# Governance, Risk, and Compliance Controls Suite

## User's Guide

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ORACLE®

Governance, Risk, and Compliance Controls Suite User's Guide

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# Chapter 1

# Introduction

Oracle Governance, Risk, and Compliance Controls Suite documents and enforces business controls, enabling users to demonstrate regulatory compliance and to promote operational efficiency. Users may create controls (and supporting elements) one at a time, or upload a selection of "seeded" controls and adapt them as needed.

An essential aspect of creating controls is to describe and catalog them, enabling a company not only to manage its controls effectively, but also to demonstrate compliance with requirements imposed by regulations such as the Sarbanes-Oxley Act. For this documentary purpose, Governance, Risk, and Compliance Controls Suite enables users to do the following:

- Maintain a "control library," which contains not only controls themselves, but also elements that show how each control affects the operations of the company. By default each control is linked directly to a control objective; identified as a component of subprocesses, processes, policies, policy sections, and business cycles; and associated with risks that the control is meant to address. However, most of these elements can be renamed to suit a company's operating structure.
- Record a text description of each control-library element, together with assessments of its effectiveness. For each control, record a rating of its relative importance and a likelihood that the control, if it were to fail, would permit material error to be committed in the financial statements.
- Assign "dimensions" to each control-library element. A dimension is a segment of a business environment — such as a region, department, or line of business — to which elements are applied.

- Assign "attributes" to each control-library element. An attribute is a category of values that describe the qualities or nature of an element.
- Configure control-library elements, likelihoods, ratings, dimensions, attributes, and other components used in controls documentation.
- Create workflows, each of which defines a sequence in which approval requests are distributed to users or user groups. Each consists of a "workflow routing" and a "workflow definition"; the former selects the users and groups who are to receive and answer approval requests, and the latter maps the workflow routing to items in need of review. These items include control-library elements, as they are created or modified.
- Review approval requests at a Task Inbox.
- Manage Governance, Risk, and Compliance Controls Suite users and user groups.
- Review reports, which present detailed information about controls and their approval status.

Because Governance, Risk, and Compliance Controls Suite is intended to fulfill this documentary purpose, a company would use it to create records of all its controls — even those that are executed manually. For those controls that are to be automated, however, the Governance, Risk, and Compliance Controls Suite provides three modules that offer enforcement capability.

- Application Access Controls Governor implements segregation-of-duties (SOD) rules, which identify responsibilities or functions that should not be assigned simultaneously to individual users. SOD rules can prevent such assignments from occurring, or uncover them so that they can be properly managed. Application Access Controls Governor can also grant users temporary access to duties they do not ordinarily fulfill, and then guard against conflicts by auditing all actions performed by such users.

  The Governance, Risk, and Compliance Controls Suite enables users to create workflows that distribute emergency-access requests for review, and it presents these requests for approval at the Task Inbox. It also displays an array of reports specific to Application Access Controls Governor.
- Transaction Controls Governor enables users to create "control monitors." Each uses structured query language (SQL) to define actions subject to control, and each generates "suspects" — instances of potential control violations. Users can create workflows that distribute suspects for review; the Task Inbox displays requests to review suspects. Moreover, a control monitor can be used only if it is attached as an "automation" to a control defined in Governance, Risk, and Compliance Controls Suite.
- Preventive Controls Governor implements rules that apply change control to fields in Oracle E-Business Suite forms. Each change-control rule may also be attached as an "automation" to a control defined in Governance, Risk, and Compliance Controls Suite.

# Starting Governance, Risk, and Compliance Controls Suite

Governance, Risk, and Compliance Controls Suite is a web-based application designed to run in Microsoft Internet Explorer. To start Governance, Risk, and Compliance Controls Suite:

1. Open Internet Explorer.
2. In the Address field, type the URL for your instance of Governance, Risk, and Compliance Controls Suite, and press the Enter key.
3. A Sign In dialog box appears. Type your user name and password, and click on the Sign In button.

Using standard Windows procedures, you can, of course, save the URL as a favorite or create a desktop shortcut to the URL.

# Access to Features

The Governance, Risk, and Compliance Controls Suite displays up to seven tabs in a horizontal row near the top of each of its forms, as well as four links at the upper right corner of each form; these provide access to features. While the four links are always available to all users, your access to the tabs depends in part on what modules are in use at your site.

## How Tabs Correlate to Modules

The four links provide the following functionality, regardless of what modules are installed:

- Tasks: Open the Task Inbox to review and respond to approval requests, notifications, and (if your site uses Transaction Controls Governor) suspects.

- Profile: Configure an "out-of-office assistant," which forwards tasks to other users if you are unavailable to review them. Configure filters that determine which elements are selected for display in the control library. Change your password.
- Sign Out: Log off the Governance, Risk, and Compliance Controls Suite.
- Help: Review documentation.

Four tabs apply broadly to the Governance, Risk, and Compliance Controls Suite:

- Home: View two lists of tasks. One presents the five most recently generated approval requests that you can review, and the other the five most recent approval requests you have generated. Each list contains a link to the Task Inbox.
- Control Library: View, create, or edit entries that define and document controls and the other control-library elements.
- Reporting: View reports that serve as records of control configuration; that document SOD rules, present the results of conflict analysis, and audit the actions of temporary users, if your site uses Application Access Controls Governor; that document control monitors and the suspects they generate, if your site uses Transaction Controls Governor; that show the effects of rules enforcing change control on Oracle E-Business Suite fields, if your site uses Preventive Controls Governor; that document the responsibilities, menus, and functions to which users have access; and that document the use of "embedded agents," which work within Oracle to modify forms, establish processes, and audit changes.
- Administration: View, create, or edit items used in defining controls, such as dimensions, attributes, likelihoods, and ratings. Import or export control-library elements. Manage users and user groups. Configure workflow routings and workflow definitions. Configure data sources (connections to database instances to which controls are to be applied) and manage other system-level properties. Manage Business Objects, which provides the Governance, Risk, and Compliance Controls Suite reporting capability.

Two tabs are available only if your site uses Application Access Controls Governor:

- Segregation of Duties: Create SOD rules. Evaluate them to uncover conflicts, and assign status to conflicts that are subject to review. Simulate the effect of remedial actions, such as changes to the assignment of functions to responsibilities, and implement those actions if the simulation shows they reduce conflicts.
- Access Monitoring: Configure and send requests for users to receive temporary access to duties they do not ordinarily perform.

A final tab, Control Automation, is accessible only if your site uses Transaction Controls Governor. From it, view or create control monitors, workflow routings, and workflow definitions.

## User Roles

Each user is assigned a primary application role (and may be assigned reporting roles) when his user account is created. While your access to Governance, Risk, and Compliance Controls Suite may be limited by the selection of modules you have

installed, it is limited further by your roles. Each primary application role provides write access to some features and view access to other features, and may provide no access to still other features. Each reporting role enables you to generate and review a distinct selection of reports. The rights available to each role are discussed in detail in Chapter 2; for now, be aware that an individual user has full access to only some of the features discussed in this manual.

# Conventions

As you work with the Governance, Risk, and Compliance Controls Suite, you'll make repeated use of the following features.

## Breadcrumbs

Once you have begun to select options within a panel, the Governance, Risk, and Compliance Controls Suite leaves a trail of "breadcrumbs" — a string of links to each of the screens you have navigated to reach the screen you are using, culminating in the title of the current screen. (In the figure below, the breadcrumbs trail begins with the word *Home*.) To return to any of the earlier screens, click on its link.

## Sorting and Selecting Items in Lists

Several panels in Governance, Risk, and Compliance Controls Suite present lists of items. For example, the following illustration shows a list of controls:

| Control ID | Name | Description | Risk | Policy | Process | Cycle | Subprocess | Control Objective | Rating | Automation | Status |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CA-00-00002 | Dormant Users | Users are reviewed if they have not logged on in a specified time | 0 | 0 | 0 | 0 | 0 | 0 | Critical | No | Active |
| CA-q1-00001 | ca-q1-00001 | ca-q1-00001 | 0 | 0 | 0 | 0 | 0 | 0 | Critical | Yes | Active |

Show 15 Results  Result 1 - 2 of 2  Page 1 of 1

Each of these lists implements the following conventions:

- In the header row, some column headings are underlined. Each of these is a sort column. When you click on one of these headings, the contents of its column are arranged in alphanumeric order; the values in other columns are arranged appropriately so that records remain intact.
- In the footer row, you can select a number in the Show Results list box to determine how many rows the list displays at once. The list entries are divided into pages, each of which consists of the number of rows you've chosen to display. To move to another page than the one currently displayed, click on its number in the Page list box. Or, click on the Next Page or Previous Page link, each of which is present only if there is a next or previous page to go to.

## Date Fields

As you create an item in Governance, Risk, and Compliance Controls Suite, you typically set a range of dates during which the item remains in effect. To do so, you use fields labeled *Effective From* and *Effective To*.

By default, the Effective From field is set to the date on which you create the item, and the Effective To field is blank. If you accept these values, the item takes effect immediately (or, in some cases, immediately upon approval) and remains in effect indefinitely.

You may, however, choose to modify these values. If so, you can type a date directly in either field, in the format *DD-Mmm-YYYY*. Alternatively, you can click on a grid-like icon next to the field, and a pop-up calendar appears. In it, click on the < or > symbol surrounding a month name or year to display an earlier or later month or year; then, in the calendar, click on the date you want. The pop-up window closes, and the date you selected appears, correctly formatted, in the field.

# Chapter 2

# User Administration

Every Governance, Risk, and Compliance Controls Suite user is assigned one "primary application role" and any number of "reporting roles."

Each of nine primary application roles — Author, Manager, Rule Builder, SOD Super User, SOD Approver, Executive, User, Auditor, and System Administrator — grants access to a distinct set of features (apart from reports). For example, only an Author can create or modify Control Administration items that serve as "building blocks" for other items. Only a System Administrator can create or modify users and user groups. An Auditor has view and assessment rights, but can create or edit nothing. Before controls or related items can be configured, it's necessary to create users with rights to configure them.

(A tenth primary application role — AG Super User — has view, edit, and create privileges to all features and access to all reports. Because this role has unlimited authority, it should be assigned as sparingly as possible.)

Moreover, control-library elements, once created or modified, must be approved before they can be used. Workflows distribute these elements for review, so workflow routings and definitions must be configured before any control-library elements can be created. Each workflow routing calls users or user groups; these must be created first so that they exist to be assigned to routings.

Each reporting role specifies a selection of reports a user is able to open and review. Each selection provides information appropriate to work performed by a user at one of the primary application roles, and so the reporting-role names correspond to the primary-application-role names.

The Governance, Risk, and Compliance Controls Suite comes with one user configured as a System Administrator; the user name and password for this user are both *admin*. By logging on as the admin user, one can create other users with rights to the various configuration tasks, or users and groups for membership in workflow routings. However, it's imperative for proper security that an authoritative user modify the admin user's password as soon after installation as that task can be completed.

# User Permissions for Primary Application Roles

Every user has access to the Task Inbox and can change his own password. Apart from these, each user has the rights available to the primary application role he has been assigned. For all but the Reporting and Administration tabs, these rights amount to the following:

| Rights to Features on: | Author | Manager | Rule Builder | SOD Super User | SOD Approver |
|---|---|---|---|---|---|
| Control Library Tab | C | C, A | C, A | C, A | N |
| Control Automation Tab | C | C | C | C | N |
| Segregation of Duties Tab | C | C | C | C | R |
| Access Monitoring Tab | C | C | C | C | N |

| Rights to Features on: | Executive | User | Auditor | System Admin |
|---|---|---|---|---|
| Control Library Tab | C, A | C | V, A | V |
| Control Automation Tab | V | V | V | V |
| Segregation of Duties Tab | V | C, V | V | V |
| Access Monitoring Tab | C | C | V | C |

Generally, a *C* indicates create rights; *A*, assess rights; *V*, view rights; *R*, review rights; and *N*, no rights. But these labels can have different meanings on different tabs, so the following descriptions are more specific.

On the Control Library tab:

- **C:** Create. Open lists of control-library elements (one list of each type). Create, edit, and view configuration details for individual elements in lists.
- **A:** Assess. Configure assessments of control-library elements. (Users without this privilege can view, but not create, assessments.)
- **V:** View. Open control-library element lists. View configuration details for individual elements in lists. Do not create or modify elements.

On the Control Automation tab:

- **C:** Create. Open lists of configured control monitors, workflow routings, and workflow definitions. Create, edit, or view items in these lists.
- **V:** View. Open control monitor, workflow routing, and workflow definition lists, and view configuration details for individual items in lists. Do not create or modify these items.

On the Segregation of Duties tab:

- **C:** Create. View, create, and edit SOD rules and "entity groups" (sets of functions or responsibilities that may be included in SOD rules); run a "background program" that evaluates SOD rules to uncover conflicts, and other background programs; view conflicts generated by SOD rules, but do not approve or reject them. View, create, and edit "global subscribers" (data groups, submenus, functions, operating units, or users who are exempt from SOD rules); create, edit, and view rules that simulate changes intended to resolve conflicts; run simulations and view results; and run remediation (put simulated conflict resolutions to actual use).
- **R:** Review. Approve or reject conflicts generated by SOD rules. View SOD rules and entity groups, but do not create or edit them. Have no access to background programs, global subscribers, simulation, or remediation.
- **V:** View. Exercise view-only privileges to SOD rules, entity groups, global subscribers, and simulation rules. Do not create or edit them. View conflicts generated by SOD rules, but do not approve or reject them. Run simulation, but do not run background programs or remediation.

**Note**
For SOD purposes, the User primary application role is a hybrid. Users at this role can create and edit SOD rules, but otherwise have View privileges.

On the Access Monitoring tab, an SOD Approver has no rights, and an Auditor can view requests for temporary access. All other roles can both view and create requests for temporary access, for themselves or others.

Administration-tab features are divided into six categories. The SOD Approver has no access to these features; other users have the following access. In this table, *F* indicates full rights to a feature, *V* indicates view rights, and *N* indicates no rights:

| Feature | Author | Manager | Rule Builder | SOD Super User | Executive | User | Auditor | System Admin |
|---|---|---|---|---|---|---|---|---|
| **Control Administration** | | | | | | | | |
| Manage Control Element Names | N | N | N | N | N | N | N | F |
| Manage ID Value Sets | F | V | V | V | V | V | V | N |
| Map Control Elements to ID Value Sets | F | N | N | N | N | N | N | N |
| Manage Likelihoods | F | V | V | V | V | V | V | N |
| Manage Ratings | F | V | V | V | V | V | V | N |
| Manage Dimensions | F | V | V | V | V | V | V | N |
| Mass Update Dimension Value Mappings | F | F | N | N | N | N | N | N |
| Manage Attributes | F | V | V | V | V | V | V | N |
| Mass Update Attribute Value Mappings | F | F | N | N | N | N | N | N |
| Import Controls from Excel | F | F | F | N | N | N | N | F |
| **User Administration** | | | | | | | | |
| Manage Users | V | V | V | V | V | V | V | F |
| Manage Groups | V | V | V | V | V | V | V | F |

*Table continues on the next page.*

| Feature | Author | Manager | Rule Builder | SOD Super User | Executive | User | Auditor | System Admin |
|---|---|---|---|---|---|---|---|---|
| **Workflow Administration** | | | | | | | | |
| Workflow Routing | F | F | F | F | V | V | V | V |
| Workflow Definition | F | F | F | F | V | V | V | V |
| Manage Workflow Priorities | F | F | F | F | N | N | N | N |
| **Data Administration** | | | | | | | | |
| Export | F | F | F | N | N | N | N | F |
| Import | F | F | F | N | N | N | N | F |
| Control Monitor Import/Export File Merger | N | N | N | N | N | N | N | F |
| **System Administration** | | | | | | | | |
| Manage Data Sources | F | F | N | N | N | N | V | F |
| Manage Licenses | N | N | N | N | N | N | N | F |
| Mange Configuration Properties | N | N | N | N | N | N | N | F |
| **Business Objects Administration** | | | | | | | | |
| Central Management Console | N | N | N | N | N | N | N | F |
| Report Instance Manager | N | N | N | N | N | N | N | F |
| Report Server Summary | N | N | N | N | N | N | N | F |
| Query Builder | N | N | N | N | N | N | N | F |
| Object Repository Helper | N | N | N | N | N | N | N | F |

# Users and Groups as Approvers

Users may be named in workflow routings, and so serve as approvers of suspects, control-library elements, or access-monitoring requests. User groups exist solely for that purpose. You may want to allow only users at certain roles to perform approval tasks. If so, be aware that a user at any role can be added to a routing or a group; you must make sure that only users at the proper roles are. Know also that a user cannot create or modify a control-library element if workflows are configured so that the user, individually or as a group member, would be an approver for the element.

# User Permissions for Reporting Roles

Reports are organized by folder, and the AG Super User has access to all reports in all folders, even if no reporting role is assigned to him. This role has access to two reports that are not accessible to any other reporting role — the Access Monitor Request and Access Requests Awaiting Approval reports in the Access Monitoring folder.

The Manager reporting role has access to all but these two Access Monitoring reports, and the Auditor reporting role has access to all but these two and one more — the Approver Performance report in the Change Control folder.

Only these three reporting roles have access to reports in the following two folders:

- Change Control, which documents work done in Preventive Controls Governor. The Auditor role does not have the Approver Performance report (which pro-

vides statistics about numbers of field-value change requests approved or rejected by individual approvers), but does have access to two remaining reports (which provide information about change-control rules and changes made to the fields those rules control). The other two roles have access to all three reports.

- Oracle Embedded Agent, which applies to rules created in Flow Rules, Form Rules, and Audit Rules. These are "embedded agents" that run within Oracle E-Business Suite.

All roles have access to reports in the Segregation of Duties folder, and all but the SOD Approver have access to reports in the Oracle EBS Security folder. Reports in these folders document work done in Application Access Controls Governor. All roles also can open the sole report — Control Framework — in the Control Library folder.

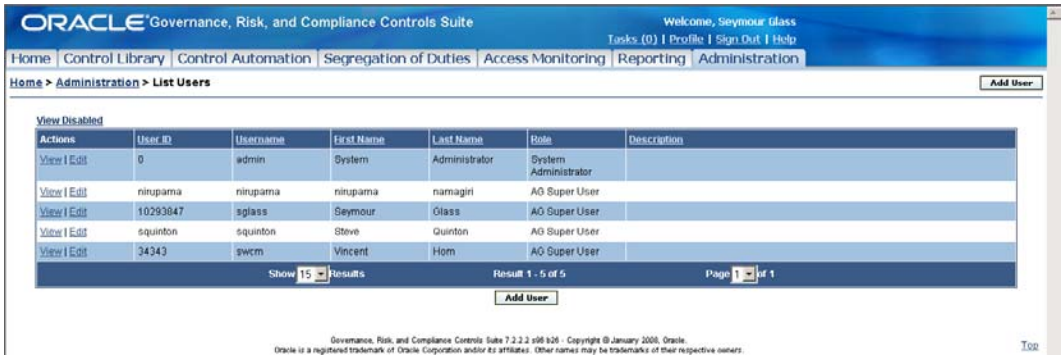
Apart from these rights, reporting roles have access to the following reports. (In this table, the value *Y* stands for *yes*, indicating that the role has access to the report, and the value *N* stands for *no*.)

| Report | Author | Rule Builder | SOD Super User | SOD Approver | Executive | User | Admin |
|---|---|---|---|---|---|---|---|
| **Access Monitoring Folder** | | | | | | | |
| Access Monitor Request | N | N | N | N | N | N | N |
| Access Monitoring User Activity | N | Y | Y | N | Y | N | Y |
| Access Requests Awaiting Approval | N | N | N | N | N | N | N |
| **Administration** | | | | | | | |
| User Summary by Report Role | Y | Y | Y | N | Y | N | Y |
| User Summary | Y | Y | Y | N | Y | N | Y |
| **Control Automation Folder** | | | | | | | |
| Automated Controls | Y | N | Y | N | Y | Y | N |
| Automated versus Manual Controls | Y | N | Y | N | Y | Y | Y |
| Average Days of Outstanding Tasks | Y | N | Y | N | Y | Y | N |
| Control Automation List by Control Objective | Y | N | Y | N | Y | Y | N |
| Control Automation List by Primary Element Name | Y | N | Y | N | Y | Y | N |
| Control Automation List by Primary Element | Y | N | Y | N | Y | Y | N |
| Control Automation List by Subprocess | Y | N | Y | N | Y | Y | N |
| Control Automation Suspects by Dimension Value | Y | N | Y | N | Y | Y | N |
| Control Monitor Detail | Y | N | Y | N | Y | Y | N |
| Detail Suspect History | Y | N | Y | N | Y | Y | N |
| Open Suspect Tasks by Control Objective | Y | N | Y | N | Y | Y | Y |
| Open Suspect Tasks by Subprocess | Y | N | Y | N | Y | Y | Y |
| Open Suspects by Primary Control Element | N | N | Y | N | Y | Y | Y |
| Summary Suspect History by Control Element | Y | N | Y | N | Y | Y | N |
| Summary Suspect History by User | Y | N | Y | N | Y | Y | N |
| Suspect Task Detail | Y | N | Y | N | Y | Y | N |

# Displaying a List of Users

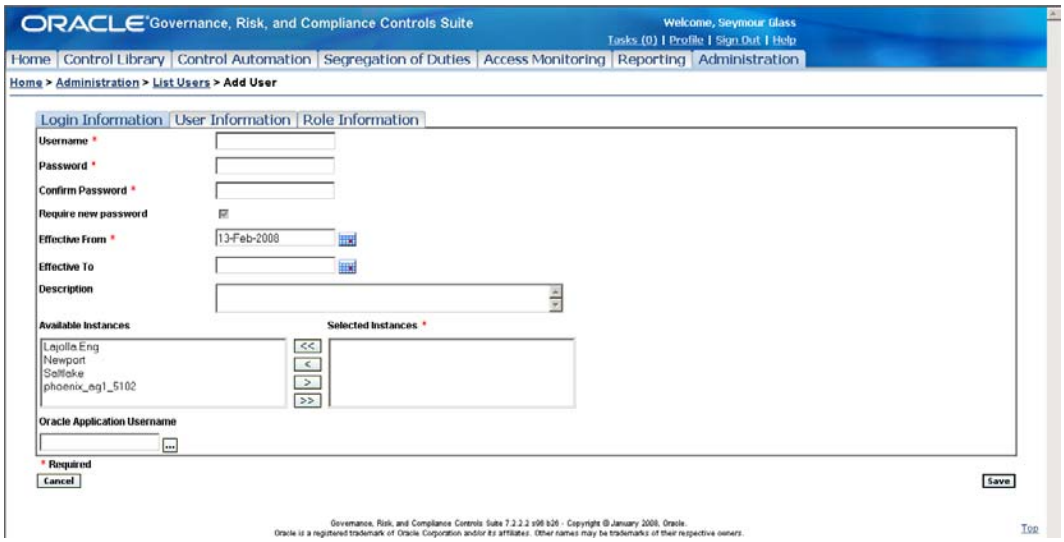
Only a system administrator or an AG super user can add or edit a user or group. Users at other roles can view user configuration without changing it (and so have access to the View panels described below, but not to the Add or Edit panels).

To view, add, or edit a user, click on the Administration tab, then on the List Users link in the User Administration section of the Administration Home. A List panel displays active users and, for each, an ID number and username (either of which can serve as a unique identifier), the user's given name and surname, the primary application role assigned to her, and a description. Users may be disabled. To produce a separate list of these users, click on the View Disabled link; to restore the active-user list, click on a View Current link.




# Adding a User

To add a user, click on either of two Add User buttons, which appear near the top right and bottom center of the List Users panel. The following Add User panel appears:



## Setting Logon Values

Click on the Login Information tab, and then provide information that is used by Governance, Risk, and Compliance Controls Suite:

1. In the Username field, type a name by which the user identifies herself as she logs on. A username consists of alphanumeric characters, may be any length, and is case-insensitive — alphabetic characters are converted automatically to lower case both here and in the logon panel.

2. In the Password field, type a password with which the user validates her username as she logs on. Retype the password in the Confirm Password field. A password is case-sensitive and must consist of at least eight characters, taken from at least three of four character sets: uppercase letters, lowercase letters, numbers, and special characters, which comprise !@#$%&*. Moreover, the password cannot match the username.

   A check box labeled Requires New Password is selected by default, and this setting cannot be changed for a new user. Thus every new user is required to create a new password the first time she logs on. Once she has done so, the check box clears itself and a new password is no longer required for subsequent log-ons. You can change the setting of this check box when you edit the account of an existing user.

3. Select starting and ending dates for the user in the Effective From and Effective To fields, respectively. By default, the current date appears in the Effective From field and the Effective To field is blank; accept these entries if you want the user to begin working immediately and continue indefinitely. Otherwise, enter new dates (see "Date Fields," page 6).

4. Optionally, type a brief description of the user in the Description field. It appears in the Description column of the user's entry in the List Users panel.

5. The Available Instances field contains a list of databases configured to connect to Application Access Controls Governor (through use of the Manage Data Sources feature on the Administration tab). These databases store data to which access controls may be applied. Select the database instances in which the user you are configuring will be able to create SOD rules or use access monitoring:

   - In the Available field, highlight the instances you want to assign to the user. To highlight a single instance, click on it. To highlight a continuous set of instances, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold down the Ctrl key as you click on instances.

   - Click on the > button to send the instances you've highlighted from the Available field to the Selected field. Or, click on the >> button to send all instances to the Selected field, regardless of whether they are highlighted.

     If you reconsider, highlight instances in the Selected field, then click on the < button to return them to the Available field. Or, click on the << button to return all instances to the Available field, regardless of whether they are highlighted.

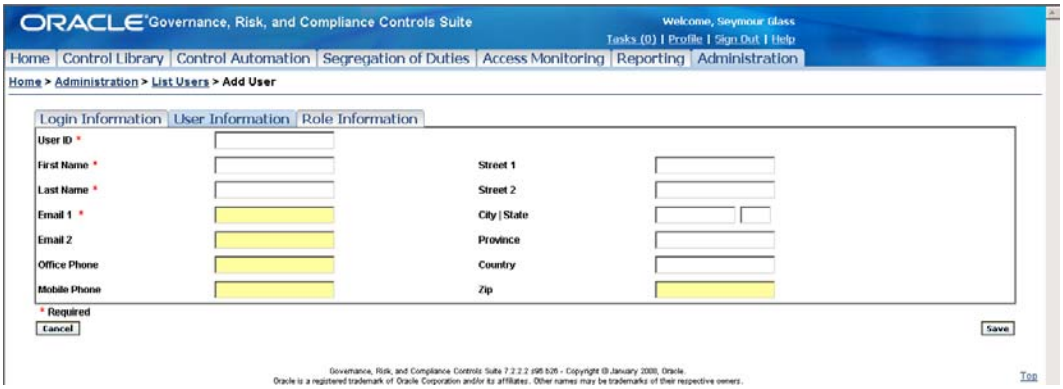
6 For each database in the Selected Instances field, identify the Oracle logon ID used by the Governance, Risk, and Compliance Controls Suite user you are creating. If you do not complete this step, the user is unable to access the Segregation of Duties and Access Monitoring tabs.

For each database, complete this process: Highlight (click on) the database in the Selected Instances field. In the OracleApps User field, click on the ellipsis icon; a pop-up window opens. In its Key Word field, type the first few letters of the username you want; then click on the Search button. The window presents a list of usernames that begin with your search string; click on the one you want. The pop-up window closes, and the username you selected appears in the OracleApps User field.

Oracle logon IDs are also available for selection as SOD rule owners in Application Access Controls Governor. If the ID you select here is also to be selected as an SOD rule owner, be sure to assign SOD Approver primary application role to the user, as this is the only roles that can update conflict status in Application Access Controls Governor. (You'll select a role a little later; see page 15.)

## Setting User Values

Next click on the User Information tab and then provide data that identifies the user:




1 In the ID Number field, enter an ID number for the user. The intention is for this number to be unique, and therefore to distinguish the user from others when there is no other distinction (for example, should users share the same name). Use any format.

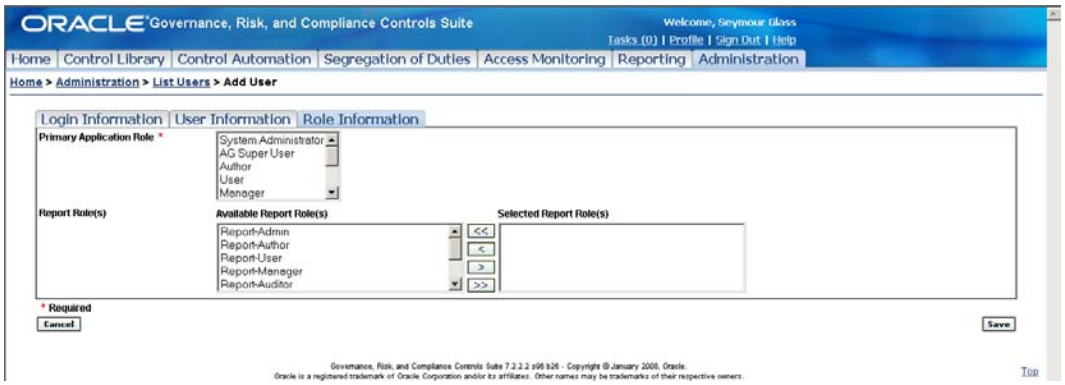
2 In the First Name and Last Name fields, enter the user's given name and surname.

3 In the Email1 field, supply an email address for the user. Governance, Risk, and Compliance Controls Suite sends email messages to the user for several reasons, such as being assigned a task in the Task Inbox. Or, if the user creates an access request through use of the Access Monitoring feature, he receives an email notification when the request has been either approved or rejected. These messages are sent to the email address you supply in this field.

4 Optionally, provide tracking information in the remaining fields: a second email address, office and mobile phone numbers, and physical address information. Governance, Risk, and Compliance Controls Suite does not use this information.

## Assigning Roles

Finally, click on the Role Information tab, and then assign roles to the user:




1 In the Primary Application Role field, select (click on) the primary application role you want to assign to the user. (You must select one; primary application roles are defined on page 8.)

2 In the Available Report Roles field, highlight the reporting roles you want to assign to the user. (These are optional, and you can select as many as you like.) To highlight a single role, click on it. To highlight a continuous set of roles, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold down the Ctrl key as you click on roles.

3 Click on the > button to send the roles you've highlighted from the Available Report Roles field to the Selected Report Roles field. Or, click on the >> button to send all roles to the Selected Report Roles field, regardless of whether they are highlighted.

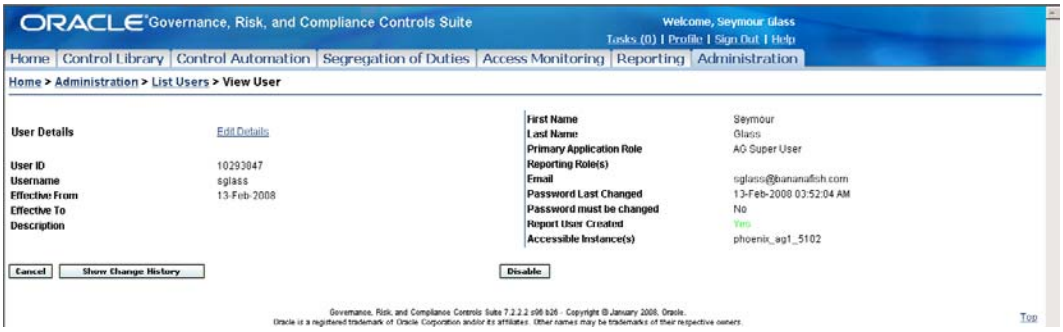
If you reconsider, highlight roles in the Selected Report Roles field, then click on the < button to return them to the Available Report Roles field. Or, click on the << button to return all roles to the Available Report Roles field, regardless of whether they are highlighted

## Saving the User

When you finish supplying logon, user, and role information, click on the Save button. (Several fields are mandatory, and each is marked by a red asterisk. If you have not entered a value for any of them, you cannot save the user, and when you click on the Save button an error message lists the fields you must complete.) When the user is saved successfully, the List Users panel returns, with an entry for the new user in the list.

# Viewing and Editing a User

Although the List Users panel presents a summary of the information configured for each user, you can see detailed information for one user at a time by clicking on the View link in the Actions (leftmost) column of that user's entry on the List Users panel. A View User panel opens:




## Editing User Values

To edit any of the current values for a user, either click on the Edit link in the Action column of the user's entry on the List Users panel (see page 12), or click on the Edit Details link in his View User panel.

This opens an Edit User panel — in all but name a copy of the Add User panel, with the current values for the user displayed in its fields. Modify any of the values (see "Adding a User" on page 12 for descriptions of the information you can provide), and click on the Save button. The List Users panel returns.

## Disabling and Re-enabling a User

A user may be disabled. If so, the Effective To value for the user is set to the current date, and he loses his access to Governance, Risk, and Compliance Controls Suite. For auditing purposes, however, he remains in the system as a disabled user. To disable a user:

1. Open the View User panel for the user you want to disable.
2. Click on the Disable button.
3. A Confirm Disable Users panel prompts you to corroborate your intention to disable the user. Click on its Disable button; the List Users panel reappears, with the user removed from the list.

You can view entries for disabled users by clicking on the View Disabled link in the List Users panel. To re-enable a disabled user, locate his entry in the list of disabled users. Open his account for editing (click on the Edit link in his entry on the List Users panel, or click on the View link and then on the Edit Details link in the View User panel). Then delete the Effective To date and save the user.

