Oracle Financial Services
Governance, Risk, and Compliance
Workflow Manager
User Guide

Release 8.0.2.0.0
February 2016

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About this Guide

The *Oracle Financial Services Governance, Risk, and Compliance Workflow Manager User Guid*e explains the concepts of the Oracle Financial Services Governance, Risk, and Compliance Workflow Manager and provides step-by-step instructions for navigating through the application.

This chapter discusses the following topics:

- Who Should Use this Guide
- Where to Find More Information
- Conventions Used

Who Should Use this Guide

The *Oracle Financial Services Governance, Risk, and Compliance Workflow Manager User Guide* is designed for administrative users of Operational Risk/Governance and Compliance Management application for administrating and configuring the workflow function within the application.

Where to Find More Information

For more information on Oracle Financial Services Governance, Risk, and Compliance Workflow Manager , refer to the following documents:

- *Oracle Financial Services Governance, Risk, and Compliance User Guide.*
- *Oracle Financial Services Governance, Risk and Compliance Installation Guide.*
- *Oracle Financial Services Governance, Risk and Compliance Administration and Configuration Guide.*

These documents are available in the OTN library.

To find additional information about how Oracle Financial Services solves real business problems, see our Web site at www.oracle.com/financial services.

Conventions Used

Table 1 lists the conventions used in this guide.

Table 1. Conventions Used in this Guide

Convention	Meaning
Italics	• Names of books, chapters, and sections as references • Emphasis
Bold	• Object of an action (menu names, field names, options, button names) in a step-by-step procedure • Commands typed at a prompt • User input
`Monospace`	• Directories and subdirectories • File names and extensions • Process names • Code sample, including keywords and variables within text and as separate paragraphs, and user-defined program elements within text
<Variable>	Substitute input value

CHAPTER 1 About Workflow Manager

This chapter provides a brief overview of Oracle Financial Services Governance, Risk, and Compliance Workflow Manager configurations and administrations.

The chapter covers the following topics:

- Overview of OR/ GCM
- Overview of Workflow Manager

Overview of OR/ GCM

Operational Risk and Governance Compliance Management solution provides a comprehensive framework to manage governance, risk, and compliance across the organization. The solution is built on Oracle Financial Services Analytical Application Infrastructure. Oracle Financial Services Analytical Applications use a commonly available analytical infrastructure consisting of a unified financial services data model, analytical computations and the industry-leading Oracle Business Intelligence platform.

Overview of Workflow Manager

The Workflow Manager utility provides an ability to configure multiple approvals, reviews process to ensure the maker-checker is set in place to enable veracity of information by different set of users. This utility allows setting of actionable tasks and notification to specific users which are generated based on system set parameters or when a user takes a specific action for an entity. These Tasks and Notifications can be turned on or turned off at different stages in the process flow. In addition to the system notifications, email alerts can also be configured for the Tasks and Notifications which would be sent to the stakeholders on any change in the information relevant to them.

CHAPTER 2 Getting Started

This chapter provides step-by-step instruction to login to the Governance, Risk, and Compliance application and different features of the Workflow Manager.

This chapter discusses following topics:

- System Requirements
- Accessing OFSAA Applications
- Managing the GRC Application Page
- Troubleshooting Your Display

System Requirements

The following applications are required to run Oracle Financial Services Governance, Risk, and Compliance:

- Microsoft Internet Explorer (IE) version 9 or later.

  Earlier versions and other browsers are not supported and may produce errors, inaccurate data and display failures. For users of IE version 8.0, the browser should be run in compatibility mode.
- Adobe Acrobat Reader version 9.0, or later.

  You can download a free copy of the latest version of the Reader at www.adobe.com.
- Java should be installed. JDK 1.6 (version 6) or above.
- The screen resolution of the system should be set to 1280 × 1024 or higher for proper display of the user interface (UI).

Accessing OFSAA Applications

Access to the Oracle Financial Services Governance, Risk, and Compliance application depends on the Internet or Intranet environment. Oracle Financial Services Governance, Risk, and Compliance is accessed through Microsoft Internet Explorer (IE). Your system administrator provides the intranet address uniform resource locator (URL).

