Siebel Assignment Manager Administration Guide

Version 7.7

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1 What's New in This Release

What's New in Siebel Assignment Manager Administration Guide, Version 7.7

Table 1 lists changes described in this version of the documentation to support version 7.7 of the software. For default values and usage comments for each of the predefined assignment object properties, see *Object Types Reference*.

Table 1. New Product Features in Siebel Assignment Manager Administration Guide, Version 7.7

Topic	Description
Delegated administration of assignment rules See "Delegated Assignment" on page 50 and Chapter 6, "Assignment Rule Administration for Delegated Assignment".	This new feature allows organizations to create a hierarchy of assignment rules so that partner organizations can receive leads or service requests and then apply their own assignment logic to the assignment rules.
Dynamic candidates See "Dynamic Candidates" on page 47 and "Configuring Assignment Objects for Dynamic Candidates" on page 93.	This new feature allows administrators to dynamically bind candidates to assignment rules. Prior to version 7.7, candidates were statically assigned.
Expanded rule group support See "About Different Modes of Running Assignment Manager" on page 22.	This enhancement provides the ability to configure Assignment Manager to load rules associated with a rule group without specifying a server key map. Assignment Manager can process a set of rules within a given rule set as opposed to all rules in a default set.
Better integration with Siebel Workflow See "Assignment Manager Integration" on page 172.	This new feature provides Assignment Manager the ability to return results as a property set and allows Assignment Manager and Siebel Workflow to share inputs and outputs (supports rerouting of objects).
Ability to exclude a set of candidates from assignment See "About Excluding Candidates from Assignment" on page 164.	This enhancement allows configuration so Assignment Manager can exclude (ignore) a particular candidate or candidates using the ExcludePersonList and ExcludeOrgList request-level server parameters.

Table 1. New Product Features in Siebel Assignment Manager Administration Guide, Version 7.7

Topic	Description
Ability to exclude expired (terminated) employees from assignment See "About Excluding Expired (Terminated) Person Candidates from Assignment" on page 165.	This enhancement allows configuration so Assignment Manager can exclude (ignore) certain employees—such as inactive employees or employees on a leave of absence—for rule evaluation using a component-level server parameter. After assignment rules are released, the employees are ignored even if they are explicitly added to an assignment rule as candidates.
Changes to the logging events and subevents used by Assignment Manager See "Configuring Assignment Manager Event Logs" on page 168.	Assignment Manager uses four events, with four subevents for each event, for logging messages during startup and assignment of object rules. This enhancement allows more control of what Assignment Manager logs. Prior to version 7.7, there were only two events with one subevent for each event.
Improved cache file management See "About Assignment Manager Rule Cache Files" on page 25.	Assignment Manager uses several cache files (by server and rule group) and re-creates (updates) these cache files only if the rules are released. Prior to version 7.7, there was only one cache file that often re-created itself even though none of the rules had changed.
Siebel ARM and FDR instrumentation See *System Monitoring and Diagnostics Guide for Siebel eBusiness Applications*.	The Assignment Manager server component is enabled for Siebel Application Response Measurement (Siebel ARM) and Siebel Flight Data Recorder (FDR). Siebel ARM captures timing data useful for monitoring the performance of the Siebel application, and records this information to binary files. Siebel FDR is a feature of the Siebel application infrastructure that records system and server component data at run time.

2 Assignment Manager Concepts

This chapter explains how Assignment Manager works and provides a high-level overview of how you can configure Assignment Manager to meet your organization's needs. The topics include:

- "Assignment Manager Concepts Overview" on page 11
- "Assignment Manager Components Overview" on page 13
- "Assignment Operation Modes" on page 44
- "Dynamic Candidates" on page 47
- "Delegated Assignment" on page 50

Assignment Manager Concepts Overview

Siebel Assignment Manager allows sales, service, and marketing organizations to assign the most qualified people to specific tasks. 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. For you to define assignment rules, you select:

- Assignment object or objects to which each assignment rule applies
- A rule group to which each assignment rule belongs
- Candidates—person (employee or position), organization, or both—for each assignment rule
- Criteria for each assignment rule
- Values for each assignment criterion

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

- Skills to match assignment rules or objects to employees, positions, and organizations
- (Optional) Expertise levels to weigh skill scores (to measure competency in a certain area for each candidate)
- (Optional) Scores for each assignment rule, criteria, and value and a personal score for each individual candidate

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 define:

- Workload rules to balance work among the candidates

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.

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
  - Inclusion and exclusion methods
  - Scores weighted based on expertise levels
  - Wildcard values
- Defining how assignment rules are matched by using:
  - Assignment rule groups
  - Assignment rule sequencing
- Defining how candidates are assigned by using multitiered assignment
- Creating and configuring your own components, including:
  - Assignment objects
  - Assignment criteria
  - Assignment attributes
- Running Assignment Manager in different operation modes to process assignments:
  - Interactively, in real time using Assignment Manager (AsgnSrvr) server component
  - Dynamically, when object rows are created or attributes on object rows are changed by connected or mobile users
  - Assigning objects in batches using the Batch Assignment (AsgnBatch) server component
- Defining which servers are used to run selected groups of rules
- Checking availability before assigning employees to objects

Assignment Manager Components Overview

Table 2 lists the Assignment Manager components and topics and where to find more information about each specific component.

Table 2. Assignment Manager Components

Component	For More Information, See...
Assignment Manager screens and views	"Assignment Manager Administration Views" on page 14
Assignment objects	"About Assignment Objects" on page 14
Assignment candidates	"About Assignment Candidates" on page 16
Assignment rules	"About Assignment Rules" on page 19
Assignment rule groups	"About Assignment Rule Groups" on page 22
Server key maps	"About Server Key Maps" on page 23
Assignment rule sequencing	"About Assignment Rule Sequencing" on page 26
Assignment criteria and attributes	■ "About Assignment Criteria and Criteria Methods" on page 27 ■ "About Column-Based Attributes Versus Row-Based Skills" on page 31 ■ "About the Required Attribute for Assignment Criteria" on page 32 ■ "About Assignment Criteria Values" on page 34
Assignment skills	"About Assignment Skills" on page 37
Assignment scoring	"About Assignment Scoring" on page 39
Assignment workload criteria	"About Assignment Workload Criteria" on page 40
Activity-Based Assignment	"About Activity-Based Assignment" on page 42
Availability-Based Assignment	"About Availability-Based Assignment" on page 42
Multitiered Assignment	"About Multitiered Assignment" on page 43

Assignment Manager Administration Views

Assignment Manager functionality is administered with two administration screens:

- **Administration - Assignment**. The assignment administrator (AA) uses the assignment administration views (Navigate > Site Map > Administration - Assignment) to create and administer assignment rules.

  The AA creates rules and criteria, associates rules to particular rule groups (or the default rule group), and adds candidates for assignment to each rule. If using the delegated assignment feature, the AA also creates child rule groups and makes rules inheritable to the owners of those child rule groups.

  AAs have visibility for rules only in their organizations but have unrestricted access to rule administration within those organizations.

  For information about tasks performed by AAs, see the topics in Chapter 5, "Assignment Rule Administration."

- **Administration – Delegated Assignment**. Delegated administrators (DAs) use the delegated assignment administration views (Navigate > Site Map > Administration - Delegated Assignment) to inherit and refine assignment rules.

  DAs inherit the rules and further specify assignment rule behavior and candidates using the delegated assignment views. DAs can also choose to delegate rule responsibility by creating child rule groups and making rules inheritable to the owners of those child rule groups. The refined rules can again be inherited and modified by other delegated administrators at a lower level in the hierarchy, and so on.

  In the Administration – Delegated Assignment screen, rule group owners have visibility for their rule groups (and subtrees).

  For information about tasks performed by DAs, see Chapter 6, "Assignment Rule Administration for Delegated Assignment."

About Assignment Objects

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 eBusiness Applications. A number of predefined assignment objects are available for use by Assignment Manager for the most commonly-used business entities in Siebel eBusiness 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

For more information about the predefined assignment objects, see "Creating Assignment Objects" on page 92 and *Object Types Reference*.

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) the configuration of these objects before using them.

If your deployment requires other objects, or if you need to modify predefined objects, you can create new objects and configure existing objects using Siebel Tools.

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.

You must associate every assignment rule with at least one assignment object. To indicate an assignment object for an assignment rule, you choose an assignment object from the Objects to be Assigned multi-value group (MVG). For information about properties for each of the predefined assignment objects, see "About Assignment Object Properties" on page 15 and "Creating Assignment Objects" on page 92.

About Assignment Object Properties

Using Siebel Tools, you configure assignment object property values in the Siebel 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 at run-time. For example, the Replace Team Members property controls whether candidates who no longer qualify for an assignment rule (or rules) should be removed from the team.

For descriptions of and usage comments for each of the predefined assignment object properties, see *Object Types Reference*, and search for the following object types:

- Assignment Object
- Assignment Attribute
- Assignment Attribute Column
- Assignment Criteria
- Assignment User Prop
- Dynamic Candidate
- Dynamic Candidate Attribute

To view or change the default values for each of the predefined assignment object properties, see *Object Types Reference*.

NOTE: The default values provided in the Siebel repository for 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 more information about configuring assignment object properties, see "Configuring Assignment Objects" on page 92.

About 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. When processing rules, Assignment Manager determines potential candidates either statically from an assignment rule or dynamically from an attribute on the object row.

Static means that candidates do not change before releasing rules (unless you intentionally associate other, different candidates). You associate candidates statically with an assignment rule by adding candidates to the Employee Candidates, Position Candidates, or Organization Candidates view tabs within the assignment rule. Alternatively, you can associate all people or all organizations as candidates for a rule. The following subtopics describe the different types of assignment candidates as well as primary assignees.

For information about dynamic candidates and dynamic candidate behavior, see "Dynamic Candidates" on page 47.

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.

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 restrict their visibility to price lists for the products. To do this, 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 3 on page 18.

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. Or you can assign a team of sales professionals—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 3 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 a single owner or assignment; *M* indicates the ability to allow multiple owners or team assignments.

Table 3. Team Versus Individual Assignments Listed by Assignment Object

Assignment Object	Candidate		
	Employee	Position	Organization
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

If you need to modify the default properties—for example, if you want to assign accounts to employees—you can do so by configuring the assignment object properties using Siebel Tools.

Primary Assignees

A *primary* on an assignment rule 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 object. The primary is the main or first owner of an assignment object.

When assigning a team of assignees to an object row (depending on the candidate or organization source chosen for the assignment rule), you can configure Assignment Manager to assign one of the assignees as the primary. This assigned primary is usually the highest-scoring assignee from the highest-scoring assignment rule.

However, you can also define a particular candidate as the primary assignee on a specific assignment rule by picking an employee, position, or organization from the Primary Employee, Primary Position, or Primary Organization pick dialog box from the Assignment Rules List. A primary on an assignment rule 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: For assignments that allow only single assignees, the single assignee also becomes the primary assignee.

For more information about primary assignees, see Step 7 and Step 8 in "Assignment Methodology" on page 57.

About Assignment Rules

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.

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.

Assignment rules use 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. For information about how the total score for a candidate is calculated for each assignment rule, see "About Assignment Scoring" on page 39.

The following subtopics describe some of the assignment rule fields.

Assignee Filter Field

Table 4 shows the filters used by Assignment Manager to determine which potential assignees are assigned to the object from each assignment rule.

Table 4. 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.

The assignee filter determines how candidates are evaluated as potential assignees to the object.

Candidates Source Field

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

Person Candidates Source

- **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 person dynamic candidate teams you define in Siebel Tools (the value of the Team Type property in the Dynamic Candidate object) appear in the Person Candidates Source list of values (LOV) field in the assignment rule. You choose one of these values to indicate that 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.

Organization Candidates Source

- **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 organization dynamic candidate teams you define in Siebel Tools appear in the Organization Candidates Source list of values (LOV) field in the assignment rule. You choose one of these values to indicate that 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 more information about determining person and organization candidates, see Step 3 in "Assignment Methodology" on page 57. For more information about defining dynamic candidate teams for each assignment object, see "Configuring Assignment Objects for Dynamic Candidates" on page 93.

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 42.

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 multiple exclusive rules, the exclusive rule with the highest scoring assignee is chosen as the only exclusive rule. 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.

You make an assignment rule exclusive by checking the Exclusive flag in the Assignment Rules List view.

For more information about exclusive rules, see Step 7 in "Assignment Methodology" on page 57.

About 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 previous versions of Assignment Manager to version 7.7 are automatically associated with the Default Rule Group, if you have not already assigned a specific rule group.

Prior to the introduction of rule groups, Assignment Manager processed all active rules (for a particular assignment object), so it was impossible to execute a subset of rules in the database. With rule groups, you can split rules and execute only a certain set of rules. For example, you may have one set of business rules for assigning repair activities and another set of rules for assigning other activities, such as an appointment activity. Given this, you could create two rule groups with five rules each. Then, when you are assigning a particular activity, you specify the rule group you want Assignment Manager to process. Only the five rules from that rule group are processed during assignment of the activity.

NOTE: Typically, you want to split rules into rule groups based on business logic. Otherwise, all applicable rules may not get loaded and that can lead to incorrect assignments.

For more information about assignment rule groups, see "Creating Assignment Rule Groups" on page 128. If you plan to use delegated assignment, see also "About Hierarchical Rule Groups" on page 51 and "About the Rule Group Explorer" on page 53.

About Different Modes of Running Assignment Manager

You can choose one of two modes—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. For interactive assignment (AsgnSrvr) and batch assignment (AsgnBatch), if the Assignment Key parameter is not passed when submitting the request, all rules are processed.

  NOTE: By default, interactive and dynamic assignment run in default mode.

- **Rule Group Mode.** In this mode, you can process rules of one particular rule group when you assign an object row.
  - **Interactive assignment (AsgnSrvr)**. There are two ways in which you can run Assignment Manager in rule group mode—with or without using server key mappings.
    - **Using server key mappings to run Assignment Manager.** 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 for AsgnSrvr along with the request.

    For more information on server key mappings, see "About Server Key Maps" on page 23.

    - **Without using server key mappings to run Assignment Manager.** Assignment Manager supports the use of the 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, when you submit the request and you specify the rule group in the Assignment Key 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.
  - **Batch Assignment (AsgnBatch)**. At the time of the assignment request, you specify the rule group in the Assignment Key parameter for AsgnBatch to run in rule group mode.
  - **Dynamic assignment**. Rule group mode is not supported in dynamic assignment. Only default mode is supported. All active rules are loaded and processed.

About Server Key Maps

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.

Server key mapping 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.

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.

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. After which, 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 mapping and rule group features. For more information about each of these Siebel products, see *Siebel Incentive Compensation Administration Guide* and *Siebel Marketing Installation and Administration Guide*.

About Assignment Manager Rule Cache Files

The rule cache file contains the most recent copy of assignment rule, criteria, candidates, skill, and skill item 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** (where SERVERNAME is the name of the Siebel Server)

  This file contains information about the rules in the rule groups assigned to a particular Siebel Server and is used when server key mappings are defined.

- **rulecache_RULEGROUPID.dat** (where RULEGROUPID is the Assignment Key parameter)

  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 above). If you set this parameter to TRUE, it creates a separate cache file, rulecache_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 (because the rulecache_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. So, if batch assignment is running in default mode (that is, the Assignment Key parameter is not supplied), then the value of this parameter is ignored.

About 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.

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 5, 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 runtime, Assignment Manager evaluates the rules in the first segment (Segment 1) first, 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 5. 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 the following table:

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.

About Assignment Criteria and Criteria Methods

Assignment criteria are the fundamental building blocks for assignment rules. The assignment business logic you determined is translated into assignment criteria. Criteria are the conditions that the candidates must satisfy in order to qualify for assignment to a particular work item. For example, if you want an assignment requirement that employees speak German before a service request is assigned, then you should use the Language criterion. Assignment criteria are usually defined along with criteria values. Language is the assignment criterion and German (or DEU, which is the language code for German) is the criterion value. There may be several criteria values for the same criteria (1:M relationship). For example, if you want activities of type Repair or Break-fix handled by a certain employee, create a criterion called Activity Type with two criteria values, Repair and Break-fix. An assignment rule can include none, one, or many criteria.

For more information about criteria values, see "About Assignment Criteria Values" on page 34.

Assignment Criteria Comparison Methods

Table 6 provides the types of comparison methods each criteria uses to determine if candidates meet the criteria.

Table 6. Assignment Criteria Comparison Methods

Comparison Method	Description[1]
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 attributes of person candidates (employees or positions). Person candidates that possess the attributes required by the criterion qualify for this criterion. For example, language = ENU.
Compare Object to Person	Compares object attributes to attributes of person candidates (employees or positions). Person candidates that possess the attributes 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.
Compare to Organization	Compares criteria values to organization attributes. Organizations that possess the attributes required by the criterion qualify for this criterion. For example, type = gold-level partner.
Compare Object to Organization	Compares object attributes to organization attributes. Organizations that possess the attributes required by the object qualify for this criterion. For example, zipcode means compare the zipcode of the service request and the zipcode of the organization.

1. Attributes (object or candidate) can be either attributes or skills depending on the criterion value.

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. This 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

Assignment criteria also use an inclusion method 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 7 shows the types of inclusion methods for assignment criteria.

Table 7. Assignment Criteria Inclusion Methods

Inclusion Method	Comments
Include	At least one value needs to match: ■ 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. 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.
Include All	All values must match: ■ 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. 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.

Table 7. Assignment Criteria Inclusion Methods

Inclusion Method	Comments
Include All Matching	This inclusion method matches in the same manner as the Include inclusion method, that is, at least one value needs to match. 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. **TIP:** The Include All Matching inclusion method matches like the Include inclusion method but scores like the Include All inclusion method.
Exclude	None of the values must match: ■ 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. Note that for this inclusion method, criterion value scores are ignored. If the criterion is met, only the criterion score is added to the candidate's score.

About Column-Based Attributes Versus Row-Based Skills

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

- 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.

- *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 employee skill table (S_EMP_SKILL) and the employee skill item table (S_EMP_SK_IT). 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.

- 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 by way of the:

  - Products subtab and associating the product to the opportunity

  or

  - Skills subtab and creating a Product skill and a skill item for the product you want to associate

While 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.

Assignment Manager evaluates criteria by comparing two string, number, or date literals 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.

For information about the assignment criteria comparison methods, see "Assignment Criteria Comparison Methods" on page 28.

About the Required Attribute for Assignment Criteria

You make assignment criteria required by selecting Always from the picklist in the Required field in the Criteria list for the assignment rule. The Required property on the assignment criterion gives you the ability to make certain conditions for the criterion mandatory. If candidates meet this criterion, the candidate's score is increased, providing that candidate a better chance of being assigned.

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 criteria 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, 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 as the required property on the assignment criterion. 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.

If an assignment rule does not include any required criteria and an object has not been selected for the rule, you must define the assignment rule with nonrequired criteria that apply to objects that you want to assign.

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. And, 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), 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.

About Assignment Criteria Values

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. *Criteria values* are details associated with criteria that are compared to an object or candidate.

A criterion can have multiple values. A criterion value represents the actual string, number, or date literal that is used in matching. There are predefined criteria values available dynamically based upon the criterion selected, or you can create your own criteria values. Criteria values can be based on MLOVs, picklists (a popup 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.

A criterion can consist of only one attribute, such as a service request priority, or can consist of multiple attributes, known as a composite criterion. For example, Account City State Country is a composite criterion because it has three attributes: City, State, and Country. For more information about attributes, see "Assignment Attributes" on page 35.

Figure 1 shows a Language Code 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.

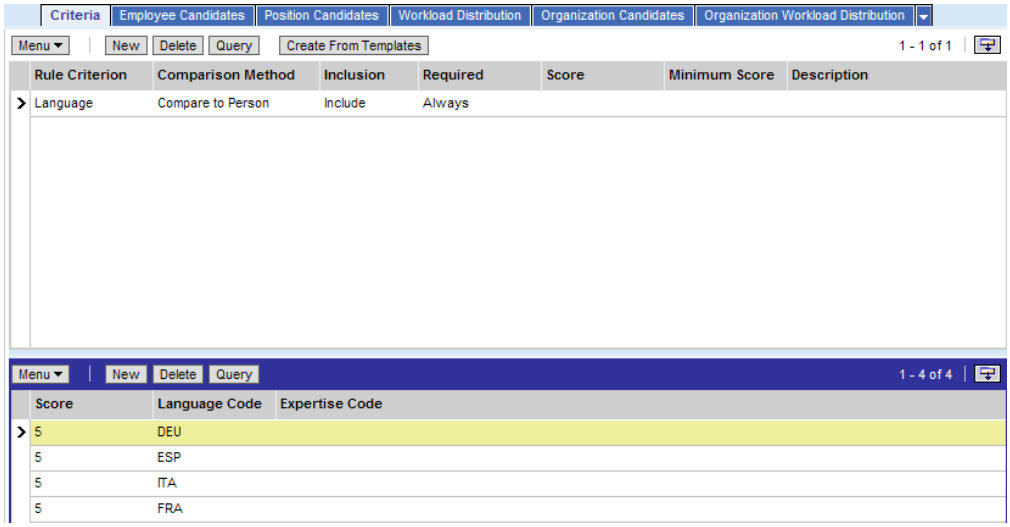


Figure 1. Sample Assignment Criteria Values

Assignment Attributes

Assignment attributes are logical attributes of the object or candidate that can be used for matching. For example, Service Request priority, Account City, and Employee Salary are assignment attributes. Each criteria value can include one or more assignment 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.

Figure 2 shows a Product Line Wildcard assignment criteria that uses the Compare to Person comparison method. The assignment criteria also uses the Include All inclusion method and includes two criteria values. Each criteria value includes two assignment attributes. In this case, only candidates that possess an Expert expertise in monitors and graphic cards qualify for the assignment criteria. Furthermore, 25 points are added to the qualifying candidates score.

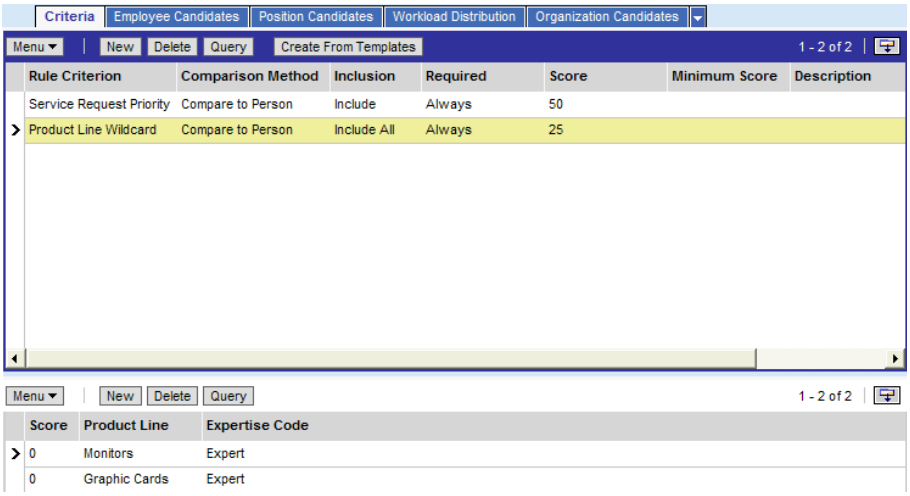


Figure 2. Sample Assignment Attributes

Assignment Attribute Columns

Assignment attributes can have one or many attribute columns. 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 from.