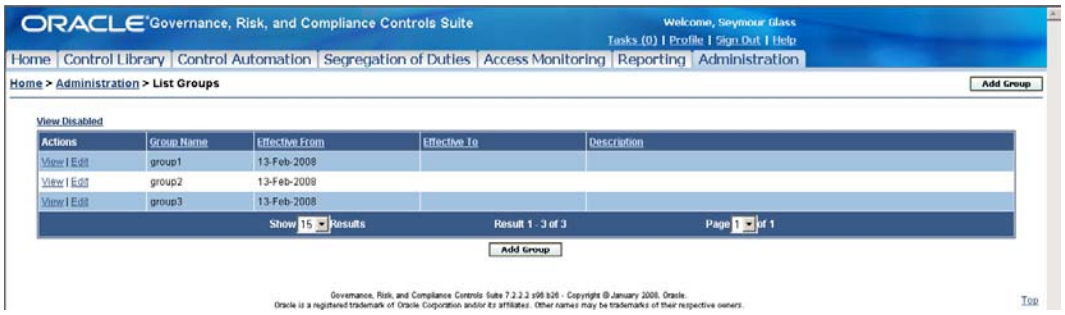
### Setting the Report User

In addition to items detailed in "Adding a User" (page 12), the View User panel displays an entry for Report User Created. Reports are generated by third-party software called Business Objects. Typically, the act of creating a user in Governance, Risk, and Compliance Controls Suite creates the user in Business Objects as well. If so, the Report User Created entry reads "Yes," and the user can view reports (provided that he has been assigned at least one reporting role).

Occasionally, a user is created in Governance, Risk, and Compliance Controls Suite while Business Objects is inaccessible. If so, the Report User Created entry reads "No," and the user cannot view reports. In this case, edit the user's account while Business Objects is running, enter a new password in the Password and Confirm Password fields, and save the user. The Report User Created entry then changes to "Yes," and the user is able to view reports.

## Displaying a List of Groups

To view, add, or edit a user group, begin by clicking on the Administration tab. Then click on the List Groups link in the User Administration section of the Administration Home. A List Groups panel then displays active groups and presents information about each — a name, effective dates, and a description. Like users, groups may be disabled; you can produce a separate list of these groups by clicking on the View Disabled link, and restore the list of active users by clicking on a View Current link.

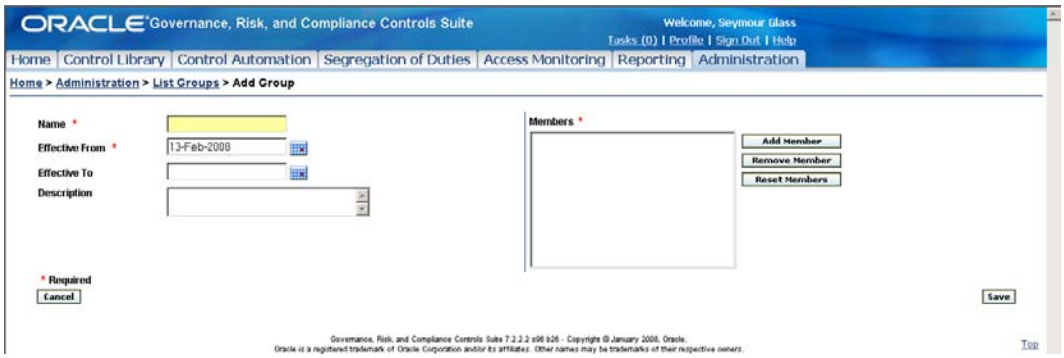



## Adding, Viewing, or Editing a Group

To add a new group, open an Add Group panel: Click on an Add Group button in the List Groups panel. (The button appears in two places, near the top right of the panel and at the bottom center.)

To view the settings for an existing group, open a read-only View Group panel: In the Actions (leftmost) column of a group's entry on the List Groups panel, click on the View link. To modify those settings, open a write-enabled Edit Group panel: Either click on the Edit link in the Actions column of the group's entry on the List Groups panel, or click on the Edit Group button in its View Group panel.

Apart from its label (and write privileges), the panel you open looks as follows:




## Defining a Group

To define a new group, supply the following values in the Add Group panel. To modify an existing one, alter any combination of these values in the Edit Group panel.

1. In the Name field, type a name for the group. (If you create a group, include it in a workflow routing, and subsequently change its name, the group remains selected in the workflow routing, with its name updated to reflect the change.)
2. Select starting and ending dates for the group in the Effective From and Effective To fields, respectively. By default, the current date appears in the Effective From field and the Effective To field is blank; accept these entries if you want the group to exist immediately and remain indefinitely. Or, click on the icon to the right of each field and select a date in the pop-up calendar that appears. (See "Date Fields" on page 6.)
3. In the Description field, type a brief explanation for the purpose of the group. It appears in the Description column of the group's entry in the List Groups panel.
4. Add members. Either individual users or groups may be members of a group.
   - **a** Click on the Add Member button (located at the top of the set of three buttons near the right of the panel). A pop-up window displays two lists, one of users and one of groups configured on your system. (Because it would make no sense to add the group you are configuring as a member of itself, the group is excluded from the list.)
   - **b** For each user or group you want to add, click on the Add link at the left of its entry in the pop-up window. The user or group then appears in the Members field on the Edit Group panel.
   - **c** When you finish selecting members, close the pop-up window: Click on its Close button or on the × symbol in its upper right corner.
5. Optionally, remove members:
   - **a** In the Members field, highlight members you intend to remove. Click on a member to highlight it. Or, to highlight a continuous set of members, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold the Ctrl key as you click on items.

**b** Click on the Remove Member button (second in the set of three buttons near the right of the Edit Group panel).

**6** You may restore the list of members to its state the last time it was saved. Click on the Reset Members button (third in the set of three at the right of the Edit Group panel). Then make new additions and removals.

**7** Click on the Save button. The List Groups panel returns.

## Disabling or Re-enabling a Group

You can disable a group. If so, it is no longer available for use, and any workflow routings in which it had been included would have to be reconfigured. For auditing purposes, however, it remains available in the system as a disabled group.

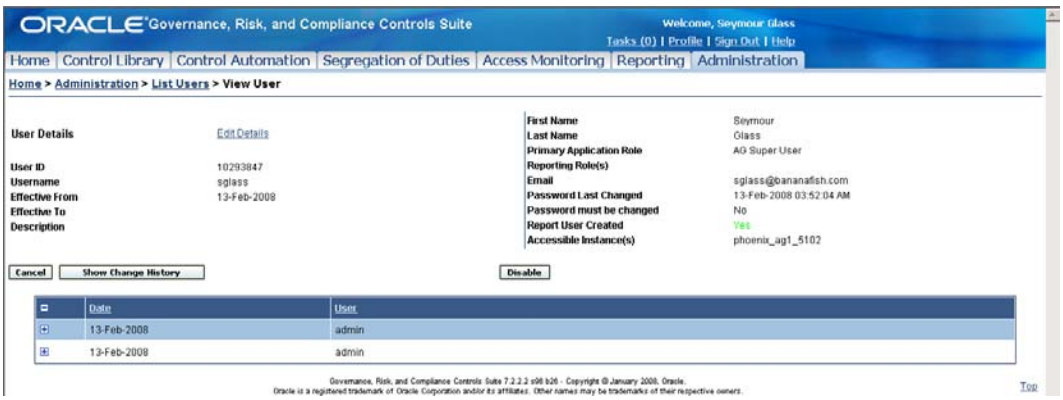
To disable a group, set its Effective To value to the current date. To re-enable a group, delete its Effective To value (or set it to a future date). You can view entries for disabled groups by clicking on the View Disabled link in the List Groups panel, or restore the listing of active groups by clicking on the View Current link.

# Reviewing Changes to Users and Groups

You can review a history of the changes made to each user or group. (This functionality exists, however, only if you have installed version 7.2.1 or later.)

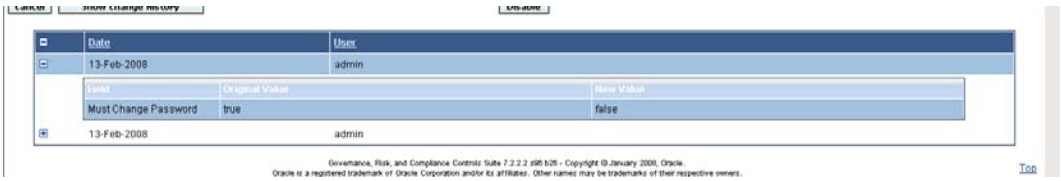
**1** In the List Users or List Groups panel, click on the View link for the user or group whose history you want to see.

**2** In the View User or View Group panel, click on the Show Change History button. A change-history grid displays a row for each time changes were saved for the user or group. Each row shows the date on which changes were saved, and identifies the user who made the changes:




**3** The last row in the grid documents the creation of the user or group; each subsequent row documents a change, which may in fact constitute modifications to several fields, all of which were saved at once. To view details about such modifications, click on the + icon in the leftmost column for one of these rows. An

inset grid appears, displaying the old and new values for each modified field associated with the row you selected:



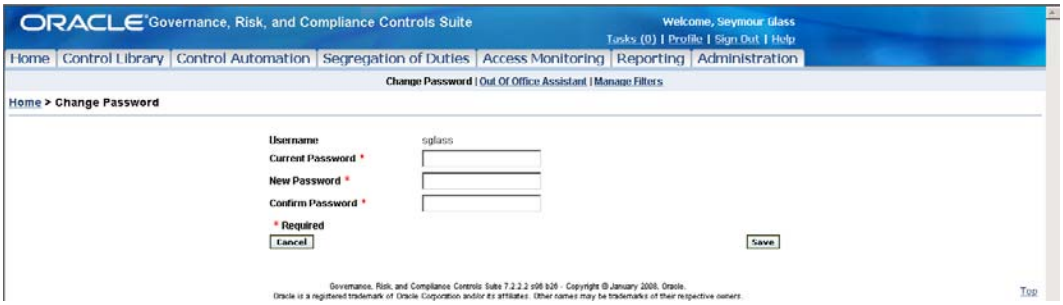

4 Click on the + icon in other rows (or on the + icon in the header row) to view old and new values for changes saved at other moments. Each of the icons changes to display a minus sign; click on minus icons for individual entries to close their inset, detail grids, or click on the minus icon in the header row to close all the inset grids.

# Changing a Password

The user who is currently logged on can change his own password, regardless of the primary application role that has been assigned to him. For a new user, who must do so, a Change Password Panel opens automatically the first time he logs on. For another user to open this panel:

1 Click on the Profile link near the upper right corner of any panel in Governance, Risk, and Compliance Controls Suite.

2 Click on the Change Password link, near the center top. This panel appears:




To use the panel to change your password:

1 Type your existing password in the Current Password field.

2 In both the New Password and Confirm Password fields, type the password to which you want to change. A password must consist of at least eight characters, taken from at least three of four character sets: uppercase letters, lowercase letters, numbers, and special characters, which consist of the following: !@#$%&*. Moreover, your password cannot match your username.

3 Click on the Save button. If there are any problems with the format of the new password, a message explains the problem so that you may correct it as you retype the new password in the New Password and Confirm Password fields, and click on the Save button again. Typically, however, a message informs you that the new password has been accepted, and you can navigate to any other panel in the Platform to which your primary application role gives you access.

# Chapter 3

# Control Administration

Before you can create controls, you must create components used by controls (and elsewhere): dimensions, attributes, likelihoods, ratings, and ID value sets. To work with any of these items, click on the Administration tab, and then select an appropriate link in the Control Administration section of the Administration Home.

## Who Can Do This?

If your primary application role is Author, you can create and edit control administration items, and so can complete the dimension, attribute, likelihood, rating, and ID value set procedures described below; Managers, Rule Builders, SOD Super Users, Executives, Users, and Auditors have view-only rights to the panels described in these procedures; System Administrators and SOD Approvers cannot open them. A System Administrator can rename the types of elements contained by the control library; other users cannot open the panel in which this procedure is performed.

## Creating Dimensions and Attributes

A dimension is a segment of your business environment to which a control-library element applies. For example, it may be a region or a department. An attribute is a category of values that may describe the qualities or nature of a control-library element. For example, it may show where a control fits in the COSO control framework.

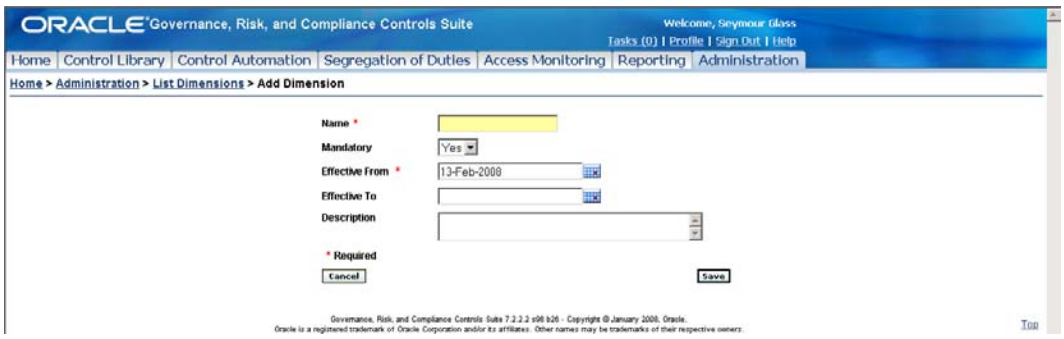
To configure a dimension or an attribute, first name the item — for example, "Region" as a dimension. Next, assign values appropriate for the item, such as "East" and "West" as regions. (Ultimately, a user who creates a control-library element selects one or more of these values for it — in this example East, West, or both.)

While meaningful in themselves, dimensions and attributes also serve as filters to determine who can approve either the creation or modification of control-library elements, or of suspects generated by control monitors. (See Chapter 4, "Creating Workflows.") For example, a control designated for use in the Eastern region might be sent for approval to a group charged with overseeing controls for that region.

Moreover, a dimension may be included as a parameter in a SQL query that selects the suspects generated by a control monitor. If so, the dimension serves as one of the selection criteria by which the control monitor generates suspects: the SQL query selects only those records for which the value of a specified database table matches a specified dimension value. This use of a dimension enables end users to select a value used for filtering suspects as they run a control monitor, rather than rewriting the SQL code that defines the control monitor.

To create a dimension or attribute:

1. From the Administration Home, click on the Manage Dimensions link or on the Manage Attributes link. A List panel displays the names of existing dimensions or attributes and, for each, a description, its effective dates, and whether its use is mandatory.
2. To edit an existing dimension or attribute, click on its name in its list. To create a new one, click on the Add Dimension button or the Add Attribute button. A form like the following one appears:

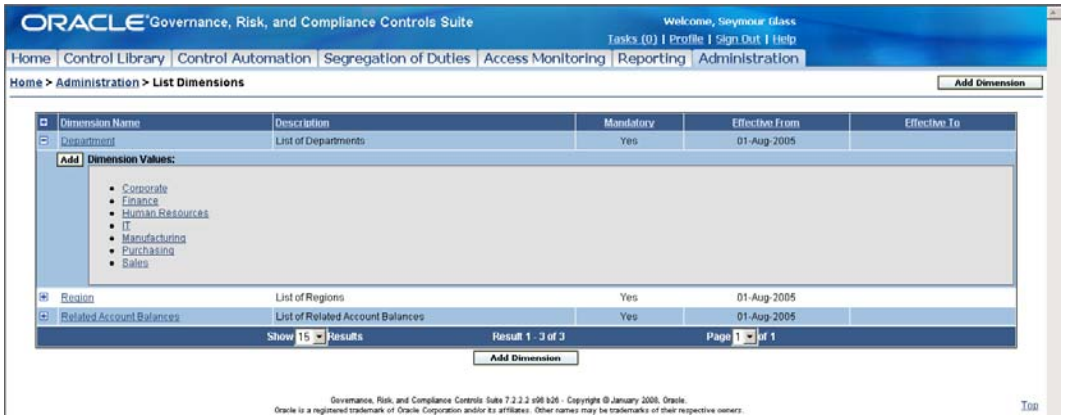



3. In the Name field, type a name for the dimension or attribute.
4. In the Mandatory list box, select Yes to require a user to choose at least one value for this dimension or attribute as he creates a control, or select No to make this item optional. (This setting applies only when dimension or attribute values are selected for controls. Dimensions and attributes are always optional for other control-library elements.)
5. Select starting and ending dates for the dimension or attribute in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)
6. In the Description field, type a brief description of the item.

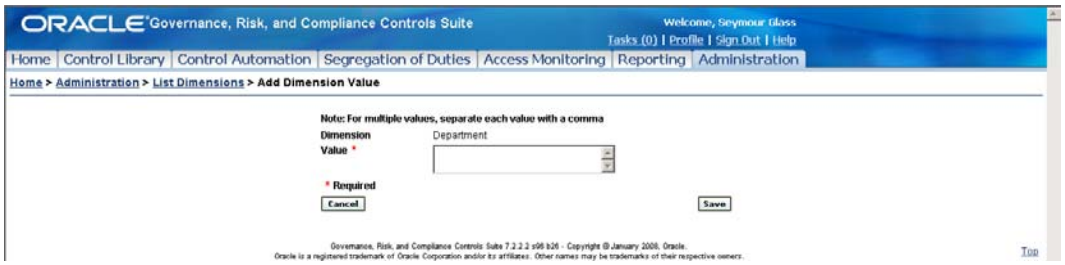
7 Click on the Save button to save the item. The List panel is restured, displaying dimensions or attributes, with the one you've just created among them.

To assign values to a dimension or attribute:

1 In the List panel, locate the row that defines the dimension or attribute whose values you want to set, and click on the plus-sign icon at the left of its row. A Dimension Values or Attribute Values field appears, displaying an Add button and any values already configured for the dimension or attribute. (If, instead, you click on a plus-sign icon at the left of the header row, fields display values for all dimensions or attributes.)




2 To edit an existing value, click on its name. To create a new value, click on the Add button. A form like the following one appears:




3 If you are editing an existing value, alter its name in the Value field. If you are adding new values, you can add more than one at a time; type names for any number of values in the Value field, using a comma to separate distinct entries.

4 Click on the Save button. The List panel returns.

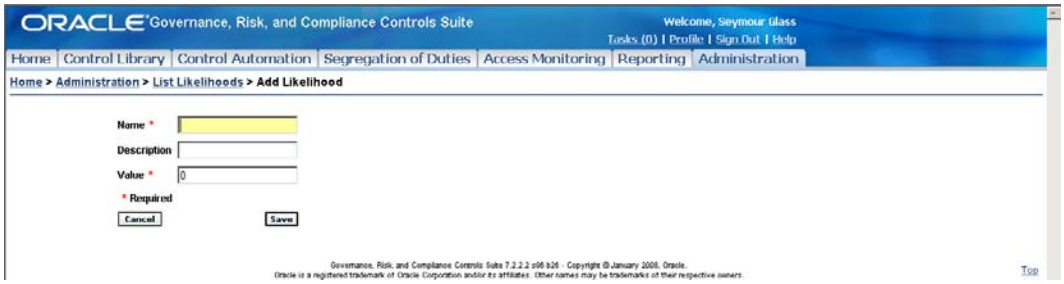
5 When you clicked on a plus-sign icon to display dimension or attribute values, the icon changed to a minus sign. Click on a minus-sign icon to restore a row, or the minus-sign icon in the header row to restore the List panel, to its original form, with no values displayed.

## Creating Likelihoods and Ratings

A likelihood expresses the potential for a control, if it were to fail, to permit material error to be committed in the financial statements. A rating is an assessment of the rel-

ative importance of a control. The values one can select for either are user-configured, and the configuration process for the two measures is very similar:

1. From the Administration Home, click on the List Likelihoods link to create or edit likelihoods, or on the List Ratings link to create or edit ratings. A list panel displays the names of existing likelihoods or ratings, together with a description and a numeric value associated with each.
2. To edit an existing likelihood or rating, click on its name in its list. To create a new one, click on the Add Likelihood button or the Add Rating button. A form like the following one appears:




3. In the Name field, type a name for the item — for example, “high” or “moderate” for a likelihood, or “critical” or “minor” for a rating. (As a user creates a control, she selects from the Name values configured for likelihoods or ratings.)
4. In the Description field, type a brief description of the item.
5. In the Value field, type a number that sets a precedence this item has with respect to other ratings or likelihoods. (You’re free to decide whether a lower numeric value is equivalent to a greater or lesser precedence.)
6. Click the Save button to save the item.

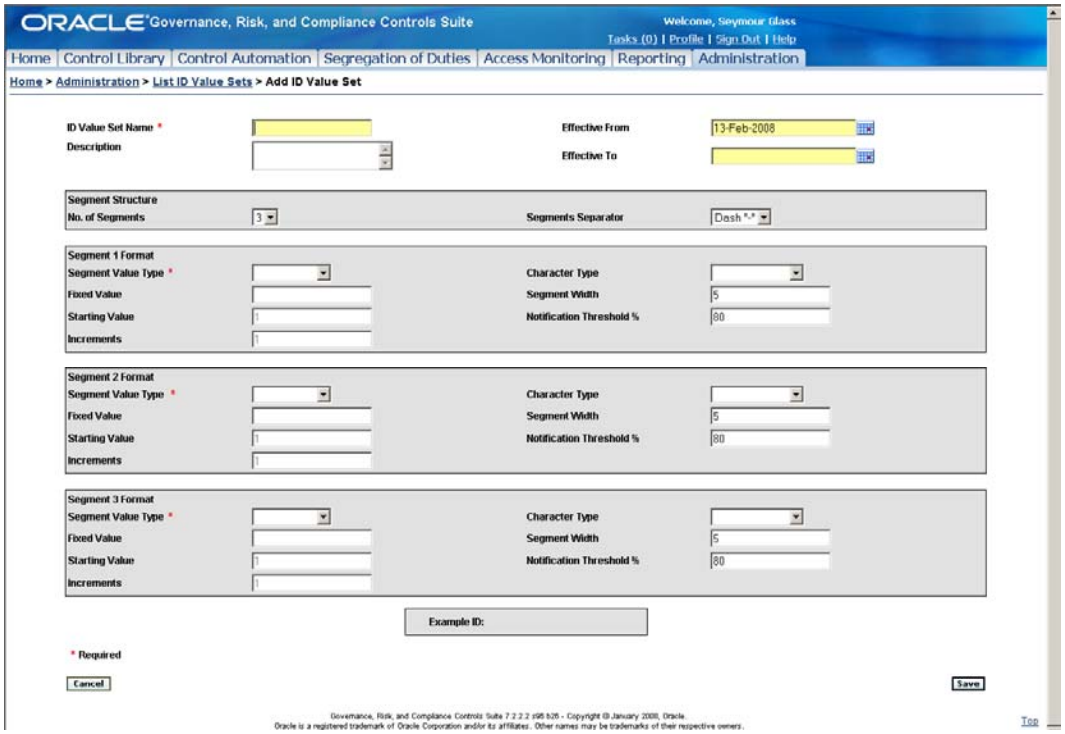
# Creating and Mapping ID Value Sets

An ID must be assigned to each control-library element: controls, control objectives, subprocesses, cycles, processes, policies, and risks (to use their default names). For each element, configure an “ID value set,” which determines the format and range of ID values. An ID may consist of up to three segments, and you can make formatting selections for each segment.

## Create or Edit Value Sets

To define value sets, click on the Administration tab, and then on the List ID Value Sets link. A List ID Value Sets panel appears, displaying a name, description, and formatting example for each value set that has already been defined, if any.

To edit an existing value set, click on its name in the list. To create a new value set, click on the Add ID Value Set button. An Add ID Value Set form appears (as shown at the top of the next page).




Insert entries in fields to create a new value set, or alter any of the current entries to edit an existing value set:

1. Type a name for the value set in the ID Value Set Name field, and type a brief explanation of its use in the Description field.
2. Select starting and ending dates for the value set in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)
3. In the No of Segments field of the Segment Structure box, select the number of segments into which each ID is to be divided — up to three. If you select more than one, also use the Segments Separator list box to choose a mark of punctuation that delimits the segments — a dash, a dot, or a pipe (|).
4. A Segment Format Validation box remains in place for each of the segments you specified in step 3. In each box, select values that define its segment format.

   First, in the Segment Value Type list box, choose how the segment value is generated. Select Fixed Value to set a single value that is repeated in every ID, Manual to require the user to enter a value while creating a control library element, or Automation to have values supplied. Then:

   - If you choose Fixed Value in the Segment Value Type field, define the value by entering it in the Fixed Value field. Type up to six characters in any alphanumeric combination. In this case, no other field accepts input.
   - If you choose Manual in the Segment Value Type field, complete the following fields. (Other fields do not accept input).

     Character Type: Choose whether the segment should consist of alphabetic characters, numeric characters, or both.

Segment Width: Enter a number (1–6) that sets the number of characters in the segment.

- If you choose Automation in the Segment Value Type field, the segment necessarily consists of numeric characters. Complete the following fields. (Other fields do not accept input.)

  Starting Value: Type a number that is the initial value for the segment.

  Increments: Type a number that sets the amount by which each segment value increases over the previous one.

  Segment Width: Enter a number (1–6) that sets the number of characters in the segment.

  Notification Threshold %: Enter a number that sets the percentage of possible defined values that are to be used before a notification message alerts an administrator that the full range of defined values is soon to be exhausted.

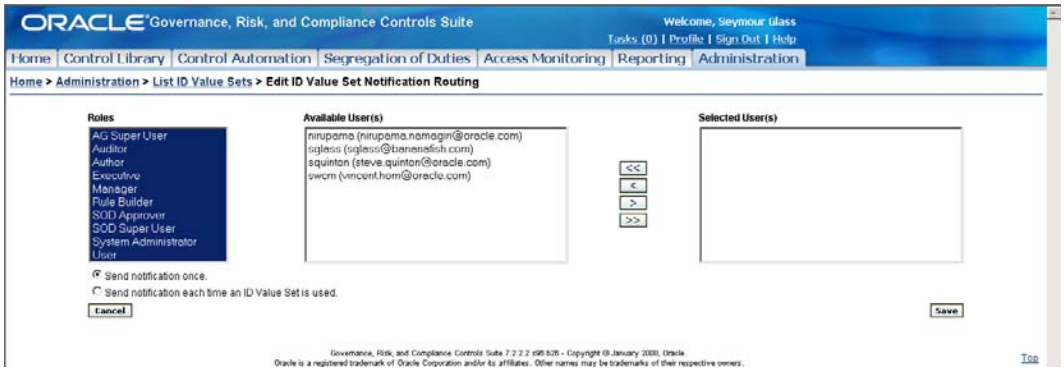
**5** When you have finished defining all segment formats, click on the Save button. (Or, to discard the values you've configured, click on the Cancel button.)

As you create the value set, an Example ID field presents a sample in the format you are configuring. (If you choose the Automation value type for a segment, this sample displays ones for the segment regardless of what you select as a starting value.)

## Designate Recipients of Notifications

If any segment in any ID value set is automated, then a notification threshold has been selected for it (see step 4 above). You must therefore select users who are to be notified when the number of possible defined values has exceeded the threshold.

**1** In the List ID Value Sets panel, click on the Manage Notification Routing button. The following panel opens:




**2** In the Roles field, select the primary application roles whose members may receive notifications. To highlight a single role, click on it. To highlight a continuous set of roles, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold the Ctrl key as you click on roles.

**3** The Available Users field now displays only users assigned primary application roles you selected in step 2. Select those who will receive notifications. Once

again, to highlight a single user, click on his name. To highlight a continuous set of users, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold down the Ctrl key as you click on users.

4 Click on the > button to sent the users you've highlighted from the Available Users field to the Selected Users field. Or, click on the >> button to send all users displayed in the Available Users field to the Selected Users field, regardless of whether they are highlighted.

If you reconsider, highlight users in the Selected Users field, then click on the < button to return them to the Available Users field. Or, click on the << button to return all users to the Available Users field, regardless of whether they are highlighted.

5 Click on the radio button labeled "Send notification once" to have the users receive a single notification the first time that an ID value set exceeds its threshold. Or click on the radio button labeled "Send notification each time an ID Value Set is used" to have the users receive notification every time a value is assigned from the set after it has exceeded its threshold.

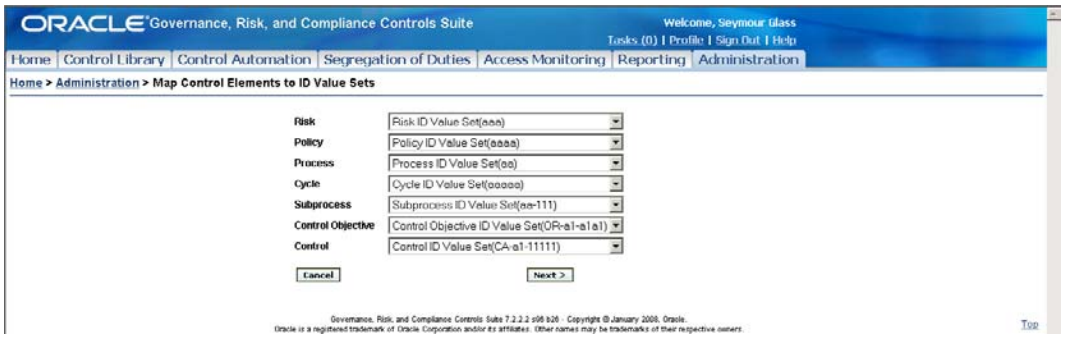
(The notification takes the form of an email message sent to the address entered in the Email1 field on the Add User panel for each of the designated users; see page 14.)

6 Click on the Save button.

## Map Value Sets to Control Library Elements

Once value sets have been created, you need to assign them to control-library elements. To do so:

1 Click on the Administration tab, and then on the Map Control Elements to ID Value Sets link. The following form appears:




2 In the list box for each control-library element, select the name of the ID value set you want to assign to it.

3 Click on the Next button. A second panel summarizes the selections you've made. If you are dissatisfied with any of them, click on the Back button until you reach the earlier panel in which that selection was made, change it, and then click on the Next button to return to the summary panel. When you are satisfied with

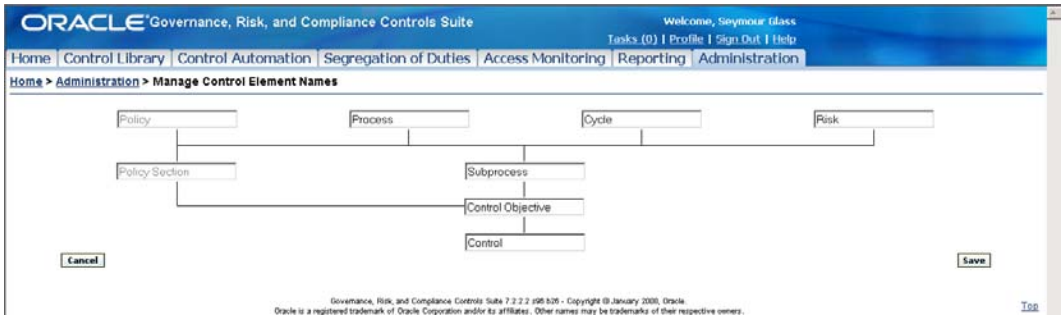
your selections, click on the Finish button to complete the mapping of the ID value set.

# Renaming Control Library Elements

Each element in the control library is one of eight types, and each type is related hierarchically to the others. (For more on this, see Chapter 5, "Creating Elements in the Control Library.") By default, element categories are named control, control objective, subprocess, process, policy, policy section, cycle, and risk. The hierarchical structure of the control library cannot be changed, and neither can the names policy nor policy section, but a System Administrator can rename the other categories to suit the structure of your organization.

To do so:

1. Click on the Administration tab, and then on the Control Administration link labeled Manage Control Element Names. A Manage Control Element Names panel opens, displaying not only the current names for element categories, but also the hierarchical structure of the control library:




2. For each name you want to change, click in the field displaying the name and edit or replace it.
3. Click on the Save button. The Administration home panel reopens.

In the panels accessible from the Control Library tab, all fields, buttons, and labels display the names you've chosen.

Chapter 4

# Creating Workflows

Whenever a control-library item is created or modified, it must be approved before it can be used. Similarly, each request made through the Access Monitoring feature — to give a user access to duties she does not ordinarily perform — must be approved before the user can assume the new duties. To define sequences in which approval requests are sent to users, groups, or both, Governance, Risk, and Compliance Controls Suite implements workflows.

## Who Can Do This?

If your primary application role is Author, Manager, Rule Builder, or SOD Super User, you can create, edit, or view workflows. An Executive, User, Auditor, or System Administrator has view rights only, and an SOD Approver has no rights. This chapter is written in the assumption that you have full rights.

## Workflow Routings and Definitions

Each workflow consists of two items: a workflow routing and a workflow definition.

The workflow routing selects sets of users, groups, or both, and establishes a sequence in which they receive messages prompting review of control-library elements or access requests. The routing can designate users or groups with authority to approve or reject these items, and others who are notified of the decisions as they are made.

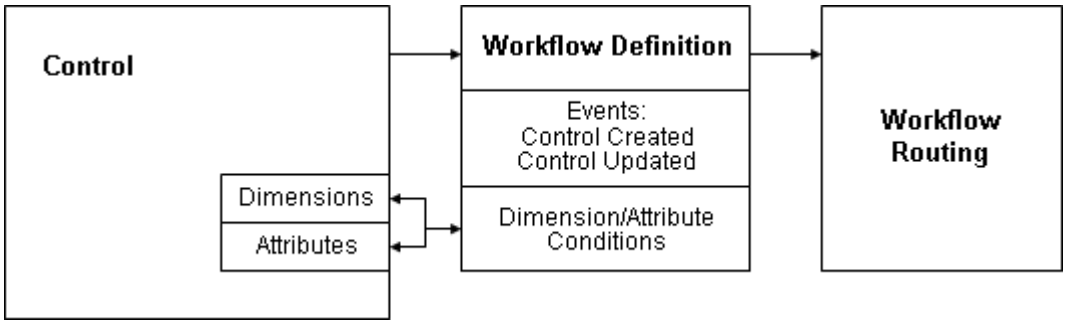
The workflow definition maps the workflow routing to items in need of review, by specifying events, dimension/attribute conditions, data source conditions, and a priority:

- An event is a circumstance — for example the creation of a control — that triggers the distribution of messages to users or groups named in the workflow routing. Two events — "Created" and "Updated" — exist for each of the control-library elements, and a "Requested" event exists for each type of Access Monitoring request.
- A dimension/attribute condition specifies a dimension or attribute value. Because each control-library element is granted or inherits dimension and attribute values, dimension/attribute conditions select the control-library elements to which the workflow routing applies — those configured with a corresponding set of dimension and attribute values.
- A data source condition identifies one or more database instances in which user-access requests are to be implemented.
- The priority determines which workflow routing is used when more than one might otherwise apply.