Your system administrator provides you with a user ID and password. Login to the application through the Login page. You are prompted to change your password on your first login. You can change your password whenever required by logging in. (Refer to section *Changing Password* for more information.)

Your password is case sensitive. If you have problems with the password, verify that the **Caps Lock** key is off. If the problem persists, contact your system administrator.

To access OFSAA Applications, follow these steps:

1. Enter the URL into your browser using the following format:

   ```
   <scheme/ protocol>://<ip address/ hostname>:<port>/<context-name>/login.jsp
   ```

For example: https://myserver:9080/ofsaaapp/login.jsp

The OFSAA Login page is displayed.

Figure 1. OFSAA Login Page

2. Select the Language from the Language drop-down list.
3. Enter your User ID and Password.
4. Click **Login**. The OFSAA Application page is displayed.

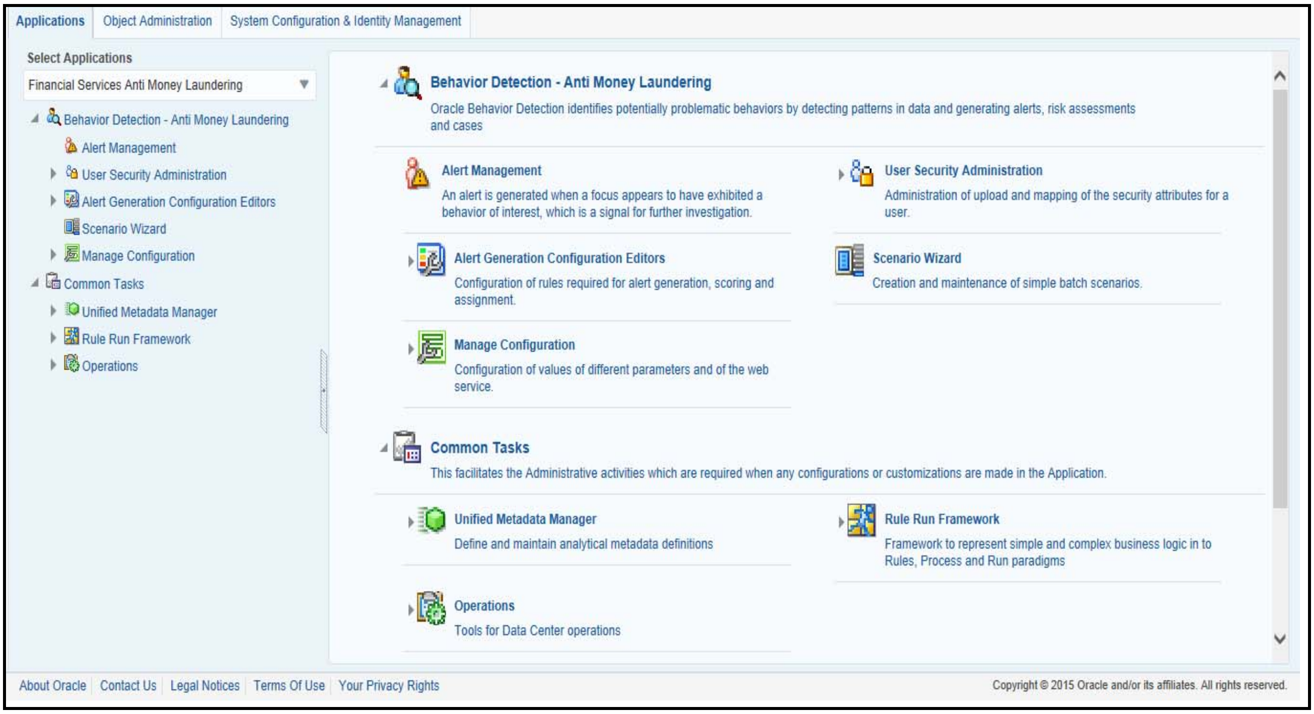

Figure 2. OFSAA Application Page

The OFSAA Application page is a common landing page for all users until a preferred application page is set. For more information about how to set your preferred application page, refer to *OFS GRC User Guide*. You can use the OFSAA Application page to access the Oracle Financial Services applications in your environment. For example, to access GRC, select **Governance, Risk, and Compliance** from the drop-down list.