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. And you should 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.

About Assignment Skills

Skills are extensions to attribute data stored in designated skill and skill item tables. By default, sales objects do not use skills.

The Siebel application provides predefined skills, however, you can create new skills using Siebel Tools. You can also 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 attributes are matched. Assignment Manager applies scores and other filters to find the best candidate after a match has been made.

For information about the predefined skills and creating new skills, see "Creating New Skills" on page 118. For more information about enabling and configuring skills, see "Assignment Criteria Configuration" on page 107. For more information about how skills are matched, see "About Assignment Criteria and Criteria Methods" on page 27.

Expertise Codes

Assignment Manager uses expertise codes to rank skills to find the most suitable candidate. For example, you do not want to assign a novice to a service request that requires an expert. Using expertise codes allows you to prevent assigning objects to underqualified candidates.

Expertise codes are predefined for the following skill types (or assignment criteria):

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

The three predefined expertise codes are Novice, Intermediate, and Expert. Expertise codes are stored in—and can be modified, added to, or deleted from—the List of Values data administration view. Expertise codes apply only to skills and are global; after they are defined, assignment criteria share the same set of expertise codes.

After you select an expertise code for a skill, Assignment Manager matches assignment rules based on the assignment criteria comparison method. If the expertise code belongs to a skill that uses the:

- **Compare to Object criteria**. The assignment rule passes if the skill's expertise code is equal to, or higher than, the object's expertise code.
- **Compare Object to Person criteria**. The assignment rule passes if the candidate's expertise code is equal to, or higher than, the object's expertise code.
- **Compare Object to Organization criteria.** The assignment rule passes if the organization's expertise code is equal to, or higher than, the object's expertise code.
- **Compare to Person criteria**. The assignment rule passes if the candidate's expertise code is equal to, or higher than, the skill's expertise code.
- **Compare to Organization criteria.** The assignment rules passes if the organization's expertise code is equal to, or higher than, the skill's expertise code.

For more information about assignment criteria comparison methods, see "About Assignment Criteria and Criteria Methods" on page 27.

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 8 on page 39.

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:

  Score=Criteria Score + Skill Score*(Weighting Factor/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:

  Score=Criteria Score*(Weighting Factor/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 ignored.

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

Weighting factors for expertise codes are stored in—and can be modified, added to, or deleted from—the List of Values data administration view. For procedures, see "Defining Weighting Factors" on page 141. 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 8 shows sample weighting factors that can be used for the three types of predefined expertise codes.

Table 8. 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.

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)

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.

You can also configure Assignment Manager to save the scores of candidates who are assigned to an object. Saved candidate scores can be accessed by other Siebel application modules and used to produce items such as analysis reports for employee utilization. The scores can also be exposed 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. Team member scores are written independently for each type of candidate (employees, positions, and organizations).

For more information about specifying the team score columns, see *Object Types Reference*. For information about exposing scores for user review and sorting, see "Configuring Assignment Objects for Team Scoring" on page 105.

Addition of Scores for the Same Candidate Across Rules

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 to merge (add) the scores for the same candidate across assignment rules and take the total score in the calculation of the primaries. This is accomplished using the AddScores task-level server parameter for the AsgnSrvr and AsgnBatch commands (interactive and batch assignment, respectively) and a workflow policy program argument for dynamic assignment. If the AddScores parameter is passed as TRUE, Assignment Manager adds the scores for each candidate across rules and uses that to determine the primary candidate.

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.

About Assignment Workload Criteria

The workload criterion is a special criteria type used to balance the load between candidates. You can create workload criteria by adding workload rules in the Assignment Workload view for employees and positions, or the Assignment Organization Workload view for organizations. Workload criteria are generally used with service assignments. You can also define your own workload rules using the Workload Distribution Rules view.

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.

The workload criteria apply a workload score to candidates based on their current workload. The workload score is calculated as follows:

Workload score = Score * (1 – (current workload/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 criteria can be used for each assignment rule.

NOTE: As with other criteria, workload criteria have a Required attribute, which functions in the same manner as it does for regular criteria.

Figure 3 shows a workload criterion 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 criteria is marked as Required

For information on defining workload see "Defining Assignment Workload" on page 142.

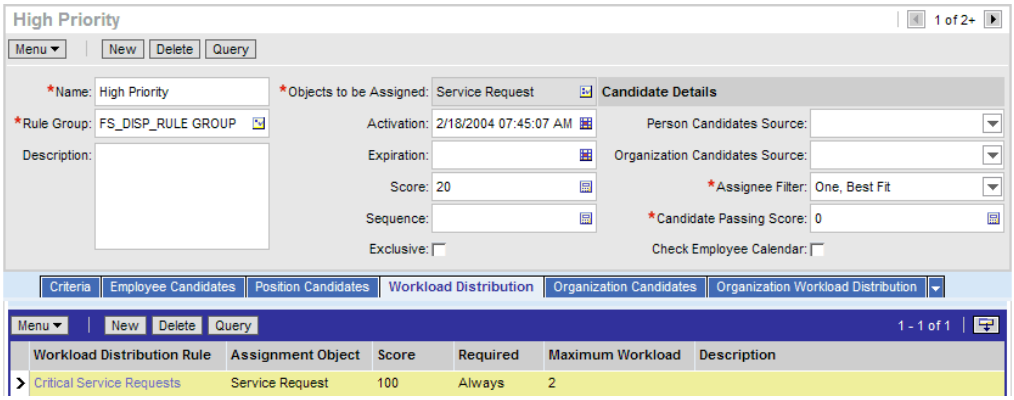


Figure 3. Sample Workload Criterion

Workload criteria can be enabled for multilingual list of values (MLOV) capabilities with additional configuration. MLOV allows workload criteria to be stored 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 eBusiness Applications*.

About Activity-Based Assignment

Assignment Manager can assign emails as email activities created during inbound and outbound email processing. Communications Server (Communications Inbound Manager server component) works in conjunction with Siebel eMail Response and Siebel Workflow to create activities for inbound emails. Communications Server (Communications Outbound Manager server component) creates activities for outbound emails. For more information, see *Siebel Email Response Administration Guide* (Workflow section) and *Siebel Communications Server Administration Guide*.

NOTE: Setting up assignment rules to assign email activities requires customization in Siebel Tools for Applets, Workflow Policy Object Column, and Assignment Attribute. For related implementation information, see *Using Siebel Tools*, *Configuring Siebel eBusiness Applications*, and *Object Types Reference*.

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 "Configuring Assignment Objects for Availability-Based Assignment" on page 100 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.

For more information about checking employee availability, see "Check Employee Calendar Field" on page 21. For more information about availability-based assignment, see "Assigning Employees to Assignment Rules Based on Availability" on page 149. For more information about customizing Assignment Manager user properties, see "Configuring Assignment Object User Properties" on page 96.

About 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. Without multitiered assignment—or appropriate assignment rules—it is possible for Assignment Manager to assign an unrelated organization or person to an assignment object. Multitiered Assignment has the following modes of assignment operation:

- 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 configuring the Assignment Mode assignment object property.

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.

Assignment Operation Modes

This topic lists the assignment operation modes available for running Assignment Manager and where you can find more information about these modes:

- Interactive (see "About Interactive Assignment" on page 44)
- Dynamic (see "About Dynamic Assignment" on page 44)
- Batch (see "About Batch Assignment" on page 45)
- Mobile (see "About Mobile Assignment" on page 45)
- Contact Denormalization (see "About Contact Denormalization" on page 46)
- Product Denormalization (see "About Product Denormalization" on page 47)

Depending on the assignment mode, you invoke Assignment Manager by using the server administration views, the command-line interface, or both. For more information on how to establish each mode, see Chapter 7, "Running Assignment Manager."

About Interactive Assignment

Running Assignment Manager in interactive mode allows users to make real-time assignments.

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.

By clicking the Menu button on any selected object and choosing Assign, Interactive Assignment allows you to view the list of assignees generated by Assignment Manager. You can then override the assignment and select another assignee from the list in real time.

About Dynamic Assignment

Dynamic assignment allows users to create assignments as other users and server programs create records or change assignment object attributes in existing records. For example, if a user creates a new opportunity or changes the revenue amount (or address) of an opportunity, dynamic assignment detects the change and automatically invokes Assignment Manager to reassign the opportunity to a different territory or sales team, if indicated.

The dynamic assignment process is as follows: a user makes a change that requires assignment; a database trigger fires (triggers are setup by the Generate Triggers server component) and inserts records in the S_ESCL_REQ table (escalation request table); the Workflow Monitor Agent polls this escalation table periodically for records and assigns the object (internally invoking Assignment Manager within its own process). By default, the Server Request Broker and the Assignment Manager server components are not explicitly used in dynamic assignment.

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.