**Note**
Workflow routings and workflow definitions may also establish review processes for suspects generated by control monitors. This aspect of workflow configuration is discussed in detail in the *Transaction Controls Governor User's Guide*, and so is not covered here. Moreover, a workflow definition may be configured to use data conditions, in addition to items listed above. Data conditions apply only to workflows that distribute suspects for review, and so they too are discussed in the *Transaction Controls Governor User's Guide*.

# A Simple Workflow Example

The following figure illustrates how a control-library element, workflow routing, and workflow definition may work together to initiate review when the element is created or updated:




In this example:

- A control has been created. The user who configured it assigned it a set of dimension and attribute values.

- A workflow definition has a matching set of dimension/attribute conditions.
- The workflow definition also has the appropriate event — Control Created — for initiating the review of a newly configured control. (It also has the Control Updated event, and so would apply when the control is modified.)
- As a result, the workflow definition can forward requests to approve the control to users and groups named in the workflow routing.

## Combining Priorities and Conditions in Workflow Definitions

Only one workflow routes a control-library element for review as it is created or updated, but any number may contend to be that one. That's because any workflow definition may apply if it specifies the appropriate event and if an element satisfies every one of its conditions.

For example, a control may be assigned values for two dimensions and one attribute — d1, d2, and a1. A workflow definition with d1, d2, and a1 as dimension/attribute conditions might apply to the control. But so might definitions that set any combination of the three as conditions — such as d1 and d2, or d1 and a1, or d2 alone — or that set no conditions at all.

To resolve contention among workflow definitions, you assign each a priority. The value *1* indicates highest priority, and precedence declines as number values increase. When several workflow definitions might apply to a control-library element, the highest-priority definition among them is the one to be used.

More specifically, assume that a control has been created. Several workflow definitions are configured to have the Control Created event; any of them may apply to review of the control. The workflow engine compares the control configuration with that of the highest-ranking among the workflows: does the control have all the dimension and attribute values specified as dimension/attribute conditions in the workflow definition?

If so, the workflow routing mapped to the definition is applied to that control. If not, the engine compares the record with the second-highest-priority workflow definition. Again, if the control satisfies all conditions set by the definition, the mapped workflow routing is used; if not, the engine moves to the next-highest-priority workflow definition. It continues until it finds a match.

There is a danger of configuring a workflow definition with a specific set of conditions, and having it never be used because a more general definition has a higher priority. A control that qualifies for the d1-d2-a1 definition would, for example, be captured first by a higher-priority definition that sets d1 (or any of the other values) as its only condition. As a result, it is generally advisable that as the conditions configured for a workflow definition become more specific, the definition should receive a higher priority.

Suppose, for example, that your firm recognizes two regions, East and West. Some controls apply to both regions; they would be configured so that a dimension called Region has two values, East and West. Other controls apply to one region or the

other; they would be configured so that the Region dimension has only a single value, East or West.

It may be appropriate that reviewers within a region approve controls for that region. If so, you could create three workflows. The first, for the review of controls that apply to both regions, would set two conditions, Region equals East and Region equals West. Each of the remaining two workflows would set only one condition — Region equals East for one and West for the other. Of the three, the Both Regions workflow would be the highest ranking because it is most specific. East and West are equally specific, so either might be second, and the other would be third. Say East is second.

Thus, the workflow engine would route controls for approval as follows:

- A control with the Region dimension set to both East and West would be considered first for the Both Regions workflow. The engine would reach a true result, and the workflow would be used. The other two workflows would not be considered.
- A control with the Region dimension set only to East would be considered first for the Both Regions workflow. The control does not have both of the dimension values specified as conditions in that workflow, so the engine would reach a false result. It would then consider the next-priority workflow, East. This time the evaluation would produce a true result, and the East workflow would be used. The West workflow would not be considered.
- A control with the Region dimension set only to West would be considered first for the Both Regions workflow and then for the East workflow; the engine would reach a false result for each and would then consider the next-priority workflow, West. This time the evaluation would produce a true result, and the West workflow would be used.

A definition with no conditions and the lowest priority serves as a "catch-all," implementing a workflow routing for any object whose dimension and attribute assignments do not match up with the conditions of any higher-priority workflow definitions. A "Default Workflow" exists to serve this purpose. It routes requests to a user selected during installation, and its definition has priority number 1000, has no conditions, and calls all possible events.

## Combining Events and Conditions in Workflow Definitions

You may combine any number of events within a single, multipurpose workflow definition. However, each event can be paired only with conditions that do not filter out all of the items the event is intended to select. For example, access requests are not associated with dimensions or attributes and do not return data values, so an access-request event would never generate results if it were paired with a dimension/attribute condition or a data condition.

Similarly, control-library elements are associated with dimensions and attributes, but do not return data values. So a "Created" or "Updated" event for a control-library element may be paired with dimension/attribute conditions, but would never generate results if associated with a data condition.

Therefore, as you create a workflow definition, you select events before conditions, and Governance, Risk, and Compliance Controls Suite prevents you from setting conditions that do not agree with the events you've chosen. Specifically:

- You can create data conditions only if a workflow definition specifies the Control Monitor Task Created event and no other events. (The Control Monitor Task Created event triggers the review of suspects generated by control monitors; see the *Transaction Controls Governor User's Guide*.)
- You can create dimension/attribute conditions if a workflow definition specifies the Control Monitor Task Created event, one or more "Created" or "Updated" events for control-library elements, or both. These conditions become unavailable if the definition specifies a "Requested" event for access requests.
- You can create data source conditions only if a workflow definition specifies "Requested" events for access requests, but no other events.

Moreover, when you edit a workflow definition, you are prevented from adding or removing events if the definition includes any condition.

## Statuses and Versions

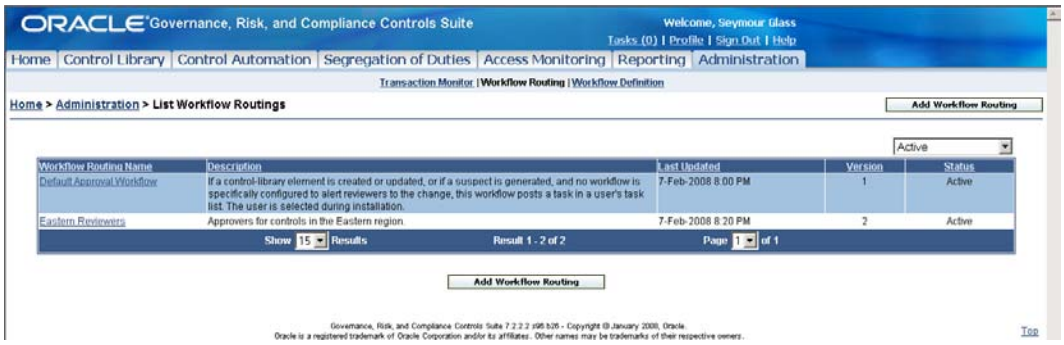
A workflow routing may have any number of versions, and each version exists at one of four statuses: Editing, Active, Pending Inactivation, and Inactive.

- A workflow routing at the Editing status is in development. Editing is the default status for a newly created version of a workflow, and only a version at the Editing status can be modified.
- An Active workflow routing is actually used; it generates approval requests. Only one version of a workflow routing can be Active at a time.
- When a workflow routing is promoted from Editing to Active, the version that had been Active should be made inactive. At that moment, however, any number of approval requests may have been initiated but not completed under the terms of the earlier Active version. If so, status for that earlier version is set automatically to Pending Inactivation; it remains at that status until all of its outstanding issues are resolved.
- An Inactive workflow routing is not used. A version may reach this status from Active (when a new version is promoted from Editing and replaces it as Active) or from Pending Inactivation (upon resolution of issues that were outstanding when it was replaced as the Active version). You can assign Inactive status to a version manually. Or, when you promote a version to Active status, the version (if any) that had previously been active is inactivated.

## Displaying a List of Workflow Routings

To view, create, or modify a workflow routing, ensure that the Administration tab is selected. Then click on the Workflow Routing link in the Workflow Administration

section of the Administration Home. A List panel then displays active workflow routings, and presents information about them — name, description, date last modified, version number, and status:



**Note**

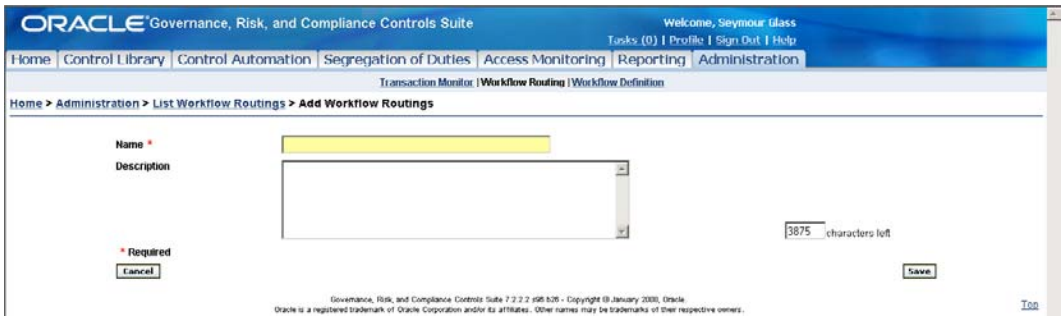
If Transaction Controls  Governor is installed, you can select the Control Automation tab instead. You would then select a Workflow Routing link to work with routings or a Workflow Definition link to configure definitions. By convention, however, this manual directs you to the Administration tab; workflow features are available from it regardless of whether Transaction Controls Governor is implemented.

To view entries for workflows at a specific status, use the Status list box (it's unlabeled, but is located above the list of workflow routings, along the right side). You can select All or any of the individual statuses — Active, Editing, Pending Inactivation, or Inactive.

# Adding a Workflow Routing

To create a new workflow routing:

1. The List panel displays two buttons — one at the top right, and another at the bottom center — labeled Add Workflow Routing. Click on a button to open a panel called Add Workflow Routings:




2. In the Name field, type a name for the workflow routing.
3. In the Description field, explain how the routing is to be used. (A second field keeps a tally of the number of characters you may use.)
4. Click on the Save button.

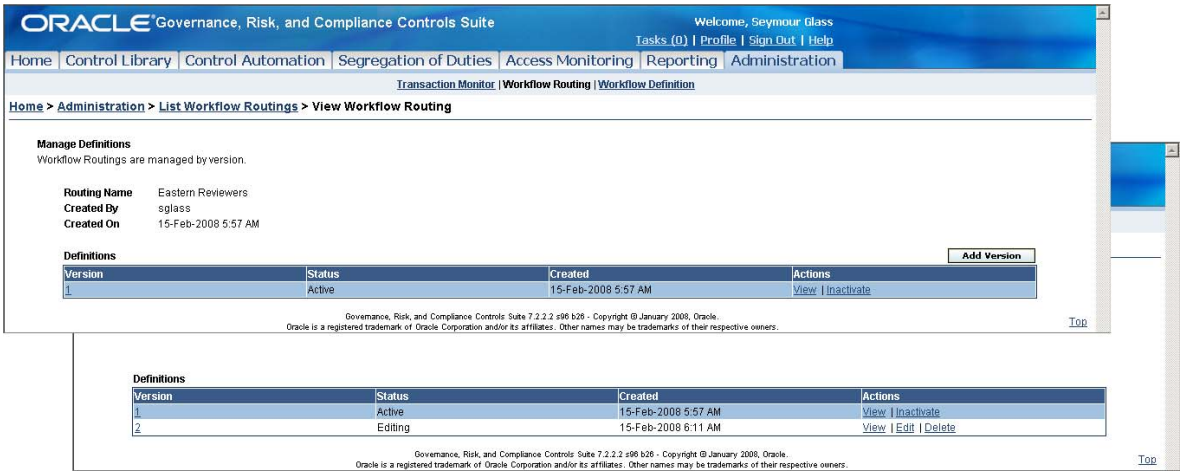
The act of saving the routing automatically opens a panel that lists its existing versions — in this case, a single version at the Editing status. From this panel (which is shown below), you can open the routing for editing.

## Opening a Workflow Routing for Editing

As you edit a workflow routing, you either select values for a newly added one or modify values for an existing one. In either case, a version of the item must exist at the Editing status.

You begin to edit a routing by selecting (or creating) its Editing version in a panel that lists all its versions. In the same panel, you can select another version (if any has been created) to view its configuration details. The panel opens automatically for a newly created routing (which necessarily has only an Editing version). For an existing routing, complete these steps to open the panel:

1. Ensure that you have opened the List Workflow Routings panel. (See page 33.)
2. If you are interested in routings at a particular status, set the Status filter accordingly; or, select All if you want to see routings at more than one status.
3. The List panel presents a filtered list of workflow routings. Click on the name of the one you want to change. produces a View Workflow Routings panel, which lists all existing versions of the routing you've selected.
   - If no Editing version yet exists, the panel displays a Add Version button (as shown in the top instance of the panel in the following illustration).
   - If an Editing version already exists, the panel displays a row for it (row 2 in the bottom instance of the panel in the following illustration).




From this panel, you can:

- Create an Editing version by clicking on the Add Version button. The new version is a copy of the most recent (typically Active) version.
- Open the Editing version for modification by clicking on its version number or its Edit link.

- Open any other version for viewing by clicking on its version number. You cannot change any information for a version at any status other than Editing.
- Delete the Editing version by clicking on its Delete link.
- Retire the Active version by clicking on its Inactivate link.
- Rename the routing, or revise its description, by clicking on an Edit link that appears next to its name. (The link, and the renaming capability, exist only if the routing has an Edit version and no other version.) This opens an edit panel that works in the same way as the Add panel (page 34) in which the routing was originally named and described.

# Editing a Workflow Routing

A workflow routing implements a series of steps, each of which selects either users or groups charged with rendering approval decisions, and may designate other users or groups who receive notification when each decision is made. All receive approval requests or notifications at the Task Inbox.

Those with decision-making authority approve or reject requests — for the creation or modification of a control-library element, or for access to extraordinary duties. A request must be approved at one step before it proceeds to the next. If it is rejected, the workflow ends; reviewers identified in subsequent steps are not sent messages.

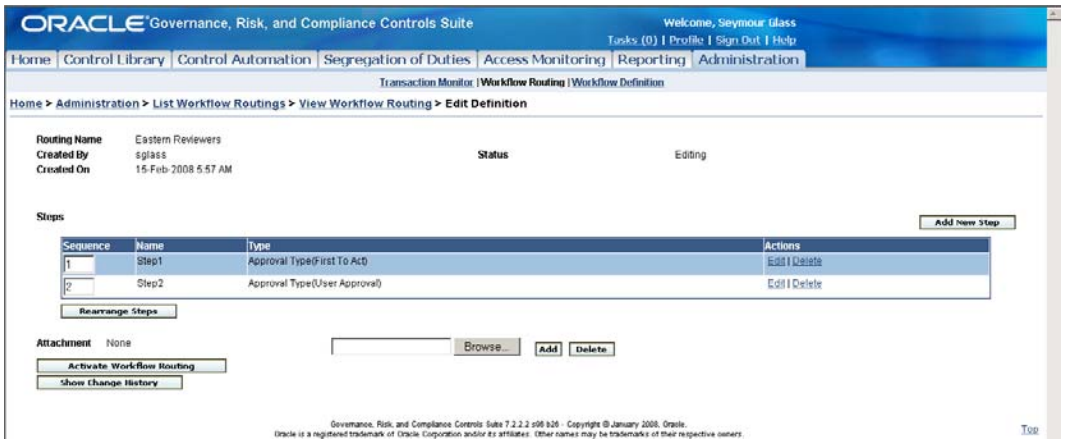
At each step, you can select one of three types of decision-makers:

- Groups/First to Act: All members of one or more groups receive messages that an item is to be reviewed, but the first member to respond acts for everyone, either approving or rejecting. After the first response, other members of the groups can no longer respond.
- Groups/Requires All: All members of one or more groups receive messages that an item is to be reviewed. For the item to be approved, all group members must approve it. A single rejection decision causes the item to be rejected and the workflow to end.
- User: One or more users receive messages that an item is to be reviewed. If two or more users are designated, all must approve the item in order for the workflow to proceed to its next step. A single rejection decision causes the item to be rejected and the workflow to end.

Before you can create a workflow routing, the groups or users it is to call must already have been created. (See Chapter 2, "User Administration.")

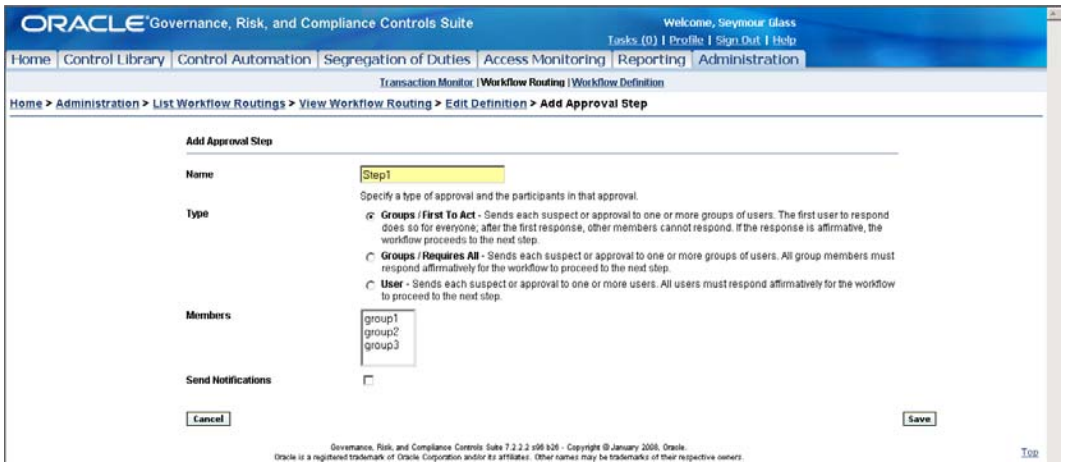
Once this is done, either create a workflow routing (page 34) and open its Editing version (page 35), or open the Editing version of an existing routing. An Edit Definition panel appears, displaying a prompt to create new steps; if steps have already been created, the panel also lists them, with prompts to edit them. (The Edit Definition panel is shown below. You can open a View Definition panel for a version of the routing at any status; this panel lists its steps with prompts to view, but not change,

their details.) The Edit Definition panel also enables you to attach a document to the Editing version (page 38) or review change history for any version (page 44).




To create or modify steps that designate reviewers:

1 Click on the Add New Step button to create a new step, or click on the Edit link in the listing for an existing step to modify it. The following form opens:



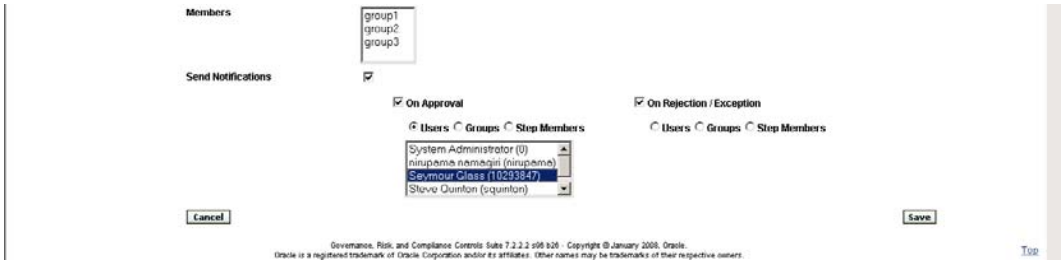

2 In the Name field, type a name for the step.

3 Click on one of the Type radio buttons to determine the reviewer type (definitions of the types appear on page 36).

4 A list of values appears next to the Members label, displaying either groups or users (depending on the type selection you made). Highlight those you want: To highlight a single user or group, click on it. To highlight a continuous selection of users or groups, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous selection of users or groups, hold down the Ctrl key as you click on items.

5 You may or may not designate users or groups who are notified when actions are taken. If you choose not to, ensure that the Send Notifications check box is cleared and skip ahead to step 8. If, however, you want to designate notification recipients, click on the Send Notifications check box and continue at step 6.

6 When you click on the Send Notifications check box, two more check boxes appear, labeled On Approval and On Rejection/Exception. Click on either or both to designate those who will receive notifications of approvals, rejections, or both.




7 Beneath each selected check box, a set of three radio buttons appears: Users, Groups, and Step Members. Click on one.

- If you select Step Members, you need make no further selections; notifications will be sent to the users or groups already chosen in the Members field.
- If you click on Users or Groups, a field appears, displaying names of users or groups; highlight those you want. Again, to highlight a single item, click on it. To highlight a continuous selection of items, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous selection, hold down the Ctrl key as you click on items.

8 Click on the Save button. The focus returns to the Edit Definition panel, which now displays a row for the step.

When you finish creating steps, the workflow routing is saved in its Editing status (because you have saved its individual steps as you created or edited them). At this point, you can use the Definition panel to perform these additional actions:

- Delete a step by clicking on the Delete link in its entry on the panel.
- Rearrange the order in which steps are to be completed: In the Sequence column of the Steps listing, renumber the steps to reflect the sequence you want, and then click on the Rearrange Steps button.
- Promote the workflow routing from Editing to Active status by clicking on the Activate Workflow Routing button. If a prior version was already Active, it moves to the Inactive status. A newly Active version of a routing inherits the workflow definition configured for the previously Active version.

# Attaching a Document

Optionally, you can attach a file to each version of a workflow routing, and then display the contents of the file. Typically, such a file documents what the workflow routing does. Use a text editor, word processor, spreadsheet, or similar application to prepare the file.

You can attach only one file at a time to a given version of a routing, and only when that version exists at the Editing status. However, you can detach an existing file to make room for a new one (once again, for a version at the Editing status). You can

view a file even after the version to which it is attached has been promoted to any other status.

To attach a file:

1. Navigate to the Edit Definition panel for the Editing version of a workflow routing.
2. Click on the Browse button in the Attachment area, near the lower center of the panel.
3. A Choose File dialog opens. Using standard Windows procedures, navigate to the file you want, click on its name, and then click on the Open button.
4. The path to the file appears in the text box next to the Browse button on the Edit Definition panel. Click on the Add button. The name of the attached file appears next to the Attachment label.

To detach a file, click on the Delete button. A confirmation message appears in a pop-up window; click on its Yes button.

To open and review an attached file:

1. Click on the Download button. (This button appears once a document is attached, and is the only one to remain available when the workflow routing is at a status other than Editing.)
2. A File Download dialog appears. Click on its Open button, and the file appears in a distinct window. Alternatively, click on its Save button and, in a Save As dialog, navigate to a directory in which you want to save the file, and click on the Save button.

# Copying a Workflow Routing

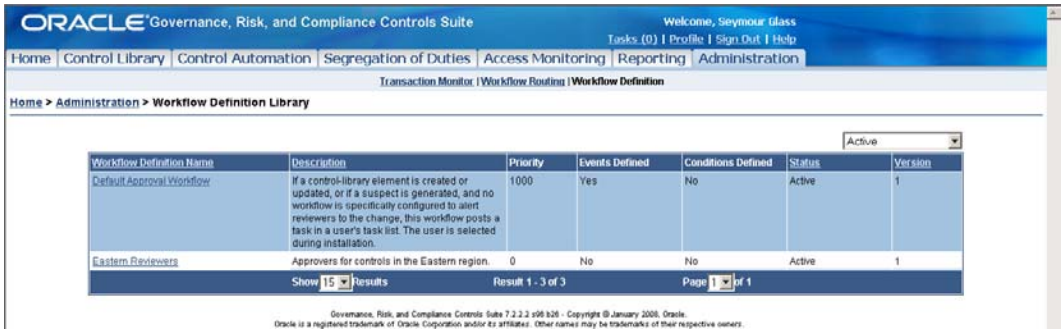
You can copy a workflow routing under a new name, to use as a template for a new workflow routing. As the source for such a copy operation, you can select only an object at the Active status, and its copy is created at the Editing status.

1. Navigate to the View Definition panel for the Active version of a workflow routing.
2. Click on the Create Copy button, located near the lower left of the panel.
3. The Add Workflow Routing panel opens. (It's identical to the panel discussed in "Adding a Workflow Routing"; see page 34.) In the Name field, type a name for the copy you are creating; in the Description field, optionally type explanatory information; and click on the Save button.
4. The copied object now exists at the Editing status, identical to the source in every way except for name and status. Using standard procedures, open it and edit it as you wish.

# Configuring a Workflow Definition

To create the workflow definition that applies a workflow routing to items in need of review, return to the Administration Home — click on the Administration link in the breadcrumb trail or on the Administration tab. Then click on the Workflow Definition link in the Workflow Administration section of the Administration Home.

A Workflow Definition Library panel displays an entry for each Active workflow routing, with its description, the priority number of its workflow definition (if one has been assigned), whether events and conditions have been assigned, its status, and its version. Click on the name of the routing for which you want to configure a definition.

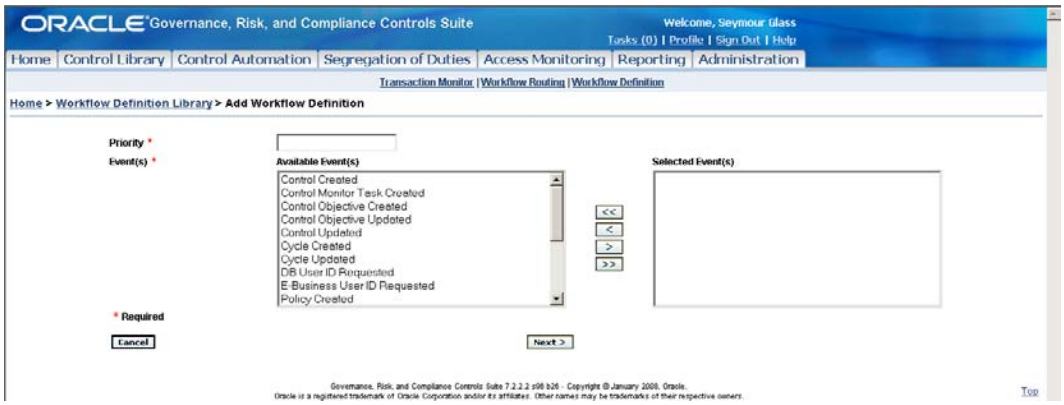



You can edit or view definitions that correspond to workflow-routing versions at the Active status. You can view, but not edit, the definitions for those workflow-routing versions as they move to the Pending Inactivation or Inactive status. To view definitions that correspond to routings at a particular status, use the Status list box (it's unlabeled, but is located above the list of workflow definitions, along the right side). You can select All or an individual status — Active, Pending Inactivation, or Inactive.

When you promote an Editing version of a workflow routing to Active status, it automatically assumes the definition configured for the version that had been Active before it. A definition corresponding to a workflow routing version at the Editing status would therefore never be used, and so you can neither configure nor view a definition that corresponds to the Editing version of a workflow routing.

## Selecting Priority and Events in a New Definition

If you have selected a workflow routing for which no definition yet exists, an Add Workflow Definition panel opens:



In this panel, you can select both priority and events. Do not select 0 as a priority; apart from that, you can select any number not already in use (you'll receive an error message if you do select a duplicate). You may wish to review "Combining Priorities and Conditions in Workflow Definitions" (page 31).

Each type of control-library element has a "Created" event and an "Updated" event; each type of access request has a "Requested" event; and a "Control Monitor Task Created" event applies to the review of control monitor suspects. You can select any combination of events in a workflow definition, but the way you combine them determines the types of conditions you can configure for the definition. Choose events that will enable you to create the conditions your workflow definition will need. You may wish to review "Combining Events and Conditions in Workflow Definitions" (page 32).

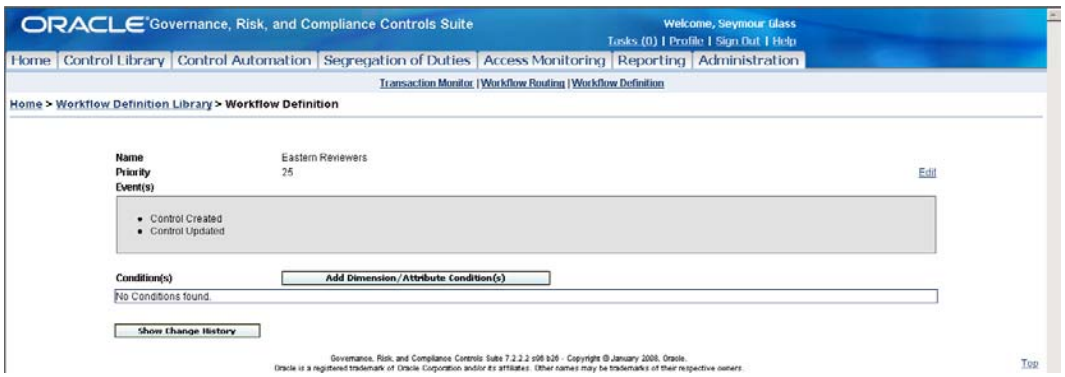
To use the Add Workflow Definition panel to select a priority and events:

1. In the Priority field, type the priority number you want.
2. In the Available Events field, highlight the events you want to select. To highlight a single event, click on it. To highlight a continuous set of events, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous set, hold down the Ctrl key as you click on events.
3. Click on the > button to send the events you've highlighted from the Available Events field to the Selected Events field. Or, click on the >> button to send all events to the Selected Events field, regardless of whether they are highlighted.

   If you reconsider, highlight events in the Selected Events field, then click on the < button to return them to the Available Events field. Or, click on the << button to return all events to the Available Events field, regardless of whether they are highlighted.
4. Click on the Next button. The Add Workflow Definition panel now summarizes your selections. If you are dissatisfied with any of them, click on the Back button to return to the previous panel; edit the values it displays and click on the Next button to return to this summary panel. When you are satisfied, click on the Finish button to complete the configuration of the priority and events.

## Selecting Conditions for a New Definition

When you finish configuring priority and events, a Workflow Definition panel displays the values selected for the definition:



The panel presents buttons you can click to configure distinct types of conditions. As noted earlier, the types you can configure depend on the events selected for the definition; the assortment of buttons on this panel also depends on the event selection:

- If you have selected "Created" or "Updated" events for control-library elements (with or without the Control Monitor Task Created event), the panel presents the dimension/attribute condition button, and you can create that type of condition.
- If you have selected only the Control Monitor Task Created event, the panel offers two buttons, for dimension/attribute conditions and data conditions, and you can create both types of conditions.
- If you have selected only "Requested" events for access requests, the panel presents the data source condition button, and you can create that type of condition.
- If you combine access-request events with any other event type, the panel presents no condition buttons, and you cannot create conditions.

Two or more conditions are joined by AND connectors; all must evaluate to true (and the workflow must have a higher priority than other eligible workflows) for the workflow routing associated with this definition to be used.

A single condition can have more than one right operand — for example, in a workflow devoted to access requests, DATASOURCE EQUAL TO DB1; DB2. In this case there is an OR relationship; there are implicitly as many conditional statements as there are right operands, and the condition evaluates to true if any one is true. In the example, if a request were made for access to DB1 or DB2 (and, once again, the workflow had a higher priority than other eligible workflows) the routing associated with this definition would be used. For a workflow that contains access-request events, use a single condition with any number of right operands; do not create two or more conditions.

A dimension/attribute condition states that a dimension or attribute equals one or more values; the workflow may map to a control-library element assigned a dimension or attribute with one of the values. To create dimension/attribute conditions:

1. Click on the Add Dimension/Attribute Conditions button. An Add Workflow Condition panel appears:

2. As a Field, select a dimension or attribute. The leftmost box always reads Control Element; click on either Dimensions or Attributes in the middle box. According to your selection, the rightmost box displays either the dimensions or attributes configured on your system; click on one of them.
3. Accept the default, Equal To, as the Operator value. (You cannot change it.)

4 The Value box displays the values for the dimension or attribute you selected as a Field in step 2. Select any number of them. (To select more than one, hold down the Ctrl key as you click on values.)

5 Click on the Save button. The focus returns to the Workflow Definition panel, with the new condition added to the list.

A data source condition identifies one or more database instances in which user-access requests are to be implemented. To select data source conditions:

1 Click on the Add Data Source Conditions button (if you have selected access-request events for a workflow definition, and so the button is present). A different instance of the Add Workflow Condition panel appears:

2 Accept the default, Equal To, as the Operator value. (You cannot change it.)

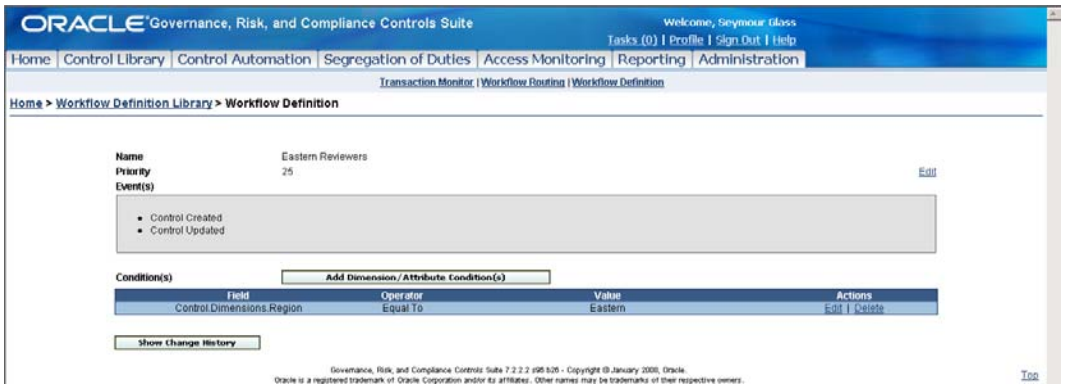
3 In the Data Source Name field, select any number of databases. (To select more than one, hold down the Ctrl key as you click on data source names.)

4 Click on the Save button. The focus returns to the Workflow Definition panel, with the new condition added to the list.