The OFSAA Application page has multiple tabs and each tab has specific links to OFSAA Infrastructure and Application modules. The modules which you may access depend on your user role and the OFSAA Application you select. The relevant tabs and links are displayed

This page is divided into two panes:

- **Left Pane**: Displays any menus and links to modules in a tree format based on the application selected in the Select Application drop-down list.
- **Right Pane**: Displays any menus and links to modules in a navigational panel format based on the selection of the menu in the Left pane. It also provides a brief description of each menu or link.

Managing the GRC Application Page

This section describes the different panes and tabs in the OFSAA Application page.

The OFSAA Application page has the following tabs:

- Applications Tab
- Object Administration Tab
- System Configuration and Identity Management Tab

The following sections describe these tabs.

Applications Tab

The Applications tab lists the various OFSAA Applications that are installed in the OFSAA setup based on the logged in user and mapped OFSAA Application User Group(s).

To access the OFSAA Applications, choose the required Application from Select Application drop-down list. For GRC select **Governance Risk and Compliance.** Based on your selection, the page refreshes the menus and links across the panes.

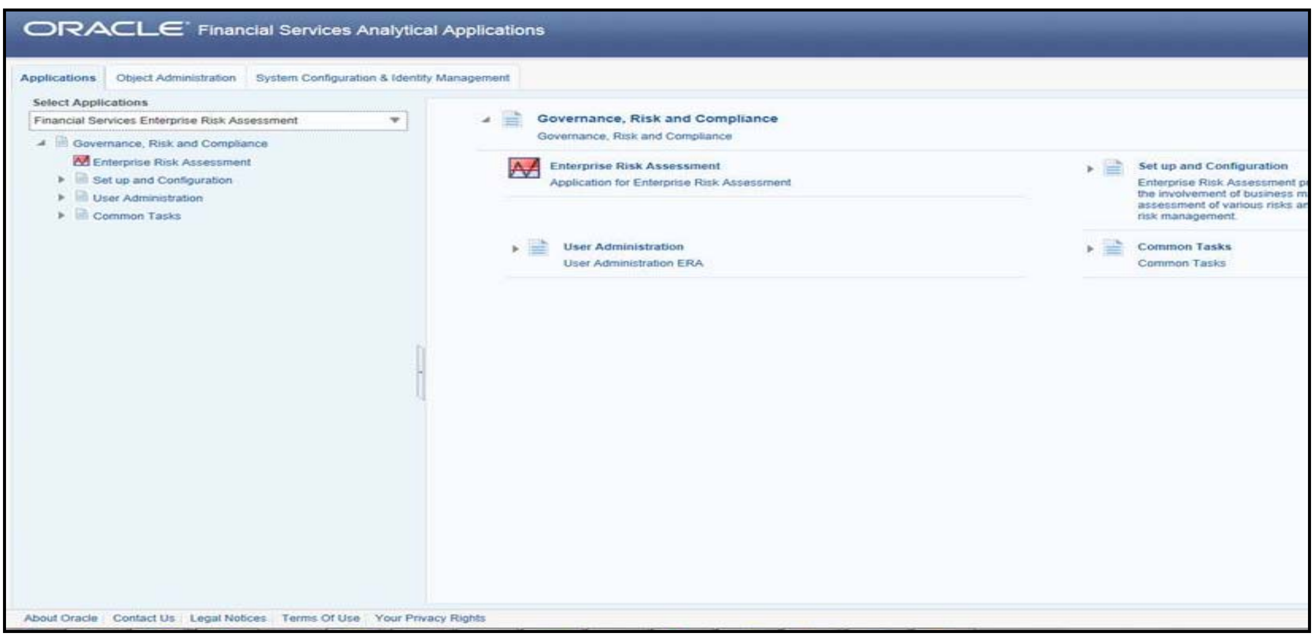

Figure 3. OFSAA Application Selection Tab

Object Administration Tab

Object Administration is an integral part of the Infrastructure system and allows system administrators to define the security framework with the capacity to restrict access to the data and meta data in the warehouse, based on a flexible, fine-grained access control mechanism. These activities are mainly done at the initial stage, and then as needed. This tab includes information related to the workflow of the Infrastructure Administration process with related procedures to assist, configure, and manage administrative tasks.