About Batch Assignment

You can use batch assignment to assign multiple records of an object 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 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. You can 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
```

This clause identifies all service requests that are not as yet assigned to a owner.

You should monitor the performance of batch assignment and increase or decrease the number of running tasks to obtain the optimal performance.

You can set up batch assignment to run Assignment Manager in Contact Denormalization mode.

About 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.

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.

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 202.

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 new feature 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).

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.

For more information about Contact Denormalization, see Chapter 7, "Running Assignment Manager," and "Activating Contact Denormalization" on page 182.

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.

NOTE: Product to Price List is a many-to-many relationship.

Assignment Manager also 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.

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. Additionally, you should run Product Denormalization only in batch mode. For more information about running Batch Assignment, see "Running Assignment Manager in Batch Mode" on page 184.

Dynamic Candidates

Dynamic candidates are potential assignees for objects and behave in the same manner as static candidates. That is, dynamic candidates support criteria-based attributes and skills (such as Language), workload criteria, and so on. Assignment Manager determines potential dynamic candidates from an attribute on the object row (as opposed to coming statically from an assignment rule) when processing rules.

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 these employees (team) for an activity and have the same employees available as potential candidates for other activities. These employees are known as *dynamic candidates*. The team of employees associated with the activity is known as the *team table* because this is the database table where the candidates are stored.

To define dynamic candidates, you use the Person Candidate Source and Organization Candidate Source list of values (LOV) field on the assignment rule.

In summary, the following points explains 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 loaded when a request is submitted from the attribute team table on the object row.

For more information about candidates source, see "Candidates Source Field" on page 20.

About Single- Versus Multiple-Owner Dynamic Candidate Types

Depending on the relationship an attribute has with an object row, dynamic candidates can be of the single-owner type or multiple-owner type.

If there is a one-to-one relationship, dynamic candidates are of the single-owner type. For example, in the asset team example discussed in "Dynamic Candidates" on page 47, the dynamic candidates are of the single-owner type because only one asset can be associated with an activity. This is illustrated in the top half of Figure 4.

If there is a one-to-many relationship, dynamic candidates are of the multiple-owner type. For example, if an opportunity is associated with multiple accounts and each account has a team of positions, the position dynamic candidates are of the multiple-owner type. This is illustrated in the bottom half of Figure 4.

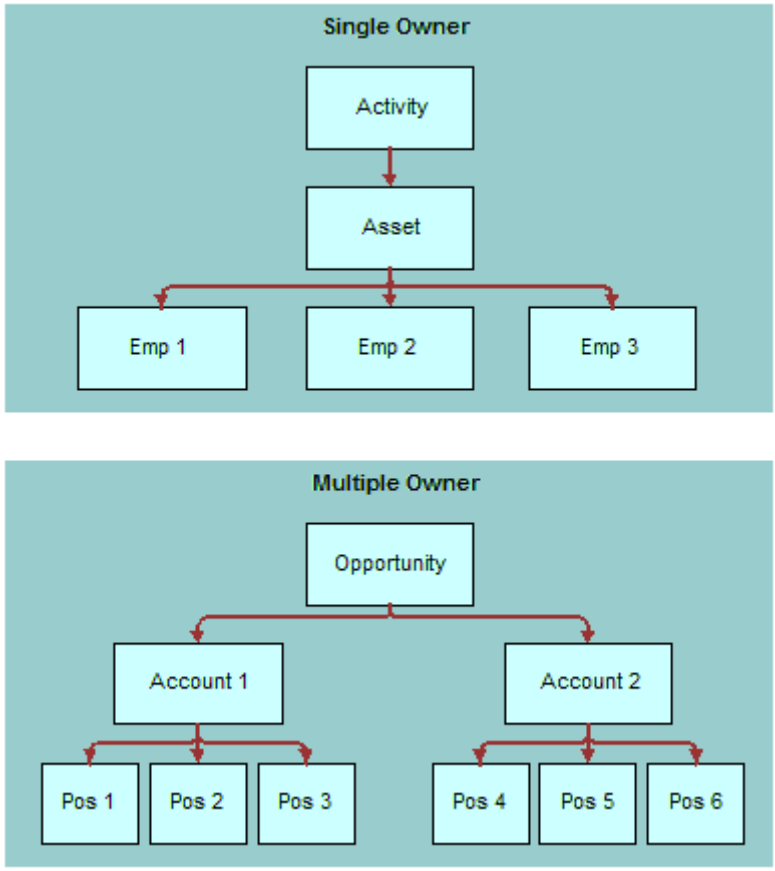


Figure 4. Example of Single- Versus Multiple-Owner Dynamic Candidate Types

Using Siebel Tools, you create the dynamic candidate definitions for each assignment object by creating records for the Dynamic Candidate object (a child of the Assignment Object object). The dynamic candidate properties define the table and column names involved in performing the join from the assignment object primary table to the team table to retrieve the dynamic candidates.

For more information about dynamic candidates, see "Dynamic Candidates" on page 47. For more information about creating dynamic candidate definitions, see "Configuring Assignment Objects for Dynamic Candidates" on page 93.

About Team-Based Assignment Criteria

A *team-based criterion* is a criterion based on a column on the attribute team table. You can define a team-based criterion only for an assignment rule that has dynamic candidates.

The columns in the team table describe the relationship between a candidate and an attribute. For example, the Relationship Type column in the Asset team table can have values such as Primary, Secondary, Tertiary, and so on to describe that a certain employee is primary (or secondary, tertiary, and so on) for the asset team. You can create assignment criteria based on these team table columns, known as team-based criteria. Assignment Manager supports team-based criteria only for the Compare To Person and Compare To Organization comparison methods.

Using Siebel Tools, you create records in the Dynamic Candidate Attribute object to map columns in the team table to team-based assignment criteria by specifying the column name in the team table and the assignment criterion that is based on this column.

NOTE: Assignment Manager supports team-based criteria based only on columns on the team table.

Using Siebel Tools, you define team-based criteria as you would any other criteria. When you define the assignment criteria record, you click the Team flag to indicate that it is a team-based criterion. You can define only one assignment criteria attribute record per team-based criterion. You must also define the data type of the attribute for the assignment attribute record. Because Assignment Manager retrieves the data for the team-based criteria from the dynamic candidate attribute configuration, you need not specify assignment attribute column records for team-based criteria. Assignment Manager ignores these.

You define team-based criteria for rules that have dynamic candidates as you would any other criteria, that is, you apply a comparison method (only Compare to Person or the Compare to Organization supported) and define the criteria values.

However, a 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

NOTE: Assignment Manager does not support composite team-based criteria. For a description of composite criteria, see "Assignment Attributes" on page 35.

Delegated Assignment

Delegated assignment allows assignment administrators (AAs) to enforce core business logic using rule inheritance, while allowing delegated administrators (DAs) the ability to further refine that logic. In addition, inheritors of rules can refine those same rules and specialize them for their unique circumstances.

Delegated assignment provides AAs the ability to delegate rule administration to other administrators and partners to route leads, activities, accounts (and other objects) to employees or positions. These delegates are known DAs. A DA can, in turn, delegate assignment rule administration to other DAs. This hierarchical assignment feature is well-suited to sales organizations and organizations that work closely with partners.

NOTE: Prior to Siebel 7.7, the assignment administrator was the only person responsible for administering assignment rules.

The topics covered are:

- "About Hierarchical Rule Groups" on page 51
- "About the Rule Group Explorer" on page 53
- "About Assignment Rule Inheritance and Templated Criteria" on page 54

For a scenario for using delegated assignment, see "Examples for Using Delegated Assignment" on page 75. For information about administering assignment rules for delegated assignment, see Chapter 6, "Assignment Rule Administration for Delegated Assignment."

About Hierarchical Rule Groups

A *rule group* is a group of categorized assignment rules. You can think of a rule group as similar to a territory. Delegated assignment provides a hierarchical (tree) distribution of rule groups as shown in "The Rule Group Explorer" on page 53. 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.

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 5 on page 52, RG 2 is the parent of RG 4, but RG2 is not a root-level rule group. Only RG1 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 5 provides a sample rule hierarchy that shows how parent and root rule groups relate to other rule groups in the same hierarchy.

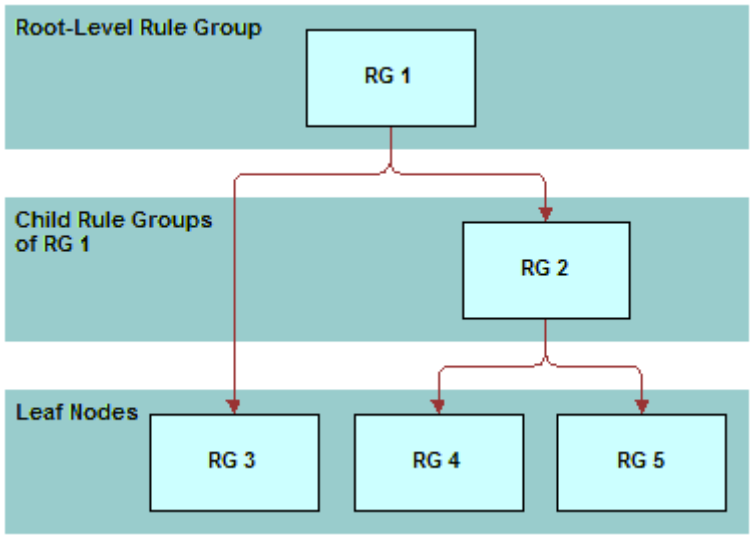


Figure 5. Relationships Between Parent and Child Rule Groups in a Hierarchy

Figure 5 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).

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).

Rule Group Visibility and Permissions

The AA sees only the rule groups (and the rules within those rule groups) for his or her 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.

For more information about rule group hierarchies, see "About the Rule Group Explorer" on page 53.

About the Rule Group Explorer

The relationships between parent and child rule groups is a hierarchy. The Rule Group Explorer (see Figure 6) is a graphical representation of the rule group hierarchy (tree) and provides a convenient way to navigate the entire rule group hierarchy.

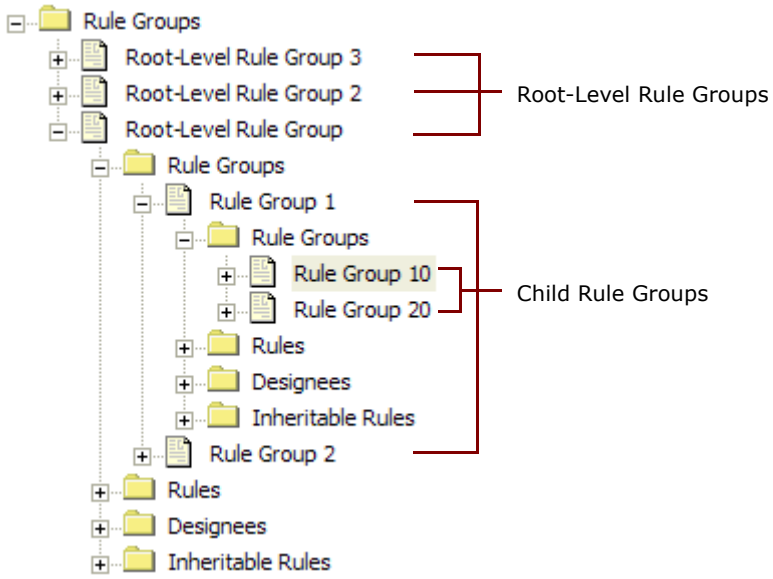


Figure 6. The Rule Group Explorer

Figure 6 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. AAs 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. DAs 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, and this new rule group is considered a child rule group. DAs can also create grandchild rule groups, great-grandchild rule groups, and so on.

For more information about rule groups, see "About Hierarchical Rule Groups" on page 51.

About Assignment Rule Inheritance and Templated Criteria

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.

Templated criteria are special criteria that can be applied to inherited rules. Assignment Manager does not process templated criteria until an inheritor of an assignment rule chooses to apply a template to the inherited rule.

To use templated criteria, 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 templated criteria 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 templated criteria is applied to the inherited rule.

TIP: It is recommended that AAs create templated criteria 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 more information about creating criteria templates for assignment rules, see "Adding Criteria Templates to Assignment Rules" on page 158. For more information about applying templated criteria to assignment rules, see "Applying Templated Criteria to Inherited Assignment Rules" on page 160. For examples of delegated assignment rule inheritance and adding and applying templated criteria to assignment rules, see "Examples for Using Delegated Assignment" on page 75.

3 Assignment Methodology, Strategies, and Scenarios

This chapter provides common strategies and scenarios that you can use to develop effective assignment rules for your sales and service organizations. It includes the following topics:

- "Assignment Methodology" on page 57
- "Assignment Strategy Considerations" on page 61
- "Assignment Strategy for Sales Organizations" on page 61
  - "Example of Creating Sales Assignment Rules Based on Territories" on page 62
  - "Example of Creating Sales Assignment Rules That Combine Criteria" on page 64
  - "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 66
- "Assignment Strategy for Service Organizations" on page 68
  - "Example of Creating Field Service Assignment Rules Using Availability" on page 70
- "Scenario for Assigning Candidates Dynamically" on page 73
- "Examples for Using Delegated Assignment" on page 75

Assignment Methodology

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

1. **Find assignment rules for the object.** Find active assignment rules for evaluation for the object being assigned. Assign objects to assignment rules in the Objects to be Assigned field in the Assignment Rules List view. 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: Assignment Manager evaluates rules in ascending order of the sequence number. For more information about the order in which rules are evaluated, see "About Assignment Rule Sequencing" on page 26.

2. **Evaluate assignment criteria for the object.** After determining the rules for processing, Assignment Manager 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 **Determine 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 the same method.

4 **Evaluate each candidate against assignment rule criteria.** Evaluate each candidate against the criteria using the selected comparison method as described in "About Assignment Criteria and Criteria Methods" on page 27. 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 **Score each qualified candidate for each assignment rule.** Scoring of each candidate for an assignment rule is based on the sum of:

- Assignment rule score
- Score of each assignment criterion that is satisfied
- Each assignment criterion value that is satisfied depending on the inclusion method as explained in "About Assignment Criteria and Criteria Methods" on page 27

  Some assignment criteria values (skills) are weighted by expertise.
  - To rank expertise codes, use the Order field in the List of Values view. For procedures, see "Creating Expertise Codes" on page 140.
  - To define expertise weight, use the Weighting Factor field in the List of Values view. For procedures, see "Defining Weighting Factors" on page 141.

  For more information about skills, see "About Assignment Skills" on page 37. For more information about expertise, see "Expertise Codes" on page 37. For more information about weighting factors, see "Weighting Factors" on page 38.
- 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

  Score based on the current workload of candidates compared to the maximum workload allowed. For more information about workload criteria, see "About Assignment Workload Criteria" on page 40.

  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.

  For more information about employee availability, see "About Availability-Based Assignment" on page 42. For more information about the Assignment Scoring Mode property, see *Object Types Reference*.

6 **Apply the assignee filter to scored candidates to generate a list of potential assignees.** Use 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

For more information about each of these filters, see "Assignee Filter Field" on page 20.

7 **Evaluate exclusive assignment rules and determine 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 AddScores 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 ignored.

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, then the manually assigned primary position is retained and the default position is added to the team as a nonprimary.

8 **Determine the primary assignees.** Determine 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 59, 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 59.
- 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 59, 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 59.
- 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 59, 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 59.

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 "Assignee Filter Field" on page 20.

9 **Filter out certain assignees based on multitiered mode.** By default, the assignment mode is set to independently assign qualifying people and organizations. Three other assignment modes are available, which allows filtering of unwanted, but qualifying, people and organizations based on the relationship that exists between them. Then recalculate primaries, if necessary; for example, if primaries were filtered out by multitiered filtering. See "About Multitiered Assignment" on page 43 for further information.

10 **Generate assignments.** Write assignees to the database to finalize the assignment.

- Write the primary assignment rule and primary assignees to the object's primary table.
- For team-based objects, write 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 in yellow. 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.

Assignment Strategy Considerations

To use Assignment Manager for your organization, you must develop and document a clear set of strategies that can be consistently applied by Assignment Manager or system administrators.

For each assignment object, you 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 described above. For example, sales organizations can benefit from assignment rules using employee skills as well as territory rules.

Assignment Strategy for Sales Organizations

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, 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. For more information about database extracts, see *Siebel Remote and Replication Manager Administration Guide*. For more information about running server tasks, see *Siebel System Administration Guide*.

Because sales organizations typically distribute their accounts and opportunities based on territories, create assignment rules based on these territories. Assignment Manager includes two additional views, Territory List view and Territory Detail view, originally designed for sales organizations. However, these views function exactly as the Assignment Rule view and Assignment Criteria view, respectively. 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 chapter do not appear in the Territory List view.

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

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 7. 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 5, "Assignment Rule Administration."

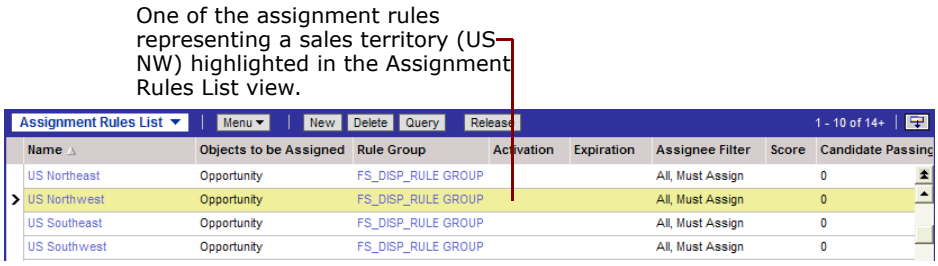


Figure 7. Example of Creating Sales Territories

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 7.

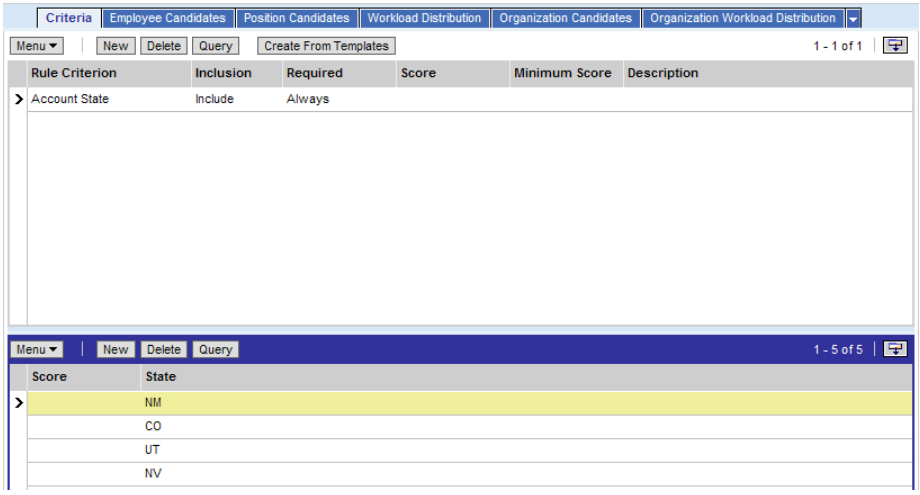
2. Determine the assignment criteria.

   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.



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 view) and also assign a specific position within that rule (Assignment Rules > Positions). For more information on the primary position, see "Creating Assignment Rules" on page 130. For more information about assigning positions, see "Adding Positions to Assignment Rules" on page 150.

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 Assignment Manager in Batch Mode" on page 184.

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 is not modifiable 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 64. For general information about sales assignment strategies, see "Assignment Strategy for Sales Organizations" on page 61.

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 8. 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 5, "Assignment Rule Administration."

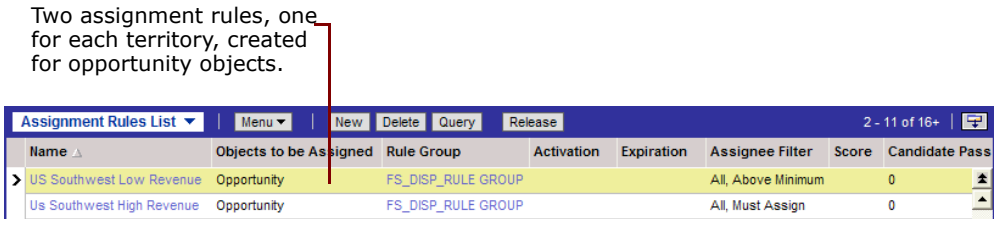


Figure 8. Example of Creating Assignment Rules with Combined Criteria

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 8.

2. Determine the assignment criteria.

   In this example, select Account State and Revenue as the criteria.

3. Define the criteria values.

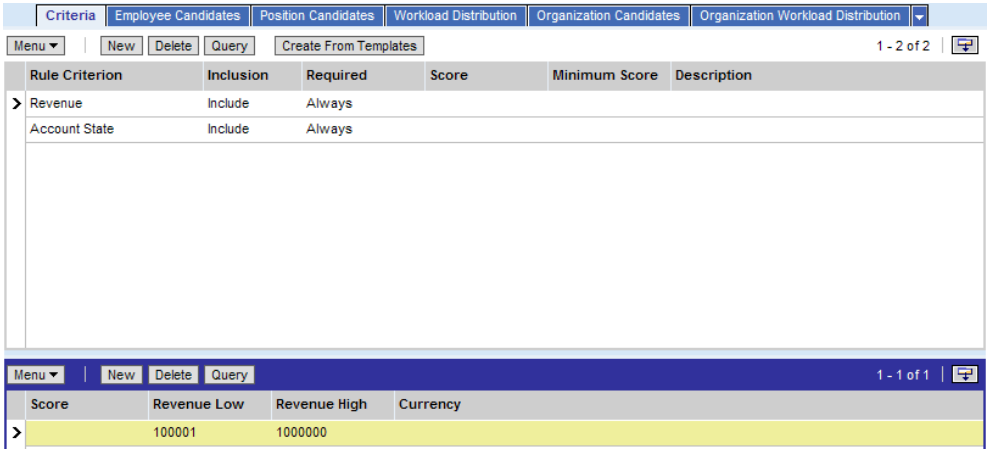
   In this example, use the states that make up each territory as the Account States criteria values. For the Revenue criteria values, select different assignment attributes for each assignment rule:

   - 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.



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 Assignment Manager in Batch Mode" on page 184.

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.

For an example of how a sales organization can strategically assign salespeople based only on territories, see "Example of Creating Sales Assignment Rules Based on Territories" on page 62. For general information about sales assignment strategies, see "Assignment Strategy for Sales Organizations" on page 61.

Scenarios for Using Multitiered Assignment with Sales Assignment Rules

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		

For more information about multitiered assignment and its assignment modes, see "About Multitiered Assignment" on page 43. For information about configuring multitiered assignment, see "Configuring Assignment Objects for Multitiered Assignment" on page 104.

Assignment Strategy for Service Organizations

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.

Use the following strategy to develop assignment rules for your service organization:

- 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.

- 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.

- 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.

- 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.

- 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

- Define assignment rules, assignment criteria, assignment criteria values, and assignment workloads.

  Using the strategy, rules, and criteria discussed above, 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.

- Define candidates.

  Using the All People value in the Person Candidates Sources field or the assignment rule Employee Candidates view, define the eligible employees for assignment. You may further restrict or weight employees who have different skills using the Compare to Person assignment criteria.

- 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.

- 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 Batch Assignment, see "Running Assignment Manager in Batch Mode" on page 184.

Figure 9 shows a sample assignment rule for assigning support representatives to a service request.

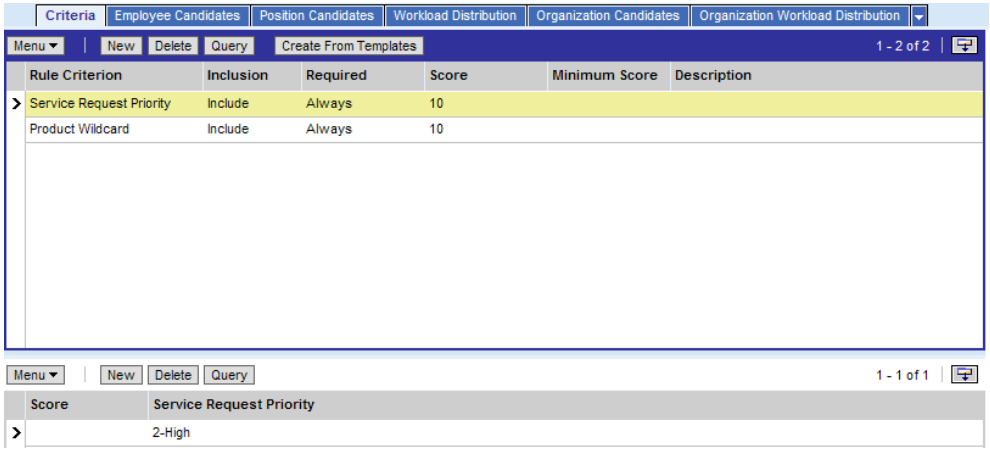


Figure 9. Assignment Rule for a Service Organization

The assignment rule shown in Figure 9:

- 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

Example of Creating Field Service Assignment Rules Using Availability

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.

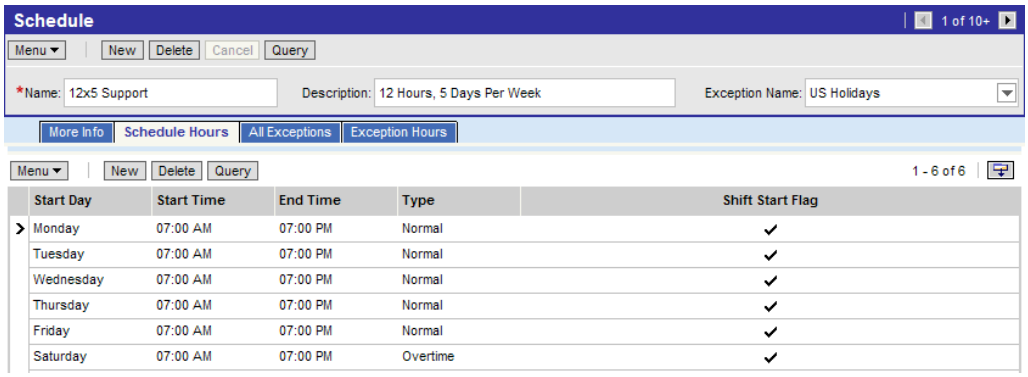
To use the availability assignment feature, certain setup procedures must be performed in the Field Service application before creating the assignment rule. For more information about this feature and its requirements, see "About Availability-Based Assignment" on page 42. Several configurations must also be made to the assignment object before using the availability feature. See "Configuring Assignment Objects for Availability-Based Assignment" on page 100.

NOTE: The following procedure 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.

Navigate 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.



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.

Navigate 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.

Navigate 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.

Navigate to Assignment Rules List view of the Administration - Assignment screen, and create the assignment rule. For this example, name the rule West Coast Service. Define the assignment object as Service Request and the assignee filter as One, Best Fit. The Check Employee Calendar box is the field that activates the assignment availability feature. Check this box once to make this feature operational.

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.

Now, 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, see "Configuring Assignment Objects for Availability-Based Assignment" on page 100. For more information about ABS, see *Siebel Field Service Guide*.

Figure 10 shows the assignment rule described in the preceding procedure.

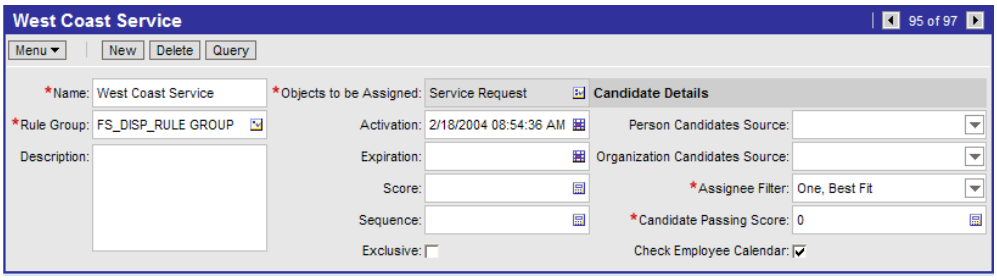


Figure 10. A Field Service Assignment Rule with the Check Employee Calendar Field Activated

Scenario for Assigning Candidates Dynamically

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 9. The numbers at the top of the table correspond to the numbered text following the table.

Table 9. 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	

1 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

2 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 candidates for this activity. This list is the *union* of the employees from all three lists above, 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

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 75
- "Delegated Assignment Example 1: Assignment Administrator Tasks" on page 77
- "Delegated Assignment Example 2: 2nd-Tier Delegated Administrator Tasks" on page 79
- "Delegated Assignment Example 3: 3rd-Tier Delegated Administrator Tasks" on page 81
- "Delegated Assignment Example 4: 3rd-Tier Delegated Administrator Tasks for Partners" on page 81
- "Summary for Working with Delegated Administrators" on page 82

Scenario for Working with Delegated Administrators

This scenario is one of the topics for "Examples for Using Delegated Assignment" on page 75.

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 templated criteria 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 11.

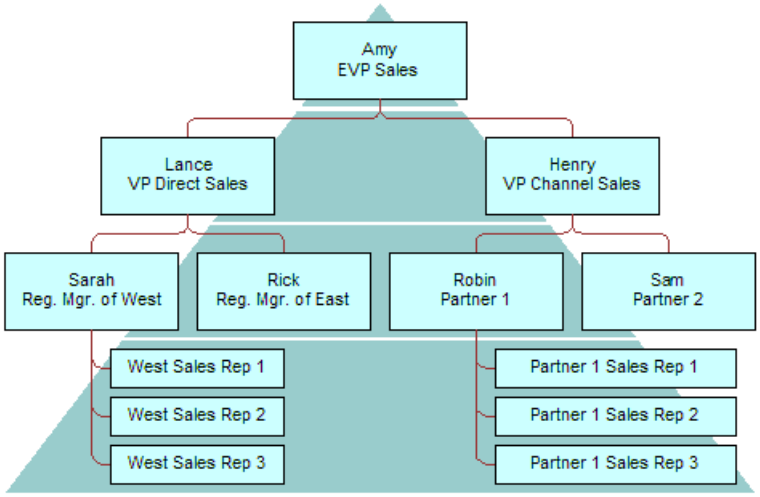


Figure 11. Sample Delegated Assignment Organization Chart

Figure 11 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 Sales

  Lance and Henry are 2nd-tier delegated administrators
- Two managers report to Lance:
  - Sarah, Western Regional Manager
  - Rick, Eastern Regional Manager

  Sarah and Rick are 3rd-tier delegated administrators (DAs)
- Two partners report to Henry:
  - Robin, Partner 1
  - Sam, Partner 2

  Robin 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 10 provides sample responsibilities for each of the above positions.

Table 10. 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 "Examples for Using Delegated Assignment" on page 75.

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 128.

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 157.

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 147.

c Add criteria templates (templated criteria) 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 158.

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 157.

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 (templated criteria).

   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
Templated Criteria 1	Product Line= Servers	
Templated Criteria 2	Product Line = PCs	
Templated Criteria 3	Product = Notebooks	State = NY, CT, NJ
Templated Criteria 4	Product = Desktops	State = WA, CA, OR, NV
Templated Criteria 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: 2nd-Tier Delegated Administrator Tasks

This example is one of the topics for "Examples for Using Delegated Assignment" on page 75.

The 2nd-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 2nd-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 157.

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 159.

4 Refine the inherited assignment rule (or rules).

a Apply templated criteria (criteria from templates).

See "Applying templated criteria to an assignment rule" on page 160.

b Add candidates.

See "Adding Employees, Positions, and Organizations to Assignment Rules" on page 147.

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 templated criteria.

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 157.

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 templated criteria 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: 3rd-Tier Delegated Administrator Tasks

Sarah and Rick are 3rd-tier delegated administrators in the rule group hierarchy.

Sarah and Rick follow the same steps as Lance in "Delegated Assignment Example 2: 2nd-Tier Delegated Administrator Tasks" on page 79, 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: 3rd-Tier Delegated Administrator Tasks for Partners

This example is one of the topics for "Examples for Using Delegated Assignment" on page 75.

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 159.

3. Refine the inherited rule (or rules).

   a. Apply templated criteria (criteria from templates).

      See "Applying templated criteria to an assignment rule" on page 160.

   b. Add candidates.

      See "Adding Employees, Positions, and Organizations to Assignment Rules" on page 147.

4 Add owners to the inheritance access list for the assignment rule.

See "Adding Owners to the Inheritance Access List" on page 157.

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 templated criteria.

Summary for Working with Delegated Administrators

This summary is one of the topics for "Examples for Using Delegated Assignment" on page 75.

Figure 12 shows a high-level process flowchart of the delegated assignment scenario examples described in "Examples for Using Delegated Assignment" on page 75.

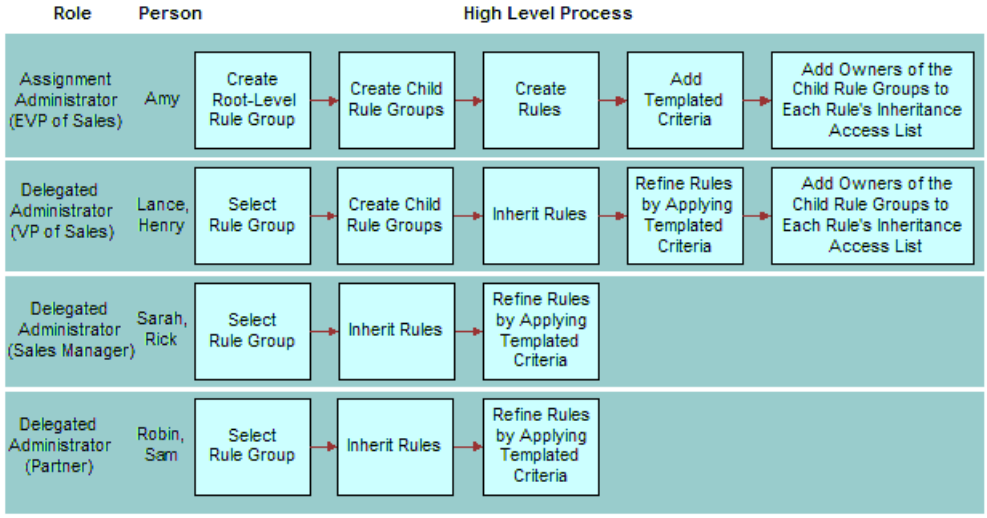


Figure 12. Sample Process Flowchart for Delegated Assignment

Figure 12 shows the following relationships:

- 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 (templated criteria) and owners of the child rule groups to the assignment rules before delegated assignment can be implemented.
- 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.
- 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.
- 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.

For detailed tasks pertaining to the sample delegated assignment process, see:

- "Delegated Assignment Example 1: Assignment Administrator Tasks" on page 77
- "Delegated Assignment Example 2: 2nd-Tier Delegated Administrator Tasks" on page 79
- "Delegated Assignment Example 3: 3rd-Tier Delegated Administrator Tasks" on page 81
- "Delegated Assignment Example 4: 3rd-Tier Delegated Administrator Tasks for Partners" on page 81

The following points further summarize 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.

  For more information about rule group hierarchies, see "About Hierarchical Rule Groups" on page 51.

- Each rule group owner can assign a designee.

  Designess 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.

  For more information about owners and designees, see "Owners and Designees" on page 52 and "Adding Owners to the Inheritance Access List" on page 157.

- 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 templated criteria). However, it is recommended that the AA create criteria templates (templated criteria) for the most common criteria to ease the learning curve for the DAs.

  For information on how to create new criteria, see "Configuring Assignment Criteria" on page 113.

4 Assignment Object Configuration

This chapter explains assignment object configuration components, how to configure the components, and the additional system administration tasks needed to complete your configurations. It includes the following topics:

- "Assignment Manager Configuration Overview" on page 86
- "Assignment Object Configuration Concepts" on page 87
- "Assignment Object Configuration Overview" on page 91
- "Assignment Criteria Configuration" on page 107
- "Creating New Skills" on page 118
- "Example of Using Skill Tables" on page 120
- "Creating Workflow Policy Components" on page 121
- "Server Administration After Configuring Assignment Manager" on page 125

If you plan to use the predefined Assignment Manager components, skip this chapter and proceed to Chapter 5, "Assignment Rule Administration."

Assignment Manager Configuration Overview

Table 11 lists the assignment configuration tasks you perform using Siebel Tools.