As a reminder, data conditions are appropriate only for a workflow to be used for reviewing suspects generated by control monitors. For information on creating them, see the *Transaction Controls Governor User's Guide*. Because you have saved individual elements of the workflow definition as you created them, the definition itself requires no further saving. It is ready for use.

## Editing an Existing Definition

To edit a workflow definition, click on its name in the Workflow Definition Library panel (see page 40). This takes you directly to the Workflow Definition panel that displays the configured values for the definition you've selected:



The values are editable if the definition corresponds to a workflow-routing version at the Active status, or are read-only if the definition corresponds to a workflow-routing version at the Pending Inactivation or Inactive status.

For Active definitions, you can modify the priority assigned to a workflow (if the new priority value is not taken by another workflow). However, once you have configured a set of events for a workflow definition, you cannot subsequently add or remove events if you have also configured conditions for the definition. To edit the selection of events for a workflow definition, you must first delete all of its conditions. To do this, click on the Delete link in the row for each condition.

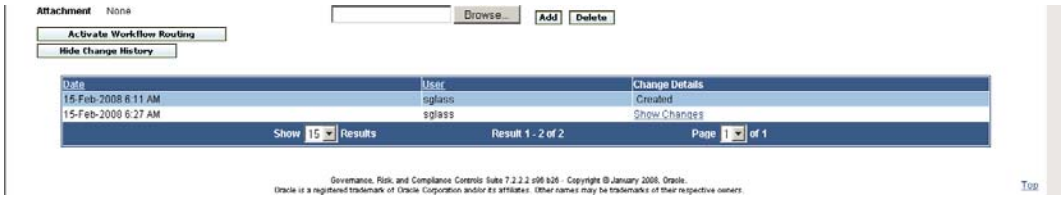
To edit priority or events, click on the Edit link in the Workflow Definition panel. (This link is toward the upper right of the panel, aligned horizontally with the Priority field). This opens an Edit Workflow Definition panel; apart from its label, it's the same as the Add Workflow Definition panel, except that it shows the values already selected for the definition, and the event fields are read-only if you have not deleted the conditions associated with the definition. Use the Edit Workflow Definition panel as you would the Add Workflow Definition panel (see page 40).

To edit a condition, click on the Edit link in its row on the Workflow Definition panel. This opens an Edit Workflow Condition panel appropriate to the type of condition you are editing. Each panel, label aside, is the same as the corresponding Add Workflow Condition panel except, once again, that it displays the values already configured for the condition. You can use these panels in the same way that you would use the Add Workflow Condition panels (see page 41). You can also delete conditions (as discussed above) or use the Add buttons to add new conditions.

# Reviewing Change History

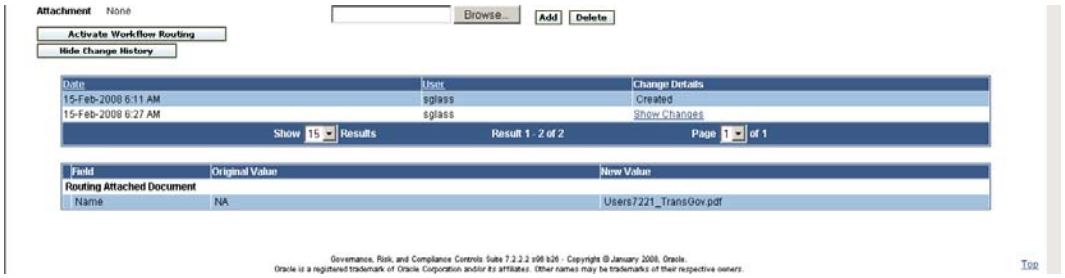
For each version of a control monitor, workflow routing, or workflow definition, you can view a history of the changes made to the item:

1. Open the panel from which change history can be viewed:
   - For a workflow routing version at the Editing status, this is the Edit Definition panel; for one at any other status, this is the View Definition panel (see page 37).
   - For a workflow definition, this is the Workflow Definition panel (see page 43), which is opened from the Workflow Definition Library panel (see page 40).
2. Click on the Show Change History button. A grid appears at the bottom of the panel, displaying a row for each time changes were saved for a workflow routing or workflow definition. Each row shows the date and time on which changes were saved, and identifies the user who made the changes.



3 The first row in the grid documents the creation of the item; it's read-only, and it displays a static value, "Created," in a Change Details Column. Each subsequent row documents a change, which may involve modifications to several fields, all of which were saved at once. To view details about such modifications, click on the Show Changes link in the Change Details column for one of these rows.

A second grid appears, displaying the old and new values for each modified field associated with the row you selected.




This grid categorizes the changes according to whether they have been made to the "header" (the name and status of an item), the steps, or other miscellaneous items such as attachments. (This form is used also to show change history for control monitors created in Transaction Controls Governor, and a parameters category applies to them.)

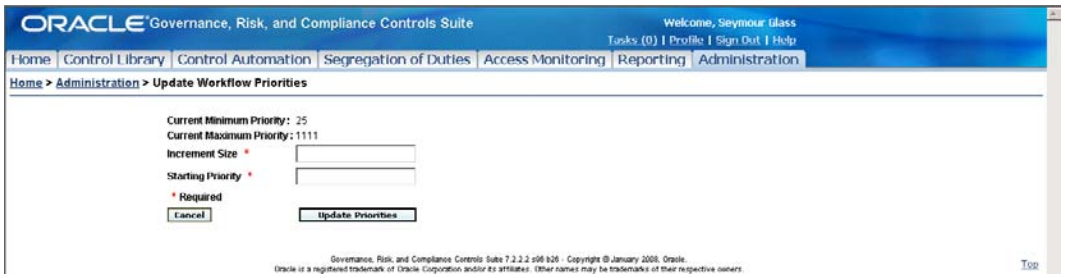
4 Click on the Show Changes link in other rows to view old and new values for changes saved at other moments. Or, to close both grids, click on the Hide Change History button.

# Updating Priority Values

You may create a large number of workflows, each, of course, incorporating a definition that includes a unique priority number. You may then identify a need to create a new workflow whose priority must be set at some point amid the values that have already been taken. This may require that the priorities assigned to many workflows be reset (if, for example, one thousand existing workflows have consecutive priority numbers, and you need to create a new workflow with a priority of, say, 15).

You can reset the priorities of any number of workflows at once, rather than edit individual workflow definitions. To do so:

1 Click on the Administration tab. This opens an Administration Home panel; in it, locate the Workflow Administration section and click on the Manage Workflow Priorities link. An Update Workflow Priorities panel appears:



2. Review information about your current priority configuration:
   - The Current Minimum Priority field shows the smallest priority value (and therefore actually the highest priority) assigned to an existing workflow definition.
   - The Current Maximum Priority field shows the largest priority value (and therefore the lowest priority) assigned to an existing workflow definition.
3. In the Starting Priority field, type the existing number of the first priority you want to reset to a new value. In the example above, you want to create a new workflow at priority 15. So the first priority you need to reset is for the workflow currently at 15. It and subsequent priorities will increase by an amount to be determined in the next step.
4. In the Increment Size field, type the number of openings you want to create at the starting point.

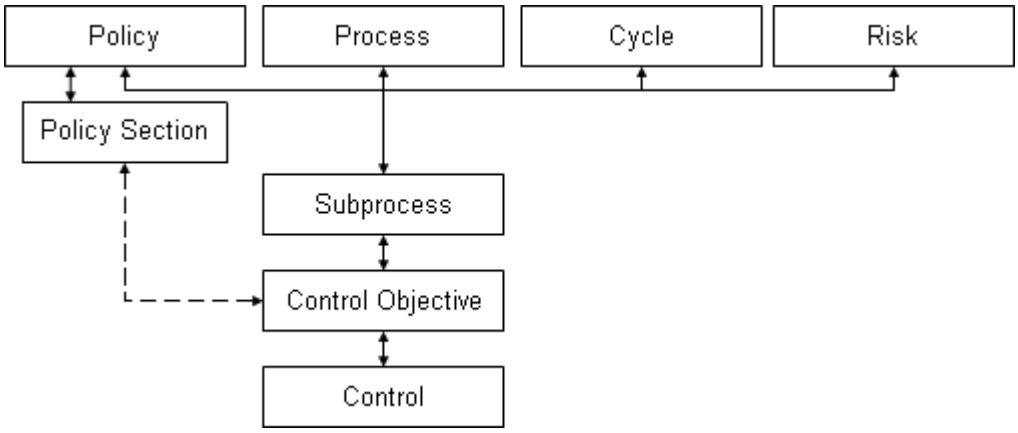
   In the example above, you're creating one new workflow, so you need one opening for it, and would enter the value 1 in the Increment Size field. The workflow whose priority was originally at 15 would move to 16, and subsequent priorities would also be increased by one.

   But if, instead, you had two new workflows to create and wanted to assign them priorities 15 and 16, you would enter 2 here; the existing number 15 would then become 17, and subsequent priorities would be renumbered accordingly.
5. Click on the Update Priorities button.

# Chapter 5

# Creating Elements in the Control Library

The control library constitutes a set of objects which, taken together, define a business environment — broad statements of activity such as policies, the increasingly focused elements from which they are built, and the controls that enforce them. By default, Governance, Risk, and Compliance Controls Suite adopts the following naming conventions for these elements: A control connects directly to a control objective, inherits its associations with subprocesses, and at a higher level inherits associations that subprocesses have with processes, policies and policy sections, cycles, and risks. Although a company may rename these element categories, and although it would configure instances of these elements to reflect its own needs, elements must nevertheless fit the following hierarchical scheme:



So that this hierarchy is enforce, most of these elements, as they are created, can be linked only to those directly above or below:

- A policy, process, cycle, or risk connects directly to a subprocess, and inherits the control objectives and controls associated with the subprocess.
- A subprocess links upward directly to a policy, process, cycle, or risk, and downward to a control objective. It inherits controls associated with the control objective.
- A control objective links upward directly to a subprocess and downward to a control. It inherits policies, processes, cycles, and risks associated with the subprocess.
- A control links directly to a control objective an inherits all the higher-level objects associated with the control objective.

The one exception to this scheme is the policy section. While subordinate to a policy, it links to one or more control objectives, conceptually bypassing the subprocess.

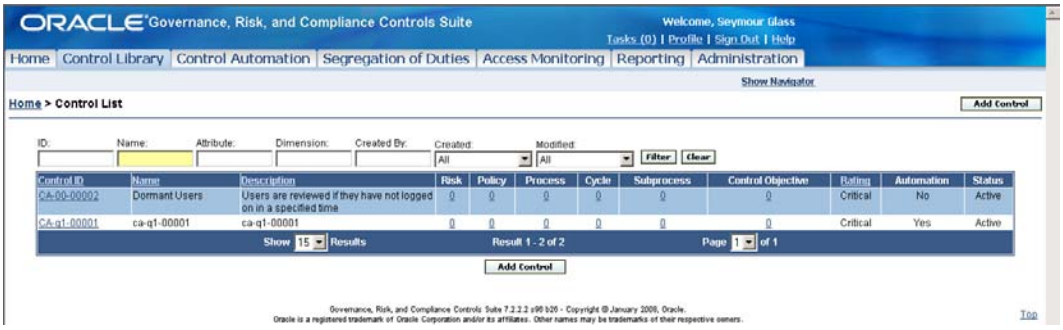
**Note**
Although you can use a Manage Control Element Names feature, available on the Administration tab, to rename the elements, this manual will use the default names throughout.

## Who Can Do This?

A Manager, Rule Builder, SOD Super User, or Executive can create, edit, or assess control-library elements. An Author or User can create or edit them, but not assess them. An Auditor can view and assess them, and a System Administrator can only view them; neither has create or edit rights. An SOD Approver has no rights. This chapter is written in the assumption you have full rights.

## Displaying Lists of Control-Library Elements

To view, add, or edit any control-library element, begin by clicking on the Control Library tab. A Control List panel then appears. You can use a Library Navigator feature (see page 51) to display a similar List panel for any of the other elements (as well as to redisplay the Control List panel).




Initially, of course, these panels are empty; in that case, skip ahead to "Adding a Control-Library Element" (page 52). Ordinarily, though, each panel displays a list of

its type of control-library elements; each entry includes an ID, name, and description for an element; the number of other elements with which it is associated, by type; and its status (see page 57 for status definitions). The Control List panel also shows the rating configured for each control, and whether an "automation" (a control monitor; segregation-of-duties rule; or form, flow, or change-control rule) has been attached to the control.

# Locating Control-Library Elements

To manage long lists of control-library elements, you can limit the contents of any List panel to entries that satisfy filtering criteria. Alternatively, you can use an the Library Navigator feature to locate, and open View panels for, individual elements.

## Filtering Lists of Elements

To view a filtered set of entries in a List panel:

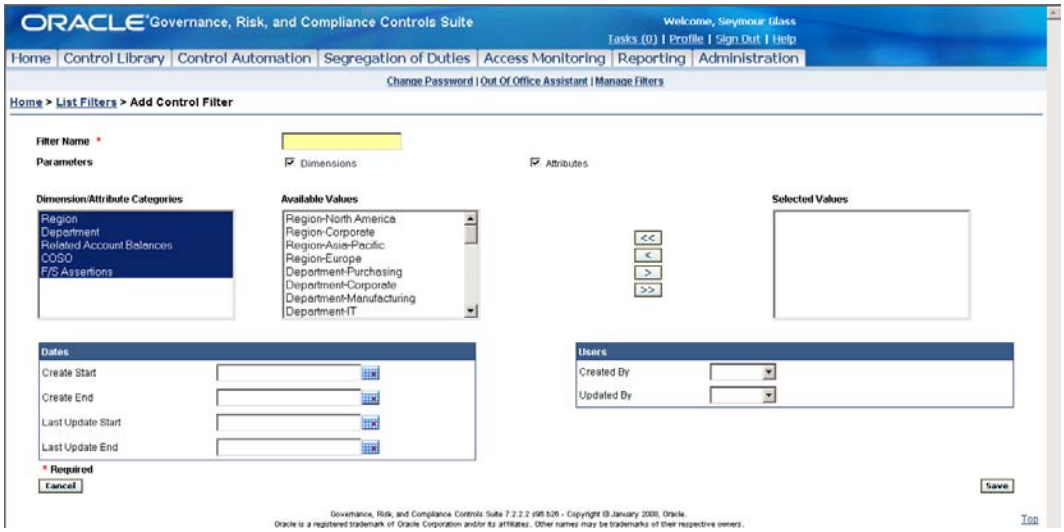
1. Specify filtering criteria by entering complementary values in any combination of the fields that run horizontally above the list of elements:
   - Filter: Select a filter you've configured for use in listing elements. If you haven't created any filters, this field does not appear.
   - ID and Name: In each field, type the full ID for an element or its full name to display the single element bearing that ID or name. Or, type a fragment of an ID or name to display all elements whose IDs or names contain the fragment. For example, the text string *ment* in the Name field would return elements with the words *Management* and *Disbursements* in their names.
   - Attribute and Dimension: In each field, type a value configured for an attribute or dimension (not the name of an attribute or dimension) to display elements that have been assigned the attribute or dimension value. For example, if a Region dimension has the values *East* and *West*, the word *East* in the Dimension field would return elements configured to belong to the East region; the word *Region* in the Dimension field would produce no results.
   - Created By: Type a Governance, Risk, and Compliance Controls Suite username to display elements created by that user, or a text fragment to display elements created by all those whose usernames contain the fragment.
   - Created and Modified: Select one of five time ranges (such as Yesterday or Since Last Week) to display elements created within that period, or select All (the default) to list all elements, without time constraint.
2. When you finish specifying filtering criteria, click on the Filter button.

To discard filtering criteria and redisplay all configured elements of the type displayed in the List panel, click on the Clear button.

## Configuring Filters

You can configure filters for use in displaying control-library elements in their list panels. These filters can select elements with specified dimension or attribute values, with creation or update dates in specified ranges, or with a specified creator or updater. Once they are configured, you can select filters in the Filter field on the List panel for each element type. To configure filters:

1. Click on the Profile link. Then, in the page that it opens, select the Manage Filters link. A List Filters panel displays an entry for each filter that has already been created (if any).
2. Click on the Add Filter button. An Add Control Filter panel appears:

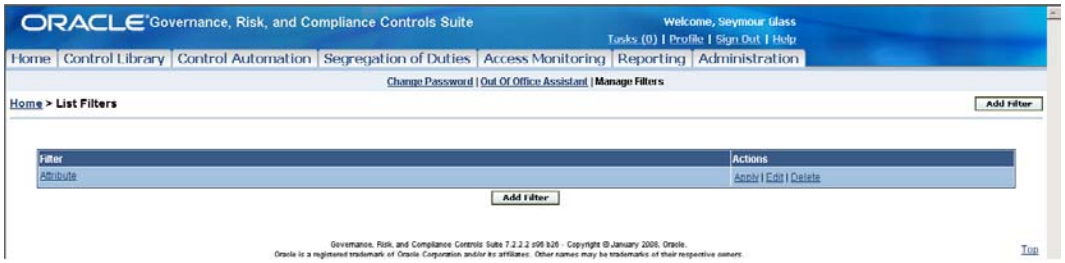



3. In the Filter Name field, type a name for the filter.
4. To add dimension or attribute values to a filter, select the Dimensions or Attributes check box (or both). This populates the Dimension/Attribute Categories field with the names of dimensions or attributes configured for your system; click on those for which you want to select values. Their configured values then appear in the Available Values field; click on those you want and transfer them to the Selected Values field (See page 53 for instructions on transferring values from an Available field to a Selected field).
5. To filter on date ranges, enter values in fields in the Dates section.
   - Use the two Create fields to identify the dates between which elements may have been created if they are to qualify for the filter; use the two Last Update fields to identify dates between which elements may have been most recently modified.
   - Select a start date, but no end date, to select elements created or updated from the start date to the present moment; select an end date as well to define a static period.
   - For any of the four fields, click on the icon to display a month-by-month calendar; click on the < or > symbol surrounding a month name or year to

display an earlier or later month or year; then, in the calendar, click on the date you want.

**6** To filter for elements either created or most recently updated by a particular user, select his username in the Created By or Updated By list box in the Users section.

**7** Click on the Save button. The the List Filters panel reappears, with an entry for the filter you've configured:



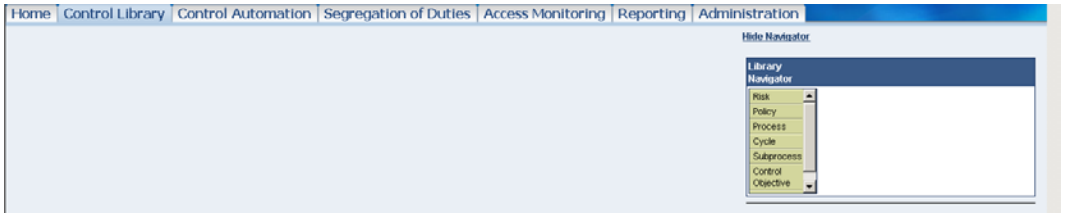

**8** In this panel, you can:

- Click on the Apply link to put the filter to use. When you open any of the List panels available from the Control Library tab, only filtered entries appear. (You can apply other filters, or clear all filters, by making new selections on a List panel.)
- Click on the Edit link to open an Edit Control Filter panel — in all but name a copy of the Add Control Filter panel — and modify the values you've configured for the filter.
- Click on the Delete link to delete the filter. A Delete Control Filter panel opens and prompts you to confirm the deletion. Click on its delete button to do so, or on its Cancel button if you choose to keep the filter.

## Using the Library Navigator

A Library Navigator enables you to trace the hierarchical relationships among elements in the control library, and to open a View panel to examine detailed information about any of the elements in the hierarchical chain you've constructed.

**1** From the list panel for any type of control-library element, click on the Show Navigator link, located at the upper left corner of the light green band that demarcates the Library Navigator. A hidden Navigator form is exposed. Initially, it contains a single block that displays an entry for each type of control-library element.




**2** Double-click on any of the element-type names to open the list panel for that type of element. Or, single-click on any of the element-type names to display a

second block. This one lists all configured elements of the type you selected in the first block. Although the following figure begins with policies, you can start at any level in the hierarchy.

**3** In this second block, single-click on any of the elements to display a third block; it lists elements configured to descend in the hierarchy from the one you chose in the second block. In each new block, click on an element name to produce another block displaying linked elements in the next-lower level of the hierarchy:

**4** To open a View panel for any of the elements you've displayed, double-click on its name.

**5** Click on the Hide Navigator link to close the Library Navigator and restore the Control Library panel to its original appearance.

# Adding a Control-Library Element

When you add an element to the control library, you provide information that identifies and describes it, but you also associate it with other objects that establish its context: dimensions, attributes, and other control-library elements. When you complete the process, the element you've created is subject to approval (according to the terms of workflows configured for your system). Thus, the element appears in its List panel not immediately, but only if and after approval has been granted. Moreover, you cannot create an element if workflows are configured so that you would be an approver for it.

The information you provide for a control is somewhat different from the information you provide for other control-library elements. Specifically, a control is given a rating and a likelihood, and may be associated with related controls. As a result, the configuration process for controls starts out a bit differently from the process for other elements, but the processes become uniform after the initial steps are complete. So the following sections describe the beginning of the control-configuration process, the beginning of the process for configuring other elements, and then the completion of the process for controls and other elements alike.

But first, when you create or edit any element, you make repeated use of a particular feature, which is explained in the following section.

## Selecting Sets of Values — a Software Convention

As you create control-library elements (or filters), you have opportunities to select sets of values — for example, dimension values that might apply to a control. Values appear for selection in an "Available" box; you transfer those you want to a "Selected" box (or transfer those you no longer want back to the Available box). In some cases, a third box contains categories of items — for example, dimensions if you are assigning dimension values to a control. You select one or more categories, and the Available box shows values appropriate to those categories:

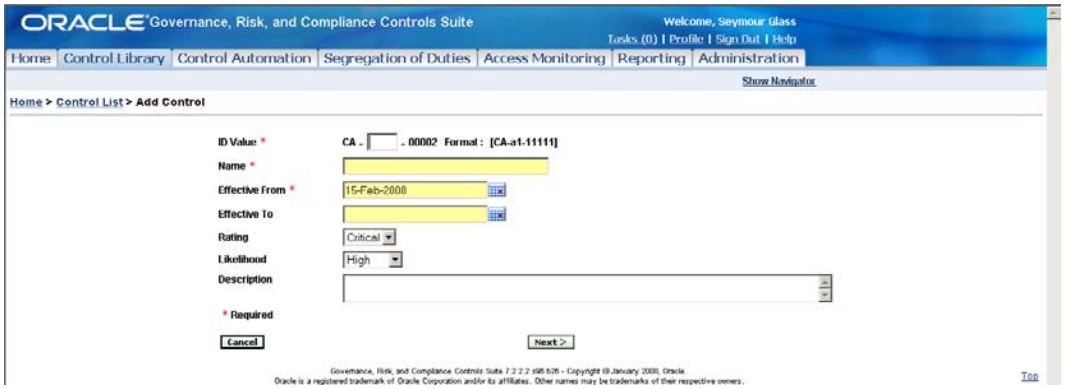
As you transfer items between the Available and Selected boxes, you can:

- Highlight items you intend to select. In any box, click on an item to highlight it. Or, to highlight a continuous group of items, click on the first one, hold down the Shift key, and click on the last one. To highlight a discontinuous group, hold the Ctrl key as you click on items.
- Click on the > button to move highlighted items from an Available box to its corresponding Selected box. Or, click on the >> button to send all values displayed in the Available box (regardless of whether you've highlighted them first) to the Selected box.
- Click on the < button to return highlighted values from a Selected box to its corresponding Available box. Or, click on the << button to return all values displayed in a Selected box to its Available box.

## Beginning to Configure a Control

To add a control to the control library:

1. Open the Control List panel and click on its Add Control button. (The button appears in two places, near the top right of the panel and at the bottom center.) The following form appears:

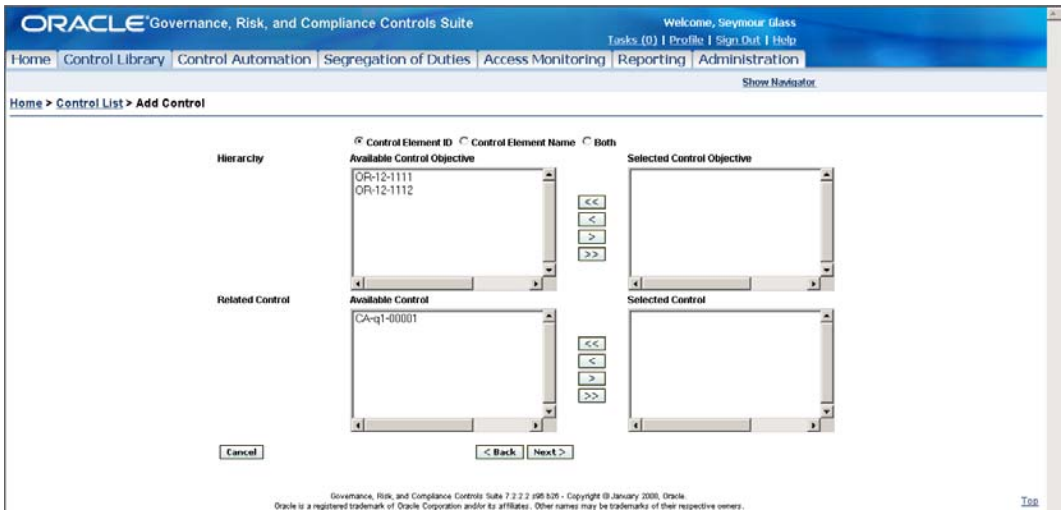


**2** In this form, provide the basic descriptive information for the control:

- In the ID Value field, complete an ID value for the control if ID values are configured in a way that makes this necessary. The illustration, for example, shows a three-segment ID for which the first segment is a fixed value and the last is an automatically generated value; the user cannot edit them. But the middle segment is configured for manual entry, and the user must enter a value in the text box.
- In the name field, type a name for the control.
- Select starting and ending dates for the control in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)
- In the Rating and Likelihood list boxes, select values which, respectively, weigh the relative importance of the control and express the chance that if the control were to fail, it would permit material error in financial statements. (The fields present rating and likelihood values your company has configured.)
- In the Description box, type an explanation of the control's purpose. The description can be up to 3,000 characters in length, and it appears in the entry for the control on the Control List panel.

**3** Click on the Next button. In a new form, click on control objectives (top) and "related controls" (bottom) that you want to associate with the control you are creating; move the items to the Selected boxes. (Controls may be related to one another for any reason your company determines to be meaningful.)

Depending on your preference, you may have this form display ID values, names, or both for the controls and control objectives you're selecting. Simply click on the appropriate radio button.

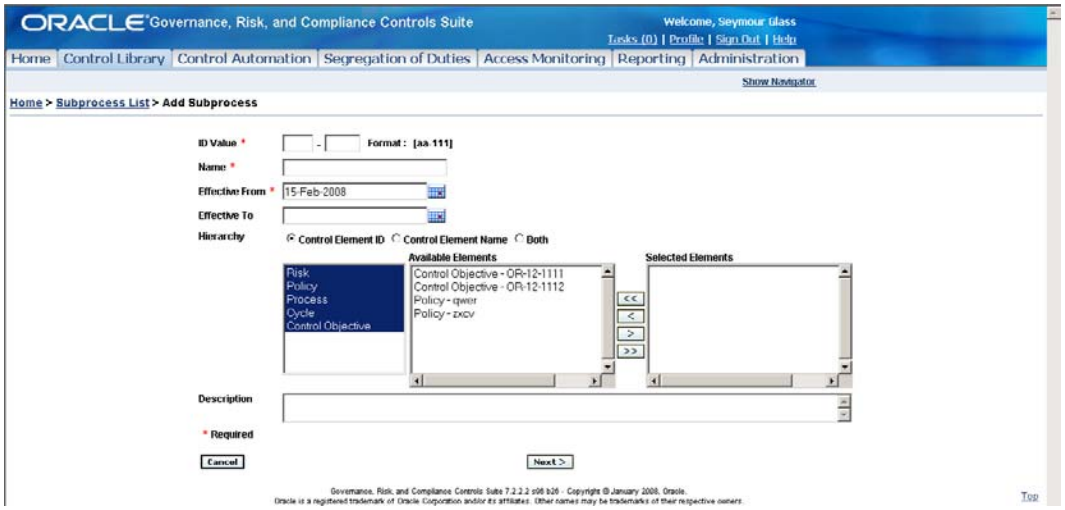



**4** Click on the Next button to display a form in which you can select dimension or attribute values for the control. For instructions on using this and subsequent forms to finish configuring the control, skip ahead to "Completing the Control Element Configuration" (page 56).

## Beginning to Configure Other Control Element Types

To add an element other than a control to the control library:

1. Open the List panel for the type of element you want to create, and click on its Add button. (Once again, the button appears in two places, near the top right of the panel and at the bottom center.) The form like the following one appears:




2. In the ID Value field, complete an ID for the element if ID values are configured to include manual-entry segments. (If not, accept the default ID value.)

3. In the Name field, type a name for the control-library element.

4. Select starting and ending dates for the element in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)

5. In the Hierarchy area, choose other control-library elements that you want to associate with the one you are creating; move the items to the Selected box. You can select only items with a "parent-child" relationship, so the form varies according to the type of element you are configuring. For items at the top of the hierarchy, it displays two boxes for available and selected subprocesses; for midlevel items, it adds a third box in which you can select a type of element to add.

   Depending on your preference, you may have this form display ID values, names, or both for the elements you're selecting. Click on the radio button that reflects your choice.

6. In the Description box, type an explanation for the purpose of the element. The description can be up to 3,000 characters in length, and it appears in the entry for the element on its List panel.

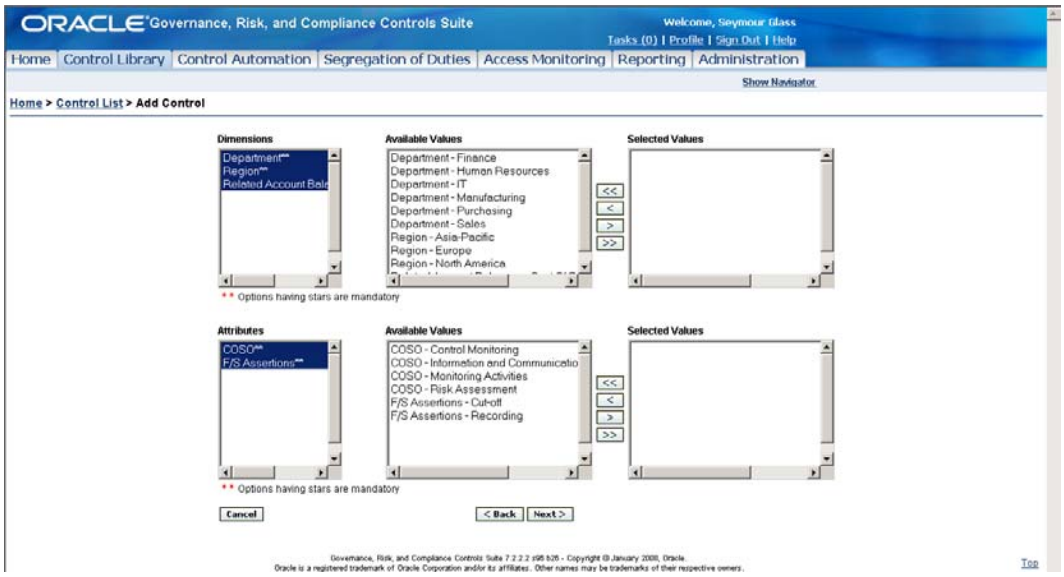
7. Click on the Next button to display a form in which you can select dimension or attribute values for the control-library element. For instructions on using this and subsequent forms to finish the configuration, see the next section, "Completing the Control Element Configuration."

## Completing the Control Element Configuration

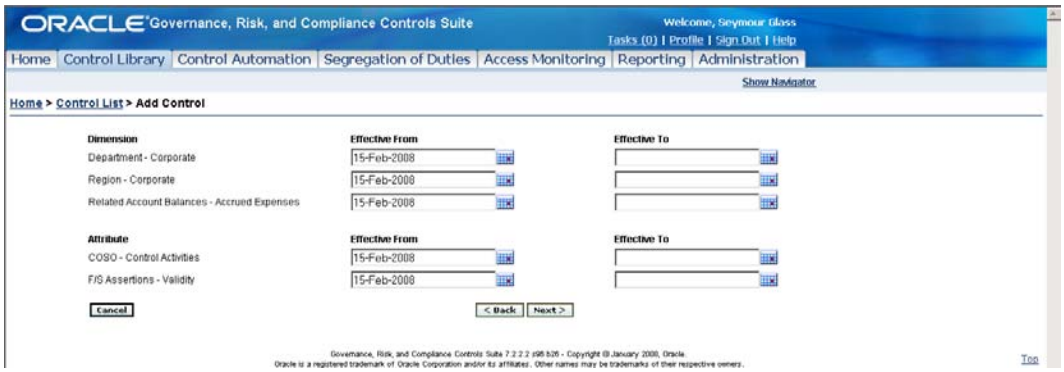
To finish configuring a control-library element, select dimension and attribute values for it, specify a time period for each, and review the configuration. An element not only acquires dimension and attribute values you assign directly, but also inherits values from lower-ranking elements to which it is linked. Once an element is saved you cannot remove a value from it, but you can set an end date to inactivate a value.

**1** Having completed the early steps of creating a control-library element, you've arrived at the following panel. In it, use the Dimensions and Attributes fields to select dimensions and attributes. Values configured for your selections appear in the Available Values fields; move those you want to the Selected Values fields.

If a dimension or attribute is marked by two asterisks, you must assign a value for it to each control you create. You need not assign such mandatory dimensions or attributes to other control-library elements, because they'll inherit values for these from the controls with which they are linked.