The Object Administration tab lists the various OFSAA Information Domains created in the OFSAA setup based on the logged in user and mapped OFSAA Application User Groups. For more information about managing Information Domains, refer to the *Administration Guide*.

To define or maintain access for an Information Domain, choose the required Information Domain from the Select Information Domain drop-down list. Based on your selection, the page refreshes the menus and links across the panes.

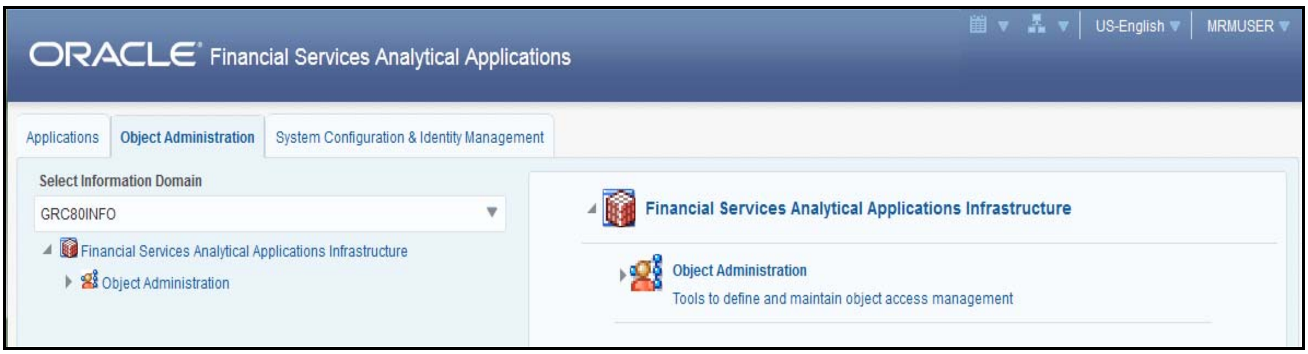

Figure 4. Object Administration Tab

System Configuration and Identity Management Tab

System Configuration and Identity Management is an integral part of the Infrastructure administration process. This tab helps System Administrators to provide security and operational framework required for the Infrastructure.

System Administrators can configure Server details, Database details, OLAP details, and Information Domains, along with other configuration processes such as segment and metadata mapping, mapping segments to securities, and rules setup. System Configuration is mostly a one-time activity, which helps the System Administrator make the Infrastructure system operational.

The System Configuration and Identity Management tab lists the OFSAA Infrastructure System Configuration and Identity Management modules. These modules work across Applications and Information Domains, so there is no Application and Information Domain drop-down list in this tab.

Figure 5. System Configuration and Identity Management Tab

Selecting Identity Management allows System Administrators to manage Users, User Groups, and the functions each User or User Group may access. For more information about managing Users and User Groups, refer to the *GRC Installation and Administration Guide.*

Copyright Information

To access copyright information, click **About** in the OFSAA Login page. The Copyright text is displayed in a new pop-up window.

Figure 6. Copyright Information

Changing Password

If you want to change your password, you can do so using the **Change Password** option available from the drop-down list available on the OFSAA Application page.

The application navigates to the Password Change page. Enter your old and new password in the given fields respectively, and click **OK**. Your password is changed successfully. After clicking **OK** in the pop-up window, the application navigates back to the Login page where you can login with the new password.

Figure 7. Change Password

Troubleshooting Your Display

If you experience problems logging into Oracle Financial Services Governance Risk and Compliance Application, the browser settings may be incompatible with running OFSAA applications. The following sections provide instructions for properly setting your Web display options for OFSAA applications within IE.