Table 11. Assignment Manager Configuration Tasks

If You Need To...	For More Information, See...
■ Create new assignment objects	"Creating Assignment Objects" on page 92
■ Modify the predefined assignment objects	"Configuring Assignment Objects" on page 92
■ Configure assignment objects for dynamic assignment	■ "Configuring Assignment Objects for Dynamic Candidates" on page 93 ■ "Configuring Assignment Objects for Dynamic Candidate Attributes" on page 95
■ Configure assignment object user properties	"Configuring Assignment Object User Properties" on page 96
■ Configure Assignment Manager for interactive assignment	■ "Configuring Assignment Objects for Interactive Assignment" on page 97 ■ "Configuring Interactive Assignment for an Assignment Object Using Server Key Mappings" on page 100
■ Configure Assignment Manager for availability-based assignment	■ "Configuring Assignment Objects for Availability-Based Assignment" on page 100 ■ "About Creation of Activities for Employees During Availability-Based Assignment" on page 104
■ Configure Assignment Manager for multitiered assignment	"Configuring Assignment Objects for Multitiered Assignment" on page 104
■ Configure assignment objects for team scoring	"Configuring Assignment Objects for Team Scoring" on page 105
■ Define additional assignment criteria types and attributes	■ "Assignment Criteria Configuration" on page 107 ■ "Configuring Assignment Attributes" on page 108 ■ "Configuring Assignment Attribute Columns" on page 111 ■ "Configuring Assignment Criteria" on page 113 ■ "Configuring Assignment Criteria Attributes" on page 115
■ Remove existing assignment criteria and attributes	"To remove seed assignment criteria" on page 108

Table 11. Assignment Manager Configuration Tasks

If You Need To...	For More Information, See...
■ Disable existing assignment attributes	"Disabling an Assignment Attribute" on page 117
■ Create new skills	"Creating New Skills" on page 118
■ Work with the skill tables	"Example of Using Skill Tables" on page 120
■ Create new workflow policy components	■ "Creating Workflow Policy Components" on page 121 ■ "Example of Creating a Workflow Policy Component" on page 121

NOTE: If you add or change assignment objects, assignment attributes, or assignment criteria, you must migrate the repository to the server production database. For information on migrating the repository, see "Migrating Assignment Rules" on page 127 and *Going Live with Siebel eBusiness Applications*.

CAUTION: The criteria values, skills, and workload conditions components are specialized. Do not configure these components.

Before you can successfully configure Assignment Manager, you need to possess a solid understanding of how to use Siebel Tools. For more information, see *Using Siebel Tools*. You should also familiarize yourself with the basics of the underlying Siebel application architecture. For more information, see *Deployment Planning Guide.* Assignment Manager object types are also related to Workflow Manager object types. For more information, see *Siebel Business Process Designer Administration Guide*.

Assignment Object Configuration Concepts

Using Siebel Tools, you can create new assignment object definitions in the repository. After you compile the changes, these new assignment objects appear in the 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 (if want to use dynamic candidates)

- List of dynamic candidate attribute objects for each dynamic candidate (if you want to create team-based criteria)

Assignment Manager Object Types

The following object types are specific to Assignment Manager and can be configured using Siebel Tools:

- **Assignment Object.** Assignment objects are assigned to assignment rules in the Objects to be Assigned field of assignment rule records. 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 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 encapsulates multiple assignment attributes. Assignment criteria appear in the picklist in the Criteria list column when you are editing an assignment rule record.
- **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, and as such, are known as composite criteria.

Assignment Manager Object Hierarchy and Relationship

Figure 13 illustrates the hierarchical (parent-child) relationships of Assignment Manager object types (and two related object types in Workflow Manager configuration). You use the Object Explorer in Siebel Tools to view these relationships.

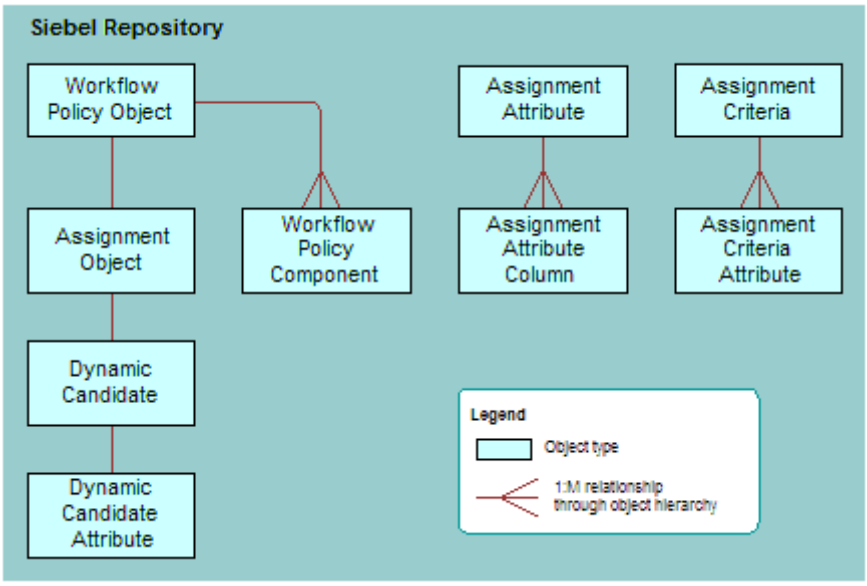


Figure 13. Parent-Child Relationships Between Assignment Manager Object Types

Figure 13 shows the following relationships:

- Assignment object is a child of workflow policy object.
- Dynamic candidate is a child of assignment object.
- Dynamic candidate attribute is a child of dynamic candidate.
- 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 14.

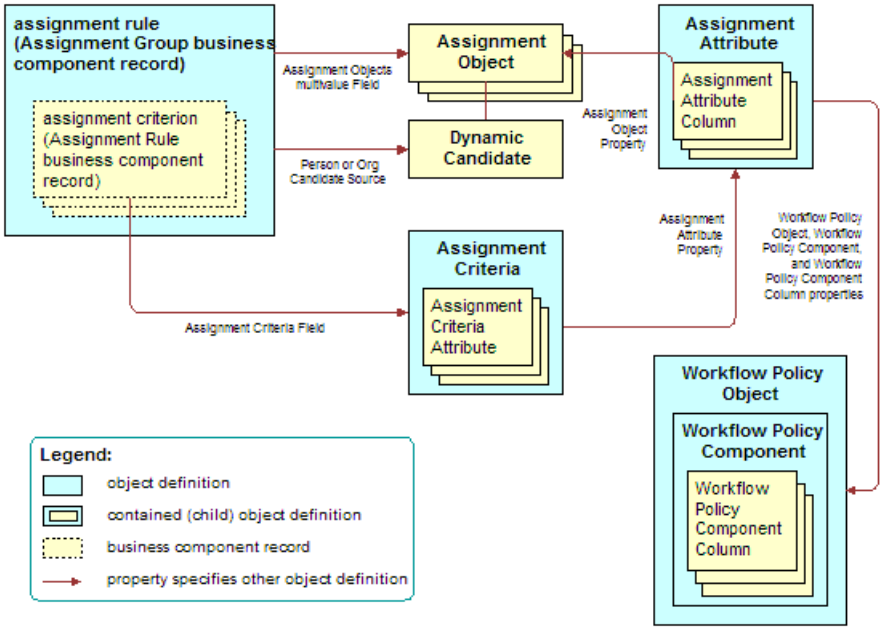


Figure 14. Field Value and Property Relationships Among Assignment Manager Object Types

Figure 14 on page 90 shows the following relationships:

- Assignment rules (the box with a dashed border at the upper left) 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 (Assignment Group business component) record.

  NOTE: Assignment Object is a required field for all assignment rules; however, Assignment Manager ignores rules that have no objects specified when upgrading.
- Dynamic Candidate is a child of Assignment Object and each assignment rule points to one or more dynamic candidates.
- 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 and/or Org Candidate Source fields point to a Dynamic Candidate object definition.

Assignment Object Configuration Overview

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 in accordance with the settings in the assignment object.

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.

NOTE: The Sample database includes predefined assignment rules for several of the predefined objects.

The predefined Workflow Policy Object and Workflow Policy Component column definitions include mappings for the most commonly used attributes for each object. For example, the Opportunity object has the following predefined definitions: Account Name, Account City, Account State, Account Zip Code, Account Country, Lead Quality, Revenue, Industry SIC Code, and so on.

CAUTION: Only create or configure assignment objects for either position-based or employee-based assignment, not both. 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.

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 run-time parameter.

   For a list of assignment object parameters 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, see "Activating Assignment Policies" on page 180.
7. Update your deployment with the new configurations.

   For instructions, see "Server Administration After Configuring Assignment Manager" on page 125.

Configuring Assignment Objects

Each assignment object uses its own set of run-time parameters that control the behavior of Assignment Manager for that assignment object. These run-time parameters are stored in the Siebel repository in the assignment object definitions. You can use Siebel Tools to modify the default values for these run-time parameters.

NOTE: The default values provided in the Siebel repository for different 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.

TIP: If modifying the parameters default employee, default position, or default organization, 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 group administration organizations screen called *My Organization*.

To configure assignment objects

1. Start Siebel Tools.
2. Lock the project to which the assignment object belongs.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. 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 in the Development Tools Options dialog box (View > Options > Object Explorer).
4. In the Workflow Policy Objects window, select the assignment object that you want to configure.
5. In the Assignment Objects window, configure the assignment object by setting values in the appropriate fields for each run-time parameter.

   For a list of assignment object parameters and their default values, see *Object Types Reference*.
6. Update your deployment with the new configurations.

   For instructions, see Step 2 on page 126 and Step 3 on page 126 in the "To update your deployment with new configurations" procedure.

   NOTE: It is not necessary to recompile the siebel.srf file when configuring an assignment object. For more information on when to recompile, see Table 20 on page 125 and *Using Siebel Tools*.

Configuring Assignment Objects for Dynamic Candidates

The Dynamic Candidate object records contain the definition of the various dynamic candidate teams for each assignment object. The properties define the table and column names used when performing a join from the assignment object primary table to the team table to retrieve the dynamic candidates. There are two types of dynamic candidates—single-owner or multiple-owner.

Table 12 provides descriptions of some of the Dynamic Candidate object properties.

Table 12. Dynamic Candidate Object Properties

Property	Description
Attribute Id Column	The name of the column in the assignment object primary table (single owner) or the attribute table (multiple owner) that contains the foreign key to the attribute.
Attribute Table	In the case of a multiple-owner relationship, the name of the intersection table between the assignment object primary table and the attribute. If single owner, leave this blank.

Table 12. Dynamic Candidate Object Properties

Property	Description
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. 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.
Name	The name of the team. For example, Activity Asset Team.
Object Id Column	In the case of a multiple-owner relationship, the name of the column in the attribute table (multiple owner) which contains the foreign key to the assignment object primary table. If single owner, leave this blank.
Score Column	(Optional) The column in the team table containing scores of the candidates. If specified, the score of each candidate is written to this column.
Team Table	The name of the table where the candidates are stored.
Team Table Attribute Id Column	The name of the column in the team table that contains the attribute Id, which 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.

Use the following procedure to view or configure dynamic candidate properties.

To view or configure dynamic candidate properties

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 view or 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. In the Object Explorer, expand Assignment Object, and then select Dynamic Candidate.

   The dynamic candidate teams for this assignment object appear in the Dynamic Candidates list in alphabetical order.

For more information about dynamic candidates, see "Dynamic Candidates" on page 47. For more information about single owner versus multiple owner, see "About Single- Versus Multiple-Owner Dynamic Candidate Types" on page 48. For more information about Siebel Tools, see *Using Siebel Tools* and *Configuring Siebel eBusiness Applications*.

Configuring Assignment Objects for Dynamic Candidate Attributes

To map columns in the team table to team-based assignment criteria, you configure records in the Dynamic Candidate Attribute object. You specify the column name in the team table and the assignment criterion that is based on this column. Table 13 provides descriptions of some of the Dynamic Candidate Attribute object properties.

Table 13. Dynamic Candidate Attribute Object Properties

Property	Description
Assignment Criterion	A picklist for the various team-based criteria that you defined (assignment criteria that have the Team flag checked).
Team Attribute Column	The name of the column in the team table on which the assignment criterion is based.

Use the following procedure to view or configure dynamic candidate attribute object properties.

To view or configure dynamic candidate attribute object properties

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 view or 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. In the Object Explorer, expand Assignment Object, next expand Dynamic Candidate, and then select Dynamic Candidate Attribute.

   The team-based criteria for the selected dynamic candidate team appears in the Dynamic Candidate Attributes list.

Configuring Assignment Object User Properties

Assignment object user properties allow you to optionally specify additional run-time characteristics for each assignment object. Each assignment object uses its own set of run-time properties.

You need to configure the assignment object user properties for:

- Copying additional columns to the team table

  The PositionTeamDenormN user property (where N is any number) is used to copy additional columns from the S_ASGN_GRP_POSTN assignment rule position candidate table to the team table.

  For more information about copying additional columns to the team table, see "Configuring Assignment Objects to Copy Additional Columns to the Team Table" on page 203.

- Configuring availability-based assignment

  Using Siebel Tools, you can configure the values of the Activity Type, Activity Priority, and Breakable Flag properties to come from either the object row itself or through constants.

  Table 14 lists the assignment object user properties for configuring availability-based assignment.

Table 14. Assignment Object User Properties

User Property[1]	Description
Breakable Flag Column	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. For example, you can create a user property for the Activity assignment object with name=Breakable Flag Column and value=ALLOW_BREAK_FLG.
Breakable Flag Value	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.
Activity Priority Column	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. For example, you can create a user property for the Activity assignment object, with name=Activity Priority Column and value=ALLOW_BREAK_FLG.

Table 14. Assignment Object User Properties

User Property[1]	Description
Activity Priority Value	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.
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.

1. 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.

For more information using Siebel Tools and configuration, see *Using Siebel Tools* and *Configuring Siebel eBusiness Applications*.

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. For example, you would choose the Assign option from the Menu button in the All Service Requests view (Navigate > Site Map > Service > Service Requests > Service Requests List, then choose All Service Requests from the view drop-down list).

When the user clicks 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. The user then selects an employee from the list to be 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. You can use Siebel Tools to configure Interactive Assignment for other assignment objects. For more information on Interactive Assignment, see "About Interactive Assignment" on page 44.

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.
   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 Optionally, 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.

   NOTE: This business component already exists, and is either: 1) 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), or 2) Assignment Results (Organizations) if Assignment Type is set to Organizations.

   a In the Object Explorer, select Business Object.

   b In the Business Objects window, select the Business Object for which you want to add a child business object component.

   c In the Object Explorer, click Business Objects Components, and in the Business Objects Components window, choose Edit > New Record.

   d 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).

8 Optionally, the business component user property called Assignment Results BusComp and the applet user property called Assignment Results Applet can be defined.

   NOTE: 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.

9 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.

10 Update your deployment with the new configurations.

For instructions, see Step 1 on page 125 in the "To update your deployment with new configurations" procedure.

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 Table 20 on page 125 and *Using Siebel Tools*.

Configuring Interactive Assignment for an Assignment Object Using Server Key Mappings

In the default configuration, interactive assignment submits requests to an assignment server that is running in default mode. However, you can customize interactive assignment to use the server key mappings feature.

If you use server key mappings, 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.

For more information about default mode, see "About Different Modes of Running Assignment Manager" on page 22. For more information about scripting, see *Object Types Reference*. For more information about workflow processes, see *Siebel Business Process Designer Administration Guide*.

Configuring Assignment Objects for Availability-Based Assignment

Configuring assignment objects for availability-based assignment allows Assignment Manager to 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. For more information on availability-based assignment, see "About Availability-Based Assignment" on page 42 and "Assigning Employees to Assignment Rules Based on Availability" on page 149.

Before configuring the assignment object, make sure the following information is satisfied:

- The Field Service component group is enabled.

  For more information, see *Siebel System Administration Guide*.

- A mapping of the server to the Field Service components and region exists.

  For more information, see *Siebel Field Service Guide*.

- Employees are associated with service regions.

  For more information, see *Siebel Field Service Guide*.

- The object that you are configuring for assignment availability has the necessary columns in its database table (information and procedure follow).

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 field is desired. All other assignment objects must have their base tables extended. To extend an object's base table for availability-based assignment, use the following procedure. As an example, the Service Request Assignment object is considered.

CAUTION: You must review the sections on extension tables and columns in *Configuring Siebel eBusiness Applications* before completing this procedure.

To extend the Service Request'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 S_SRV_REQ table.
4. With the S_SRV_REQ table selected, choose Tools > Lock Project to lock the project.

   The project associated with the S_SRV_REQ table is newtable.

5. In the Columns list, choose Edit > Add New Record to add the records in the following table (only Record 1 and 2 are required):

	Record 1	Record 2	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 S_SRV_REQ table is now extended with the following three columns: X_DURN_MIN, X_EARLY_START_TIME, and X_START_TIME.

With the appropriate columns in place, use the following procedure to configure availability criteria for the assignment object.

To configure Availability-based Assignment for an assignment object

1 Start Siebel Tools.

2 Lock the assignment object's project.

a In the Object Explorer, click the Types tab, and then select Project.

b In the Projects window, select the appropriate project.

c Check the Locked field.

3 In the Object Explorer, expand Workflow Policy Object and select the assignment object.

4 In the Assignment Objects list, select the object you want to configure, and set the column values, as shown in the following table:

Column	Required	Value
Calendar Start Time Column	Yes	The table column that references the start time of the object. For example, X_START_TIME.
Calendar Duration Column	Yes	The table column that references the duration of the object. For example, X_DURATION.
Calendar Early Start Time Column	No	The table column that references the early start time of the object. For example, X_EARLY_START_TIME.
Calendar Create Activity	No	Check this column if you want an activity created for the assigned employee. TRUE = Activity *is* created in employee's calendar FALSE =Activity *is not* created in employee's calendar Note: You must check this field 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 42 in this guide and *Siebel Field Service Guide*.
Calendar Activity Additional Fields	No	When this field 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.

NOTE: The fields in the preceding table are specified as one value string for that property.

If a value is not specified for the field specified in the Calendar Start Time Column column for an assignment object, Assignment Manager does not check calendars when assigning that object, 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. 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.

After these fields 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 these procedures, see *Using Siebel Tools*.

You can now configure the following user property values to come from either the object row itself or through constants:

- Activity Type

- Activity Priority
- Breakable Flag

For more information about assignment user properties, see "Configuring Assignment Object User Properties" on page 96.

About Creation of 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.

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 and the employee schedule is blocked. 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.

For more information about activity- and availability-based assignment, see "About Activity-Based Assignment" on page 42 and "About Availability-Based Assignment" on page 42.

Configuring Assignment Objects for Multitiered Assignment

Configuring assignment objects for multitiered assignment allows Assignment Manager to consider the relationship between people and organizations when determining the proper assignment. By default, Assignment Manager assigns people and organizations independently. Multitiered assignment runs in a variety of modes. For more information on multitiered assignment and the assignment modes, see "About Multitiered Assignment" on page 43 and "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 66.

To configure an assignment object for multitiered assignment

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.

c Check the Locked field.

3 In the Object Explorer, expand Workflow Policy Object and select the assignment object.

4 For the assignment object, change the Assignment Mode field to the multitiered assignment mode operation of interest.

Choices are:

- Independent
- Org & Person-oriented
- Organization-oriented
- Person-oriented

Configuring Assignment Objects for Team Scoring

Configuring Team Scoring allows 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. See "About Assignment Scoring" on page 39 for more information.

Before configuring the assignment object, make sure the object has the necessary columns in its database table. To extend an object's database table for team scoring use the following procedure. As an example, the Opportunity object is considered.

CAUTION: You must review the sections on extension tables and columns in *Configuring Siebel eBusiness Applications* before completing this procedure.

To extend the Opportunity object's base table for team scoring

1 Start Siebel Tools.

2 Lock the assignment object's project.

a In the Object Explorer, click the Types tab, and then select Project.

b In the Projects window, select the appropriate project.

c Check the Locked field.

3 In the Object Explorer, expand the Table object and select Column.

4 In the Tables list, query for the S_OPTY table.

5 In the Columns window, add the records shown in the following table (the values and records shown are examples and can be modified, as appropriate, for your deployment):

	Record 1	Record 2
Name	X_POS_SCORE	X_ORG_SCORE
Physical Type	Data(Public)	Data(Public)
Length	22	22
Precision	22	22
Scale	7	7
Cascade Mode	Ignore	Ignore
TxnLog Code	TRUE	TRUE

6 Select each new record and click the Apply button.

7 Enter the appropriate value for tableowner password.

The S_OPTY table is now extended with the following columns: X_POS_SCORE and X_ORG_SCORE.

After the necessary base table columns are in place, use the following procedure to configure the assignment object for team scoring.

To configure assignment objects for team scoring

1 Start Siebel Tools.

2 Lock the assignment object's project.

   a In the Object Explorer, click the Types tab, and then select Project.

   b In the Projects window, select the appropriate project.

   c Check the Locked field.

3 In the Object Explorer, expand Workflow Policy Object and select Assignment Object.

4 In the Workflow Policy Objects list, select the object you want to configure.

5 In the Assignment Objects list, select the object, and set one of the column values as shown in the following table:

Column	Value
Employee Team Score	The table column that references a Number column in the assignment object's employee team table.
Org Team Score	The table column that references a Number column in the assignment object's organization team table.
Position Team Score	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 eBusiness Applications*.

Assignment Criteria Configuration

You can add new assignment attributes and assignment criteria using Siebel Tools.

An *assignment attribute* allows you to associate a single attribute on an object or a person or an org 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.

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).

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, see *Siebel Business Process Designer Administration Guide*.

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.

When you create new assignment criteria, you typically perform the following procedures (in the order listed):

- Create new assignment attributes
- Create new assignment attribute columns to map new assignment attributes to existing assignment objects
- Create new assignment criteria to group new assignment attributes

- Create assignment criteria attributes to enumerate assignment attributes for the assignment criteria

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

To eliminate default assignment criteria appearing in the Assignment Criteria view, use the following procedure.

To remove seed assignment criteria

1. Delete from any assignment rules the use of the criteria you want removed from the assignment criteria (Assignment Rules > Criteria).
2. In Siebel Tools, inactivate the assignment attribute column, the assignment attribute, the assignment criteria attribute, and the assignment criteria.

   For more information, see "Disabling an Assignment Attribute" on page 117.
3. Recompile all projects (not just the locked projects) in the .srf file.

   For instructions, see Step 1 on page 125 of the "To update your deployment with new configurations" procedure.

Configuring Assignment Attributes

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 Assignment Criteria view when you are entering an attribute in a value record, as shown in Figure 15.

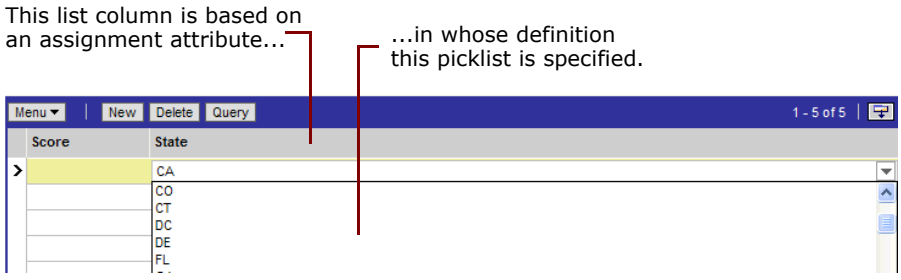


Figure 15. Picklist for Populating an Attribute in a Value Record

An assignment criteria attribute object definition implements each list column in the Values applet, as described in "Configuring Assignment Criteria Attributes" on page 115. 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 14 on page 90.

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/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 ten 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 Configuring Assignment Attribute Columns on page 111.

To create a new assignment attribute

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. In the Object Explorer, select the Assignment Attribute object, and then choose Edit > New Record.

   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).
4. In the Assignment Attributes window, 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. Optionally, 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. Optionally, 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 Optionally, you can use a pick 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 15 on page 110.

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

For instructions on updating your deployment with the new configurations, see "Server Administration After Configuring Assignment Manager" on page 125.

Table 15 shows some of the properties of the Assignment Attribute object type.

Table 15. Properties of Assignment Attributes

Property	Required	Description
Bounded	Optional	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	Required	Data type for the assignment attribute. Number, UtcDateTime, and Varchar are supported.
Name	Required	Name of the assignment attribute. Must be unique within the repository.
Order By LOV Type	Optional	Not used.
Pick Field	Optional	Name of the field to select from the picklist.
Pick List	Optional	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.
Use Range	Optional	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	Optional	When checked, enables MLOV capability for the attribute. For more information on enabling this feature, see "Configuring MLOV for Assignment Attributes" on page 110.

Configuring MLOV for Assignment Attributes

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. For detailed information on MLOV, see *Configuring Siebel eBusiness Applications*. To enable assignment attributes for MLOV, use the following procedure.

To enable assignment attributes for MLOV

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. In the Object Explorer, select the Assignment Attribute object.
4. Select the Assignment Attribute in the list of attributes that requires translation.
5. Locate the Translate column for this attribute, and select the check box to assign this property with a TRUE value.
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).

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

Configuring Assignment Attribute Columns

An assignment attribute column object definition maps an assignment attribute to an assignment object and a workflow policy component column, as shown in Figure 14 on page 90. 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.

To map assignment attributes to an existing assignment object

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. In the Object Explorer, expand the Assignment Attribute object, and select the Assignment Attribute Column object.
4. In the Assignment Attributes window, select the assignment attribute for which you want to map the logical location in the database schema.

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 16 on page 112.

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

   For instructions on updating your deployment with the new configurations, see "Server Administration After Configuring Assignment Manager" on page 125.

Table 16 shows some of the properties of the Assignment Attribute Column object type.

Table 16. Properties of Assignment Attribute Columns

Property	Required	Description