**2** Click on the Next button. A new panel lists the dimension and attribute values you've selected so that you can set effective dates for them:

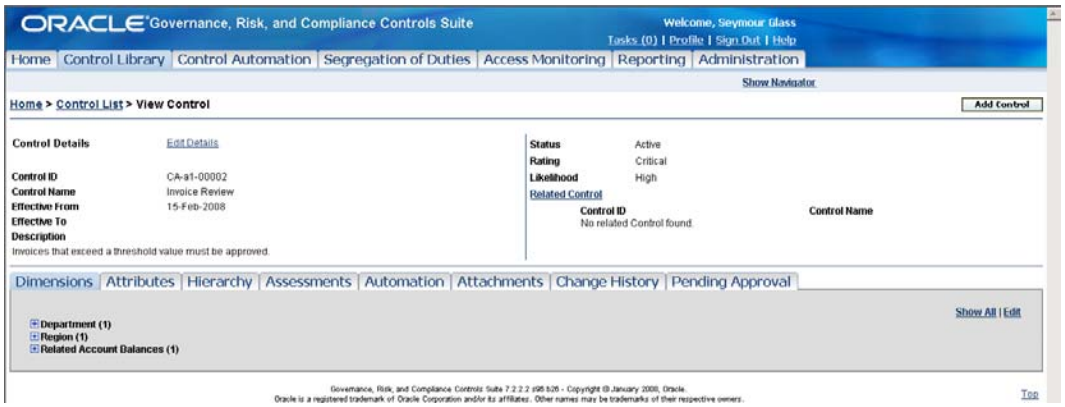


By default, all the dimension and attribute values are set to take effect immediately and remain in effect indefinitely. To make a change, set a new value in an Effective From or Effective To field (see "Date Fields," page 6.)

3 Click on the Next button. A final panel summarizes the selections you've made. If you are dissatisfied with any, click on the Back button until you reach the panel in which that selection is made, change it, and click on the Next button until you return to this summary form. When you are satisfied with your selections, click on the Finish button to complete the creation of the control-library element.

## Viewing Control-Library Elements

Once an element is created and approved, you can view the values established for it: Locate its entry on its List panel (see page 48), and click on the ID value displayed in that entry. Or use the Library Navigator (see page 51). A View form appears:




The white portion of this form presents the basic, descriptive information for an element. Items to the left of a vertical blue line — ID value, name, effective dates, and description — are displayed no matter what type of element has been selected. So is Status (the first item to the right of the vertical blue line), which may be any of the following:

- Submitted: No reviewer has looked at the control-library element.
- Pending: Review has begun, but is incomplete.
- Active: The element is approved and in use.
- Inactive: The element is rejected, or its Effective To date has passed.
- Editing: The element has been modified, and further changes are prohibited until the modified version is reviewed.

Other items (all of which appear to the right of the vertical blue line) apply only to controls, and so appear only if a control has been selected. These include not only rating and likelihood, but also related controls — those that have qualities in common with the control currently on display. When you click on a link for a related control, the View form immediately displays full information for that control.

The gray portion of this form presents tabs you can click to view hierarchy elements, dimensions, or attributes with which the element is associated; assessments of it; auto-

mations that can be run from it; a change history; and file attachments. If changes to an element are pending, you can view a list of approvers who have yet to act.

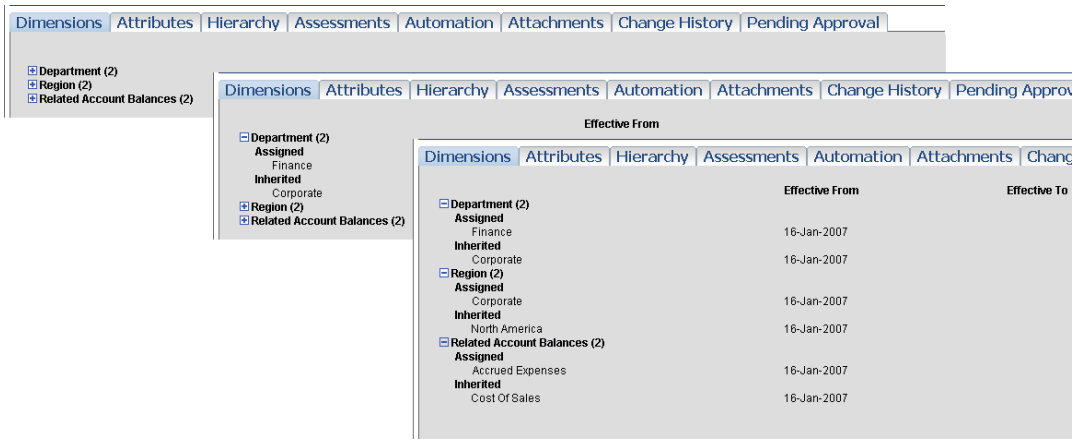
Hierarchy elements, dimensions, or attributes may be directly or indirectly associated with this element:

- The panels display items with which an element has a direct parent-child connection. If you are working with a control objective, for example, its Hierarchy panel shows the controls and subprocesses to which it is directly linked.
- The panels also display "inherited" items — those with which the current element is associated indirectly, through its connection to some other element. The Hierarchy panel for a control objective, for example, shows not only the subprocesses to which it is directly linked, but also processes, policies, cycles, and risks to which the subprocesses are linked. For another example, the Dimensions panel for a control objective displays the dimension values it has been directly assigned, as well as those it inherits from controls with which it is linked.

The Dimensions, Attributes, and Hierarchy panels display the names of dimensions, attributes, or types of hierarchy elements for which values have been selected, together with the number of values selected for each. In each panel, click on a Show All prompt to see the values selected for all the items on the panel. The prompt then changes to read "Hide All"; click on it to restore the original display. Along with each dimension or attribute value, the panel displays its effective dates; it also identifies which values are directly assigned and which are inherited.

You can view values for an individual dimension, attribute, or control-library element. To do so, click on the + icon next to the item. When the values are displayed, the icon changes to a minus sign; click on it to hide the values. Within the Hierarchy panel, if you click on the name of the element type you move to the List panel for that element, and if you click on an individual element you move to its View panel.

For example, a control objective may have values assigned for three dimensions. The Dimensions panel for this control objective initially displays the dimension names (far left in the illustration). Click on the icon next to one of them (such as "Department" in the middle illustration) to display its assigned and inherited values. Or click the Show All button to display values for all the dimensions (far right).



# Editing Control-Library Elements

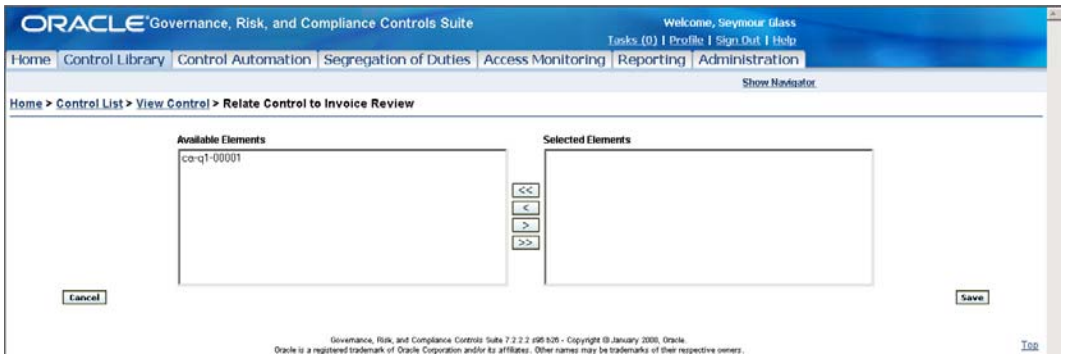
A control-library element can be edited only if it is at the Active or Inactive status. (At other statuses, prior changes are being reviewed, so the element cannot be changed.) When you make changes, the element you've modified is subject to approval, and the changes appear only if and after approval has been granted. Moreover, you cannot modify an element if workflows are configured so that you would be an approver for it.

To update the descriptive information for any element, open its View form and click on its Edit Details link. This opens a form that presents the ID value for the element in read-only form, and write-enabled fields that display its configured name, effective dates and description, as well as likelihood and rating if the element is a control. Change the write-enabled values as you wish and click on the Save button.

## Adding or Removing Related Controls

Related controls apply only at the control level; one control may be related to another in any way your company determines to be meaningful. To add or remove related controls for a given control:

1. Click on the Related Controls link in the View form. A Relate Controls panel appears:



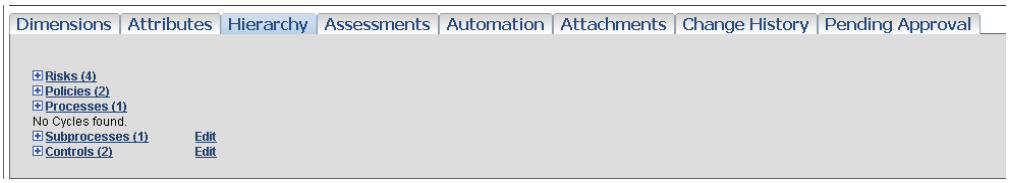

2. Move controls from the Available box to the Selected box to add them, or from Selected to Available to remove them.
3. Click on the Save button. The View form reopens.

## Connecting Elements in the Hierarchy

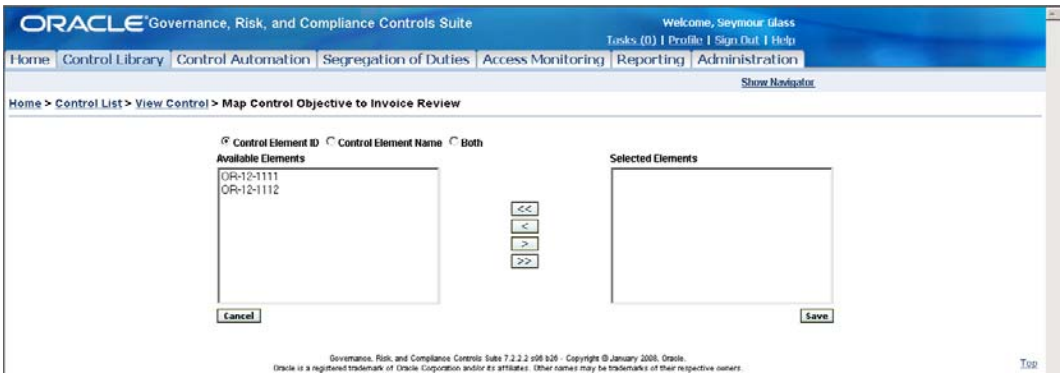
To modify hierarchy assignments for any element:

1. Open the View form for the element whose configuration you want to change.
2. Click on the Hierarchy tab, and then on an Edit link in the panel activated by the tab. One link is located next to a listing for each element you can select — for

example, controls and subprocesses if you are working in the View Control Objective panel.




**3** A "Map" form appears. In it, move values from an Available box to a Selected box to add them, or from Selected to Available to remove them. You may have this form display ID values, names, or both for the elements you're selecting. Click on the radio button that reflects your choice.




**4** Click on the Save button.

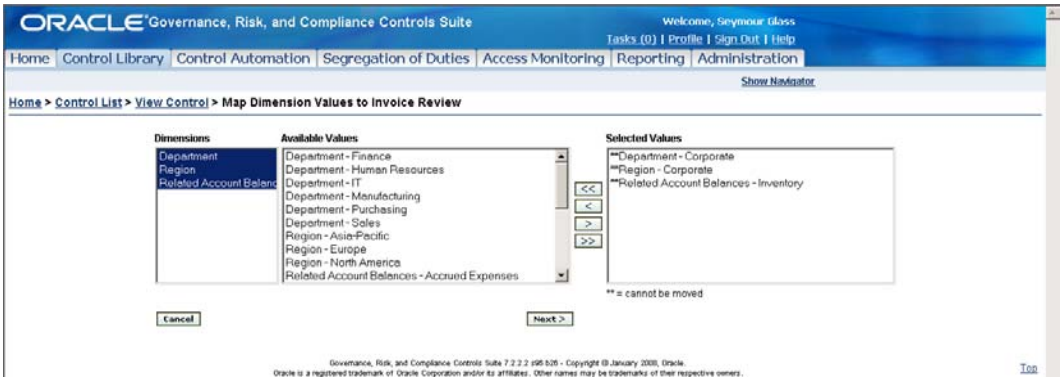
## Editing Dimension or Attribute Assignments

You can add dimension or attribute values to a control-library element, or inactivate (although not remove) those already assigned. To do so:

**1** Open the View form for the element whose configuration you want to change.

**2** Click on the Dimensions or Attributes tab, and then click on the Edit link at the right of the panel activated by the tab.

**3** A "Map" form appears:



In the Dimensions or Attributes box, select the dimensions or attributes for which you want to add values. Those configured for your selections then appear in the Available Values box. Highlight and send those you want to the Selected Values box.

In this case:

- The > button sends the values you've highlighted, and the >> button sends all displayed values, from the Available Values box to the Selected Values box.
- The < button, which returns selected values from the Selected box to the Available box, works only on those values that have not yet been saved as selected.
- The << button, which should move all values from the Selected box to the Available box, works only if no dimension or attribute values have yet been saved.

**4** Click on the Next button. A new form lists all the dimension or attribute values selected for the control so that you can set effective dates for them.

Dates already selected for existing dimension or attribute values remain in force; you can change those set in the future, but not those that have passed. To inactivate a dimension or attribute value, set an expiration date in its Effective To field.

Newly added dimension or attribute values are set to go into effect immediately and continue indefinitely. Accept default values or set new dates. (See "Date Fields," page 6.)

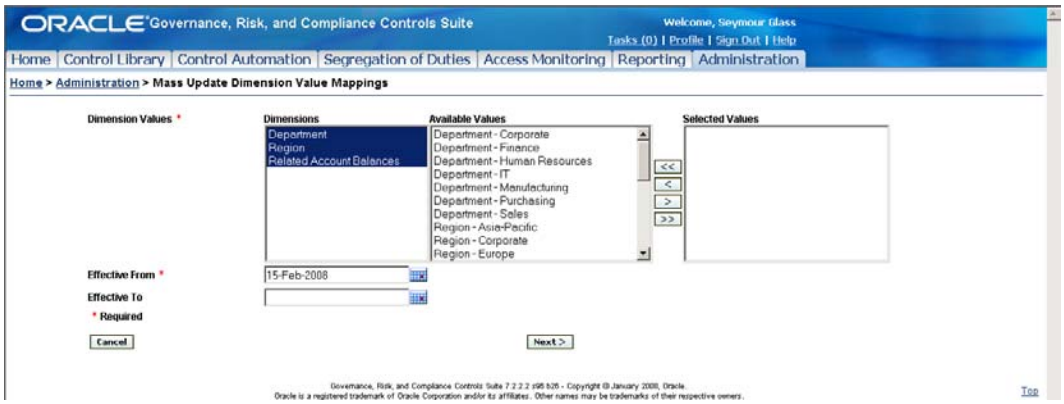
**5** Click on the Finish button.

## Mass Updating Dimension or Attribute Assignments

As you create new dimensions or attributes, or assign new values to existing dimensions or attributes, you may want to use the new values in any number of existing controls. Mass-update features enable you to incorporate new dimension or attribute values in many elements at once, rather than one at a time.

**1** When new dimension or attribute values are ready, click on the Administration tab, and then on one of two links in the Control Administration section: Mass

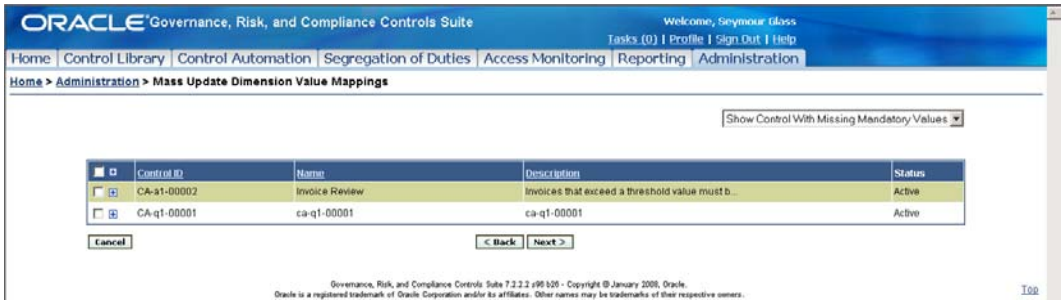
Update Dimension Value Mappings or Mass Update Attribute Value Mappings. A mass-update panel like the following one appears:




2 In the leftmost large field — labeled *Dimensions* or *Attributes* depending on your selection in step 1 — choose dimensions or attributes for which you want to add values to controls. Their values then appear in the Available Values field; move the values you want to the Selected Values field.

3 Select starting and ending dates for the dimensions or attributes in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)

4 Click on the Next button. A second mass-update panel appears:




5 In the list box near the top right corner, select one of two options:

- Show All Controls causes the panel to list all controls configured for your instance of Governance, Risk, and Compliance Controls Suite.
- Show Controls with Missing Mandatory Values applies only if, in the first mass-update panel, you selected at least one value that belongs to a dimension or attribute that is configured to be mandatory. If so, the panel lists only controls that have not been assigned a value for that dimension or attribute.

Each control occupies a row that displays ID, name, a truncated description, and status. To review other details for a control, click on the + icon in its row; or, to see details for all controls in the list, click on the + icon in the header row. This presents the full description, and current dimension and attribute assignments. (Click again on the icon, which now looks like a minus sign, to restore the original display.)

6 Select controls to which you want to assign values. As is always the case, you can update controls only at the Active and Inactive statuses; controls at other statuses, although listed in this panel, cannot be selected.

To select individual controls, click on the check box in the left column of each of their rows. To select all displayed controls, click on the check box in the left column of the header row. A control is selected when a check mark appears; to take back a selection, click on a check box so that the check mark disappears.

7 When you are satisfied with your selection of controls, click on the Next button. A third mass-update panel displays your selections — the values you want to add and the controls to which you want to add them.

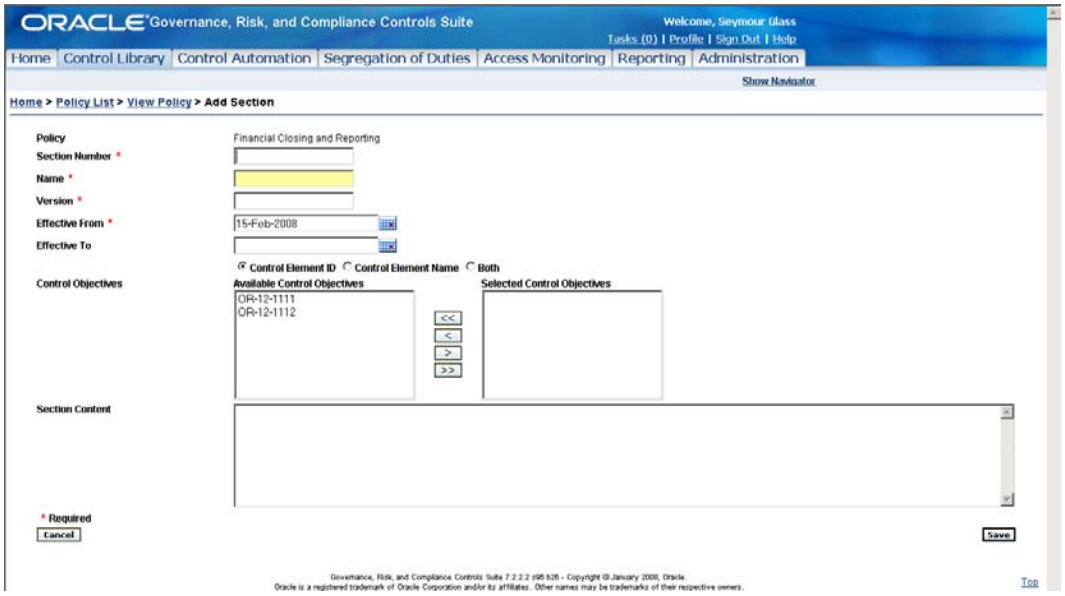
If you are dissatisfied with any of your selections, click on the Back button until you reach the earlier panel in which that selection was made, change it, and then click on the Next button to return to the summary panel. When you are satisfied with your selections, click on the Finish button to complete the assignment of dimension or attribute values to controls.

## Defining Policy Sections

Having created a policy, you can configure sections for it. Each describes a facet of the policy and is addressed by at least one control objective. If you have moved away from the Control Library tab, click on it again, and then complete the following steps:

1 Open the View form for the policy to which you want to add sections.

2 Click on the Sections tab, and then click on the Add Section button at the right of the panel activated by the tab. An Add Section form appears:




3 Complete fields that identify the section: Section Number, Name, and Version. (You are free to create your own conventions for these values.)

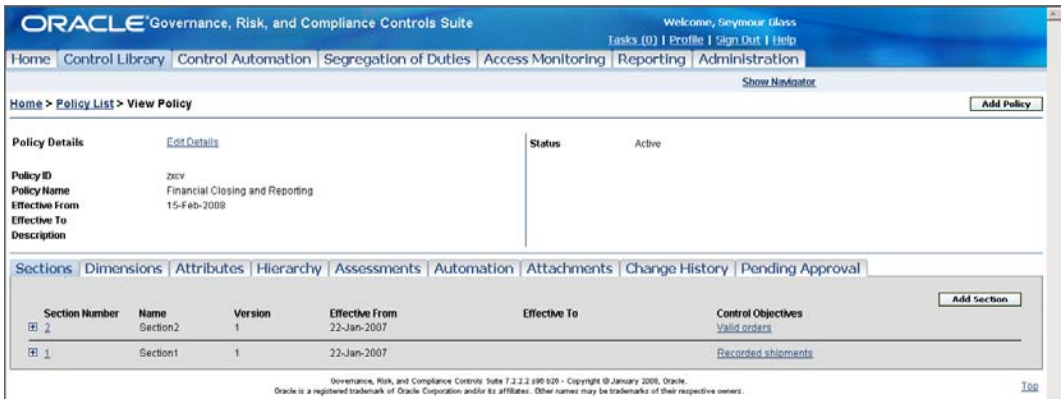
4 Select starting and ending dates for the policy section in the Effective From and Effective To fields, respectively. (See "Date Fields," page 6.)

5 Identify one or more control objectives that address issues raised in this section: move objectives from the Available box to the Selected box to add them, or from Selected to Available to remove them.

6 Write a definition of the policy section in the Section Content box.

7 Click on the Save button.

Entries for the sections you define appear in the Sections panel for the policy to which they belong:




With each entry, you can:

- Click on the plus-sign icon to display the section content in addition to the information that appears by default. (When you do, the plus sign changes to a minus sign; click on it to hide the section content.)
- Click on the section number to create a new version of (edit) the section. An Edit Section form appears, essentially identical to the Add Section form with its fields displaying current values for the section. Update the version number, make other changes as needed, and click on the Edit Section button. The Section panel includes an entry only for the latest version of each section.
- Click on the name of a control objective associated with a section to move immediately to the View form for that objective.

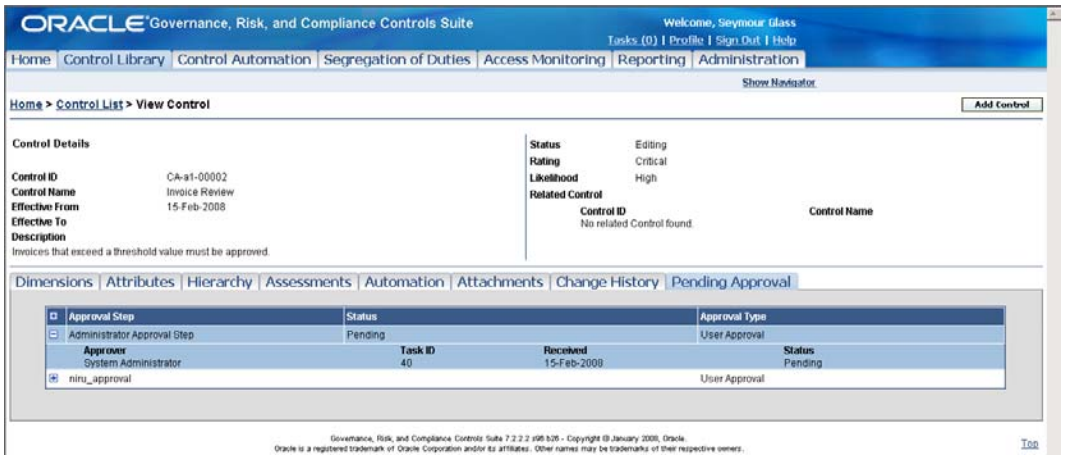
## Keeping Track of Pending Approvals

When a control-library element is modified, its status changes to Editing and no further modifications can be made to it until the original changes are approved (or rejected). Approvers are determined by the terms of workflows configured for your system.

When a control-library element is at the Editing status, you can view a list of reviewers who have rendered their approval decisions, and those who have yet to do so:

1 Open the View form for the element whose reviewers you wish to identify.

**2** Click on the Pending Approval tab:




Each row in the Pending Approval list displays information about one step in the workflow that has distributed the element for review. For a given step, a row always displays the names and email addresses of the reviewers named in the step. For each reviewer, the email address is a link; you may click on it to send an email message to the reviewer. Other fields in each row — Task ID, Received, and Status — are populated only when earlier steps have been completed. The task ID is a number assigned to the approval step by the workflow engine. Received is the date on which reviewers at a given step receive their approval notifications. Status is Pending if the reviewer has not yet taken action, or Approved or Reassigned if he has.

Once all steps have been completed, either because all reviewers have approved or any has rejected, the list of steps is replaced by the message, "No approval details available. This element has already been approved. (Since a rejection decision immediately removes the list of workflow steps, the status field at any of the steps would never read "Rejected.")

# Adding Automations to Controls

While a "control" is essentially documentary, an "automation" is a software object that implements the control. Automation types include control monitors created in Transaction Controls Governor, SOD rules created in Application Access Controls Governor, change-control rules created in Preventive Controls Governor, or form or flow rules created through the use of tools embedded in Oracle E-Business Suite.

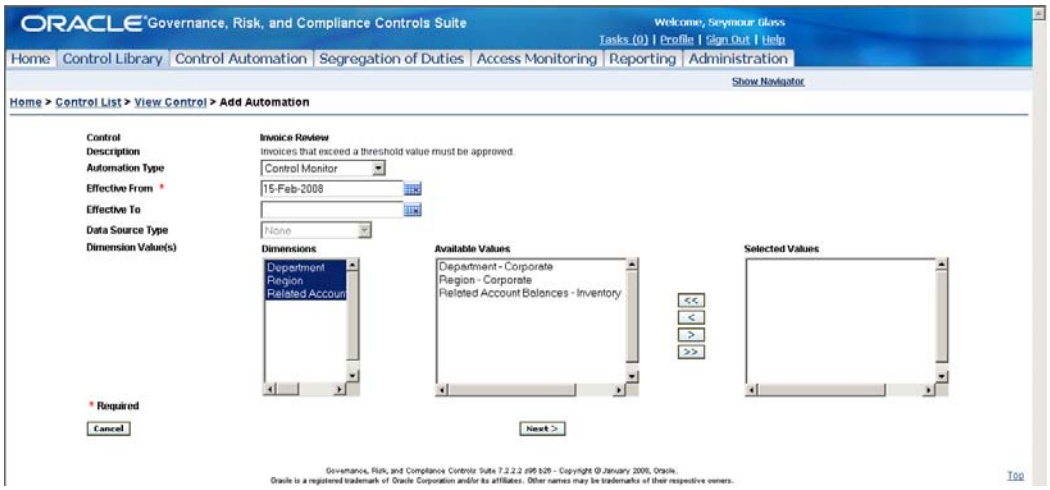
To run a control monitor, you must add it to a control. The other automations, however, run once they are created in their applications; you would add them to controls only for documentary purposes.

You can add any number of automations to a control. To add one:

**1** Open the View form for the control to which you want to add an automation.

**2** Click on the Automation tab.

3 Click on the Add Automation button. This opens the first in a series of Add Automation panels, each of which presents a read-only display of configuration choices you have already made, as well as write-enabled fields that permit you to select additional options.




4 In the Automation Type list box, select the type of automation you want to attach to the control.

- Control Monitor is a monitor created in Transaction Controls Governor.
- Segregation of Duties is an SOD rule created in Application Access Controls Governor.
- Change Control is a rule written in Preventive Controls Governor.
- Oracle Flow Rule and Oracle Form Rule are rules that regulate the use of Oracle E-Business Suite, written through the use of tools embedded in Oracle EBS.

5 In the Effective From and Effective To fields, select dates on which the association of the automation with the control begins and ends. (See "Date Fields," page 6.)

6 If you chose Control Monitor in the Automation Type field, the Data Source Type list box is set to None and cannot be changed. If you chose any other automation type, use the Data Source Type list box to choose a database instance that stores automations from which you want to select.

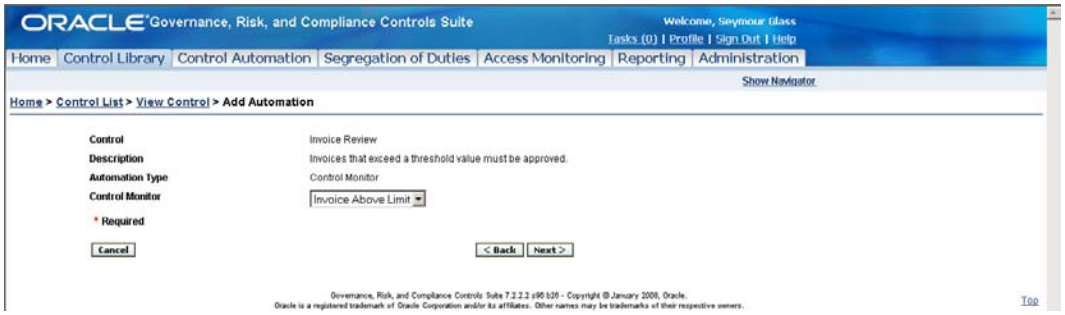
7 In the Dimension Values area, the Dimensions and Available Values fields display only those dimensions and values that have been selected for the control to which you are attaching an automation. From these, choose dimension values to determine the segments of your business environment in which the automation is to be used. (If you make no dimension selections, the automation inherits all the dimension values configured for the control.)

At this point, follow distinct procedures for adding distinct automation types.

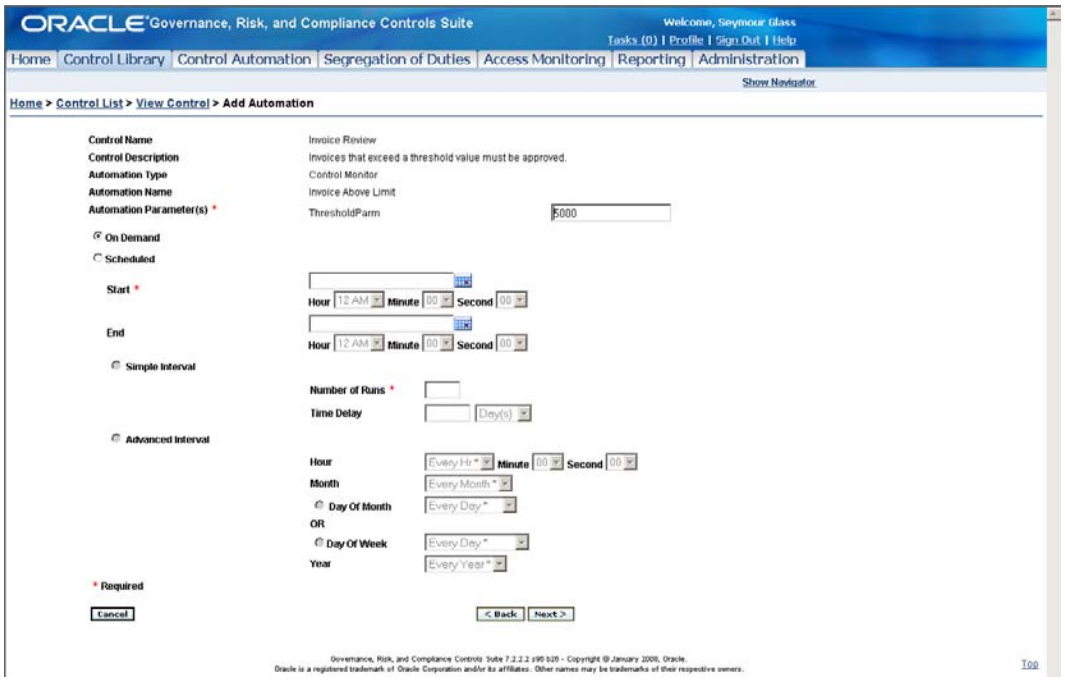
## Control Monitor Automations

To add a control monitor as an automation for a control:

1. By default, Control Monitor should be selected in the Automation Type list box on the first Add Automation panel, and the None box should be selected in the Data Type list box. After confirming this is the case and making the selections you want in the date and dimension fields, click on the Next button.
2. In a second Add Automation panel, select the control monitor you want from a Control Monitor list box. In the following illustration, for example, the selected control monitor is called Invoice Above Limit.




3. Click on the Next button. A third Add Automation panel appears:




4. For each Numeric or Character parameter configured for the control monitor you selected in step 2, this Add Automation panel presents a field labeled with the parameter name and set to its default value. Accept the default or enter a new value. (In the illustrated example, the Invoice Above Limit control monitor takes one parameter, which sets a threshold value above which invoices are reviewed.)

**5** Configure or turn off scheduling options.

Select the On Demand radio button to turn off scheduling; in this case the control monitor can only be run manually from the Automations panel. Or select the Scheduled radio button to set a schedule on which the control monitor runs automatically; in this case, it can also be run manually from the Automations panel.

If you select the Scheduled button, use the Start and End sets of fields to establish the period during which the control monitor should run:

**a** In the Start and End fields, enter dates on which the monitor should begin and finish running. (See "Date Fields," page 6.)

**b** For each date, select values in the Hour, Minute, and Second list boxes to set the precise time when the monitor should become active or cease being active.

Next, define the interval at which the monitor runs within the start and end dates you've set. To do so, use simple or advanced options; to activate one or the other, click on the Simple Interval or Advanced Interval radio button.