Note: The following procedures apply to all versions of IE listed in section *System Requirements*. Separate procedures are listed for each version where differences exist in the locations of settings and options.

This chapter explains the following sections:

- Enabling JavaScript
- Enabling Cookies
- Enabling Temporary Internet Files
- Enabling File Downloads
- Setting Printing Options
- Enabling Pop-Blocker
- Preferences

Enabling JavaScript

JavaScript must be enabled. To enable JavaScript, follow these steps:

1. Navigate to the Tools menu and click **Internet Options**.

   The Internet Options dialog box is displayed.
2. Click the **Security** tab.
3. Click the **Local Intranet** icon as your Web content zone.
4. Click **Custom Level**.

   The Security Settings dialog box displays.
5. In the Settings list and under the Scripting setting, enable all options.
6. Click **OK,** then click **OK** again to exit the Internet Options dialog box.

Enabling Cookies

Cookies must be enabled. If you have problems troubleshooting your display, please contact your System Administrator.

Enabling Temporary Internet Files

Temporary Internet files are pages that you view on the Internet and store in a folder for quick viewing later. You must adjust this setting to always check for new versions of a stored page. To adjust your Temporary Internet File settings, follow these steps:

1. Navigate to the Tools menu and click **Internet Options**.

   The Internet Options dialog box displays.

2. On the General tab, click **Settings**.

   The Settings dialog box displays.

3. Click the **Every visit to the page** option.
4. Click **OK**, then click **OK** again to exit the Internet Options dialog box.

Enabling File Downloads

File downloads must be available. To enable file downloads, follow these steps:

1. Navigate to the Tools menu and click **Internet Options**.

   The Internet Options dialog box displays.

2. Click the **Security** tab.
3. Click the **Local Intranet** icon as your Web content zone.
4. Click **Custom Level**.

   The Security Settings dialog box displays.

5. Under the Downloads section, ensure that **Enable** is selected for all options.
6. Click **OK**, then click **OK** again to exit the Internet Options dialog box.

Setting Printing Options

Printing background colors and images must be enabled. To enable this option, follow these steps:

1. Navigate to the Tools menu and click **Internet Options**.

   The Internet Options dialog box displays.

2. Click the **Advanced** tab.
3. In the Settings list, under the Printing setting, click **Print background colors and images**.
4. Click **OK** to exit the Internet Options dialog box.

   Note: For best display results, use the default font settings in your browser.

Enabling Pop-Blocker

Some users may experience difficulty running the Oracle Financial Services GRC application when the IE Pop-up Blocker is enabled. It is recommended to add the URL of the application to the *Allowed Sites* in the Pop-up Blocker Settings in the IE Internet Options.

To enable Pop-up Blocker, follow these steps:

1. Navigate to the Tools menu and click **Internet Options**.

   The Internet Options dialog box displays.

2. Click the **Privacy** tab.
3. In the Pop-up Blocker setting, select the **Turn on Pop-up Blocker** option**.**

   The **Settings** enable.

4. Click **Settings** to open the Pop-up Blocker Settings dialog box.
5. In the Pop-up Blocker Settings dialog box, enter the URL of the application in the text area.
6. Click **Add**.