Assignment Object	Required	Assignment object that is checked for a value match with the parent assignment attribute.
Name	Required	Name of the assignment attribute column. The typical format for the name is: *assignment_object*: *workflow_component_column* For example: `Service Request: Account Area Code`
Sequence	Required	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	Required	Name of the workflow policy component, within the specified workflow policy object, with which this assignment attribute column is associated.

Table 16. Properties of Assignment Attribute Columns

Property	Required	Description
Workflow Policy Component Column	Required	Name of the workflow policy component column, within the specified workflow policy component, with which this assignment attribute column is associated.
Workflow Policy Object	Required	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.

Configuring Assignment Criteria

An assignment criteria object definition defines an object, called an *assignment criteria*, that can be used in assignment criteria records. Assignment criteria appear in the picklist in the Criteria list column when editing an assignment criteria record in Siebel applications.

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, 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.

NOTE: The business component that holds assignment criteria is called *Assignment Rule*. The business component that holds assignment rules is called *Assignment Group*.

An assignment criteria includes one or more assignment criteria attributes, stored as child assignment criteria attribute object definitions. For information on assignment criteria attributes, see "Configuring Assignment Criteria Attributes" on page 115.

After you create and recompile an assignment criteria object definition, it becomes available for selection from the Criteria list column picklist in assignment criteria records.

To create assignment criteria

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. In the Object Explorer, select the Assignment Criteria object, then choose Edit > New Record.
4. Configure the assignment criteria by setting 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 Optionally, if you want the assignment criteria stored in the skill table, check the Employee Skill field.

   For information about skill tables, see "Creating Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 139.

e Optionally, 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 Optionally, 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 "About Assignment Rules" on page 19.

For descriptions of these properties, see Table 17 on page 114.

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

   For instructions on updating your deployment with the new configurations, see "Server Administration After Configuring Assignment Manager" on page 125.

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 17 shows some of the properties of the assignment criteria object type.

Table 17. Properties of Assignment Criteria

Property	Required	Description
Display Flag	Optional	When checked, the assignment criteria appears in the Criteria picklist.
Display Name	Optional	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	Optional	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 "Example of Using Skill Tables" on page 120.

Table 17. Properties of Assignment Criteria

Property	Required	Description
Name	Required	Name of the assignment criteria.
Use Expertise	Optional	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.

Configuring Assignment Criteria Attributes

An assignment criteria includes one or more assignment criteria attributes. Assignment criteria attributes are implemented as object definitions of the assignment criteria attribute object type. This is a child object type of assignment criteria. Assignment criteria attributes make it possible for an assignment criteria to consist of multiple attributes, known as composite criteria.

For example, the Account Wildcard assignment criteria includes an Account and Site, both of which correspond to a specific column. This setup is accomplished by creating two assignment criteria attribute children, Account and Site, of the Account Wildcard assignment criteria.

NOTE: Many assignment criteria have only a single assignment criteria attribute.

The set of assignment criteria attributes in an assignment criteria determines the set of list columns to appear in the Values list.

One list column appears in the Values list for each assignment criteria attribute in the assignment criteria. The Account Wildcard assignment criteria (the Account Name assignment criteria with a display name of Account Wildcard) has an Account and a Site list column in the display of its child Value records. Both the Account and Site list columns correspond to the Account Name assignment criteria attribute (with a display name of Account and Site, respectively). Figure 16 shows how this is accomplished in Siebel Tools.

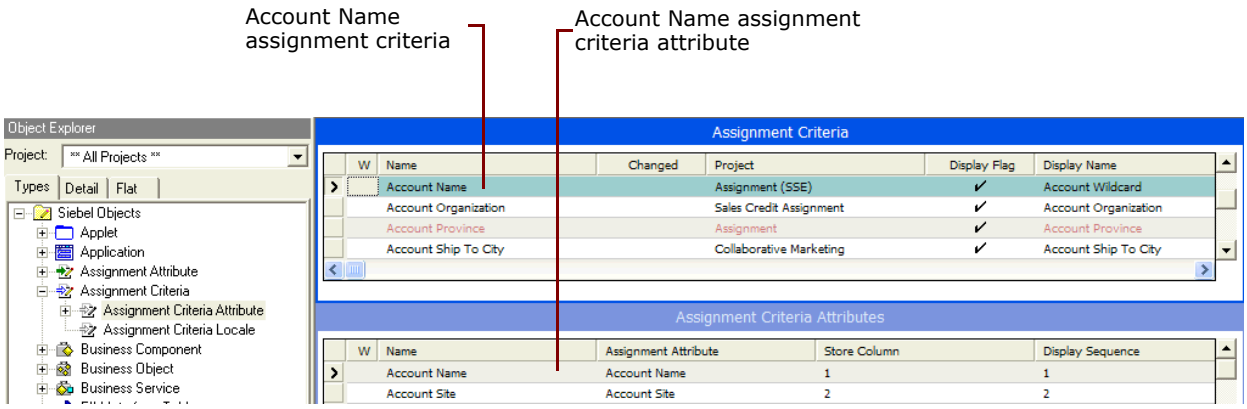


Figure 16. Assignment Criteria and Child Assignment Criteria Attribute

If there were more assignment criteria attributes for this assignment criteria, 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.

For information on configuring assignment attributes, see "Configuring Assignment Attributes" on page 108.

To create an assignment criteria attribute

1. Start Siebel Tools.
2. Lock the assignment object's project.
   a. In the Object Explorer, click the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.
   c. Check the Locked field.
3. In the Object Explorer, expand the Assignment Criteria object, and select the Assignment Criteria Attribute object.
4. In the Assignment Criteria window, select the assignment criteria for which you want to enumerate assignment attributes.
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. Optionally, 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 18 on page 117.
7. Update the siebel.srf file.

   For instructions on updating the siebel.srf file, see Step 1 on page 125 of the "To update your deployment with new configurations" procedure.
8. Run various server administration tasks.

   For instructions, see Step 2 and Step 3 of the "To update your deployment with new configurations" procedure.

Table 18 shows some of the properties of the assignment criteria attribute object type.

Table 18. Properties of Assignment Criteria Attributes

Property	Required	Description
Assignment Attribute	Required	Name of the assignment attribute that this assignment criteria attribute is based on. Selected from a drop-down list.
Display Name	Required	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	Required	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.
Name	Required	Name of the assignment criteria attribute, for identification. This name must be unique within the parent assignment criteria.
Pick Applet	Optional	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	Required	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).

Disabling an Assignment Attribute

In some cases, you may need to disable an existing assignment attribute. To do so, you must also disable the assignment attribute column, assignment criteria, and assignment criteria attribute definitions.

To disable an existing assignment attribute

1 Start Siebel Tools.

2 Lock the assignment object's project.

   a In the Object Explorer, click the Types tab, and then select Project.

   b In the Projects window, select the appropriate project.

   c Check the Locked field.

3 Disable the assignment attribute definition.

   a In the Object Explorer, select the Assignment Attribute object.

   b In the Assignment Attributes window, select the assignment attribute you want to disable.

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

   For instructions on updating your deployment with the new configurations, see "Server Administration After Configuring Assignment Manager" on page 125.

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.

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 create.

The predefined skills are:

- Activity Category
- Email Language Code
- Email Recipient Profile
- Industry
- Language
- Product
- Product Line
- Product Line Wildcard
- Product Wildcard
- Revenue

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.

   For more information, see "To create a new assignment attribute" on page 109.

2. Create an assignment criterion.

   For more information, see "To create assignment criteria" on page 113. When prompted in Step 4 of this procedure, 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 above as a child object to the Assignment Criterion created in Step 2 above.

For more information, see "To create an assignment criteria attribute" on page 116. When prompted in Step 6 of the "To create an assignment criteria attribute" procedure, select the assignment attribute created in Step 1 above.

NOTE: To use Assignment Manager to use a skill for the purpose of assignment, additional configuration is required. For more information, see "Assignment Criteria Configuration" on page 107.

Example of Using Skill Tables

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.

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. And there are 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 "Assignment Strategy for Sales Organizations" on page 61.

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 "Creating Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 139.
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 above 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 "About Assignment Criteria and Criteria Methods" on page 27.

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, see "Assignment Operation Modes" on page 44, "Expertise Codes" on page 37, and "Weighting Factors" on page 38.

Creating Workflow Policy Components

In some cases, you can create an assignment rule that assigns candidates to two 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 configure and expose the Opportunity Lead Quality column to the Account assignment object.

NOTE: The triggers for dynamic assignment are based on the workflow policy components and workflow policy component columns. For more information about triggers, see "Generating Triggers for Dynamic Assignment" on page 176.

The following procedure explains how to create assignment rules that assign two objects using only one object criteria.

NOTE: Assignment based on calculated fields is not possible. A calculated field does not have a corresponding database table field, which is a key requirement for the definition of an assignment criterion. 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.

To create an assignment rule that assigns two objects using only one object criteria

1. Create a workflow policy component for both objects.

   For procedures using a specific example, see "Phase 1: Creating a Workflow Policy Component for Both Objects" on page 122.

2. Map the workflow policy component to the assignment criteria.

   For procedures using a specific example, see "Phase 2: Mapping a Column to the Workflow Policy Component" on page 123.

3. Map the workflow policy component to the assignment attribute.

   For procedures using a specific example, see "Phase 3: Mapping the Workflow Policy Component to the Assignment Attribute" on page 123.

4. Define an assignment rule for two objects using one assignment (object) criteria.

   For procedures, see "Creating Assignment Rules to Assign Two Objects" on page 194.

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

Example of Creating a Workflow Policy Component

This section explains how to create a workflow policy component based on a specific scenario of creating an assignment rule that assigns candidates to two objects (Account and Opportunity) using only one of the object's criteria (Opportunity Lead Quality). The example for accomplishing this is divided into four phases; perform each phase and the steps within each phase in the order provided.

■ "Phase 1: Creating a Workflow Policy Component for Both Objects" on page 122

- "Phase 2: Mapping a Column to the Workflow Policy Component" on page 123
- "Phase 3: Mapping the Workflow Policy Component to the Assignment Attribute" on page 123
- "Phase 4: Administration Tasks After Configuration" on page 124

Phase 1: Creating a Workflow Policy Component for Both Objects

In this first phase, you create a workflow policy component for both objects.

To create a workflow policy component

1. Start Siebel Tools.
2. Lock the project.
   a. In the Object Explorer, select the Types tab, and then select Project.
   b. In the Projects window, select the appropriate project.

      For this example, select Assignment (SSE).
   c. Check the Locked field.
3. 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.
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.

Phase 2: 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. 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.

Phase 3: 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. In this example, you map the Account/Opportunity 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 using the following steps:
   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 "Server Administration After Configuring Assignment Manager" on page 125.

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 Table 20 on page 125.

Phase 4: Administration Tasks After Configuration

After the workflow policy component is mapped to the assignment attribute, the siebel.srf file must be updated and various server administration tasks run. To make sure your configurations are recognized, complete steps in "To update your deployment with new configurations" on page 125.

Workflow Policy Components Inactivated by Default

The Workflow Policy Components, shown in Table 19 for the Opportunity Workflow Policy Object, are inactivate by default for Assignment Manager.

Table 19. 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.*

Server Administration After Configuring Assignment Manager

After configuring Assignment Manager objects and attributes, it is often necessary to recompile the .srf file and restart various server components and tasks. Table 20 summarizes the required administration tasks based on the type of configuration process.

CAUTION: 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 20. Summarization of Server Administration After Configuring Assignment Manager

Configuration Process	Compile .srf File	Restart Assignment Manager	Regenerate Triggers	Restart Workflow Monitor Agent (for dynamic assignment)
Add, inactivate, or delete assignment objects	Yes	Yes	Yes	Yes
Configure assignment objects	No	Yes	Yes	Yes
Add, configure, inactivate, or delete assignment attributes	Yes	Yes	Yes	Yes
Configure assignment attribute columns	No	Yes	Yes	Yes
Add, configure, inactivate, or delete assignment criteria	Yes	Yes	Yes	Yes
Add, configure, inactivate, or delete assignment criteria attributes	Yes	Yes	Yes	Yes

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.

NOTE: Some steps may not be required for your particular deployment. See Table 20 on page 125 and the particular procedure for the necessary steps.

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 20 on page 125 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 154.

d Restart the Workflow Monitor Agent server component.

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

3 If your 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*.

NOTE: 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.

5 Assignment Rule Administration

This chapter explains how to migrate, define, and release assignment rules in the Siebel client using the various assignment manager components and features. It covers the following topics:

- "Migrating Assignment Rules" on page 127
- "Process of Defining Assignment Rules" on page 127
- "Releasing Assignment Rules" on page 154

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.

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.

For more information about migration, see *Siebel Enterprise Integration Manager Administration Guide* and *Going Live with Siebel eBusiness Applications*.

Process of Defining Assignment Rules

To define assignment rules, you need to perform the following tasks in the Siebel client:

1. "Creating Assignment Rule Groups" on page 128
2. "Creating Assignment Rules" on page 130
3. "Defining Server Key Maps" on page 133
4. "Defining Assignment Rule Sequences" on page 133
5. "Creating Assignment Criteria" on page 134
6. "Creating Assignment Criteria Values" on page 137 (optional when using the Compare Object to Person comparison method)
7. "Creating Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 139 (optional; use only when configuring an object to use skills)
8. "Defining Assignment Workload" on page 142
9. "Adding Employees, Positions, and Organizations to Assignment Rules" on page 147

10 "Assigning Skills to Employees, Positions, and Organizations" on page 153 (optional; only when configuring an object to use skills)

After you define your assignment rules, you must release them to instruct Assignment Manager to use these rules. For more information about releasing rules, see "Releasing Assignment Rules" on page 154.

These 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 defining new assignment rules. For additional tasks required for delegated assignment administration, see "Assignment Rule Administration for Delegated Assignment" on page 155.

NOTE: The procedures in this chapter are written for the Administration - Assignment screen and views unless noted otherwise.

Several other server processes, not fully documented in this guide, play an integral role in Assignment Manager functionality. The Siebel system administration documentation, especially *Siebel Business Process Designer Administration Guide*, and *Siebel System Administration Guide* should be used as additional references when using Assignment Manager with these processes. For application development, see *Using Siebel Tools* and *Configuring Siebel eBusiness Applications*.

Creating Assignment Rule Groups

Before defining assignment rules based on your particular business needs, you need to 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.

Another factor you should consider when deciding to create rule groups is whether or not you need rule group hierarchies. Use rule group hierarchies if you plan to use delegated assignment.

Alternatively, you do not need to create rule groups if you want all rules processed every time you run Assignment Manager. In this case, you use the Default Rule Group that is provided as part of the Assignment Manager seed data.

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 127.

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 for the new rule group.

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

Table 21 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 21. Assignment Rule Group Fields

Field	Description
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:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Expiration	End date of the assignment rule group. 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. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Key Based	Indicates the rule group is intended for key-based routing and usually has a corresponding server key mapping. 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. 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. For more information about key-based routing and server key maps, see "About Server Key Maps" on page 23.
Name	Name of the assignment rule group.
Organization	The organization in which this rule group belongs.
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.

Table 21. Assignment Rule Group Fields

Field	Description
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, see "Owners and Designees" on page 52.
Parent Rule Group	A rule group that appears directly above another rule group in the hierarchy.

For more information about rule groups and the Default Rule Group, see "About Assignment Rule Groups" on page 22. If you plan to use delegated assignment, see also "Creating Child Assignment Rule Groups" on page 157.

Creating Assignment Rules

This topic explains how to create assignment rules. For more information on assignment rules, see "About Assignment Rules" on page 19.

This task is a step in "Process of Defining Assignment Rules" on page 127.

To create an assignment rule

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Rules List.
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 22 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 22. Assignment Rule Fields

Field	Description
Activation	Start date of the assignment rule. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Assignee Filter	Filters used by Assignment Manager to determine which potential assignees are assigned. Choices for assignee filters are: ■ All, Above Minimum ■ All, Must Assign ■ One, Best Fit ■ One, Random Defaults to All, Above Minimum when creating new assignment rules. For more information about how filters are used by Assignment Manager to determine which potential assignees are assigned to an object from each assignment rule, see "Assignee Filter Field" on page 20.
Candidate Passing Score	Minimum score required for candidates to qualify for this assignment rule. Defaults to 0 (zero) when creating new assignment rules.
Check Employee Calendar	If selected, activates Assignment Manager to check employees' calendars when determining assignment eligibility. Used only for employee-based objects. For more information about this feature, see "Check Employee Calendar Field" on page 21.
Exclusive	If selected, candidates for this assignment rule supersede candidates that qualify for any other nonexclusive assignment rules. For more information on the exclusive feature, see "Exclusive Field" on page 21.
Expiration	End date of the assignment rule. Note: If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Name	Name of the assignment rule.

Table 22. Assignment Rule Fields

Field	Description
Objects to be Assigned	One or more assignment objects applied to this rule.
Person Candidates Source	Determines whether the person candidates for this rule are specified on the rule (statically) or come dynamically from the object row. The choices are From Rule, All People, and the list of other dynamic person candidate team records you defined in the Dynamic Candidate object using Siebel Tools. For more information about this field, see "Candidates Source Field" on page 20. For more information about dynamic candidates, see "About Assignment Rules" on page 19.
Organization Candidates Source	Determines whether the organization candidates for this rule are specified on the rule (statically) or come dynamically from the object row. The choices are From Rule, All Organizations, and the list of other dynamic candidate team records you defined in the Dynamic Candidate object using Siebel Tools. For more information about this field, see "Candidates Source Field" on page 20. For more information about dynamic candidates, see "About Assignment Rules" on page 19.
Primary Employee	Primary employee for this assignment rule. Typically used for service-related assignments. Applicable only if this employee is included for the assignment rule. 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 ignored.
Primary Organization	Primary organization for this assignment rule. Applicable only if this organization is included for the assignment rule. 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 ignored.
Primary Position	Primary position for this assignment rule. Typically used for sales-related assignments. Applicable only if this position is included for the assignment rule. 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 ignored.
Rule Group	Assignment rule groups applied to this rule. Each rule must be associated to an assignment rule group. For more information, see "About Assignment Rule Groups" on page 22.
Score	Score given to candidates who qualify for this assignment rule
Sequence	Sequence number for this rule. By default, assignment rules do not have a sequence number—one must be assigned by the administrator. For more information, see "About Assignment Rule Sequencing" on page 26.

For more information about the assignment rules, see "About Assignment Rules" on page 19.

Defining Server Key Maps

This topic explains how to define server key maps.

This task is a step in "Process of Defining Assignment Rules" on page 127.

To define a server key map

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Server Key Mappings.
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 23 shows the predefined fields.

Table 23. 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. For more information, see "About Assignment Rule Groups" on page 22.
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 *Siebel System Administration Guide*.

For more information about server key mapping, see "About Server Key Maps" on page 23. For more information about running Assignment Manager using server key maps, see "Running Assignment Manager in Interactive Mode" on page 171.

Defining Assignment Rule Sequences

This topic explains how to define sequences for assignment rules.

This task is a step in "Process of Defining Assignment Rules" on page 127.

To define a sequence for an assignment rule

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Rules List.

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.

For more information about assignment rule sequences, see "About Assignment Rule Sequencing" on page 26.

Creating Assignment Criteria

This topic explains how to create assignment criteria for assignment rules.

This task is a step in "Process of Defining Assignment Rules" on page 127.

NOTE: 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 create an assignment criterion

1 From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Rules List.

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 24 shows the predefined fields.

Table 24. Assignment Criteria Predefined Fields

Field	Description	Example
Comparison Method	Methods used by Assignment Manager to determine how objects and candidates are matched. For explanations of each method, see Table 6 on page 28.	Compare to Object
DA Read Only	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. For example, if an 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. **NOTE:** This field appears only in the Administration - Assignment screen (does not appear in the delegated assignment views). Criteria with this flag set to TRUE remain editable in the assignment administration views.	
Inclusion	Methods used by Assignment Manager to determine how criteria values and candidates are matched. Choices are: Include, Include All Matching, Include All, and Exclude. For more information on inclusion methods, see Table 7 on page 30.	Include
Inherited	If selected, indicates the criterion was inherited from a parent rule. This is a read-only field. **NOTE:** This field appears only in the Administration - Assignment screen (does not appear in the delegated assignment views).	
Minimum Score	Minimum score required to qualify for this criterion. 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. For more information about inclusion methods, see "Assignment Criteria Inclusion Methods" on page 29.	

Table 24. Assignment Criteria Predefined Fields

Field	Description	Example
Read Only	Indicates the criterion is read-only. **TIP:** If either the DA Read Only flag or the Inherited flag for a criterion is true in the assignment administration view, the Read Only flag is true in the delegated assignment views. **NOTE:** This field appears only in the Administration - Delegated Assignment views. (It does not appear in the Administration - Assignment views).	
Required	Determines whether the criteria is required. Choices are: Always, Never, and When Available. For more information, see "About the Required Attribute for Assignment Criteria" on page 32.	Always
Rule Criterion	The assignment criterion you create.	Product Defect Priority
Score	Score for this criteria. Candidates that satisfy this criteria have this score added to their total score.	
Template	If selected, Assignment Manager ignores the criterion when processing rules. **NOTE:** Assignment Manager does not process templated criteria until an inheritor chooses to apply a template to an assignment rule. For more information about applying templated criteria, see "Applying Templated Criteria to Inherited Assignment Rules" on page 160. **TIP:** When a rule with a templated criterion 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.	

Figure 17 shows an example of creating assignment criteria using the values from Table 24. This example creates a required Product Defect Priority assignment criteria for an assignment rule that is compared to service objects.

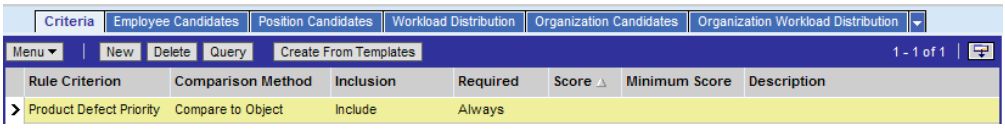


Figure 17. Example of Creating Assignment Criteria

For more information on assignment criteria, see "About Assignment Criteria and Criteria Methods" on page 27.

Creating Assignment Criteria Values

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

This task is a step in "Process of Defining Assignment Rules" on page 127.

NOTE: Only assignment criteria that use the Compare to Object, Compare to Person, or Compare to Organization comparison methods use criteria values.

To create criteria values

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.

Table 25 shows examples of assignment attributes for the assignment criteria created in "Creating Assignment Criteria" on page 134.

NOTE: 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 25. Available Assignment Attributes

Criteria Value	Example
Score	10 5
Product Defect Priority	1—Very High 2—High

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

CAUTION: It is recommended that you 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. And, if you use the Include All or Include All Matching inclusion method, both the scores are added to the passing candidate.

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 18 shows an example of creating Product Defect Priority criteria values using the procedure "To create criteria values" on page 137 and the values in Table 25 on page 138.

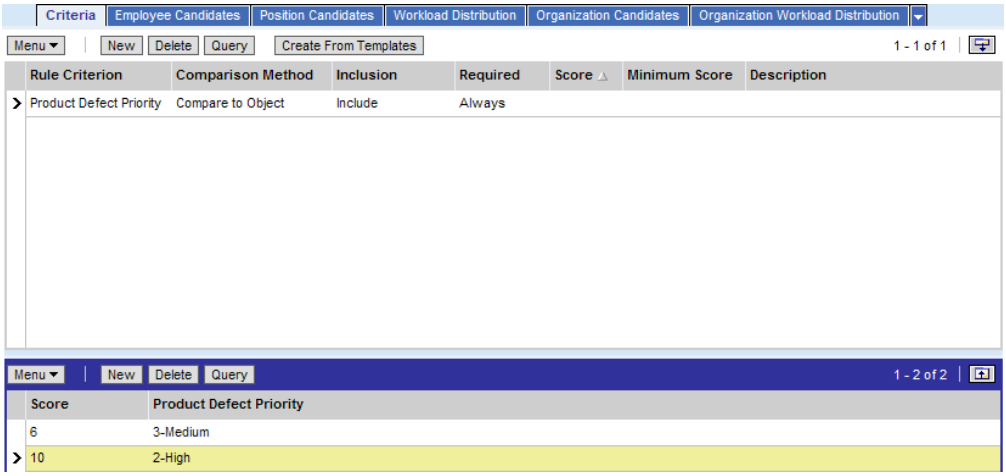


Figure 18. Example of Creating Criteria Values

For more information on criteria values, see "About Assignment Criteria Values" on page 34.

Creating Criteria Values as Skills with Expertise Codes and Weighting Factors

Creating 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 object configured to use skills). Creating skills is similar to creating criteria values. This section explains how to create skills with expertise codes and how to use weighting factors for the skills that you create by describing the following tasks:

- "Creating Expertise Codes" on page 140
- "Defining Weighting Factors" on page 141

These tasks are one step in "Process of Defining Assignment Rules" on page 127.

For more information on creating assignment criteria values, see "Creating Assignment Criteria Values" on page 137.

Figure 19 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 skill with an expertise level of intermediate or better.