**Note**
The schedule you set is not validated. As you define either a simple or an advanced interval, you can configure a recurrence cycle entirely outside of the active period defined by the Start and End fields. Be sure that your schedule makes sense.

If you select Simple Interval, configure the cycle on which the control monitor is to run:

**a** In the Number of Runs box, type the number of times the control monitor should run.

**b** In the two Time Delay boxes, set the period between each running of the monitor — the first box accepts a number and the second enables you to select a unit of time (days or hours).

You could, for example, use the Start and End sets of fields to define a 24-hour time span, and then cause the monitor to run once every other hour by typing 12 in the Number of Runs field and selecting 2 hours in the Time Delay field.

If, instead, you select Advanced Interval, determine when and how often the control monitor runs. Each field in this section sets a unit of time; by default, most read "Every," but Minute and Second are set to zero, so that the monitor would run every hour on the hour. As you modify the defaults, work from small units of time to large, in effect defining a time and a date at which the monitor recommences running.

If you were to set Second to 30, for example, the monitor would run once per hour at 30 seconds after the hour. If you were then to set Minute to 15, the monitor would run every hour at 15 minutes and 30 seconds after the hour. If you were then to set Hour to, say, 3 PM, the monitor would run once per day at 15 minutes and 30 seconds after 3 PM.

You might then select a value for Month. By default, the monitor would run every day during the month you select (at the time set in the Hours, Minutes, and Seconds fields). However, you have two options for specifying days within the month. You can select either of the following:

- The Day Of Month radio button, and then a specific date (or the last day or last weekday of the month). The monitor would then run on the date of the month you selected (at the time set in the Hours, Minutes, and Seconds fields).
- The Day Of Week radio button, and then a specific day or a "Last" day (such as Last Monday). The monitor would then run each selected day during the month, or the last selected day during the month (once again, at the time set in the Hours, Minutes, and Seconds fields).

Finally, if you select a year value, the monitor runs at the configured days and time only during the selected year.

6 Click on the Next button. A final panel summarizes your selections. You can click on the Back button until you reach the panel in which a selection is made, change it, and then click on the Next button until you return to this summary panel. When you are satisfied with your selections, click on the Finish button.

## Other Automations

If you are adding a segregation-of-duties, form, flow, or change-control rule as an automation:

1 Make the selections you want in the initial Add Automation panel (as documented on page 65). These include Segregation of Duties, Oracle Flow Rule, Oracle Form Rule, or Change Control in the Automation Type field and a database instance in the Data Source Type field. Then click on the Next button.

2 If you selected Segregation of Duties or Change Control, this step does not apply; skip to step 3. If you selected Oracle Flow Rule or Oracle Form rule, a second Add Automation panel presents a Library list box, which displays the names of libraries available on the database instance you selected in the initial Add Automation panel. Libraries are "containers" for rules and are configured in Form Rules or Flow Rules. Select the name of the library containing the rule you want as an automation, or select All Libraries. Then click on the Next button.

3 In another Add Automation panel, a list box displays the names of rules from which you can select. These are SOD rules or change-control rules on the database instance you've chosen, or form or flow rules in the library you've chosen. Click on one of them, and then click on the Next button.

4 A summary panel displays the selections you have made. Click on the Back button if you wish to alter your selections, or click on the Finish button to complete the addition of the automation.

# Viewing, Editing, and Running Automations

When you add an automation to a control, an entry for it appears on the Automations panel of the View form for that control. (Higher-level elements in the control library inherit automations from the controls with which they are linked. So entries for the automation appear also in the Automations panels of any linked higher-level elements.)

In addition to automation name, type, and effective dates, each entry (for any type of automation) displays an Edit link in an Action column. It enables you to edit some of the details by which the automation is attached to the control:

- Click on the link to open a series of Edit Automation panels. These are effectively copies of the Add Automation panels, except that they display the values already set for the automation.
- Work your way through the panels as you did the Add Automation panels, clicking on the Next button in each until you reach a final panel in which you click on a Finish button.
- As you do, however, you can change only some of the configured values. For a control monitor, these include the effective dates, parameter values, and scheduling details; for any other automation, you can change only the effective dates.

If the automation is a control monitor, its entry on the Automation panel provides features not available to the other automation types. First, a Version field in its listing displays the version number of the control monitor, as well as the status of that version. If a version of a control monitor is attached to a control, and you inactivate it by activating a new version, the newly active version of the monitor is attached automatically to the control.

Second, the automation name is a link to a View Automation panel (shown at the top of the next page). Click on the name to view more detailed information about the control monitor, including the current settings of its parameters and a history of its use. From the View Automation panel, you can also run the control monitor manually.

To view the description configured for a control-monitor parameter, click on the + icon at the left of its entry in the parameters grid. Or, to view descriptions for all the parameters for which descriptions have been written, click on the + icon in the header row. Each icon, when clicked turns to a minus sign; click on these to hide descriptions once again.

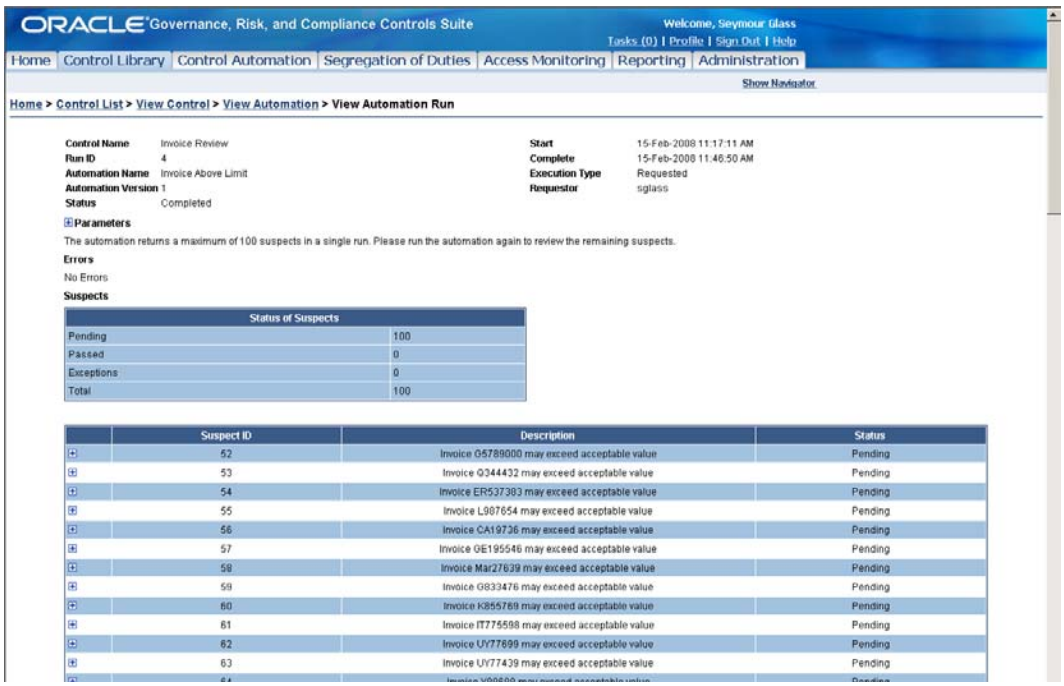
To run a control monitor, click on the Run Now button in this form. Each time you do, and each time the control monitor runs on a schedule, the SQL statements contained in the control monitor are evaluated, and a new set of suspects is generated. When you then click on the Get Latest Automation Status button, a Run History grid is updated. In it, each row displays information about a run of the control monitor. The information includes:

- A number that uniquely identifies the run.
- The number of suspects that the run has generated.
- The execution status, which indicates whether the control monitor is running or has finished, and if the latter, whether the run was successful or generated errors.
- The dates and times on which the control monitor run starts and ends. (The End field is populated only when the Execution Status field indicates completion, with a value such as "Successful.")
- The version number of the control monitor.
- An "execution type." This can be either of two values: "Requested" indicates that a user clicked the Run Now button to execute the control monitor. "Scheduled" indicates that the control monitor ran according to a schedule set up while the monitor was added to the control as an automation.

If you click on a run ID, a View Automation Run panel displays detailed information about the execution of the control monitor: the name of the automation and the control from which it has been run; the run ID, start date and time, completion date and time, and status; and the execution type and ID of the user to ran the automation. To view dimensions selected for the control monitor (which determine the segments of your business environment in which the control monitor is used), click on the + icon next to the Dimension label. To view parameter values used in the run, click on the + icon next to the Parameters label. The panel also displays any errors generated during the automation run.

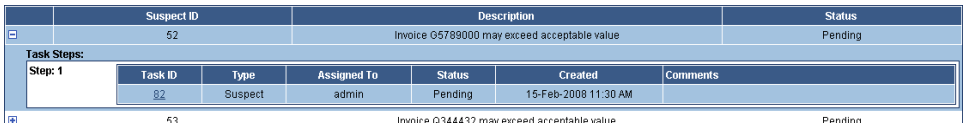
The panel provides a list of suspect tasks generated by the control monitor and forwarded to reviewers at the Task Inbox, as well as a grid showing status of these tasks. As reviewers pass judgment on the tasks, the status totals are automatically updated in the Suspects grid in this panel:

- Passed means that a suspect condition is allowed to stand.
- Exception means that a suspect condition must be remedied.
- Pending means that no decision has been reached.




Moreover, you can click on a + icon in the entry for an individual suspect to display the state of its review. Each pop-up display lists steps in the workflow routing under which the suspect is being reviewed. For each step, it lists reviewers, the actions they have taken, and any comments they have made.

In the following illustration, for example, the workflow routing consists of a single step that sends suspects to a reviewer named "ndanger." In this case the user has not yet reviewed the suspect task.

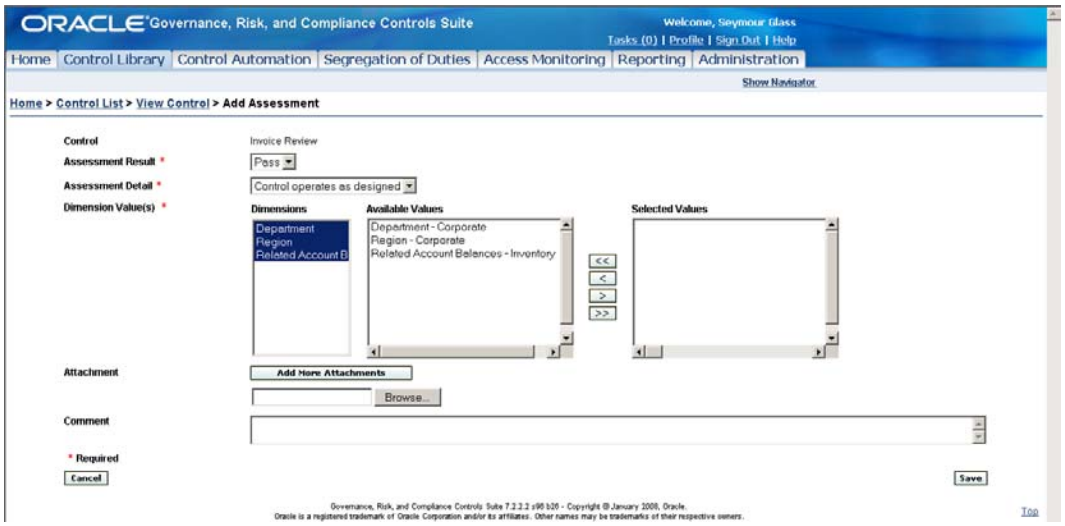



From here, you can click on a task ID to view details of the actions taken by a given user. A replica appears of the Suspect Details panel in the Task Inbox, but the buttons one needs to make an actual status assignment are removed. (Click on its Back button to return to the View Automation Run form.) Note also that when you click the + icon, it changes to display a minus sign; click on that icon to restore the original display of the View Automation Run form.

# Assessing Control-Library Elements

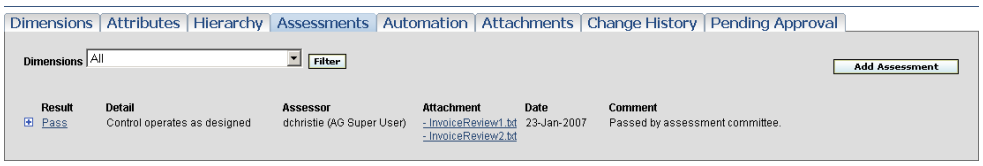
To assess the effectiveness of control-library elements:

1. Open the View panel for the element you want to assess.
2. In the View panel, click on the Assessments tab, then on the Add Assessment button. In an Add Assessment form, a field displays the name of the element you are assessing; it's filled automatically, and you cannot change its value.




3. In the Assessment Result list box, select the value *Pass* or *Fail*.
4. In the Assessment Detail list box, select one of several statements that rate the extent to which an element satisfies its purpose. (These statements in effect form a range of evaluations from most to least satisfactory.)
5. The Dimension Values area lists all of the dimension values with which an element is associated, either directly or indirectly. Select at least one of them to specify the segment of your business to which the assessment applies.
6. Optionally, attach one or more documents that explain the reasoning behind the assessment you've made. In the field next to the Browse button, type the path and file name of a document file. Or, click on the Browse button and, in a Choose File dialog box, use standard Windows techniques to navigate to the file. To attach an additional file, click on the Add More Attachments button, which inserts another Browse field, and use that field to repeat the process.
7. In the comment box, type a comment about the assessment.
8. Click on the Save button

When you complete the assessment, the Assessments tab displays details about it (and would display a similar row of data for each prior assessment):



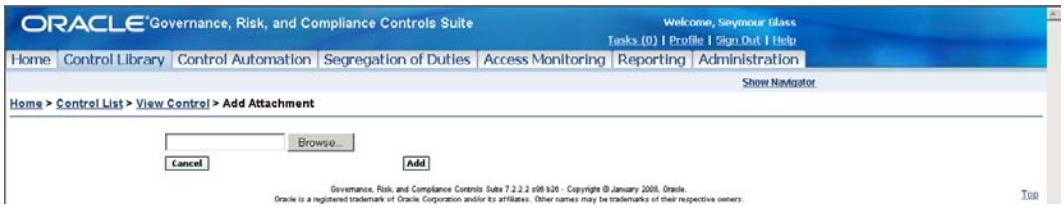
As you review assessments, you can do the following:

- Filter the list of assessments. In the Dimension list box, select a dimension. The Assessments panel then lists only assessments that set a value for the dimension (see step 5, above). Or select All to view entries for all assessments.
- Click on the plus-sign icon to display the dimension values selected for the assessment. When you do, the icon changes to a minus sign; click on it to restore the original display.
- Click on the name of an attached file to open the file.
- Click on the Result entry (*Pass* or *Fail*) to open an Edit Assessment panel — a copy of the Add Assessment panel in which the fields display the values selected for the assessment. You can alter the settings, download (either open or save) an attached file or delete it,  and resave the assessment.

## Attaching Documents to Control-Library Elements

To each control-library element, you can attach files that document the element more fully than the description you write as you create it. First, use a text editor, word processor, or similar application to prepare the files. Then, to add an attachment:

1. Open the View panel for the element to which you want to attach documents.
2. Click on the Attachments tab, and then on Add Attachment button located at the right of the panel activated by the tab. The following Add Attachment panel appears:




3. Click on the Browse button.
4. A Choose File dialog opens. Using standard Windows procedures, navigate to the file you want, click on its name, and then click on the Open button.
5. The path to the file you've selected appears in the text box next to the Browse button, and a second text box and browse button appear beneath the first. If you wish, select a another file to add. Each time you select a file, another text box and browse button appear; continue adding as many files as you like.
6. When you have selected all the files you want, click on the Add button.

The View screen for element reappears, and its Attachments panel displays a row for each document you've added:

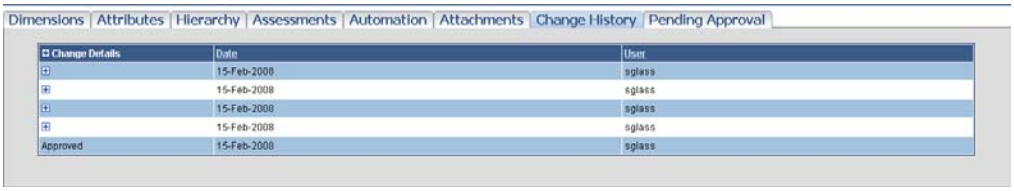
As you review the attachments, you can:

- Open and read them. Click on the Download link in the row for an attachment. A File Download dialog appears; click on its Open button.
- Delete them. Click on an Delete link in the row for an attachment. Deletion of the attachment requires no confirmation. (The attached document continues to exist; it's the attachment to the control-library element that is deleted.)

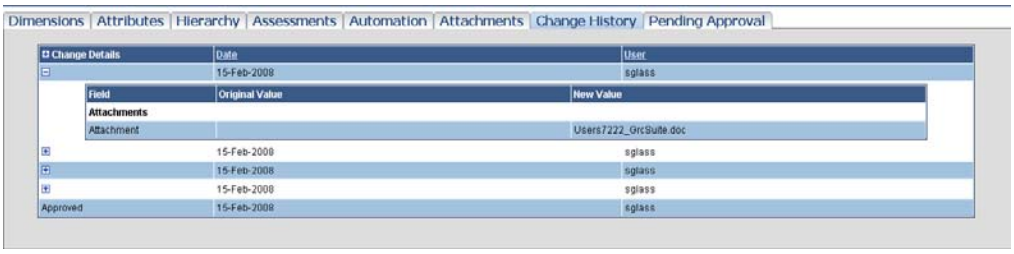
## Reviewing Changes to Control-Library Elements

You can view a history of the changes made to each control-library element:

1. Open the View panel for the element for which you want to view history.
2. Click on the Change History tab. A Change History panel displays a row for each time changes were saved for the element. Each row shows the date on which changes were saved, and identifies the user who made the changes:




3. The last row in the grid documents the creation of the element; it's read-only, and it displays a static value, "Approved," in a Change Details Column. (Despite the label, this row displays the name of the user who created the element, not of the user who approved it.)
4. Each subsequent row documents a change, which may in fact involve modifications to several related fields, all of which were saved at once. To view details about such modifications, click on the + icon in the Change Details column for one of these rows. An inset grid appears, displaying the old and new values for each modified field associated with the row you selected:




5. Click on the + icon in other rows (or on the + icon in the header row) to view old and new values for changes saved at other moments. Each of the icons changes to display a minus sign; click on minus icons for individual entries to close their inset, detail grids, or click on the minus icon in the header row to close all the inset grids.

# Chapter 6

# Reviewing Items in the Task Inbox

In the Task Inbox, users receive requests to review three types of item:

- Suspects generated by control monitors.
- Control Library elements, as they are created or modified. When a new element is created, it does not appear in its List panel until it is approved. When an existing element is modified, further modifications are not possible until the original modifications are reviewed.
- Requests, made through the Access Monitoring feature of Application Access Controls Governor, to give users access to duties they do not ordinarily perform. A user cannot assume the new duties until his request is approved.

The Task Inbox uses eight panels to list items for review. Most provide access to additional panels in which the actual review takes place. Each displays a selection of items tailored to the user currently logged on:

- Task List panels present items that have been created, modified, or reviewed by users other than the current one. As a result, the current user can pass judgment upon these items.

  There are four Task List panels, one that lists all of a user's tasks regardless of type, and one each for suspects, approvals (the review of control-library elements or access requests), and notifications (the review of other users' dispositions of approval tasks or suspect tasks). Each user receives task messages that apply only to items she is authorized to review; that authorization is determined by the configuration of workflow routings and definitions.

- Task History List panels present records of decisions the current user has made in the Task List panels. There is one panel each for suspect-task history, approval-task history, and notification-task history.
- A List User Requests panel presents records of control-library elements, access requests, or suspects created or modified by the current user. Because a user approving her own work would constitute a conflict, these items are read-only.

Moreover, each user can configure an Out of Office Assistant. If the user is unavailable, this feature directs review requests to another specified user.

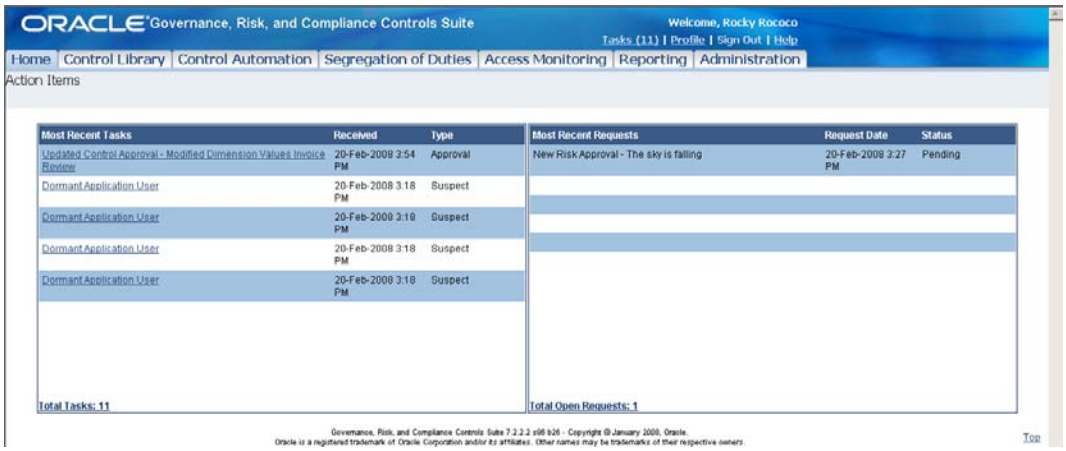
## Who Can Do This?

Every user of Governance, Risk, and Compliance Controls Suite can open the Task Inbox and respond to messages he receives in it. However, as noted above, a user is eligible to receive task messages only if he is named in at least one workflow routing (and generates task-history messages only if he can receive task messages). He can receive user-request messages only if he is able to originate tasks — if his primary application role gives him rights to create or modify items that are subject to review, or if he is eligible to receive task messages and so can reassign them to other users. This chapter is written in the assumption that these conditions apply to you.

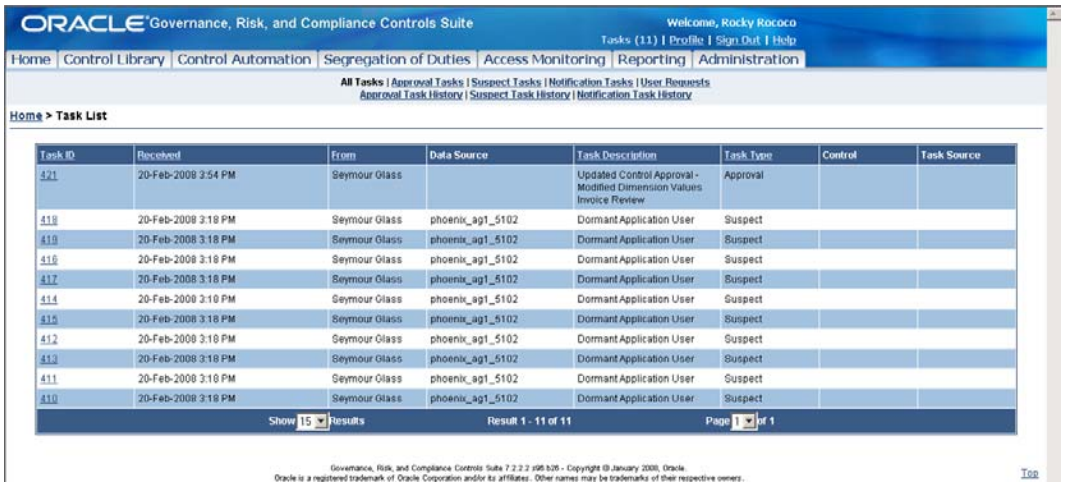
## Opening the Task Inbox

Every panel in Governance, Risk, and Compliance Controls Suite displays four links at its upper right corner. The first of these is labeled *Tasks*, and it also displays the number of tasks assigned to the user who is currently logged on.

For every primary application role except Auditor, the Home panel presents two lists of tasks — one shows the five tasks most recently assigned to the current user, and the other presents the five most recent user requests. At the base of each list, a link displays the total number of tasks or requests assigned to the current user. Moreover each item in the Most Recent Tasks list is itself a link:



To open the Task Inbox, click on one of these links. Either of the Tasks links — in the upper-right corner or at the bottom of the Most Recent Tasks list — opens a panel called Task List. This is the one that displays all tasks, regardless of type:




The link at the bottom of the Most Recent Requests list opens a panel called List User Requests, which displays entries for items the current user has generated. And the link for an individual entry in the Most Recent Tasks list opens a panel in which the user may respond only to that item. Once any of these panels is open, you can click on links for other task, history, or request List panels.

Although each List panel displays information relevant to the items it lists, all display some combination of the following items:

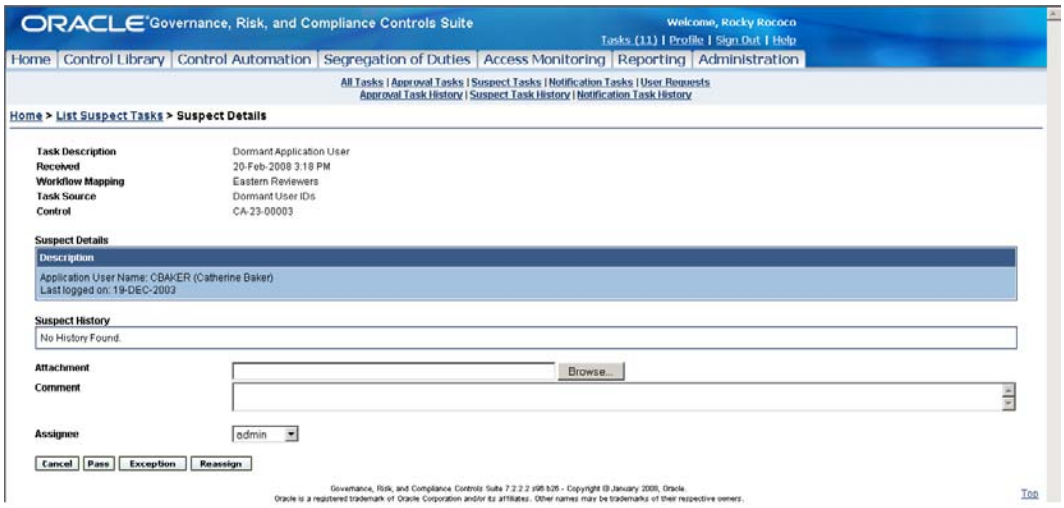
- A Task Description column encapsulates issues to be reviewed. For a control-library task, a label identifies the type of element to be reviewed, whether it is new or updated, and its name. For a suspect task, the column displays a description written into the control monitor that generated the suspect. For an access request, the description is "E-Business User ID Requested" for access to an Oracle responsibility, or "DB User ID Requested" for direct access to a database table.
- Several columns present self-explanatory information: For each entry on a panel, a Received column displays the date and time at which the entry appeared in the Task Inbox. A From column names the user who originated a task or request. Data Source identifies the database instance in which a suspect or access request exists.
- A Run ID column (in the Suspect Task List panel) or a Task ID column (in each of the other panels) presents numeric identifiers for control-monitor runs or for tasks (or requests). In all but the User Requests panel, each ID is a link to another panel in which you may act upon the item in question. A blue ID indicates a task for which the action panel has never been opened, and a red ID indicates a task for which the action panel has been opened, but no action has been taken. In the User Requests panel, ID values are black, indicating they do not link to anything.
- A Control (or Control ID) column is populated only for suspect tasks, and each entry displays the ID configured for the control with which a suspect is associated. The association, of course, follows this path: A suspect is generated by a control monitor, and the control monitor is attached as an "automation" to a control.

- For each suspect task, a column displays the name of the associated control (the one whose ID appears in the Control column); this column is labeled Control Name in the Suspect Task list, but Task Source in the Suspect Task History List panel. For each control-library element approval, the Task Source column displays the ID configured for the element. For each access request, the Task Source column displays the request ID generated by the Access Monitoring feature.
- A Task Type column displays the value *Approval* if an entry is either an access request or a new or updated control-library element, or the value *Suspect* if an entry is a suspect generated by a control monitor.
- The List User Requests panel includes a Status column. For each control-library element, access request, or suspect that you generate, the panel may contain multiple rows, each recording an action taken by a reviewer; the Status column displays the decision reached by the reviewer.

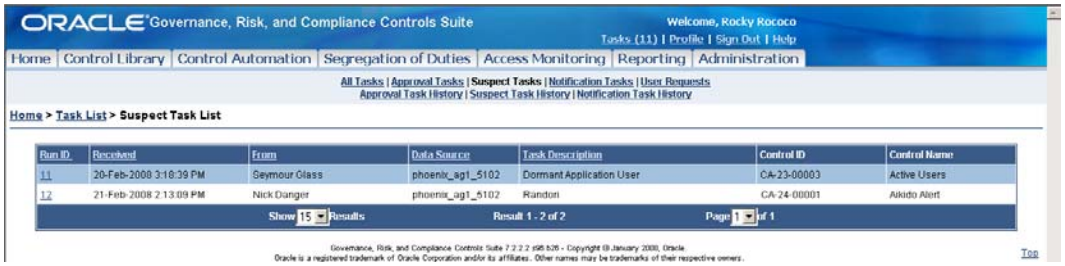
# Reviewing Suspect Tasks

If control monitors have generated suspects, and workflows are configured so that you are their reviewer, you receive email messages announcing that they await your review. One option is to review individual suspect tasks one at a time, and another is to review any number of suspects generated by a control-monitor run at once.

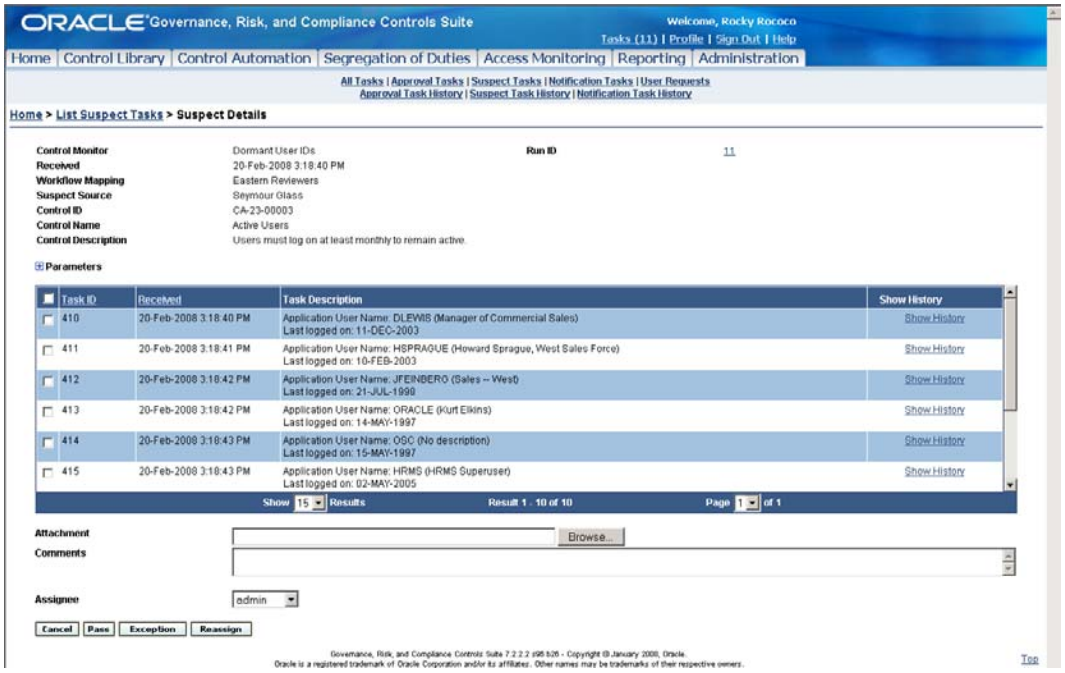
From the Home panel, you may open a single suspect directly from its listing in the Most Recent Tasks list (providing that it is one of the five most recently generated tasks and so appears in the list). Click on its link, and the following Suspect Details panel opens:




Alternatively, click on the Tasks link at the upper right corner of any panel, or click on the Total Tasks link at the base of the Most Recent Tasks list on the Home panel. This opens the All Task List panel (shown on page 79). From there, you may click on the task ID for an individual suspect. Or, you may click on the Suspect Tasks link; the latter opens a Suspect Task List panel, which displays an entry for each control-monitor run with suspects that remain outstanding:




From this panel, click on a run ID to view details of outstanding suspects generated in the run you select. If, instead, you selected a task ID in the All Task List panel, you would see details about outstanding suspects generated in the run that includes the selected suspect. In either case, the following Suspect Details panel displays the results:




## Judging Suspects

In either Suspect Details panel, you can decide whether to "pass" suspects, mark them as "exceptions," or reassign them to another user:

1. At the top of either panel, review information that traces how a suspect or a run of suspects came to your attention. Both Suspect Details panels identify the control monitor that generated suspects, the received date, the workflow that distributed tasks for review, and a suspect description.

   The Details panel that shows a full run of suspects also identifies the user who ran the control monitor, the control to which it was attached, the parameters selected for it (if you click on the + icon next to the Parameters label), the run ID for the control-monitor run, and the task ID for each suspect. Most of this information is read-only; you can, however, click on the run ID to open the View Automation Run panel. (If you do, you leave the Task Inbox.)

2. If you are working in the single-suspect Details panel, skip to step 3. If you are working in the multisuspect Details panel, click in the check box to the left of each suspect upon which you want to act. Or click in the check box next to the Task ID heading to select all the suspects currently available in the grid. (The Show Results field in the footer row of the grid determines how many suspects are available; see "Sorting and Selecting Items in Lists" on page 5. For example, to display all suspects generated by a control-monitor run, set this field to All.) A suspect is selected when a check mark appears; you can rescind a selection by clicking on a check box a second time, so that the check mark disappears.
3. Optionally, attach a document: Click on the Browse button, and a Choose File dialog opens. Using standard Windows procedures, navigate to the file you want, click on its name, and click on the Open button. The path to this file appears in the Attachment text box (and the attachment itself will be available in the Suspect Task History panel). If you are working in the multisuspect Details panel, the attachment applies to all the suspects you selected in step 2.
4. Optionally, click in the Comments text box and write a comment of up to 255 characters. The comment can be viewed in the Suspect Task History panel, and once again, if you are working in the multisuspect Details panel, it applies to all the suspects you selected in step 2.
5. If you want to reassign the suspects to another user, select that person's name in the Assignee list box. (If you don't what to reassign suspects, skip this step.)
6. Click on the button corresponding to the action you want to take:
   - *Pass* means that suspect circumstances are allowed to stand.
   - *Exception* means that suspect circumstances must be remedied.
   - *Reassign* means that the suspect will be forwarded for judgment to the user identified in the Assignee list box.

When you click on one of these buttons, the Details panel closes (if you are using the single-suspect panel), or the selected suspects disappear from the grid (if you are using the multisuspect panel). In the latter case, you can select another set of suspects from those that remain and once again assign status or reassign them to another user.

## Displaying a Running History

If you receive suspect tasks because you are a reviewer named in the first step of a workflow routing, then the tasks do not yet have any history. If, however, you are a reviewer named in the second or later step of a workflow routing, or if tasks have been reassigned to you by another user, then you can review the actions taken so far by others before coming to your own decision about the suspect.

If you are working in the single-suspect Details panel, the history information appears automatically in a Suspect History grid. If you are working in the multisuspect Details panel, click on the Show History link at the right of the row for an individual suspect; a second grid, which appears below the one that lists suspects, displays the history of the selected suspect:

| | Task ID | Received | Task Description | Show History |
|---|---|---|---|---|
| ☐ | 81 | 24-Jan-2007 11:26:57 AM | The invoice 66543 is valued at 190000, but the value threshold has been set at 50000. Please review. | Show History |
| ☐ | 82 | 24-Jan-2007 11:26:58 AM | The invoice 9998765 is valued at 201000, but the value threshold has been set at 50000. Please review. | Show History |

Show 15 Results  Result 1 - 2 of 2  Page 1 of 1

Suspect History for Task ID 81

| Task ID | Step | User | Start | End | Operation | Attachment | Comments |
|---|---|---|---|---|---|---|---|
| 77 | 1 of 2 | Rocky Rococo | Jan 26, 2007 4:55:56 PM | Jan 26, 2007 4:58:04 PM | Passed | | |

No matter whether you are working in the single- or multisuspect Details panel, each row in the Suspect History grid describes a prior action taken by another user about the selected suspect, identifying its task ID, its step in the workflow that routed it for review, the user who acted and the action he took, and the dates and times at which the user received the task and finished with it. If that user added an attachment or comment, these are also displayed.

The workflow engine assigns a new task ID each time a user acts upon a suspect. In the illustrated example, a suspect was task 77 when it was reviewed in the first step of a workflow, but is now task 81 as it is being reviewed in the second step.

If you're working in the multisuspect Details panel, each time you click on the Show History link for a suspect, its history replaces that of the previously selected suspect.

# Reviewing Approval or Notification Tasks

Workflows may be configured so that you review approval tasks — the creation or updating of control-library elements or of requests for extraordinary access to responsibilities or database tables. Or workflows may nominate you to receive notifications of reviewers' decisions about approval tasks or suspect tasks. In either case, you receive an email message whenever an item requires your attention.

## Opening Tasks for Review

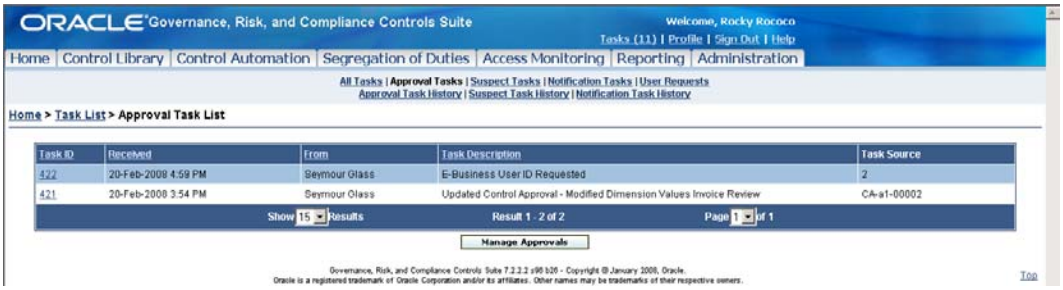
Once again, you have the option of reviewing individual tasks one at a time, or any number of tasks all at once. For a "bulk" review, you see less detail about individual tasks than you would if you were to review them one at a time. You may:

1. Select an individual approval or notification by clicking on its listing in the Most Recent Tasks list of the Home panel (providing that it is one of your five most recently generated tasks and so appears in the list). Depending on the type of task you select, this opens an Approval Details or Notification Details panel.

   Otherwise, click on the Tasks link at the upper right corner of any panel, or click on the Total Tasks link at the base of the Most Recent task list on the Home panel. This opens the All Task List panel (shown on page 79).

2. To select an individual approval or notification, click on its task ID in its entry on the All Task List panel to open the Approval Details or Notification Details panel.

   Otherwise, click on the Approval Tasks link or the Notification Tasks link. This opens a task-list panel filtered to display only the type of item you've selected. It looks like the following:




Because the Notification Task List may display entries for suspects or approvals, it provides slightly different information about each item than the Approval Task List does (see the descriptions of field values on page 79).

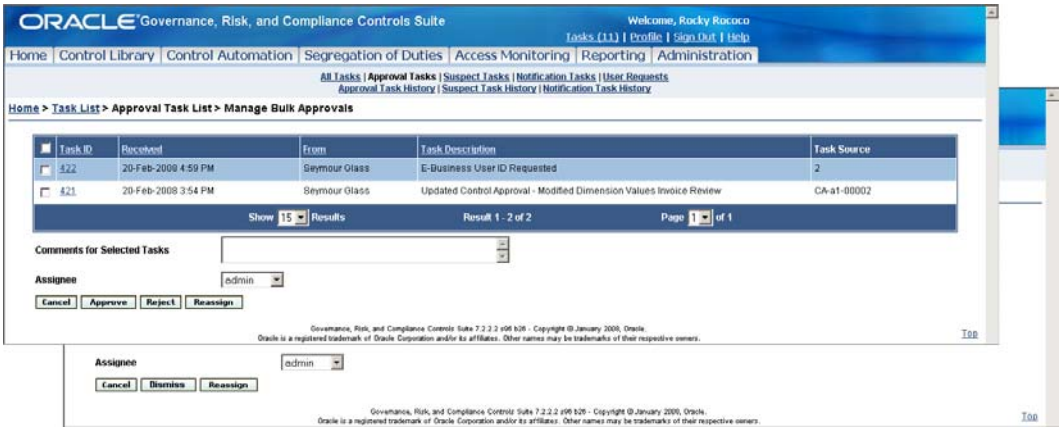
**3** To select an individual approval or notification, click on its task ID in its entry on the Approval Task List or Notification Task List. This opens the Approval Details or Notification Details panel.

To open a list of approvals or notifications to be reviewed "in bulk," click on the Manage Approvals or Manage Notifications button located at the bottom center of the task-list panel. This opens the Manage Bulk Approvals or Manage Bulk Notifications panel.

## Beginning a Bulk Review

To select a set of items for review (or for reassignment to another user):

**1** Open the Manage Bulk Approvals or Manage Bulk Notifications panel. Instances are shown below — Approvals on top and Notifications on the bottom.




The Bulk Approvals and Bulk Notifications panels are essentially the same, except for the buttons along the bottom of each panel. Each entry in the list provides a summary description of an approval or notification — the same information, in fact, as the List panel provides.

**2** Click in the check box to the left of each item upon which you want to act. Or click in the check box next to the Task ID heading to select all the items currently available in the grid. (The Show Results field in the footer row of the grid determines how many items are available; see "Sorting and Selecting Items in Lists" on page 5. For example, to display all items, set this field to All.) An item

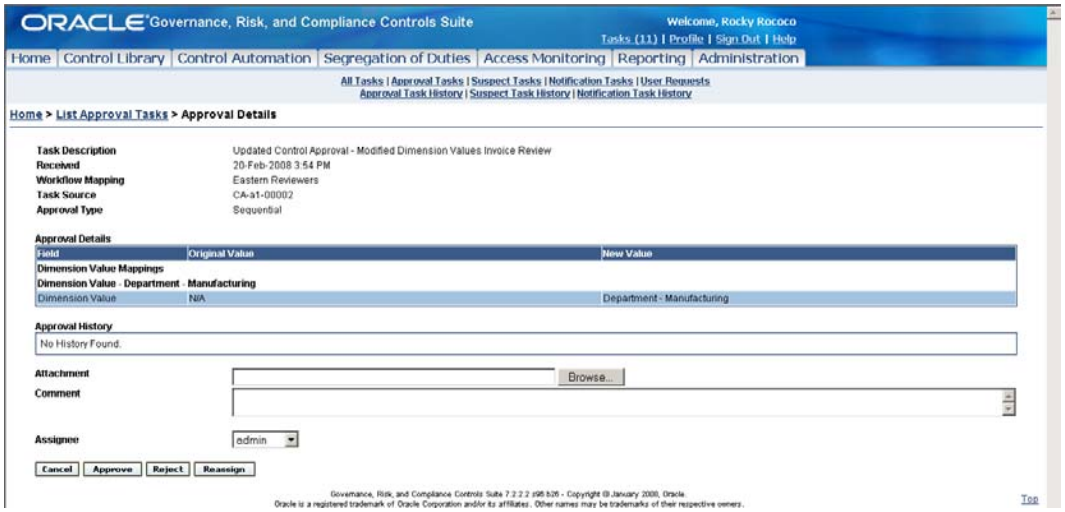
is selected when a check mark appears; you can rescind a selection by clicking on a check box a second time, so that the check mark disappears.

3 For instructions on finishing the review process, skip ahead to "Completing the Review" (page 86).

## Beginning an Individual Review

To view greater detail, and render a decision, about a single item:

1 Use any method described in "Opening a Task for Review" to open an individual approval or notification task. A Details panel like the following one appears:




2 At the top of this panel, review information that traces how the item came to your attention. This includes its task description and task source (which are the same values as those on the List panel; see page 79), the workflow that routed it to you, and date on which you received it.

3 In a Details grid, examine the changes you are to affirm or deny. For a control-library element, a review may encompass changes to any number of fields, and the grid contains one row for each field that has changed. (You must affirm all or none.) For an access request, a single row presents all of the information included in the request: the name of the user for whom access is requested and the temporary ID to be assigned to him, the type of request and the responsibility or database table for which access is requested, the start and end dates for the proposed access, the database instance, and the reason access is requested.

4 In a History grid, review a running tally of actions taken by others before you.

If you are reviewing an approval task, there is no history if you are a reviewer named in the first step of a workflow routing. If, however, you are a reviewer named in the second or later step of a workflow routing, or if tasks have been reassigned to you by another user, the History grid contains one row for each action taken so far by another user.

If you are reviewing a notification task, the History grid necessarily contains at least one row, since at least one user must have acceded to or denied a change

for the task to reach you. If any other users have also acted, the grid contains a row for each of them.

5 For instructions on finishing the review process, see the next section, "Completing the Review."

## Completing the Review

Once you have selected either an individual item or a set of items to review:

1 Optionally, attach a document: Click on the Browse button, and a Choose File dialog opens. Using standard Windows procedures, navigate to the file you want, click on its name, and then click on the Open button. The path to the file you've selected appears in the Attachment text box, and the attachment itself will be available in the Approval Task History or Notification Task History panel. (If you're working in a Bulk panel, the file is attached to all the items you selected.)

2 Optionally, click in the Comments text box and write a comment of up to 255 characters. The comment can be viewed in the Approval Task History or Notification Task History panel. (If you're working in a Bulk panel, the comment applies to all the items you selected).

3 If you want to reassign the items to another user, select that person's username in the Assignee list box. (If you don't what to reassign suspects, skip this step.)

4 Click on the button corresponding to the action you want to take. If you are working with approvals:

- *Approve* means you assent to a change or request (or to each change or request you selected in the Manage Bulk Approvals panel). Once all approvers designated by a workflow have approved, a control-library element appears in its List panel if it has been newly created or adopts changes if it has been modified, or a user receives access requested through the Access Monitoring feature.
- *Reject* means you decline each change or request. A single rejection prevents a new control-library element from appearing in its List panel or restores an element to its state before a change was attempted, or prevents a user from receiving access requested through the Access Monitoring feature.

If you are working with notifications:

- *Dismiss* means that you agree with the decisions other users have made about an item (or each the item you selected in the Manage Bulk Notifications panel).
- There is no way to signify disagreement. If you do not concur in another user's approval decision, click on the Cancel button to allow its notification to remain active, resolve the issue outside of Governance, Risk, and Compliance Controls Suite, and then dismiss it.

For approvals or notifications, *Reassign* means that the items will be forwarded to the user identified in the Assignee list box.

When you resolve issues, they disappear from their panels (and entries are created for them in the Approval Task History or Notification Task History panel). If any

items remain, you can select one or more of them (in the List or Bulk panels) and once again assign status or reassign them to another user.

## Reviewing History

Whenever a user acts upon an approval, notification, or suspect, a record of the action is displayed in the appropriate one of three List History panels. Each presents records of individual control-library elements, access requests, or suspects, meaning that the Task History panels for approvals and notifications behave like their new-item counterparts, but the Suspect Task History panel does not, as it lists individual suspect tasks rather than control-monitor runs.

From each of the List History panels, you can select an item and open a Details panel. It presents information about the item, which mirrors the information available when the item was reviewed. This includes the task description and task source (as defined on page 79), the workflow that distributed it for review, and the received date. For a suspect or suspect notification, it also includes the run ID of the control monitor that generated the suspect.

In addition, a History grid devotes one row to each task that has been completed by any user with respect to the item, culminating with the task you completed that caused this history record to be created. Each row identifies the task ID, the step in the workflow that routed the task for review, the user who completed the task and the action he took, and the dates and times at which the user received the task and finished with it. If that user added an attachment or comment, these are also displayed.

To review the history of an approval, suspect, or notification:

1. Open the Task Inbox, and click on its link for the List History panel you want to open: Approval Task History, Suspect Task History, or Notification Task History.
2. In the grid on the List History panel, identify the row corresponding to the approval, suspect, or notification whose history you want to review, and click on its task ID. A Details panel opens. (The following illustration shows the details of a notification concerning the updating of a control, but it is representative of the Details panel for any of the History selections.)

3 Review the information. The illustration, for example, shows that the rating for a control called Invoice Review was changed from Key to Critical. A user named Rocky Rococo approved the change in the first step of a workflow (task 132); an approver named Joel Cairo also approved in the second step of the workflow (task 133); the second step directed a notification of Cairo's action back to Rococo, who dismissed it (task 134).

   Typically, History Details panels are read-only; you cannot change a decision after it's been made. There is one exception: in the History Details panel for a suspect task, you can click on the run ID to open the View Automation Run panel for the control monitor that generated the suspect. (If you do, you leave the Task Inbox.)

4 When you finish reviewing the information, click on the Back button. This returns you to the List History panel from which you opened the Details panel.

# Viewing User Requests

In the User Requests panel, you can view entries that pertain to control-library elements you have created or modified, requests you have made for users to have access to responsibilities or database tables, or suspects generated by control monitors that you have run. For each such item, the panel may contain several nested entries. One documents your having created the item, and another is added each time a user acts upon the item — affirms or denies it, or dismisses a notification about it. Each entry presents the status of the item at the moment a user has made a decision about it, so the User Requests panel charts the progress of items you generate.

To view User Requests:

1 Open the Task Inbox. Click on the Tasks link at the upper right of any panel, and then on the User Requests link. Or, click on the Total Open Requests link at the base of the Most Recent Requests list on the Home panel. In either case, the List User Requests panel opens (and has no links to other panels).

   Each row represents an action taken by a user — a judgment made on a control-library item, suspect, or access request, or a dismissal of a notification that such

an action has been taken. (As a result, an individual control-library item, suspect, or access request may have more than one record in the list.)

2 Select a row for which you want to view more information and click on its + icon. One or more nested rows represent the steps in the workflow routing that distributed the item for review.

3 In each step, click on the + icon to view information the reviewer who took action at that step, what he did, and when.

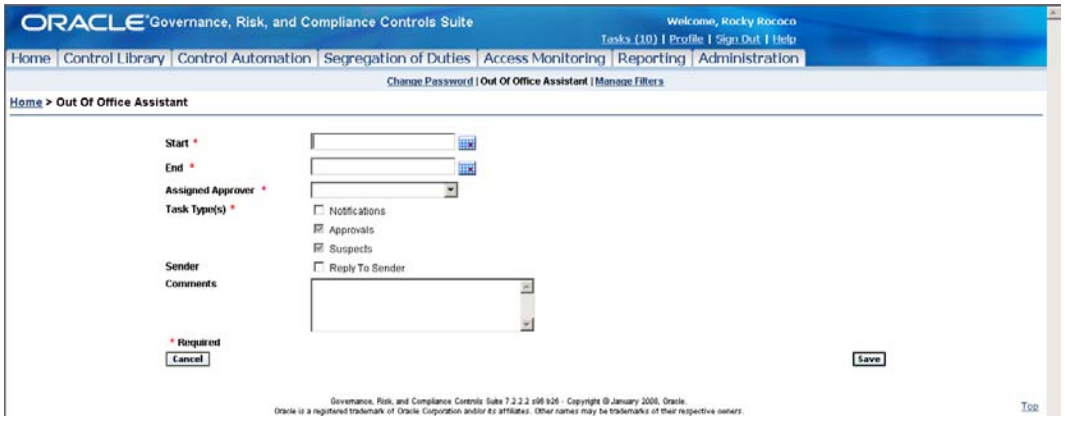
Rather than click + icons one at a time, you can click the + icon in a header row to display results for all rows. The icon in the header of the main grid displays records of the steps in all tasks, and the icon in the header for the steps grid in any task displays details about all steps. You can also click on – icons to hide the results you have displayed.

## Using the Out of Office Assistant

An Out of Office Assistant directs your tasks to a user whom you specify, for a period of time that you set. You may also create a message informing others that tasks intended for you are being redirected. Use this feature to ensure that your tasks are addressed when you are away from your office.

To set the Out of Office Assistant:

1 From any panel in Governance, Risk, and Compliance Controls Suite, click on the Profile link near the upper right corner of the panel. An Out of Office Assistant panel opens:




2 In the Start and End fields, select dates on which your tasks should start and stop being redirected to another user. (See “Date Fields,” page 6.)

3 In the Assigned Approver list box, select the Governance, Risk, and Compliance Controls Suite user to whom your tasks will be redirected.

4 In the Task Types area, the Approvals and Suspects check boxes are selected by default, and you cannot clear them. As a result, approvals and suspects are always directed to the user you selected in step 3. You may also select the Notifications check box; if you do, these are also sent to the user in step 3, and if not they accu-

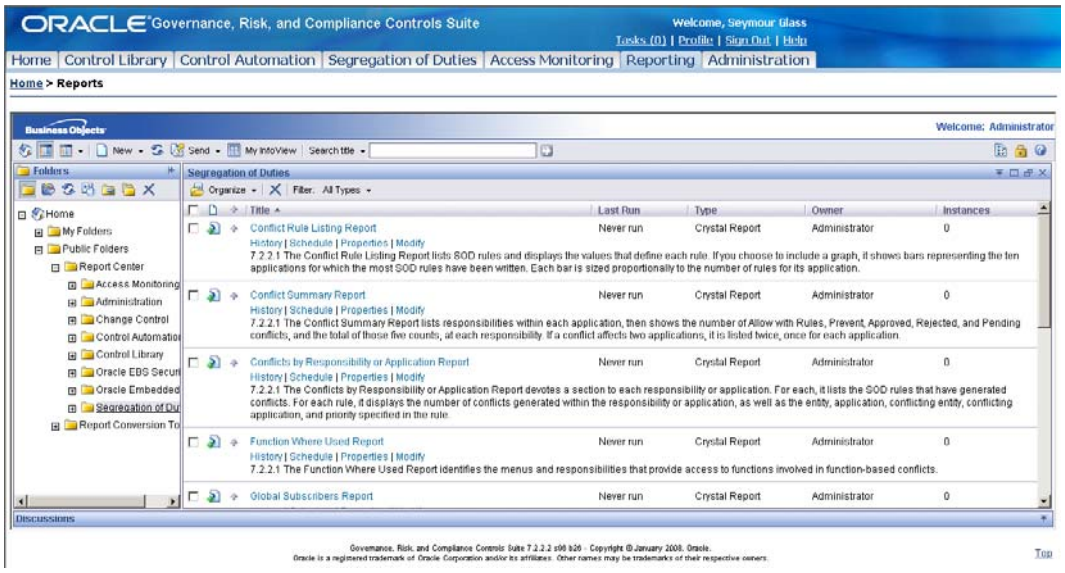
mulate in your Task Inbox during your absence. (You cannot create multiple Out of Office Assistants in order to direct various types of tasks to various users.)

5. If you want to alert the originators of tasks that their tasks are being redirected to a user other than yourself, select the Reply to Sender check box.
6. If you select the Reply to Sender check box, type the message you want to send to task originators in the Comments text box. The message can be up to 255 characters in length, and it is sent to the task originators' email addresses.
7. Click on the Save button.

# Chapter 7

# Reports

Reports, which display information about the control framework you create and its application to your business, are available from a Reports browser. To open the browser, click on the Reporting tab:




A Folders panel on the left of the Reports browser presents a hierarchical display of folders that contain reports. In it, click on Public Folders, and then Report Center.

Reports available in the Segregation of Duties, Access Monitoring, and Oracle EBS Security folders are documented in the *Application Access Controls Governor User's Guide*. Reports available in the Change Control folder are documented in the *Preventive Controls Governor User's Guide*.

Reports available in the remaining folders are documented here. These present information about control-library elements, their relationships to one another, and their assessments; control monitors, their attachments to controls, and the suspects they generate; form and flow rules that may be attached to controls as automations; audit features used in the background for access monitoring and change control; and the configuration of Governance, Risk, and Compliance Controls Suite users.

To open a report, locate the folder that contains it under the Report Center heading in the Folders panel. Click on the folder, and the larger panel on the right presents links to the reports contained in the folder. Click on the link for the report you want. The larger panel then displays fields in which you can enter values for report parameters; do so, then click on the OK button to run the report. (The reports contained in each folder, and the parameters that apply to each report, are listed below.)

## Who Can Do This?

All users who have been assigned reporting roles can run and review the reports allotted to their roles. See "User Permissions for Reporting Roles" (page 10).

## Exporting a Report

When you generate a report, it appears in the larger panel on the right of the Reports browser. For ease of viewing, however, you may want to export it to another format, such as Adobe Acrobat. To do so:

1. Click on the Export icon in the Reports browser. (It looks like two juxtaposed rectangles, representing a disc and a sheet of paper. It appears only when a report has been generated, and is located at the upper left corner of the larger panel in the Reports browser.)
2. An Export Report dialog appears. In it, select a destination program in the File Format field (for example, Adobe Acrobat). Then click on the OK button.
3. A dialog presents you with options appropriate to the program to which you've elected to export the file — for example, save or open in Adobe Acrobat. If you select the open option, the report opens in a new window. If you select the save option, you can specify a file path and name to which to save it.

## Other Report Features

Reports are presented through use of a "third-party" component, which offers features in addition to the presentation or exporting of reports. For documentation of these features, open the Help file available from the Reports browser. You can do

this by clicking on a Help icon, which looks like a question mark enclosed in a circle, and is located at the very right of the tool bar, just above the upper right corner of the larger panel in the Reports browser.

# Administration Folder

The Administration folder contains reports that provide information about Governance, Risk, and Compliance Controls Suite users.

## User Summary Report

The User Summary Report displays the ID number, user name, first and last names, primary application role, and effective dates for each of a selection of users. You can organize the report results by user or by primary application role. As you run the report, select values for the following parameters:

- AG Source Data: Select the instance that contains the data about which you want to generate reports. (You supply this value twice, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)
- Primary Role: Select one or more primary application roles to view results for users assigned those roles.
- Report Role: Select one or more reporting roles to view results for users assigned those roles.
- Effective Date: Define a range of dates in which a user's Effective From date must fall for the user to be included in the report. You may enter dates in the Start and End fields; in that case, clear the No Lower Value and No Upper Value check boxes. Or you may omit the start date and select the No Lower Value check box to include the user whose Effective From date is earliest, or omit the end date and select the No Upper Value check box to include the user whose Effective From is most recent.

  If you do enter actual dates, select an Include This Value check box (for either or both dates) to include the value you specify in the period, or clear the check box to exclude the value (thus selecting Effective From dates after but not on the start date, or before but not on the end date). You can click on the calendar icons to select dates.
- Sort by: Select the value *Role* to list users by their primary application roles, or *User* to list them alphabetically by their usernames (not their first or last names).

## User Summary by Report Role Report

The User Summary by Report Role Report provides the same information as the User Summary Report, except that it creates a section for each reporting role, and includes an entry in each section for every user assigned that reporting role. A user may have multiple entries in the report, one in each section corresponding to each

reporting role she has been assigned. The report takes the same parameters as the User Summary Report.

# Control Automation Folder

The Control Automation folder contains reports on control monitors, the suspects they generate, and their attachments to controls. Where these reports refer to control-library elements, they use default names (control, control objective, subprocess, process, risk, cycle, and policy) even if you have used the Manage Control Element Names feature (see page 28) to rename these elements.

These reports commonly accept an AG Source Data parameter: Select the instance that contains the data about which you want to generate reports. (You may supply this value more than once for a given report, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)

## Automated Control Report

The Automated Controls Report consists of a bar graph that presents the number of automations, by type, that are attached to controls. Automation types include control monitors, SOD rules, flow rules, form rules, and change-control rules; the graph includes a bar for each type; the vertical height of each bar corresponds to the number of automations. (If there are no automations of a particular type, its bar is omitted from the graph.) This report accepts only the AG Source Data parameter.

## Automated Versus Manual Controls Report

The Automated Versus Manual Controls Report presents a pie graph that shows the proportion of automated to manual controls (and provides the percentage of each to total controls). A control is considered to be automated if it has at least one control monitor, SOD rule, flow rule, form rule, or change control rule attached to it, and is considered to be manual if it has no such attachment. (A control may have more than one automation, but if so, is still considered to be one automated control.) This report accepts only the AG Source Data parameter.

## Average Days of Outstanding Tasks Report

The Average Days of Outstanding Tasks Report displays three graphs, each of which shows the average number of days that a type of task has remained unresolved. The three task types are suspect, approval, and notification. Each graph resembles a speedometer, with number values arrayed along an arch, increasing regularly from left to right, and a needle pointing to a number value on the arch. This report accepts only the AG Source Data parameter.

## Control Automation List Reports

There are four Control Automation List reports, each of which displays information about control monitors — for each, its name, version, description, last-update date, status, the controls to which it is attached, and the database instance on which it resides. The reports differ in the way they group the monitors they list:

- The Control Automation List by Control Objective Report groups control monitors by the individual control objectives with which they are associated.
- The Control Automation List by Subprocess Report groups control monitors by the individual subprocesses with which they are associated.
- The Control Automation List by Primary Element Name Report groups control monitors by individual primary elements (policies, processes, cycles, and risks) with which they are associated.
- The Control Automation List by Primary Element Report groups control monitors by the type of primary element with which they are associated.

In each case, the association results from the configuration of your control hierarchy: a monitor is attached to a control, and is associated with a control objective if the control is linked to it; is associated with a subprocess if the control objective is linked to it; and is associated with a primary element if the subprocess is linked to it. Because each object may be linked to more than one parent object, the reports may list monitors and each of the hierarchy objects more than once.

Each of the reports accepts some combination of the following parameters:

- Primary Element: Select types of elements, in any combination, for which you want the report to present information. Options include Policy, Process, Cycle, and Risk. (All four reports use this parameter.)
- Primary Element Name: Select individual primary elements for which you want the report to present data. The list from which you can choose is determined by the selections you make for the Primary Element parameter. (The By Primary Element Name, By Subprocess, and By Control Objective reports use this parameter.)
- Subprocess Name: Select individual subprocesses for which you want the report to present data. The list from which you can choose is limited to subprocesses associated with the elements you chose for the Primary Element Name parameter. (The By Subprocess and By Control Objective reports use this parameter.)
- Control Objective Name. Select the control objectives for which you want the report to present data. The list from which you can choose is limited to objectives associated with the subprocesses you chose for the Subprocess Name parameter. (Only the By Control Objective report uses this parameter.)
- Status: Select *Active* to see results for control monitors that are active, *Inactive* to see results for control monitors at any other status, or *Both*. (All four reports use this parameter.)

- Updated Date: Define a period in which control monitors must have been created or updated to be included in the report. You may enter dates in the Start and End fields; in that case, clear the No Lower Value and No Upper Value check boxes. Or you may omit the start date and select the No Lower Value check box to start with the earliest existing transaction, or omit the end date and select the No Upper Value check box to finish with the latest existing transaction.

  If you do enter actual dates, select an Include This Value check box (for either or both dates) to include the value you specify in the period, or clear the check box to exclude the value (thus selecting transactions that begin after but not on the start date, or end before but not on the end date). You can click on the calendar icons to select dates.

  (All four reports use this parameter.)

- Sort by: Select values that order the information presented the report — *Automation Name*, *Status*, or *Last Updated*. The order in which you select the values determines the priority by which they sort data. (All four reports use this parameter.)

## Control Automation Suspects by Dimension Value Report

The Control Automation Suspects by Dimension Value Report presents a bar graph displaying the number of suspects generated by monitors for each dimension value. Each bar in the graph represents a dimension value, and its height is proportional to the number of suspects. The bars are arranged in groups, with each group consisting of all the values for a given dimension.

The report also provides a table for each dimension value, in which each row displays information about a suspect generated for the dimension value: Task ID (a unique numeric identifier assigned to the suspect by the workflow that distributed it for review), Received Date (the date on which it became available for review), From (the user who ran the control monitor that generated the suspect), Data Source, Task Description (as written into the control monitor that generated the suspect), Control ID (the identifier for the control to which the control monitor is attached as an automation), and Task Source (the name of the control). As you run the report, you can select values for the following parameters:

- Dimension Name: Select any combination of dimensions for which you want to see associated suspects. The report allows you to select among all dimensions configured for your system.

- Dimension Value: Select dimension values for which you want to see associated suspects. The report enables you to select among values configured for the dimensions you selected in the previous parameter.

## Control Monitor Detail Report

The Control Monitor Detail Report shows, for a selection of the control monitors on your system, the configuration details for each monitor. These include name, status, creator, and creation date. Depending on your report-parameter selections, it may also show version history (the version number and status of each configured version), the control-monitor parameters, and the steps configured for the monitor. For each step, it would provide the step name, number, type, and (if any) detail (for example, the SQL written for an execute-query step). As you run the report, you can select values for the following parameters:

- Workflow Status: Select the appropriate value to focus the report on monitors at the active, retired (inactive), or editing status, or select *All*.
- Include Version History: Select *Yes* or *No* to determine whether the report shows version history for the monitors it documents.
- Sort by: The report alphabetizes control monitors by name. Select *Ascending* or *Descending* to determine whether it uses forward or reverse alphabetical order.
- Display Parameters Detail: Select *Yes* or *No* to determine whether the report lists parameters for the monitors it documents.
- Display Sequence Detail: Select *Yes* or *No* to determine whether the report lists steps for the monitors it documents.

## Detail Suspect History Report

The Detail Suspect History Report presents the results of control-monitor runs. It devotes a section to each control-library element for which a control monitor has been run. It identifies the type, name, and ID of the element; the name, ID, and description of the control associated with that element; and the name and version of the monitor that has been run. It also provides an entry for each suspect generated by the control monitor. For each suspect, it shows the run date and time, and IDs for the suspect task itself and for the run that generated it. It displays record details (a "suspectInfo" value — the more detailed of two descriptions, written into the control monitor, of the conditions it is intended to detect). It further provides suspect status, the date on which status was assigned and the ID of the user who assigned it, and comments by that user. As you run the report, you can select values for the following parameters:

- Control Element Level: Select the types of control-library element, in any combination, for which you want to view control-monitor runs.
- Control Element Value: Select individual control-library elements for which you want to view control-monitor runs. The parameter displays only elements of the type you selected in the Control Element Level parameter.
- Control Monitor: Select the names of control monitors whose runs you want to review. The report will document occasions when these monitors were run as automations for the control elements you selected in the Control Element Value parameter.

- Control Monitor Version: Select version numbers, in any combination, for the control monitors. The report returns results only for runs of the versions you've selected.
- Date From and Date To: Define the time period in which control monitors must have been run for their results to appear in the report. Type dates in the From and To fields in the format *yyyy-mm-dd*, or click on the calendar icons to select dates.
- Suspect Action: Choose any combination of *All*, *Pass*, *Pending*, and *Exception* to have the report display results for suspects at the statuses you select.

## Open Suspect Reports

There are three Open Suspect reports, each of which displays information about suspect tasks that have not yet been addressed:

- The Open Suspects by Primary Control Element Report provides information about suspects associated with processes, policies, risks, or cycles.
- The Open Suspect Tasks by Subprocess Report provides information about suspects associated with subprocesses.
- The Open Suspect Tasks by Control Objective Report provides information about suspects associated with control objectives.

In each case, the association results from the configuration of your control hierarchy: a monitor is attached to a control, and is associated with a control objective if the control is linked to it; is associated with a subprocess if the control objective is linked to it; and is associated with a primary element if the subprocess is linked to it.

In each report, a bar graph shows the number of suspects for each control-library element — each type of primary element in the Primary Element report, or each individual subprocess or control objective in their respective reports.

In each report, tables display one entry per suspect. Each entry provides the name and ID of a control from which a monitor is run, and the name and version of the monitor. Each displays a task description (a "suspectDesc" value — the less detailed of two descriptions, written into the control monitor, of the conditions it is intended to detect). Each entry further provides the task ID, the database on which the monitor ran, and the date and time on which the suspect was generated.