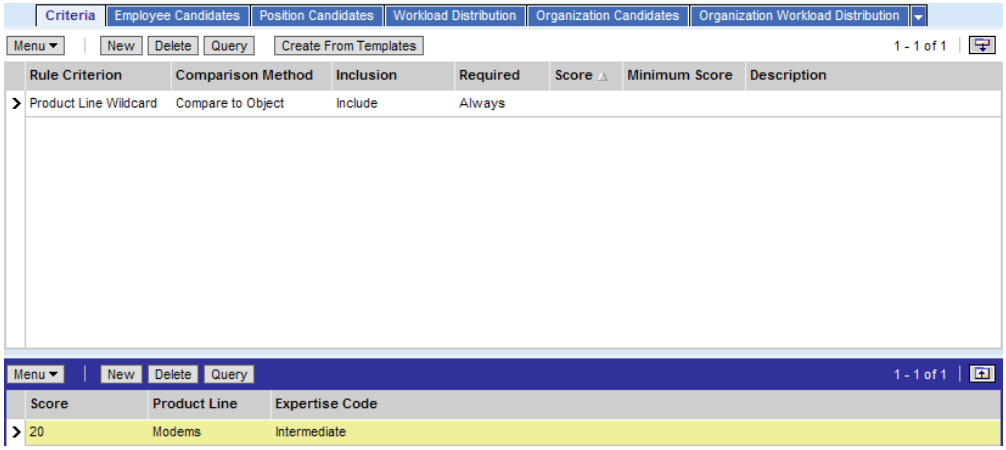


Figure 19. Example of Creating a Skill with an Expertise Code

In this example, only candidates with an intermediate or expert expertise qualify for this skill and receive 20 points.

Creating Expertise Codes

When defining a criteria value as a skill, select the desired expertise code from the Expertise Code field. For more information on skills, see "Assignment Operation Modes" on page 44.

To create expertise codes, use the procedure in this section. For more information on expertise codes, see "Expertise Codes" on page 37.

CAUTION: 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 expertise codes

1. From the application-level menu, choose Navigate > Site Map > Administration - Data> List of Values.
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.

For information on multilingual list of values (MLOV), see *Configuring Siebel eBusiness Applications*.

Figure 20 shows an example of creating a Manager expertise code that is ranked higher than the default expertise codes.

List of Values | Menu | New | Delete | Query | Clear Cache | 1 - 4 of 4

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 20. Example of Creating Expertise Codes

Defining Weighting Factors

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 8 on page 39 and the expertise code defined in Figure 19 on page 140:

- Candidates who possess an intermediate expertise in the modem product skill receive 20 points and qualify for this criterion.
- Candidates who possess an expert expertise receive 10 points and qualify for this criterion.
- Candidates who possess a novice 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 expertise are therefore favored, because they receive a higher score.

This topic explains how to define weighting factors to weigh skill scores.

To define weighting factors

1 From the application-level menu, choose Navigate > Site Map > Administration - Data > List of Values.

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.

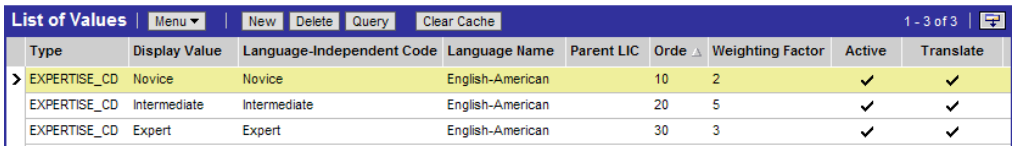
d In the List of Values list, click Go to complete the query.

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.

NOTE: 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 21 shows an example of defining the weighting factors for the default expertise codes using the values listed in Table 8 on page 39.



Type	Display Value	Language-Independent Code	Language Name	Parent LIC	Orde	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 21. Example of Defining Weighting Factors

For more information on weighting factors, see "Weighting Factors" on page 38. For information on assigning skills to employees, positions, and organizations, see "Assigning Skills to Employees, Positions, and Organizations" on page 153.

Defining Assignment Workload

This topic explains how to create workload rules and define workload criteria. For more information on workload criteria, see "About Assignment Workload Criteria" on page 40. Optionally, you can also create workload rules that can be used in workload criteria. After you have created your workload rules (or you can use the predefined workload rules instead), you can define workload criteria in assignment rules for employees, positions, or organizations.

The tasks in this topic are one step in "Process of Defining Assignment Rules" on page 127. You must first create the workload rules and then define workload criteria for employees, positions, and organizations.

To create workload rules

1 From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Workload Distribution Rules.

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.

   The following table shows the predefined workload rules:

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

   NOTE: The workload rule's assignment object must match the assignment rule's assignment object; otherwise, the assignment workload criteria is ignored or a runtime error occurs (dependent on the assignment rule assignment object's Ignore Extra Attributes runtime 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 143.

   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 143.

      NOTE: 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 22 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.

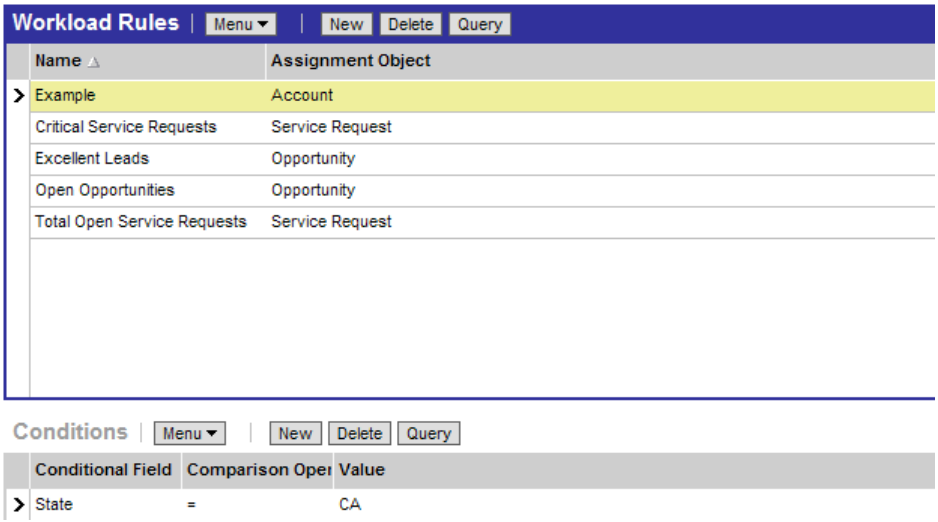


Figure 22. Creating Workload Rules

To define workload criteria for employees and positions

1. Drill down on the assignment rule for which you want to define workload criteria (Navigate > Site Map > 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 26 shows the available predefined fields.

Table 26. Workload Criteria Fields for Employees and Positions

Field	Description	Example
Assignment Object	Type of assignment object related to this workload rule.	Service Request
Maximum Load	The maximum workload allowed for this workload rule. For more information on how this value affects the workload score, see "About Assignment Workload Criteria" on page 40.	2
Required	Determines whether the workload rule is required for the assignment rule. Choices are: Always and Never. For more information, see "About Assignment Criteria and Criteria Methods" on page 27.	
Score	Score to apply for this workload rule. For more information on workload scores, see "About Assignment Workload Criteria" on page 40.	50
Workload Distribution Rule	Name of the workload rule to apply to the assignment rule. The Workload Rule should already be defined as shown in "To create workload rules" on page 142.	Total Open Service Requests

Figure 23 shows an example of defining a workload criteria for employees and positions using values specified in Table 26.

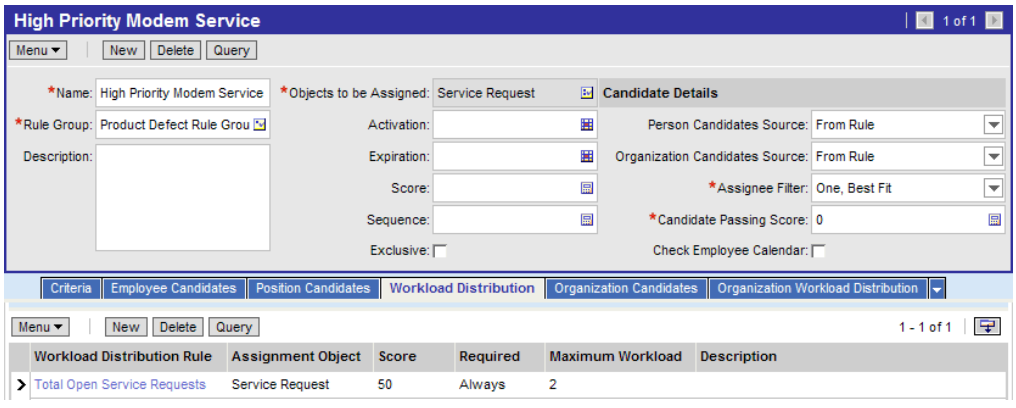


Figure 23. Example of Defining Workload Criteria for Employees and Positions

To define workload criteria for organizations

1. Drill down on the assignment rule for which you want to define workload criteria (Navigate > Site Map > 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 27 shows the available predefined fields.

Table 27. Workload Criteria Fields for Organizations

Field	Description	Example
Assignment Object	Type of assignment object related to this workload rule.	Opportunity
Maximum Load	The maximum workload allowed for this workload rule. For more information on how this value affects the workload score, see "About Assignment Workload Criteria" on page 40.	3
Required	Determines whether the workload rule is required for the assignment rule. Choices are: Always and Never. For more information, see "About Assignment Criteria and Criteria Methods" on page 27.	
Score	Score to apply for this workload rule. For more information on workload scores, see "About Assignment Workload Criteria" on page 40.	10
Workload Distribution Rule	Name of the workload rule to apply to the assignment rule. The workload rule should already be defined as shown in "To create workload rules" on page 142.	Excellent Leads

Figure 24 shows an example of adding a workload criteria for organizations using values specified in Table 27 on page 146.

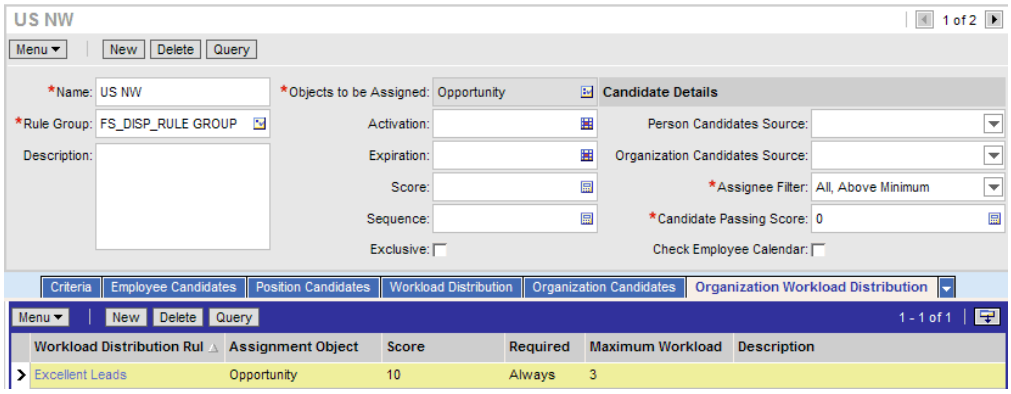


Figure 24. Example of Defining Workload Criteria for Organizations

Adding Employees, Positions, and Organizations to Assignment Rules

This topic provides procedures for adding employees, positions, and organizations to assignment rules as follows:

- "Adding Employees to Assignment Rules"
- "Assigning Employees to Assignment Rules Based on Availability" on page 149
- "Adding Positions to Assignment Rules" on page 150
- "Adding Organizations to Assignment Rules" on page 151

This task is a step in "Process of Defining Assignment Rules" on page 127.

For more information about employees, positions, and organizations, see "About Assignment Candidates" on page 16. For information about assigning skills to employees, positions, and organizations, see "Assignment Strategy for Sales Organizations" on page 61.

Adding Employees to Assignment Rules

This topic explains how to add employees to an assignment rule. Service organizations typically add employees to objects. For more information on employees, see "Employee Candidates" on page 16.

NOTE: Assignment Manager does not prevent you from adding employees to an assignment rule that requires position assignment. Before adding employees, make sure that the objects for the assignment rule allow employee assignment.

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.

   TIP: To select multiple employees, hold down the CTRL key while selecting employees.
4. In the new employee record, click in the available fields to enter or edit the relevant information.

Table 28 shows select predefined fields available.

Table 28. Employee Candidates List Fields

Field	Description
Activation	Start date of the assignment rule employee. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Expiration	End date of the assignment rule employee. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Score	An initial score for each employee is permitted in this field to differentiate between other employees for potential assignment.

If new candidates are added, make sure you release the assignment rules for the changes to take affect. For more information about releasing assignment rules, see "Releasing Assignment Rules" on page 154

NOTE: Assignment Manager caches employee skills when the Siebel Server is started. Every time rules are released, employee skills are updated and cached. If you want to automatically refresh employee skills at a periodic interval, set the value of Refresh people skills interval (an AsgnSrvr component parameter) to the desired interval of update. For more information about employee skills, see "Assignment Strategy for Sales Organizations" on page 61. For information about the AsgnSrvr component parameter, see "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174.

Assignment Manager can also assign employees based on their association with their parent organization. For example, only employees associated with a specific organization can be assigned to an assignment object even if other employees not associated with the organization qualify. This functionality is called multitiered assignment and must be configured for the appropriate assignment object. For more information multitiered assignment, see "About Multitiered Assignment" on page 43 and "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 66.

Alternatively, you can set a default employee 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 property, see *Object Types Reference*. For more information about setting this property, see "Configuring Assignment Objects" on page 92.

Assigning Employees to Assignment Rules Based on Availability

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. Assignment objects must be preconfigured before using the assignment availability criteria feature. For more information on configuring assignment availability, see "Configuring Assignment Objects for Availability-Based Assignment" on page 100.

When an assignment object is configured for availability, a user specifies three times for the assignment object: an Early Start Time, a Must Start Time, and a Duration.

- (Optional) Early Start Time (which is specified in the Calendar Early Start Time Column property of the assignment object) is the earliest time the assignment object can be scheduled.

  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 (which is specified in the Calendar Start Time Column property of the assignment object) is the latest time that the assignment object can be started.

- Duration (which is specified in the Calendar Duration Column property of the assignment object) is the time in minutes required to finish the assignment object's task.

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. 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 (if 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 (if 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. For more information about activities for availability assignment, see "About Creation of Activities for Employees During Availability-Based Assignment" on page 104.

When administrators define a new rule, selecting the Check Employee Calendar box activates the assignment availability criteria.

Adding Positions to Assignment Rules

This section explains how to add positions to an assignment rule. Sales organizations typically assign positions to objects. For more information on positions, see "Position Candidates" on page 16.

NOTE: Assignment Manager does not prevent you from adding positions to an assignment rule that requires employee assignment. Before adding positions, make sure that the objects for the assignment rule allow employee assignment.

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.

   TIP: To select multiple positions, hold down the CTRL key while selecting positions.
4. In the new record in the Positions list, click in the available fields to enter or edit the relevant information.

Table 29 shows select predefined fields available for editing.

Table 29. Positions List Fields

Field	Description
Activation	Start date of the assignment rule position. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Expiration	End date of the assignment rule position. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Score	An initial score for each position is permitted in this field to differentiate between other positions for potential assignment.

NOTE: You can configure Assignment Manager to define additional fields for Positions associated with an assignment rule. For more information, see "Configuring Assignment Objects to Copy Additional Columns to the Team Table" on page 203.

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 200.

If new candidates are added, make sure you release the assignment rules for the changes to take affect. For more information about releasing assignment rules, see "Releasing Assignment Rules" on page 154

NOTE: Assignment Manager caches position skills when the Siebel Server is started. Every time rules are released, position skills are updated and cached. If you want to automatically refresh position skills at a periodic interval, set the value of Refresh people skills interval (an AsgnSrvr component parameter) to the desired interval of update. For more information about position skills, see "Assignment Strategy for Sales Organizations" on page 61. For information about the AsgnSrvr component parameter, see "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174.

Assignment Manager can also assign positions based on their association with their parent organization. For example, only positions associated with a specific organization can be assigned to an assignment object even if other positions not associated with the organization qualify. This functionality is called multitiered assignment and must be configured for the appropriate assignment object. For more information on this feature, see "About Multitiered Assignment" on page 43 and "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 66.

Alternatively, you can set a default employee 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 property, see *Object Types Reference*. For more information about setting this property, see "Configuring Assignment Objects" on page 92.

Adding Organizations to Assignment Rules

This topic explains how to add organizations to an assignment rule. For more information on organizations, see "Organization Candidates" on page 17.

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.

   TIP: To select multiple organizations, hold down the CTRL key while selecting organizations, and click OK.
4. In the new record in the Organizations list, click in the available fields to enter or edit the relevant information.

Table 30 shows select predefined fields available for editing.

Table 30. Organizations List Fields

Field	Description
Activation	Start date of the assignment rule organization. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Expiration	End date of the assignment rule organization. **NOTE:** If your application is enabled for the Universal Time Coordinated (UTC) standard, see *Global Deployment Guide* for proper database settings.
Score	An initial score for each organization is permitted in this field to differentiate between other organizations for potential assignment.

If new candidates are added, make sure you release the assignment rules for the changes to take affect. For more information about releasing assignment rules, see "Releasing Assignment Rules" on page 154

NOTE: Assignment Manager caches organization skills when the Siebel Server is started. Every time rules are released, organization skills are updated and cached. If you want to automatically refresh organization skills at a periodic interval, set the value of Refresh people skills interval (an AsgnSrvr component parameter) to the desired interval of update. For more information about organization skills, see "Assignment Strategy for Sales Organizations" on page 61. For information about the AsgnSrvr component parameter, see "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174.

Assignment Manager can also assign organizations based on the positions associated within the organization. For example, positions assigned to an assignment object can also have their associated organizations assigned. This functionality is called multitiered assignment and must be configured for the appropriate assignment object. For more information on this feature, see "About Multitiered Assignment" on page 43 and "Scenarios for Using Multitiered Assignment with Sales Assignment Rules" on page 66.

Alternatively, you can set a default organization for assignment objects. For example, if you want records for a given assignment object assigned to a certain organization, you can change the Default Org property on the assignment object using Siebel Tools. For more information about the Default Org property, see *Object Types Reference*. For more information about setting this property, see "Configuring Assignment Objects" on page 92.

Assigning Skills to 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 tries to find 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 skillset. For more information about how skills are applied, see "Assignment Operation Modes" on page 44, and "Creating Criteria Values as Skills with Expertise Codes and Weighting Factors" on page 139. For more information about creating skills, see "Creating New Skills" on page 118.

This task is a step in "Process of Defining Assignment Rules" on page 127.

You can enable and configure skills at the criteria level by using Siebel Tools. For more information, see "Assignment Criteria Configuration" on page 107.

To associate skills with an employee

1. From the application-level menu, choose Navigate > Site Map > Administration - User > Employees > Assignment Skills.
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. From the application-level menu, choose Navigate > Site Map > Administration - Group > Positions > Assignment Skills.
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. From the application-level menu, choose Navigate > Site Map > Administration - Group > Organizations > Assignment Skills.
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.

Releasing Assignment Rules

After you create (define) 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 25.

CAUTION: The following procedure releases all assignment rules simultaneously. Do not release assignment rules while associated server tasks are running.

To release assignment rules

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Rules List.
2. In the Assignment Rules list, click the Release button.

   A confirmation message appears indicating the rules have been released and the rulecache.dat file is updated. For v77

NOTE: You can also refresh (update) the rule cache by deleting the rule cache files (the *rulecache*.dat files in the siebel_server\bin folder) and restarting the Siebel Server.

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.

6 Assignment Rule Administration for Delegated Assignment

This chapter covers assignment rule administration tasks for delegated assignment. It includes the following topics:

- "Delegated Assignment Rule Administration Overview" on page 155
- "Process of Making an Assignment Rule Inheritable" on page 156
  - "Creating Child Assignment Rule Groups" on page 157
  - "Adding Owners to the Inheritance Access List" on page 157
  - "Adding Criteria Templates to Assignment Rules" on page 158
- "Process of Inheriting and Refining Delegated Assignment Rules" on page 159
  - "Inheriting Delegated Assignment Rules" on page 159
  - "Applying Templated Criteria to Inherited Assignment Rules" on page 160
- "Process of Delegating Assignment Rules to Others" on page 160
- (Optional) "Adding Designees to Assignment Rule Groups" on page 161

These 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.

NOTE: The procedures in this chapter are written for the Administration - Delegated Assignment screen and views unless noted otherwise. However, you can also perform these same operations using the Rule Group Explorer views in the Administration - Assignment screen.

Before performing the tasks in this chapter, you should be familiar with the assignment administration tasks explained in Chapter 5, "Assignment Rule Administration."

Delegated Assignment Rule Administration Overview

If you plan to use delegated assignment, the assignment administrator (AA) or designee must first prepare the assignment rules for inheritance in addition to the tasks presented in "Process of Defining Assignment Rules" on page 127.

The assignment administrator (or designee) typically creates rules and rule criteria templates (templated criteria) from which all other delegated rules and rule criteria are created using the Administration - Assignment views. Delegated administrators (DAs) can inherit these predefined rules and further refine those rules by adding new criteria or from templated criteria using the Administration - Delegated Assignment views. These refined rules can again be inherited and modified by other delegated administrators 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 11 on page 76 shows an example of this n-tier hierarchical relationship.

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.

For more information about delegated assignment, see "Delegated Assignment" on page 50. For more information about rule inheritance and templated criteria, see "About Assignment Rule Inheritance and Templated Criteria" on page 54. For examples for implementing delegated assignment, see "Examples for Using Delegated Assignment" on page 75.

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:

- "Creating Child Assignment Rule Groups" on page 157

  You must first create a child rule group from a parent rule group, setting the Parent Rule Group field to the current rule group.

- "Adding Owners to the Inheritance Access List" on page 157

  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.

- "Adding Criteria Templates to Assignment Rules" on page 158

  Optionally, you can *add* templated criteria to an assignment rule. DAs then have the option to *apply* the templated criteria to their inherited rules in lieu of creating new criteria.

For more information about inheriting a rule, see "Inheriting Delegated Assignment Rules" on page 159.

For more information about rule groups, see "About Hierarchical Rule Groups" on page 51 and "About the Rule Group Explorer" on page 53. For more information about owners and inheritance, see "Owners and Designees" on page 52 and "About Assignment Rule Inheritance and Templated Criteria" on page 54.

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 156 and "Process of Delegating Assignment Rules to Others" on page 160.

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 128.

   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.

For more information about rule groups, see "About Hierarchical Rule Groups" on page 51. For more information about the Rule Group Explorer, see "About the Rule Group Explorer" on page 53.

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 156 and "Process of Delegating Assignment Rules to Others" on page 160.

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.

For more information about owners, see "Owners and Designees" on page 52.

Adding Criteria Templates to Assignment Rules

This topic explains how assignment administrators (AAs) can add criteria templates (create templated criteria) to an assignment rule using the delegated administration views. After you create criteria templates, the templated criteria is 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 under the steps required and implications of creating new logic.

This task is a step in "Process of Making an Assignment Rule Inheritable" on page 156.

Adding 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 templated criteria.

   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 "Creating Assignment Criteria" on page 134.

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 templated criteria 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.

To learn more about templated criteria, see "About Assignment Rule Inheritance and Templated Criteria" on page 54. For information about applying templated criteria to an inherited assignment rule, see "Applying Templated Criteria to Inherited Assignment Rules" on page 160.

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 159.

2 Add criteria to the inherited assignment rule by either creating new criteria or applying templated criteria.

For information about:

- Creating new criteria, see "Creating Assignment Criteria" on page 134
- Applying templated criteria, see "Applying Templated Criteria to Inherited Assignment Rules" on page 160

3 Add candidates to the assignment rule.

For information about adding candidates, see "Adding Employees, Positions, and Organizations to Assignment Rules" on page 147.

For more information about delegated assignment, see "Delegated Assignment" on page 50 and "Delegated Assignment Rule Administration Overview" on page 155.

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 159.

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.

For more information about inheriting rules, see "About Assignment Rule Inheritance and Templated Criteria" on page 54.

Applying Templated Criteria to Inherited Assignment Rules

This topic explains how to apply predefined templated criteria 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 159 and an optional task in "Process of Delegating Assignment Rules to Others" on page 160.

Applying templated criteria 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 templated criteria, 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 templated criteria, 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.

For information about templated criteria, see "About Assignment Rule Inheritance and Templated Criteria" on page 54. For information about how to add templated criteria to assignment rules, see "Adding Criteria Templates to Assignment Rules" on page 158.

Process of Delegating Assignment Rules to Others

To delegate assignment rules to others, you perform the following tasks:

1 Create a child rule group.

For a procedure, see "Creating Child Assignment Rule Groups" on page 157.

2 Add the owner of the child rule group you created in Step 1 to the inheritance access list of an assignment rule.

   For a procedure, see "Adding Owners to the Inheritance Access List" on page 157.

3 (Optional) Apply templated criteria to the assignment rule.

   For a procedure, see "Applying Templated Criteria to Inherited Assignment Rules" on page 160.

For more information about delegated assignment and administering delegated assignment rules, see "Delegated Assignment" on page 50 and "Delegated Assignment Rule Administration Overview" on page 155.

Adding Designees to Assignment Rule Groups

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 "Owners and Designees" on page 52.

7 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 covers the following topics:

- "Considerations Before Running Assignment Manager" on page 163
- "Preparing to Run Assignment Manager" on page 165
- "Running Assignment Manager in Interactive Mode" on page 171
- "Running Assignment Manager in Dynamic Mode" on page 175
- "Running Assignment Manager in Mobile Mode" on page 183
- "Running Assignment Manager in Batch Mode" on page 184

Considerations Before Running Assignment Manager

Before running Assignment Manager, you must already have created your assignment rules. For information on creating assignment rules, see Chapter 5, "Assignment Rule Administration." You also need to perform several preparation tasks. For more information, see "Preparing to Run Assignment Manager" on page 165.

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.

  NOTE: If you want to automatically refresh skills without restarting the Assignment Manager component, set the value of the Refresh people skills interval 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. For more information about the Refresh people skills interval, see the MaxSkillsAge AsgnSrvr component parameter in Table 35 in "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174.

- The run-time parameters of assignment objects and their properties, 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.

CAUTION: 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 all 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.

Make sure the rule cache file is updated (see "Releasing Assignment Rules" on page 154 for a procedure) and the .srf file is compiled with the latest configurations (see "Server Administration After Configuring Assignment Manager" on page 125 or *Using Siebel Tools* for information on this procedure) before running Assignment Manager.

TIP: 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.

To view assignment object properties, see "Creating Assignment Objects" on page 92. For more information about the REORG and update statistics utilities, see *Implementing Siebel eBusiness Applications on DB2 UDB for z/OS and OS/390* and the *Siebel Server Installation Guide* for your operating system.

CAUTION: 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 "Running Multiple Instances of Assignment Manager in Batch Mode" on page 190.

About Excluding Candidates from Assignment

You can choose to ignore a specific candidate or candidates, even though you added the candidate or candidates to an assignment rule. You do so at runtime by specifying the ExcludePersonList or the ExcludeOrgList request-level server parameter as comma-separated lists of candidate Ids. 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 when releasing rules, you can exclude this particular candidate from assignment consideration.

About Excluding Expired (Terminated) Person Candidates from Assignment

You can choose to ignore certain employees for 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 component-level server parameter (or use ActiveEmpLOVCode from the Server Manager command line) with a 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 only want active employees considered for evaluation and assignment:

```
AND emp.EMP_STAT_CD='Active'
```

The employees are ignored even if they are explicitly added to an assignment rule as candidates.

Similarly, you can exclude (ignore) 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.

Preparing to Run Assignment Manager

Before running Assignment Manager, you must first perform preparation tasks. These tasks include:

- "Checking the State of the Assignment Manager and Server Request Broker Components" on page 165
- "Configuring the Assignment Manager Component" on page 166
- "Configuring Assignment Manager Event Logs" on page 168

In addition to the preparatory tasks, there are server administration requirements that should be addressed before running Assignment Manager. These include:

- "Server Administration Requirements for Assignment Modes" on page 170
- "Server Administration Requirements After Configuration" on page 170

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 components.

To check the state of the Assignment Manager and Server Request Broker components

1. From the application-level menu, choose Navigate > Site Map > Administration - Server Management > Servers.
2. In the Servers 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.

Configuring the Assignment Manager Component

Before running Assignment Manager, you should configure the Assignment Manager component to enhance its performance for your implementation by adjusting the appropriate parameters. Table 31 on page 167 shows the parameters you can change.

To configure the Assignment Manager component

1. From the application-level menu, choose Navigate > Site Map > Administration - Server Configuration > Servers.
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 (the Enable State field in the Components list should have a check mark for the Assignment Manager component).
3. Click the Parameters subview (if not already active).
4. In the Parameters list, select the component parameters of interest, and adjust the values as required by your implementation to achieve optimal performance.
5. 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 starting and restarting the Siebel Server, see *Siebel System Administration Guide*.

Table 31 shows the parameters used by Assignment Manager that you can change.

Table 31. Assignment Manager Component Parameters

Parameter Name	Parameter Alias	Data Type	Description	Default Value
Check version iterations	CheckVerIter	Integer	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. One integer value equals ten seconds (minimum value is 1).	6
Default Tasks	DfltTasks	Integer	Default number of service tasks to start (server mode only).	0
Log txn only on change	LogTxnChgOnly	Boolean	Log transaction only when there is a net change in assignment (for example, sales team updated).	TRUE
Maximum MT Servers	MaxMTServers	Integer	Maximum number of active servers for a multithreaded service.	1
Maximum Tasks	MaxTasks	Integer	Maximum number of running tasks for a service.	2
Minimum MT Servers	MinMTServers[1]	Integer	Minimum number of active servers for a multithreaded service.	1

1. Applies only to the assignment server and other multithreaded request-based servers.

The following bulleted points explain why you might want to configure some of the various Assignment Manager component parameters:

- **Check version iterations.** 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 pressed 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.
- **Log txn only on change.** 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. By detault, this parameter is set to TRUE. For information about how this parameter works with regard to merge conflicts, see *Siebel Remote and Replication Manager Administration Guide*.

- **Maximum MT Servers.** 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.** 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.** 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 recommend to use the default value of one, as server processes and Assignment Manager have large resource requirements.

Configuring Assignment Manager Event Logs

Before running Assignment Manager, you can configure event logs to view results. The Assignment Manager, Batch Assignment, and Workflow Monitor Agent server components are configured to use events. For information on event logging and log files, see *System Monitoring and Diagnostics Guide for Siebel eBusiness Applications*.

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:

- **Rules Evaluation (Match)**. Logging of events during the evaluation phase
- **Object Assignment (Assign)**. Logging of events during the assignment phase.
- **Loading (Loading)**. Logging of events that happen during loading.
- **Assignment Manager Generic (Generic)**. Generic events specific to Assignment Manager.

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 Manger 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. From the application-level menu, choose Navigate > Site Map > Administration - Server Configuration > Servers > Events.
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 configuring event logs, see *System Monitoring and Diagnostics Guide for Siebel eBusiness Applications*.

Server Administration Requirements for Assignment Modes

Assignment Manager requires various functioning server components and tasks based on the selected assignment mode. Table 32 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 32. Summarization of Server Requirements for Assignment Modes

Assignment Mode	Set Assignment Manager Online	Start Workflow Monitor Agent	Start Server Request Broker[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.

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 33 summarizes the required server tasks and components that must be restarted based on the type of configuration process. For further information on Assignment Manager configuration, see Chapter 4, "Assignment Object Configuration." Detailed information on how and when to run these server tasks and components is provided in the remainder of this chapter.

Table 33. 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	No	Yes	Yes
Activating or deactivating assignment policies	No	Yes	Yes

Running Assignment Manager in Interactive Mode

This topic explains how to run Assignment Manager in interactive mode. Use interactive assignment to assign people in real time. The Activity and Service Request objects are predefined to use interactive assignment. This feature allows you to assign employees to activities and service requests in real time by clicking the Menu button and choosing Assign. You can also configure other assignment objects to use interactive assignment. For more information on interactive assignment, see "About Interactive Assignment" on page 44. For more information on configuring assignment objects, see "Configuring Assignment Objects" on page 92.

You can run interactive assignment using the Siebel Dedicated Web Client, the Siebel Web Client (also known as zero footprint client), or the command-line SRVRMGR utility. The following subsections explain how to run interactive assignment for these environments:

- "Running Interactive Assignment for a Service Request—An Example" on page 171
- "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174

NOTE: Before running interactive assignment using the Siebel Dedicated 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 Server Installation Guide* for the operating system you are using.

Interactive assignment requires that the:

- Assignment Manager server component is Online
- Server Request Broker server component is Running

You are now ready to run interactive assignment. For an example, see "Running Interactive Assignment for a Service Request—An Example."

Running Interactive Assignment for a Service Request—An Example

The Activity and Service Request assignment objects are predefined to use interactive assignment. The following procedure is an example of running interactive assignment for service requests and is applicable for use with the Siebel Dedicated Web Client as well as the Siebel Web Client.

To run interactive assignment for a service request

1. From the application-level menu, choose Navigate > Site Map > Service Requests > All Service Requests.
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.

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.

Assignment Manager Integration

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.

TIP: Prior to the version 7.7 release, Assignment Manager could only write qualified or assigned candidates to the database.

Assignment Manager integration behavior is controlled by the ReturnPropSet request-level server parameter (ReturnPropSet). Table 34 lists the conditions for which Assignment Manager returns a property set or writes the results to the database.

Table 34. 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 25 illustrates the structure of the output property set that Assignment Manager returns from a synchronous request, given the input parameter AsgnMode = Match or MatchAssign.

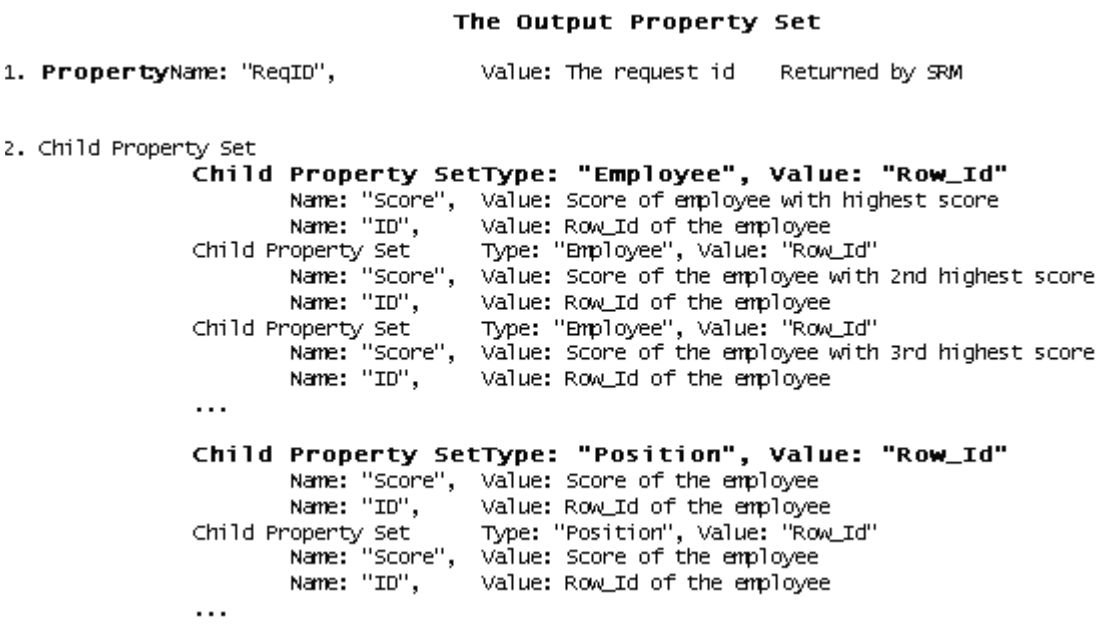


Figure 25. Example of Output Property Set Structure Returned from a Synchronous Request

Running Interactive Assignment Using the Command-Line SRVRMGR Utility

Interactive assignment uses the Assignment Manager (AsgnSrvr) server component to make assignments. Assignments can also be made to object rows using the Assignment Manager (AsgnSrvr) component from the command-line interface using the AsgnSrvr command and the parameters in Table 35. The command-line interface of the Server Manager is the srvrmgr program. For more information on using the command-line interface, see *Siebel System Administration Guide*.

Table 35. Interactive Assignment Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
AllowDupPostn	Allow Duplicate Position	Allows assignment of duplicate positions to the team For more information, see "AllowDupPostn" on page 188.	FALSE
AsgnKey	Assignment Key	Rule set used for key-based routing For more information, see "AsgnKey" on page 188.	All AM Rule Set
AsgnMode	Assignment Mode	Mode of assignment	MatchAssign
AsgnObjName	Assignment Object Name	Name of the assignment object	
BatchSize	Batch Size	Number of objects to assign before committing results (transaction) to the database.	100
EventDate	Event Date	Date of the event that caused this assignment request	
IgnoreCache	Ignore assignment rule cache	Ignore assignment rule cache and read from the database	FALSE
LogTxnChgOnly	Log txn only on change	Log transaction only when the assignment has changed	TRUE
MaxSkillsAge	Refresh people skills interval	Interval in which people skills are refreshed in seconds (must be greater than zero seconds). **NOTE:** This parameter is only applicable to interactive assignment.	0

Table 35. Interactive Assignment Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
ObjWhereClause	Object Where Clause	SQL WHERE clause that identifies the object rows from the assignment object primary table to be assigned. For more information, see "ObjWhereClause" on page 188.	
UseForUpdate	Use FOR UPDATE	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.	TRUE

Running Assignment Manager in Dynamic Mode

Use dynamic assignment if you want to reassign people when changes are made to the assignment object rows or new records are created. As other users and server programs make changes to the assignment object records, dynamic assignment automatically assigns the objects to the appropriate people and organizations.

This topic explains how to run Assignment Manager in dynamic mode. The subtopics are:

- "Generating Triggers for Dynamic Assignment" on page 176
- "Generating Triggers Using the Command-Line SRVRMGR Utility" on page 178
- "Running Workflow Monitor Agents" on page 178
- "Activating Assignment Policies" on page 180
- "Assignment Manager Performance in Dynamic Mode" on page 183

To run dynamic assignment, make sure:

- Generating Triggers is enabled
- Workflow Monitor Agent is running
- Assignment policies are set and activated

NOTE: For performance reasons, do not run dynamic assignment when running batch assignment.

You must run Generate Triggers to create triggers that monitor changes in the database.

The triggers created by the Generate Triggers server component detect changes in the Siebel database and trigger the Workflow Monitor Agent to alert the Assignment Server. However, triggers generated for Assignment Manager can reference other database columns not associated with assignment rules. It is important to make sure that triggers are generated only for an assignment policy's criteria. Large data loads can experience performance issues otherwise.

To check and edit triggers

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 an Assignment Attribute" on page 117.

   NOTE: 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 the following section, "Generating Triggers for Dynamic Assignment").

4. Recheck the trigger.sql file, to confirm that the trigger is no longer active.

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.

Generating Triggers for Dynamic Assignment

To run 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

NOTE: 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 then regenerate database triggers.

Use the Generate Triggers server component to generate the database triggers used by Workflow Manager to detect changes in the database. For more information about starting and using Generate Triggers, see *Siebel Business Process Designer Administration Guide*.

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.

To run Generate Triggers

1. From the application-level menu, choose Navigate > Site Map > Administration - Server Management > Jobs.
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. For the Microsoft SQL Server database, run the generated trigger.sql file against the database independently.
   a. Select EXEC.
   b. Click in the Value field.

c Type FALSE.

NOTE: If the EXEC parameter is set to TRUE, the Generate Trigger component automatically creates the SQL script and applies it to the server database.

Also, if you are creating a large number of triggers because there are too many workflow policies, the triggers should be applied by the user and not by the Generate Triggers server process. The EXEC parameter should be set to FALSE in this case.

For more information on the EXEC parameter, see *Siebel Business Process Designer Administration Guide*.

7 In the My Component Requests form, click the Menu button, and then click Submit request.

Generating Triggers Using the Command-Line SRVRMGR Utility

Triggers can be generated using the SRVRMGR command-line interface GenTrig command and the parameters in Table 36. The command-line interface of the Server Manager is the srvrmgr program. For more information on using the command-line interface, see *Siebel System Administration Guide*.

Table 36. GenTrig 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

Running Workflow Monitor Agents

To run dynamic assignment, the Workflow Monitor Agent 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. For more information about Workflow Monitor Agent, see *Siebel Business Process Designer Administration Guide*.

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 eBusiness 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. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.
   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 37 on page 179.

   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 detailed information, see *Siebel Business Process Designer Administration Guide*.

This command starts a new task running in the background and returns to the Server Manager immediately. 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.*

NOTE: It is possible to set up multiple Workflow Monitor Agents for dynamic assignment. For more information, see the "Monitoring and Tuning Performance" section of *Siebel Business Process Designer Administration Guide*.

Table 37 shows the Workflow Monitor Agent command-line interface parameters.

Table 37. WorkMon Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
ActionAgent	Use Action Agent	Use Action Agent	FALSE
ActionInterval	Action Interval	Do not re-execute actions within specified interval in minutes	3600
BatchMode	Processes the batch policies	Process the batch Policies	FALSE

Table 37. WorkMon Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
CheckLogCacheSz	Cache size of Policy violations	Number of policy violations to store in cache	100
DeleteSize	Request delete size	Request delete size	500
GenReqRetry	Number of seconds to retry	Number of seconds to retry sending a Generic Request message	120
GroupName	Group Name	Group Name	
IgnoreError	Ignore errors	Ignore errors while processing requests	FALSE
KeepLogDays	Number of days to keep violation information	Number of days worth of violation information that should be retained	30
LastUsrCacheSz	Cache size of last user information	Number of last user information items to cache	100
MailServer	Mail Server	Name of email server to send notification of abnormal termination	
MailTo	Mailing Address	Mail address to review notification of abnormal termination	
ReloadPolicy	Reload Policy	Reload Policy Interval in seconds	86400
Requests	Requests per iteration	Requests per iteration	5000
SleepTime	Sleep Time	Time to sleep between iterations (in seconds). This is the frequency of time the Workmon Agent polls the escalation request table and assigns rows.	60

Activating 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 create new assignment policies for dynamic assignments.

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.

CAUTION: 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.

If you want to use the rule group feature in dynamic assignment, create a workflow process that submits requests to AsgnSrvr using a business service.

CAUTION: Assign a workflow policy group to only one Workflow Monitor Agent. Multiple Workflow Monitor Agents running the same workflow policy group cause unpredictable completion times and possible multiple actions created for one trigger. For more information, see *Siebel Business Process Designer Administration Guide*.

Also, you should not associate customized workflow actions with assignment policies. For more information about workflow actions, see *Siebel Business Process Designer Administration Guide*.

To enable dynamic assignment for an assignment object, activate the assignment policy for that object. To disable dynamic assignment for an assignment object, deactivate the assignment policy for that object.

The rest of this section explains how to activate, deactivate, set the workflow group for, and create actions for assignment policies. The procedures are:

- "To set the workflow group for assignment policies" on page 181
- "To activate an assignment policy" on page 181
- "To deactivate an assignment policy" on page 182
- "To create an action for an assignment policy" on page 182

NOTE: After activating, deactivating, or creating an action for an assignment policy, you must generate triggers again for the changes to take effect.

To set the workflow group for assignment policies

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.
2. In the Assignment Policies list, select the assignment policy for which you want to set the workflow group.
3. In the Group field, click the select button.
4. In the Workflow Groups dialog box, select a workflow group (the default is Assignment Group), and then click OK.

To activate an assignment policy

1. From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.
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.

To deactivate an assignment policy

1 From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.

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.

CAUTION: 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.

To create an action for an assignment policy

1 From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.

2 In the Assignment Policies list, select the assignment policy for which you want to create an action.

3 In the Actions list, click New.

4 In the new record, enter values for the relevant information.

   a In the Assignment Action field, click the drop-down arrow and select Assignment Request (In Process).

   b In the Assignment Mode field, click the down-arrow button and select MatchAssign.

Activating Contact Denormalization

Perform the following procedure to activate contact denormalization. The policy is inactivated by default.

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.

To activate contact denormalization

1 From the application-level menu, choose Navigate > Site Map > Administration - Assignment > Assignment Policies.

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.

3 In the Actions list, click New to create a new record and enter the relevant information.

a In the Assignment Action field, click the drop-down arrow and select Assignment Request (In Process).

b In the Assignment Mode field, click the down-arrow button and select Denorm.

NOTE: Dynamic assignment can refresh employee, position, and organization skills from the database if changes were made to these items. The program argument, MaxSkillsAge, forces Assignment Manager to reload this information if activated. By default, this argument is not set. In Siebel Tools, select the Assignment Request (In Process) workflow policy program to change the MaxSkillsAge argument. For information about how to set this parameter using command-line interface, see "Running Interactive Assignment Using the Command-Line SRVRMGR Utility" on page 174.

Assignment Manager Performance in Dynamic Mode

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 DeleteSize workflow monitor parameter (the default is set to 500).
- 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).

Running Assignment Manager in Mobile Mode

This section includes procedures to run Assignment Manager in mobile mode. 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. For more information, see "About Mobile Assignment" on page 45.

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 flag.

To run Mobile Assignment

1. Be sure that you have run the Generate Triggers server component.

   For instructions, see "Generating Triggers for Dynamic Assignment" on page 176.

2. Start the Workflow Monitor Agent.

   For instructions, see "Running Workflow Monitor Agents" on page 178.

3. Start the Server Request Broker server component (if running interactive assignment).

   For instructions, see *Siebel System Administration Guide*.

Running Assignment Manager in Batch Mode

This topic explains how to run Assignment Manager in batch mode. Typically, you want to run batch jobs periodically when you anticipate the least amount of database activity (such as daily or weekly after-hours).

Use batch assignment to assign an assignment object in a single batch. You *must* run Assignment Manager in batch mode if you change non-object data that can affect assignments. This happens 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. You modify the list of employees, positions, or organizations when you:
  - Add new employees, positions, or organizations (if you use assignment rules with the All People setting)
  - Change skills of employees, positions, or organizations (these values are cached in memory)
- 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.

If you run both batch assignment and batch assignment in your environment, the batch assignment can activate batch assignment due to triggers created in the database required to run batch assignment. Before running batch assignment, you should deactivate all assignment policies and drop related triggers to prevent batch assignment from processing modified rules, objects, and candidates. For more information, see "To deactivate an assignment policy" on page 182 and "To run Generate Triggers" on page 177. After completing batch assignment, you can activate the assignment policies and re-enable batch assignment. For more information on batch assignment, see "About Batch Assignment" on page 45. For more information, see "To activate an assignment policy" on page 181.

NOTE: For performance reasons, do not run dynamic assignment while running batch assignment.

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 Group into memory. If no rule groups have been defined in the application, then all active rules in the database load. For more information, see "About Assignment Rule Groups" on page 22.

To run batch assignment

1. From the application-level menu, choose Navigate > Site Map > Administration - Server Management > Jobs.
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 Server field, type the name of the server on which you want to run this batch request.
   c. Optionally, 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 Table 38 on page 187 and further description following the table.

6 Optionally, if you want to enable Contact Denormalization for batch assignment, add two more component request parameter records with
values from the following table:

Parameter Name	Value
Assignment Object Name	`Contact Denormalization`
Assignment Mode	`Denorm`

7 Optionally, 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 My Component Requests form, click the menu button and choose Submit request.

Running Batch Assignment Using the Command-Line SRVRMGR Utility

Batch assignment can be run from the command-line interface using the AsgnBatch command and the parameters in Table 38. The command-line interface of the Server Manager is the srvrmgr program. For more information on using the command-line interface, see *Siebel System Administration Guide*.

Table 38. Batch Assignment Command-Line Interface Parameters

Parameter Name	Display Name	Description	Default Value
AllowDupPostn	Allow Duplicate Position	Allows duplicate positions. For more information, see "AllowDupPostn" on page 188.	FALSE
AsgnKey	Assignment Key	Used to specify a particular rule group for a batch assignment task. For more information, see "AsgnKey" on page 188.	All AM Rule Set
AsgnMode	Assignment Mode	Mode of assignment	MatchAssign
AsgnObjName	Assignment Object Name	Name of the assignment object	
BatchSize	Batch Size	Number of objects to assign before committing for batch assignment	100
EventDate	Event Date	Date of the event that caused this assignment request	
IgnoreCache	Ignore Assignment Rule Cache	Ignore assignment rule cache and read from the database	FALSE
LogTxnChgOnly	Log txn only on change	Log transaction only when the assignment has changed	TRUE
ObjWhereClause	Object Where Clause	WHERE clause of the object for batch assignment For more information, see "ObjWhereClause" on page 188.	
UseForUpdate	Use FOR UPDATE	Use FOR UPDATE to lock primary table row	TRUE

Additional Parameter Characteristics

The following bulleted points provide additional information about some of the parameters shown in Table 38 on page 187.

- **AllowDupPostn**

  When this parameter is set to TRUE (set to FALSE by default), Assignment Manager attempts to insert duplicate positions (positions with the same id) in the team table, given these positions do not violate the user key constraints of the table. The third field of the PositionTeamDenorm (Y, N value) user property specifies which destination columns are part of the user key. Assignment Manager checks whether or not positions with the same Id that pass violate the uniqueness of these key columns. If Assignment Manager detects a violation, the position with the lower score is ignored. Otherwise, Assignment Manager inserts both positions in the team table.

  If Assignment Manager detects a violation, only the first position encountered is inserted and the other is ignored.

- **AsgnKey**

  The AsgnKey parameter 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.

- **ObjWhereClause**

  Standard SQL WHERE statements are used for the Object WHERE Clause and can include up to 2048 characters when a batch assignment server task is started using the command-line interface. However, when you start a batch assignment server task from the Component Requests screen, 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 Object WHERE Clause can be used to restrict which records are retrieved and processed in batch assignment. The following conditions apply:

  - Joins are allowed in the Object WHERE Clause.

    An example of a join is as follows:

    ```
    Assignment Object = Account

    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.

    For example, 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 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.

Assignment Manager Performance in Batch Mode

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 "Running Multiple Instances of Assignment Manager in Batch Mode" on page 190.
- Select a good filter.

  This 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 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`

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. For more information about the Object Where Clause parameter, see "ObjWhereClause" on page 188.

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

NOTE: The ASGN_PROC_ID column in the S_ORG_EXT table is no longer used. If you have updated this column to run multiple batches of batch assignment in previous versions, note that as of version 6.0 you can no longer do so.

8 Advanced Assignment Manager Configuration

This chapter provides tasks for advanced assignment configuration. It covers:

- "Considerations for Advanced Assignment Manager Configuration" on page 193
- "Creating Assignment Rules to Assign Two Objects" on page 194
- "Assigning Objects Based on the Primary Address" on page 195
- "Reassigning Accounts to a Different Primary Position" on page 198
- "Routing of Assignments to Mobile Users" on page 199
- "Maintaining the Manually Assigned Primary Position" on page 200
- "Stopping Assignment of the Default Organization" on page 201
- "Stopping Assignment of Organizations for Accounts" on page 201
- "Setting the Lock Assignment Default Value for Activity Assignment Objects" on page 202
- "Configuring Assignment Objects to Copy Additional Columns to the Team Table" on page 203

For further information or assistance on any of the procedures in this chapter, contact Siebel Technical Support.

Considerations for Advanced Assignment Manager Configuration

Assignment Manager allows the creation of very advanced assignment configurations. This chapter is intended for users familiar with the preceding chapters and who require further information on refining their Assignment Manager deployment.

Before beginning any advanced configuration procedures, review background knowledge in the Siebel software architecture, Siebel Tools, and Siebel Workflow Manager. Consult the following documentation for this information: *Going Live with Siebel eBusiness Applications*, *Using Siebel Tools*, *Configuring Siebel eBusiness Applications*, and *Siebel Business Process Designer Administration Guide*.

Creating Assignment Rules to Assign Two Objects

In some cases, you may want to create an assignment rule that assigns candidates to two objects while using only one object's criteria. This section 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.

To define an assignment rule for two objects using one assignment criteria

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 130.

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 130.

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 "Phase 1: Creating a Workflow Policy Component for Both Objects" on page 122.

4. Map the workflow policy component you created with the column.

   For information on mapping a workflow policy column, see "Phase 2: Mapping a Column to the Workflow Policy Component" on page 123.

5. Map the workflow policy component you created to the assignment attribute.

   For information on mapping a workflow policy component to assignment attributes, see "Phase 3: Mapping the Workflow Policy Component to the Assignment Attribute" on page 123.

Figure 26 shows an example of defining an assignment rule for the Account and Opportunity objects using only the Lead Quality Code assignment criteria.

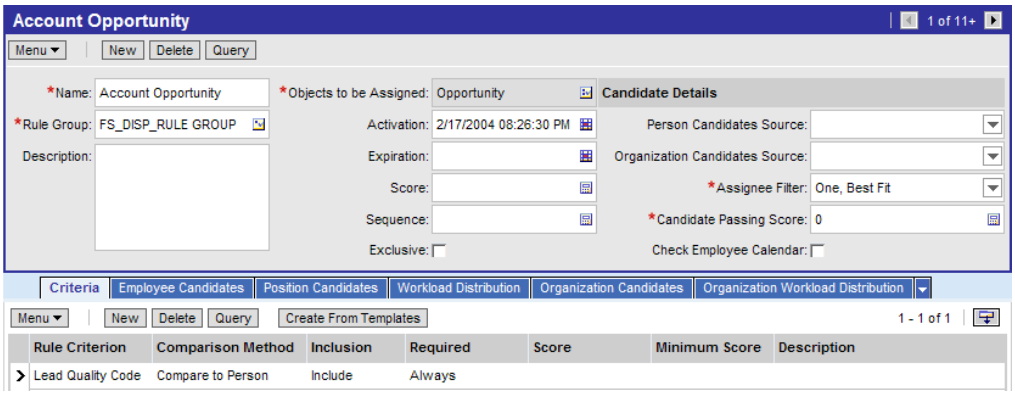


Figure 26. Example of Defining an Assignment Rule for Two Objects Using One Assignment Criteria

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 Drop and regenerate triggers by running the Generate Triggers server component (if using dynamic assignment or workflow policies).

See "Generating Triggers for Dynamic Assignment" on page 176 for more information on stopping and restarting this server component. Alternatively, see *Siebel Server 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; expand the Workflow Policy object in the Object Explorer and select the Workflow Policy Components object.

2 Create two new workflow policy components, Parent Account and Parent Account Address, with the following properties:

Source Column Name:	ROW_ID	ROW_ID
Target Component Name:	Account	Parent Account
Target Column Name:	PAR_OU_ID	PR_ADDR_ID

3 While the new Parent Account Address record is selected, expand the Workflow Policy Component object and click the Workflow Policy Component Column object. Create a new record with the following properties:

Alias	Parent Account State

4 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

5 While the new assignment attribute Parent Account State is selected, expand the Assignment Attributes object and click the Assignment Attributes Column object. 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

6 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

7 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 Attribute:	Parent Account State
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 "Server Administration After Configuring Assignment Manager" on page 125.

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 (see *Using Siebel Tools* for more information on proper Siebel Tools configuration procedures).
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.

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 eBusiness Applications* for more information on proper Siebel Tools configuration procedures).
3. In the Object Explorer, select the Workflow Policy Program and 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 row's manually-assigned primary position when the Keep Manual Primary Position property is set to TRUE, but only when PR_REP_MANL_FLG=Y on the object row. By default, this value is set to N.

For example, when an assignment opportunity object is created in the Siebel UI, the creator is added to the opportunity object's team as the primary. For this position to be recognized as the manually assigned primary by Assignment Manager, an employee with Data Administration rights must set this property in the appropriate administrative screen. This action changes PR_REP_MANL_FLG to Y so Assignment Manager does not reset the primary when run.

To maintain the object's primary position

1. Start your Siebel application.
2. Access the Administration - Data screen. (Check your responsibility if this screen is not visible.)
3. Navigate to the Opportunity (or other assignment object) screen.
4. Locate and select the assignment object of interest.
5. Click the Sales Team select button to launch the Sales Team window.
6. Click the Primary check box of another position in the list; then reselect the Primary check box of the original position.

   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 "To update your deployment with new configurations" procedure.

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: "IIf ([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 "To update your deployment with new configurations" on page 125.
8. Make sure that all Siebel clients that create activity records have the new .srf file.

   NOTE: This step applies only to mobile or dedicated clients.

   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. The following procedure details this configuration. As an example, copying columns to the team table S_ORD_CRDT_ASGN of the Order (Sales Credit Assignment) assignment object is considered; data is copied from the S_ASGN_GRP_POSTN rule group position 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.

For this example, 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 39 on page 204):