Each report includes one of these tables for each of the control-library elements on which the report is based — once again, each type of primary element in the Primary Element report, or each individual subprocess or control objective in their respective reports.

Each of the reports accepts some combination of the following parameters:

- Control Element or Element Name: Select types of elements, in any combination, for which you want the report to present information. Options include Policy, Process, Cycle, and Risk. (All three reports use this parameter; it's called *Element Name* in the By Subprocess report and *Control Element* in other two reports.)

- Subprocess: Select individual subprocesses for which you want the report to present data. The list from which you can choose is limited to subprocesses associated with the elements you chose for the Control Element/Element Name parameter. (The Subprocess and Control Objective reports use this parameter.)
- Control Objective: Select the control objectives for which you want the report to present data. The list from which you can choose is limited to objectives associated with the subprocesses you chose for the Subprocess parameter. (Only the Control Objective report uses this parameter.)
- Control Element Status: Select the status of primary elements, subprocesses, or control objectives for which a report returns results — *Active* (the Effective To date for the element has not passed, or it has no Effective To date), *Inactive* (the element's configured Effective To date has passed), or *Both*. (All three reports use this parameter.)
- Control Monitor: Select the names of control monitors whose runs you want to review. The report will document occasions when these monitors were run as automations for the control elements you selected in the Control Element Value parameter. (All three reports use this parameter.)
- Control Rating Name: Select a rating value to have the report return results only for suspects generated by monitors attached to controls that have the rating you select. Valid values comprise the Rating Names configured for your system. (All three reports use this parameter.)
- Sort By or Group By: Select a sort key to determine the order in which a report presents results in each of its tables. Valid values include control ID, control name, control rating, received date, and data source. (All three reports use this parameter; it's called *Sort By* in the By Primary Control Element report and *Group By* in the other two reports.)

## Summary Suspect History Reports

Two Summary Suspect History reports provide the following information about individual control monitor runs: the run date, number, and type (manual or scheduled); the number of suspects generated by the run and their status; the version of the control monitor that generated the suspects; the name of the workflow routing that distributed the suspects for review; and the version of the workflow routing.

In each report, a run constitutes a row in a table of related runs, and the reports differ in how they consider runs to be related:

- The Summary Suspect History by Control Element Report devotes one table each to any number of specified control-library elements; each table lists all runs within a specified time period for a control monitor associated with a specified element. Header information for the table provides:
  - The name and type of the specified control-library element.
  - The name and ID of a control to which the specified element is linked by your hierarchy configuration.
  - The dimensions configured for that control.

  - The name of a control monitor attached as an automation to the control (and which generated the runs documented in the table rows).

- The Summary Suspect History by User Report does the same, but further groups control-library elements (tables) by the user who ran the control monitors documented in the tables.

Each of the reports accepts some combination of the following parameters:

- User: Select the user IDs of users about whom you want the report to return results. (Only by the By User report uses this parameter.)
- Control Element Level or Library Type: Select types of control-library elements about which you want the report to return results. Choose any combination of control, control objective, subprocess, policy, process, or risk. (The By Control Element report uses the name *Control Element Level*; the By User report uses the name *Library Type*.)
- Control Element Value or Library Name: Select the individual elements about which you want the report to return results. The list from which you can choose is determined by the selections you make for the Control Library Element/ Library Type parameter. (The By Control Element report uses the name *Control Element Value*; the By User report uses the name *Library Name*.)
- Control Monitor: Select the names of control monitors whose runs you want to review. The report will document occasions when these monitors were run as automations for the control elements you selected in the Control Element Value/ Library Name parameter. (Both reports use this parameter.)
- Control Monitor Version: Select the versions of control monitors whose runs you want to review. (Both reports use this parameter.)
- Date From and Date To: Define the time period in which control monitors must have been run for their results to appear in the report. Type dates in the From and To fields in the format *yyyy-mm-dd*, or click on the calendar icons to select dates. (Both reports use this parameter.)

## Suspect Task Detail Report

The Suspect Task Detail Report displays information about a selection of suspects generated by control monitors. The report devotes a section to each control for which attached control monitors have generated suspects, in which each row describes an individual suspect. For each suspect, the report provides the date and time on which it was generated, the suspect details (the briefer of two descriptions written into the control monitor that generated the suspect), the suspect status (which may be *Pass*, *Exception*, *Pending*, or *Reassigned*), the approver designated by the workflow that has distributed the suspect for review, the approver (if any) to whom the original approver has reassigned the suspect, whether a document has been attached to the suspect when it was reviewed, the data source, and the name of the control monitor that generated the suspect.

The report also displays two bar graphs. In one, bars represents up to ten controls that have generated the most suspects; in the other, bars represent up to ten control

monitors that have generated the most suspects. In each graph, the vertical height of each bar corresponds to the number of suspects.

- Suspect Date Range: Define a period in which control-monitor suspects must have been generated to be included in the report. You may enter dates in the Start and End fields; in that case, clear the No Lower Value and No Upper Value check boxes. Or you may omit the start date and select the No Lower Value check box to start with the earliest existing transaction, or omit the end date and select the No Upper Value check box to finish with the latest existing transaction.

  If you do enter actual dates, select an Include This Value check box (for either or both dates) to include the value you specify in the period, or clear the check box to exclude the value (thus selecting suspects generated after but not on the start date, or before but not on the end date). You can click on the calendar icons to select dates.
- Control Name: Select one or more controls to see suspects generated by control monitors attached as automations to those controls. Or select *All* to see suspects related to all controls.
- Control Monitor: Select one or more control monitors to see suspects generated by those control monitors. Or select *All* to see suspects generated by all control monitors.
- Approval Status: Select one or more statuses — *Approved*, *Pending*, *Rejected*, or *Reassigned* — to view suspect tasks currently assigned those statuses. Or select *All* to view suspects at all statuses.
- Approved by: Select one or more usernames to see suspects assigned by workflows to be reviewed by the users you select. Or select *All* to see a selection of suspects for which anyone may have been an original approver.
- Assignee Name: Select one or more usernames to see suspects that have been reassigned by their original approvers to the users you select. Or select *All* to see a selection of suspects that may have been reassigned to anyone (or no one).
- Dimensions: Select one or more dimensions to see suspects generated by control monitors attached to controls that have at least one value selected for the dimensions you choose. Typically, however, select *All*.
- Attributes: Select one or more attributes to see suspects generated by control monitors attached to controls that have at least one value selected for the attributes you choose. Typically, however, select *All*.

# Control Library Folder

The Control Library Folder contains the following report:

## Control Framework Report

The Control Framework report consists of sections, each of which provides the name and ID of a primary control element and provides information about the items

that descend from it in one branch of its hierarchical associations with lower-level objects. In each section, the report displays the name, ID, and status of the subprocess and control objective which, in a given branch, lead down to a set of controls, and provides information about the controls. For each control, the report shows the ID, name, description, status, and rating, and whether the control has automations or assessments. As you run the report, you can select values for the following parameters:

- AG Source Data: Select the instance that contains the data about which you want to generate reports. (You are prompted to supply this value twice, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)
- Primary Control Element Type: Select types of primary elements for which you want the report to present information. Options include Policy, Process, Cycle, and Risk.
- Status: Select the status of components for which a report returns results — *Active* (the Effective To date for an element has not passed, or it has no Effective To date), *Inactive* (an element's configured Effective To date has passed), or *Both*.
- Data Sort by: Select a sort key — *Element ID* or *Element Name* — to determine the order in which a report arranges the sections devoted to primary elements.
- Control Sort by: Select a sort key — *Control ID*, *Control Name*, or *Control Rating* — to determine the order in which a report lists controls within each section.

# Oracle Embedded Agent Folder

The Oracle Embedded Agent Folder contains reports that document three "embedded agents":

- Form Rules customizes Oracle E-Business Suite forms, modifying their security, navigation, field, and data properties. Each rule consists of "elements"; each element targets a form, a block within a form, or a field within a block, specifies an "event" that triggers processing, and defines customizations to the target form, block, or field. Moreover, each rule may define "subscribers" — filters that select users, responsibilities, or other entities to which either the rule as a whole or an individual element applies. Form rules may be attached as automations to controls created in Governance, Risk, and Compliance Controls Suite.
- Flow Rules defines and implements business processes. A single flow rule defines an entire process, but consists of subordinate rules called "process flows." Each flow can notify people, or request their approval, when actions have been completed; alert people to errors or exceptions; implement "constraints," which test whether necessary conditions have been met; or run concurrent programs or SQL scripts. Flow rules may be attached as automations to controls created in Governance, Risk, and Compliance Controls Suite.
- Audit Rules tracks changes to values of fields in database tables. A user selects tables to be included in an audit by assigning them to a group, and refines the audit further by selecting columns from the tables that belong to the group.

## OracleForm Rules Summary Report

The OracleForm Rules Summary Report provides information about Form rules and, for each, its subscribers and elements. For a rule, it displays the name and description, whether the rule is active, and the filtering values that define each of its subscribers (if any). For each element, it provides the sequence number (a value that determines the order in which elements run) and name, the name and display name of the form it targets, the block and field that it targets (if any), the event that triggers it, whether it is active, and the filtering values that define each of its subscribers (if any). Essentially, this is information entered on the Main form and the Subscribers forms in the Form Rules application.

As you run the report, you can set values for the following parameters:

- Oracle ERP Agent Source Data: Select the instance that contains the data about which you want to generate reports. (You are prompted to supply this value twice, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)
- Rule Name: Select any combination of rules for which you want the report to return results.
- User Form Name: Select the names of Oracle forms affected by Form Rules, for which you want the report to return results. The selection is limited to forms affected by rules you selected in the Rule Name parameter.
- Active: Select *Yes* to view results for active rules, *No* to view results for inactive rules, or *Both*.

## OracleForm Rules Detail Report

The OracleForm Rules Detail Report provides summary information about form rules, subscribers, and elements (the same information, in fact, that the OracleForm Rules Summary Report contains). For each rule, however, this report adds configuration details for each of its elements — the values that effect security, navigation, message, default-value, list-of-values, or field-attribute modifications to the target Oracle form, or cause it to run SQL statements or Flow Rules processes. The report devotes a table to each set of values for each rule element. Essentially, this is information entered on the Details form in the Form Rules application.

This report takes the same parameters as the OracleForm Rules Summary Report.

## OracleFlow Rules Summary Report

The OracleFlow Rules Summary Report displays the following information about a selection of flow rules: its name, its "Process Type" (whether it is launched by a set of configured conditions known as a "trigger," or runs on a schedule), its start and end dates, and its "Process Status" (whether it is in development or production) and "Parent Process Owner" (a person who receives communications launched by the process if it is in development status). It also displays information that applies only to rules launched by triggers: the name of a database table containing fields used in

the trigger definition, and its primary keys; a "display table" and columns, which contain information to be included in the subject lines of communications associated with Constraint process flows, and the configured launch criteria. Essentially, this is information entered on the Main and Launch Criteria forms in the Flow Rules application.

As you run the report, you can set values for the following parameters:

- Oracle ERP Agent Source Data: Select the instance that contains the data about which you want to generate reports. (You are prompted to supply this value twice, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)
- Process Name: Select any combination of flow rules for which you want the report to return results.
- Process Type: Choose whether you want the report to return information about processes launched by triggers, schedules, or both.
- Process Status: Choose whether you want the report to return information about processes at the development or production status, or both.
- Parent Process Owner: Select any combination of users to see results for process rules that name those users as Parent Process Owners.
- Table Name: Select any combination of tables to see results for process rules that use those tables in their trigger definitions.

## OracleFlow Rules Detail Report

The OracleFlow Rules Detail Report provides the same summary information about each process (flow rule) as the OracleFlow Rules Summary Report. In addition, it provides information about each of the process flows that make up the process: the values that configure notifications or approval requests, constraints, or alerts to errors or exceptions, or that run concurrent programs or SQL scripts. Essentially this is information entered on the Process Flows form of the Flow Rules application.

This report takes the same parameters as the OracleFlow Rules Summary Report.

## OracleAudit Report

The OracleAudit Report consists of a series of sections that document changes to database field values. The heading for each section displays an audit group name, the name of a database table within that group, and its configured description and primary keys. Each row documents a change to a value held in a column of the table, and displays these values: the column name and its display name, the old and new data values, the transaction type (insert, update, or delete), the username of the user who made the change, and the date on which the change was made.

As you run the report, you can set values for the following parameters:

- Oracle ERP Agent Source Data: Select the instance that contains the data about which you want to generate reports. (You are prompted to supply this value twice, first to generate a list of the remaining parameters and then, within that list, to generate the report itself.)
- Group Name: Select the names of audit groups about which you want the report to return results.
- Table Name: Select the names of database tables about which you want the report to return results. You are able to select only tables belonging to groups you chose in the Group Name parameter.
- Column Name: Select the names of database table columns about which you want the report to return results. You are able to select only column belonging to tables you chose in the Table Name parameter
- User Name: Select the Oracle usernames of users to focus the report on database value changes made by those users.
- Role Name: Select Oracle workflow roles to focus the report on database value changes made by users at those roles.
- Transaction Date: Define a range of dates to focus the report on changes made within those dates. You may enter dates in the Start and End fields; in that case, clear the No Lower Value and No Upper Value check boxes. Or you may omit the start date and select the No Lower Value check box to start with the earliest existing transaction, or omit the end date and select the No Upper Value check box to finish with the latest existing transaction.

  If you do enter actual dates, select an Include This Value check box (for either or both dates) to include the value you specify in the period, or clear the check box to exclude the value (thus selecting transactions that begin after but not on the start date, or end before but not on the end date). You can click on the calendar icons to select dates.

# Chapter 8

# Import and Export

Governance, Risk, and Compliance Controls Suite offers three features for importing or exporting control-library elements and control monitors. These are available from the panel activated by the Administration tab in the Platform:

- One enables users to import control-library elements from a Microsoft Excel spreadsheet. A spreadsheet contains re than one thousand control-library elements that form a well-integrated controls framework. You can use it, or you can create a spreadsheet.
- A second enables users to export control-library elements or control monitors from an instance of Governance, Risk, and Compliance Controls Suite to a file, then import the contents of the file to another instance of Governance, Risk, and Compliance Controls Suite.
- The third enables users to merge export files containing control monitors into a single file.

## Who Can Do This?

A user whose primary application role is Author, Manager, Rule Builder, or System Administrator can import control-library elements from a spreadsheet, or export elements and monitors from an instance to files and import them to another instance. Only a System Administrator can merge control-monitor export files into a single file.

# Importing Controls from a Spreadsheet

Each row of a control-framework spreadsheet contains values for a control and for a control-library element at each of the higher levels; it defines a hierarchical linkage among the elements. Each row contains a unique combination of elements. Each row also contains an ID value and description for each of the elements, a likelihood and rating to be assigned to the control, and dimension and attribute values to be assigned to the control (and so inherited by the higher-level elements).

Before importing the contents of any spreadsheet, you must ensure that the formats of the ID values it contains conform to the ID value sets configured for your system, and that the values of ratings, likelihoods, dimensions, and attributes assigned to elements in the spreadsheet exactly match values configured for your system:

- ID values: You may either configure ID value sets to use the formats already contained in an import spreadsheet, or edit the ID values in the spreadsheet to match the formats configured for your system.
- Likelihoods and ratings. The control-framework spreadsheet devotes one column each to likelihood and rating values, with one cell in each column containing the value appropriate to a given control. In the spreadsheet, these columns are blank. You must configure the likelihood and rating values you want to use, then edit the spreadsheet to add these values to the controls you want to import.
- Dimensions and attributes. The control-framework spreadsheet defines a single dimension and a single attribute, each in its own column; each cell contains the dimension or attribute value that is to be assigned to a control (and inherited by higher-level elements). If either the dimension or attribute is not appropriate for your configuration, you should delete its column; if any values are not appropriate for your configuration, you should edit the values. You may add columns to define new dimensions or attributes (and the values that apply to them). If you do, all the dimension columns must run in a continuous block, to be followed by all the attribute columns, which must run in their own continuous block.

If you are use the Oracle control-library spreadsheet, you may add rows to it to define new controls, higher-level elements, or associations among them.

If you are creating your own spreadsheet (or adding rows to the Oracle spreadsheet), you must use the format of the Oracle spreadsheet, which is as follows. If you've used the Manage Control Element Names feature (see page 28) to create new terms for *Process*, *Cycle*, *Risk*, *Subprocess*, *Control Objective*, or *Control*, you should nevertheless use the default terms in the spreadsheet. Governance, Risk, and Compliance Controls Suite then maps these values to your new values.

- Spreadsheet column A
  Column heading: Type. Each cell in the column contains the type of primary element that is to be linked to other elements in a given spreadsheet row. Valid values are Process, Policy, Cycle, and Risk.
- Spreadsheet column B
  Column heading: Number (ID Value). Each cell in the column contains the ID assigned to a primary element whose type is specified in column A.

- Spreadsheet column C
  Column heading: Name. Each cell in the column contains the name for the primary element whose ID is specified in column B.
- Spreadsheet column D
  Description: Each cell in the column contains the description for the primary element whose ID is specified in column B.
- Spreadsheet column E
  Column heading: Sub-Process Number (ID Value). Each cell in the column contains the ID assigned to a subprocess that is to be linked to other elements in a given spreadsheet row.
- Spreadsheet column F
  Column heading: Sub-Process Name. Each cell in the column contains the name of the subprocess whose ID is given in column E.
- Spreadsheet column G
  Column heading: Sub-Process Description. Each cell in the column contains the name of the subprocess whose ID is given in column E.
- Spreadsheet column H
  Column heading: Control Objective Number (ID Value). Each cell in the column contains the ID assigned to a control objective that is to be linked to other elements in a given spreadsheet row.
- Spreadsheet column I
  Column heading: Control Objective Name. Each cell in the column contains the name of the control objective whose ID is given in column H.
- Spreadsheet column J
  Column heading: Control Objective Description. Each cell in the column contains the description of the control objective whose ID is given in column H.
- Spreadsheet column K
  Column heading: Control (ID Value). Each cell in the column contains the ID assigned to a control that is to be linked to other elements in a given spreadsheet row.
- Spreadsheet column L
  Column heading: Control Name. Each cell in the column contains the name of the control whose ID is given in column K.
- Spreadsheet column M
  Column heading: Control Activity Description. Each cell in the column contains the description of the control whose ID is given in column K.
- Spreadsheet column N
  Column heading: Control Rating. Each cell in the column contains the rating value to be assigned to the control whose ID is given in column K.
- Spreadsheet column O
  Column heading: Control Likelihood. Each cell in the column contains the likelihood value to be assigned to the control whose ID is given in column K.

- Spreadsheet column P and following
  Column heading: Dimension: *Dimension Name*. Each column defines a dimension, and in the heading for each, the phrase *Dimension Name* is replaced by the actual name of the dimension. Each cell in a column contains a value configured for the dimension, which is to be assigned to the control whose ID is given in column K.

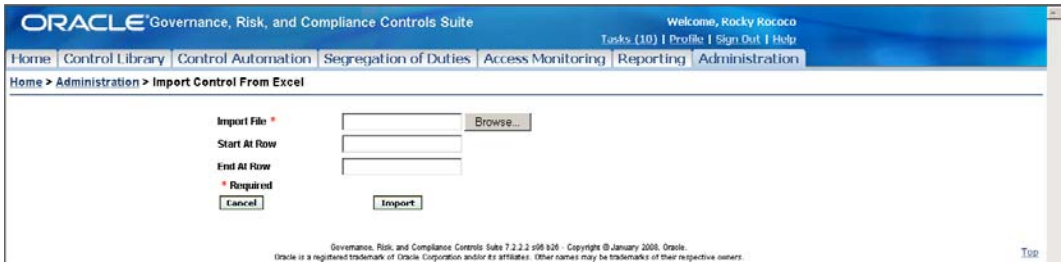
  There must be one column for every dimension configured for your system. If a dimension is optional and none of its values applies to a control, leave the appropriate cell (the intersection of dimension column and control-element row) blank.

- Spreadsheet column *x* and following
  Column heading: Attribute: *Attribute Name*. Each column defines an attribute, and in the heading for each, the phrase *Attribute Name* is replaced by the actual name of the attribute. The first attribute column must immediately follow the last dimension column (the value *x* at the beginning of this entry is a placeholder to be replaced by the actual column letter at which attributes begin). Each cell in a column contains a value configured for its attribute, which is to be assigned to the control whose ID is given in column K.

  There must be one column for every attribute configured for your system. If an attribute is optional and none of its values applies to a control, leave the appropriate cell (the intersection of attribute column and control-element row) blank.

Once you have configured Control Administration values to match spreadsheet values, edited a spreadsheet to match your Control Administration configuration, or both, complete the following steps to import the spreadsheet:

1. Click on the Administration tab, and then on the Import Control From Excel link in the Control Administration section. The following panel appears:



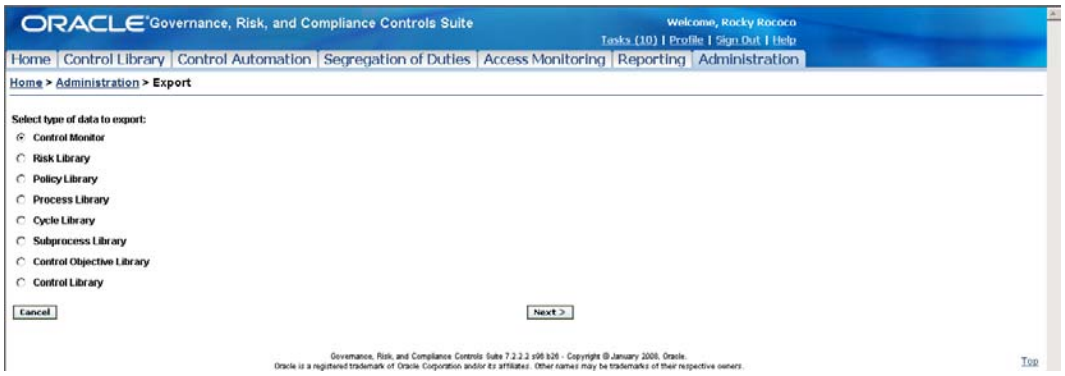

2. Click on the Browse button next to the Import File field.
3. A Choose File dialog opens. Using standard Windows procedures, navigate to your import spreadsheet, click on its name, and then click on the Open button.
4. Optionally, type a row number in one or both of the Start at Row and End at Row fields. The import operation then begins or finishes (or both) at the rows you specify. The first data row in the spreadsheet is 2, and so this is the lowest value you would ever insert in the Start at Row field. If you leave these fields blank, all rows are imported from the spreadsheet.
5. Click on the Import button.
6. A status panel appears. In it, review the status of your import operation

# Exporting and Importing Components

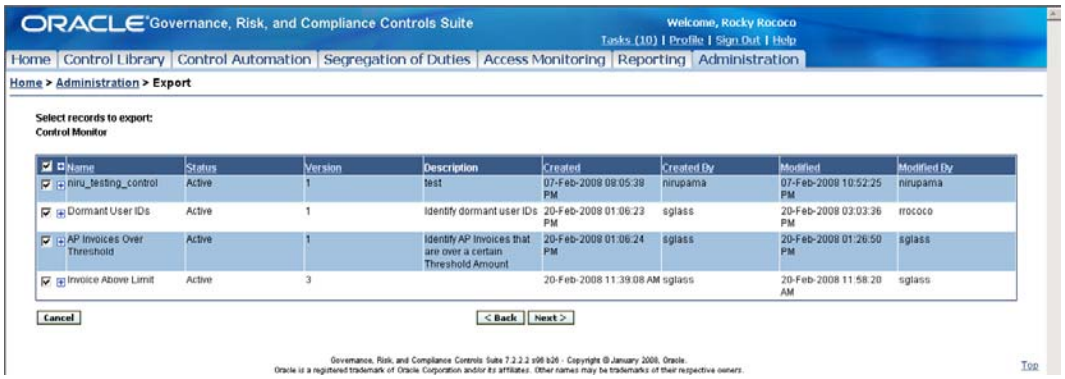
You can export items from an Governance, Risk, and Compliance Controls Suite instance to a zip file, and then import the contents of the file to another Governance, Risk, and Compliance Controls Suite instance. The items may be a selection of control monitors or of elements from any of the individual control-element libraries (Risk, Policy, Process, Cycle, Subprocess, Control Objective, or Control).

To prepare an export file:

1 Click on the Administration tab, and then on the Export link in the Data Administration section. An Export panel appears:




2 Click on the radio button for the type of item you want to export (you can select only one at a time), and click on the Next button. A second Export panel appears:




3 Review a grid in which each row provides information about one of the items you can select for export. The fields displayed by the grid vary according to the type of item you intend to export. The status of every item is Active; you cannot export items at any other status.

In each row, you can click on a +/- icon (located in the leftmost column of the row) to reveal or hide configuration details for the item displayed in the row. Or you can click on a +/- icon in the leftmost column of the header row to reveal or hide details for all the items in the grid.

4 Choose the items you want to export. By default, all are selected — a check box next to each displays a check mark. To remove an item from the export operation, click on its check box so that the mark disappears. (Or, to select it again, click on the check box so that the mark reappears.) To select or deselect all items in the grid, click on the check box that appears in the leftmost column of the header row.

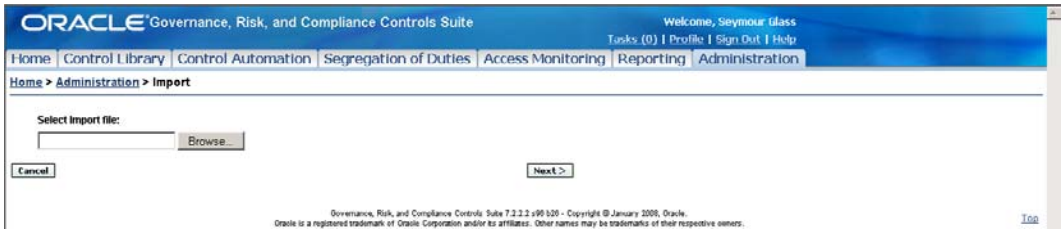
5 Click on the Next button. A third Export panel displays a grid in which each row displays information about a successfully exported item.

6 Click on the Download button. A File Download dialog box displays the name of the export file and presents options to open it or save it. Click on the Save button and, in a Save As dialog, use standard Windows procedures to navigate to a directory in which you want to save the file, and click on the Save button.

From any of these panels other than the last, you can click on a Back button to return to earlier panels and alter selections you've made in them.

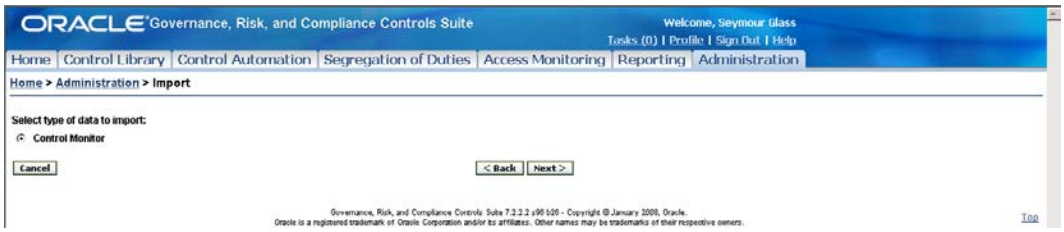
To import a file you've created, copy it to a computer that hosts an Governance, Risk, and Compliance Controls Suite instance, and then complete the following steps:

1 Click on the Administration tab. In the Administration Home panel, click on the Import link in the Data Administration section. An Import panel appears:



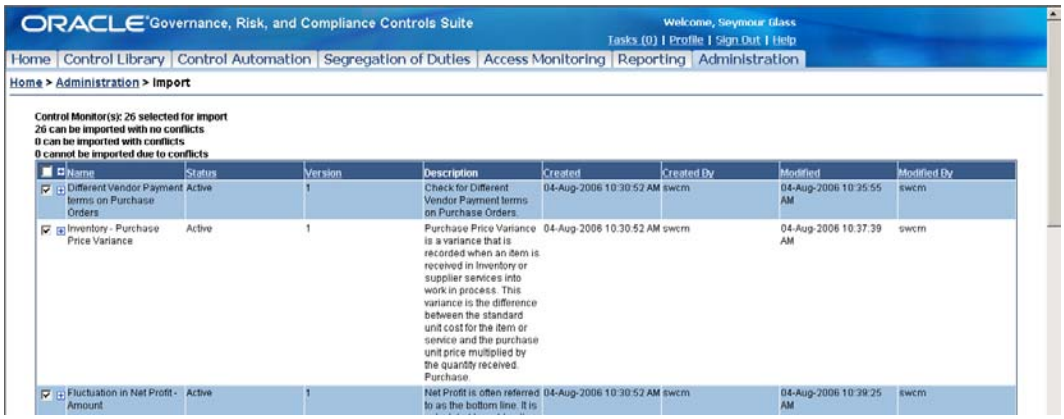

2 Click on the Browse button. A Choose File dialog box opens; in it, use standard Windows procedures to navigate to the import (zip) file you've copied to your system, and click on the Open button. The dialog box closes, and the path and name of the import file appear in the Select Import File field of the Import panel.

3 Click on the Next button. A second Import panel appears:




4 This panel displays a single radio button whose label indicates the type of item contained in the import file. Ensure that the radio button is selected

5 Click on the Next button. A third Import panel appears:



6 Review a grid in which each row provides information about one of the items contained in the Import file. (Although the status of every item is Active, each item will be imported to your system in the Editing status.)

   Choose the items you want to import. To select an individual item, click the check box that appears in the leftmost column of its row. To select all items in the file, click the check box that appears in the leftmost column of the header row. (An item is selected for import when a check mark appears in its check box.)

   If the name of an import item matches the name of an item already installed on your system, this panel reports that the two instances of the item are in conflict. If so, the final column in its row provides an explanation of the conflict. Items are always imported to the Editing status, so if the conflicting item on your system is at any other status, Governance, Risk, and Compliance Controls Suite permits the import even though it registers the conflict. If the conflicting item on your system is at the Editing status, you cannot import the item from the file.

   In each row, you can click on a +/- icon (also in the leftmost column) to display or hide the details configured for the item.

7 Click on the Next button. If you've selected items that conflict with those already existing on your system, a dialog box prompts you to confirm that you want to do so. Click on its OK button, and a final Import panel appears. It too provides a grid in which each row displays information about a successfully imported item (status is now Editing rather than Active). Click on the Finish button to return to the Administration Home panel.

From any of these panels other than the last, you can click on a Back button to return to earlier panels and alter selections you've made in them.

# Merging Control-Monitor Export Files

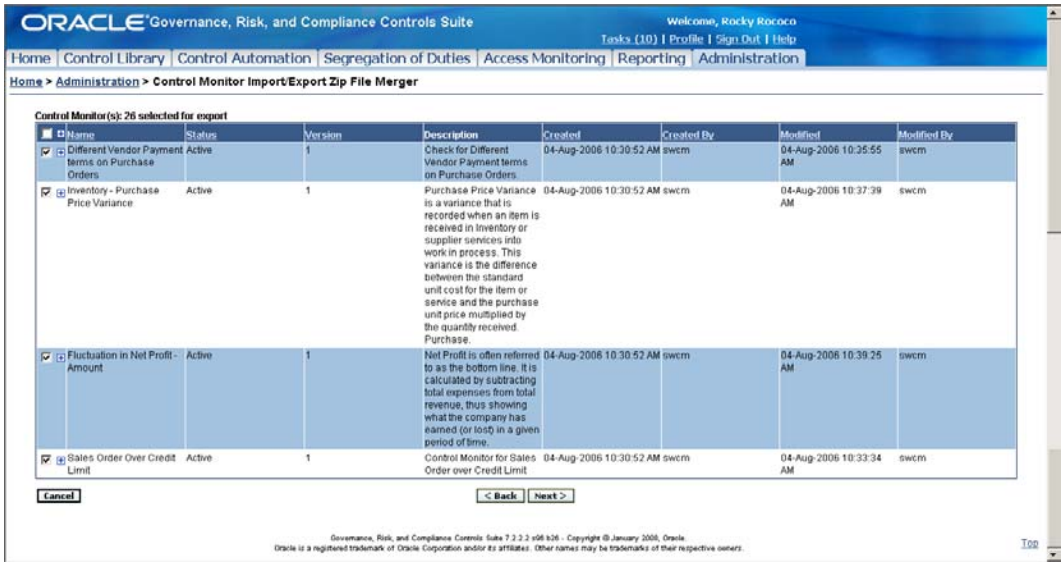
You may create several export files, each of which contains a selection of control monitors. If so, you can merge them into a single file and then use that file to import monitors into an instance of Governance, Risk, and Compliance Controls Suite. This feature works only with control monitors, not with export files containing control-library elements. To merge control-monitor export files:

1 Click on the Administration tab, and then on the Control Monitor Import/Export Zip File Merger link in the Data Administration section. The following panel appears:

2 Initially, the panel contains a single field. Click on its Browse button. A Choose File dialog opens. Using standard Windows procedures, navigate to one of the files you want to merge, click on its name, and then click on the Open button.

3 Each time you select a file, the panel not only fills the field in which you've been working with the path and name of the file you selected, but also displays a new, blank field. Click on its Browse button and repeat the process described in step 2 to select the next file you want to merge.

4 When you've selected all the files you want, click on the Next button. Another Merge panel lists the control monitors contained in the files you selected:




5 Select the monitors you want to include in the merged file. By default, all are selected (a check mark appears in a check box at the left of each row). However, a given monitor may have existed in more than one of your source files, and if so it appears more than once in this panel. (For example, the Split Purchase Orders monitor appears twice in the illustration.) If so, you can include only one instance of the monitor in the merged file, and must deselect any others (click on their check boxes so that their check marks disappear). Apart from this, you may choose to exclude some monitors from the merged file, and so would deselect them as well.

6 Click on the Next button. A third Merge panel displays a grid in which each row displays information about a successfully merged item.

7 Click on the Download button. A File Download dialog box displays the name of the export file and presents options to open it or save it. Click on the Save button and, in a Save As dialog, use standard Windows procedures to navigate to a directory in which you want to save the file, and click on the Save button.