```
source column,destination column,flag,default value
```

For this example, the following table shows 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
PositionTeamDenorm4	NUM1,ALLOC_PCT,N
PositionTeamDenorm5	CHAR3,FROM_BTM_NODE_FLG,N
PositionTeamDenorm6	NUM2,ROLLUP_PCT,N

Table 39 provides descriptions for each field of the assignment user property values.

Table 39. Assignment User Property Values

Value	Description
source column	The name of the 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. For this example, the values are copied from the S_ASGN_GRP_POSTN table.
destination column	The name of the 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. For this example, SLS_TERR_ID is one of the columns of the S_ORD_CRDT_ASGN table, which is the team table of the Order assignment object.

Table 39. Assignment User Property Values

Value	Description
flag	Indicates whether or not (Y = TRUE) 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 "AllowDupPostn" on page 188.
default value	Specifies the values that are inserted in the destination columns if the assignee is the default. For this example, the default values are null. Note: This value is optional if the default position is not specified.

When Assignment Manager runs, the user property values are copied to the team table. For more information about running Assignment Manager using the copy columns features, see Chapter 7, "Running Assignment Manager."

For more information about team tables, see "About Assignment Scoring" on page 39, "About Contact Denormalization" on page 46, and "Configuring Assignment Objects for Team Scoring" on page 105.

9 Version Compatibility

This chapter provides a summary of the changes and compatibilities between Territory Assignment in Version 4.x and Assignment Manager in version 5 and higher. Major differences between Territory Assignment and Assignment Manager covered in this chapter include:

- "Assignment Manager System Preferences Compatibility" on page 207
- "Assignment Manager Tables Version Compatibility" on page 208
- "Assignment Manager Command Line Options Version Compatibility" on page 209

NOTE: The Territory List and Detail views will eventually be phased out from the Assignment Administration screens. If your configuration currently uses these views, note that they can migrate to the existing Assignment Rule views with no loss of functionality or data. For further information, contact Siebel Technical Support.

Assignment Manager System Preferences Compatibility

Territory Assignment System Preferences (Version 4.x) are no longer used in Version 5 and higher; these preferences are referred to now as assignment object properties. Assignment Manager preferences are now set in Siebel Tools by navigating to Workflow Policy Object in the Object Explorer. Each assignment object is defined as a Workflow Policy Object. To define the preferences for an assignment object, expand the corresponding Workflow Policy Object, select Assignment Object, and locate the preference. Preferences appear as assignment object properties. Object preferences are similar to System preferences but allow you to define how Assignment Manager behaves for each object, rather than system preferences that apply to all objects.

Table 40 shows the system preferences used in Territory Assignment and the system preferences used in Assignment Manager.

Table 40. Comparison of Assignment Manager System Preferences

Territory Assignment System Preferences (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
Allow User Exclusive	Lock Assignment Column in Siebel Tools Assignment Object
Assignee of Unowned	Default Employee, Default Employee, or Default Organization
Copy Opportunity Revenue	Position Team Copy Columns in Assignment Object
Keep Creator	Keep Creator Flag
Keep Manually Assigned	Keep Manual Assigned Flag

Table 40. Comparison of Assignment Manager System Preferences

Territory Assignment System Preferences (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
(Re)determine Primary Rep	Set Primary Position or Set Primary Employee Flag
Update or Add To	Add Team Members Flag

Assignment Manager Tables Version Compatibility

Table 41 shows the tables used in Territory Assignment and the tables used in Assignment Manager.

Table 41. Comparison of Assignment Manager Tables

Territory Assignment Tables (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
S_TERR	S_ASGN_GRP
S_TERR_ITEM	S_ASGN_RULE and ASGN_RULE_ITEM

Assignment Manager Command Line Options Version Compatibility

Table 42 shows the command-line options used in Territory Assignment and the corresponding options used in Assignment Manager.

Table 42. Comparison of Assignment Manager Command Line Options

Territory Assignment Command-Line Options (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
/Address 0 /Address 1 /Address 2	Set in Assignment Attribute columns. For the Opportunity Workflow Policy Object, you can specify workflow components for the Opportunity's primary address or the Opportunity's primary account address. To generate the same results as using: ■ /Address 0 (use both Opportunity and Account primary addresses), set Workflow Components Opportunity Primary Address to Active, and set Primary Account Address to Active. ■ /Address 1 (use Opportunity primary address only), set Workflow Components Opportunity Primary Address to Active, and set Primary Account Address to Inactive. ■ /Address 2 (use Account primary address only), set Workflow Components Opportunity Primary Address to Inactive, and set Primary Account Address to Active. You must also inactivate the corresponding Assignment Attribute columns of the component under the workflow policy object. After this step is finished, recompile the .srf file and, if you are using dynamic assignment, regenerate triggers. In Version 4.x, Territory Assignment uses the Account primary address for assignments of the Account object. In Version 5 and higher, Assignment Manager uses all addresses for assignments of the Account object.
/Bypass	Use Batch Assignment to reassign existing objects.
/Group	Use Batch Assignment with WHERE clauses.
/Ignore	Ignore the Extra Attributes flag on Siebel Tools Assignment Object.

Table 42. Comparison of Assignment Manager Command Line Options

Territory Assignment Command-Line Options (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
/Indirect	Set in Assignment Attribute columns. For the Opportunity Workflow Policy Object, you can specify workflow components for the Opportunity's indirect accounts. To generate the same results as using: ■ /Indirect YES (use attributes from the opportunity's indirect accounts), set all Workflow Components named Indirect Account to Active. ■ /Indirect NO (do not use attributes from the opportunity's indirect accounts), set all Workflow Components named Indirect Account to Inactive. Note: You need to change this option for the Account ID Assignment Attribute. The default value for Opportunity's indirect accounts (Opportunity/Indirect Account and Indirect Account Synonym) are inactive in the Assignment Attribute Column. Also, the Opportunity/Indirect Account and Indirect Account Synonym Workflow Components for the Opportunity Workflow Object are active by default.
/KeepCreator	Set the Keep Creator flag on Siebel Tools Assignment Object.
/Mode	Use one or more Workflow Monitors to process requests for assignment objects. Use the Group Name parameter to specify the name of the assignment policy group to assign. The assignment policy group specifies the list of assignment objects to dynamically assign. When running Batch Assignment, use the assignment object parameter to specify the name of the assignment object to assign.
/OutputFile	No longer applicable. Output goes to Siebel Server trace files.
/NumRec	Use Workflow Monitor to specify the number of requests per iteration.
/Phase	Not used at this time. Use Workflow Monitor to detect requests.
/PrimaryAddressId	Not used at this time.
/PrimaryRep	Set Primary Position or Set Primary Employee Flag on Siebel Tools Assignment Object.
/RecID	Use batch mode with a WHERE clause.
/RollBack	Use the SIEBEL_ROLLBACK_SEG environment variable to specify rollback segments for Siebel Server tasks.
/RunTotal	No longer applicable.

Table 42. Comparison of Assignment Manager Command Line Options

Territory Assignment Command-Line Options (Version 4 or 4.x)	Assignment Manager Compatibility (Version 5 and Higher)
/Sleep	Now applicable only in Dynamic Assignment, and the parameter is Sleep Time in Workflow Monitor.
/Synch	No longer applicable.

A Assignment Manager Error Messages

This appendix explains the error codes and associated text that Assignment Manager may generate during processing.

Understanding Assignment Manager Error Messages

Table 43 lists 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 43 provides the Assignment Manager error codes.

Table 43. 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.

Table 43. Assignment Manager Error Codes

Error Code	Error Text[1]	Resolution[2]
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.
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.	

Table 43. Assignment Manager Error Codes

Error Code	Error Text[1]	Resolution[2]
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.
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 43. 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 43. 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 43 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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