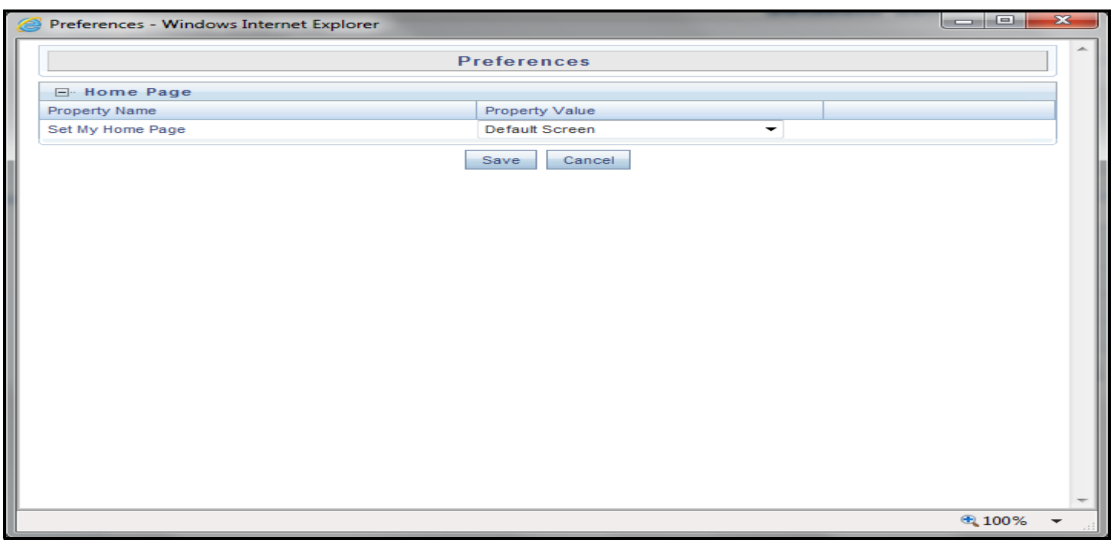

Figure 8. Preferences Screen

   The URL appears in the Allowed site list.

7. Click **Close**, then click **Apply** to save the settings.
8. Click **OK** to exit the Internet Options dialog box.

Preferences

The preferences section enables you to set your OFSAA Home Page.

To access Preferences, follow these steps:,

1. Click **Preferences** from the drop-down in the top right corner. The Preferences screen is displayed.

2. Select the application which you want to set as the Home Page from **Property Value** drop-down.

   Note: Whenever you install a new application, the related value for that application is found in the drop-down list.

3. Click **Save** to save your preference.

CHAPTER 3 Managing Workflow

This chapter provides an overview of the Workflow Manager in the OFSOR/GCM application and provides step-by-step instructions to use this feature.

This chapter covers the following topics:

- About Application Preference
- About Workflow Manager
- User Roles and Actions
- Managing Workflow Manager

About Application Preference

The Application Preferences allows you to manage the workflows of each module of OFSOR/GCM, manage the field names, messages, screen name, and so on.

Note: When you are populating/loading the user specific dimension data into following table (Atomic schema), you should not use (including update/delete) following reserved keys in the associated tables for any different purpose:

- **Application Information:**
  - Tables: `DIM_APP_INFO, DIM_APP_INFO_MLS`
  - Application Reserved Key "**1**" for Operational Risk, Application Reserved Key "**2**" for Model Risk Management, Application Reserved Key "**3**" for Governance and Compliance Management and Application Reserved Key "**4**" for Enterprise Risk Assessment.
- **Business Line:**
  - Tables: `DIM_KBD_1, DIM_KBD_1_MLS`
  - Business Line Reserved Key "**1**" for All
  - Business Line Reserved Key "**-1**" for All
- **Location:**
  - Tables: `DIM_KBD_2, DIM_KBD_2_MLS`
  - Location Reserved Key "**1000**" for All/Global
  - Location Reserved Key "**-1**" for All/Global
- **Category**
  - Tables: `DIM_KBD_3, DIM_KBD_3_MLS`
  - Category Reserved Key "1000" for All/Global
  - Category Reserved Key "-1" for All/Global
- **Reserved KBD**
  - Tables: `DIM_KBD_4, DIM_KBD_4_MLS`
  - Reserved KBD Reserved Key "1000" for All/Global

- Reserved KBD Reserved Key “-1” for All/Global

About Workflow Manager

The Workflow Manager feature allows you to configure the process flow of each module of OFSOR from a

centralized location. You can also configure Tasks and Notifications sent to each user based on the rules. It is a part of the Application Preferences section.

Accessing the Workflow Manager

This section explains how to access the Workflow Manager in Oracle Financial Services Operational Risk application.
To access the Workflow Manager section, follow these steps:

1. Login to OFSOR application. The OFSOR Home page is displayed.
2. Select **Application Preference** from the Admin menu on the Home page and then select **Workflow Manager**. The Workflow Manager page is displayed.
3. Select **Application Name** and the required **Workflow Function Name**. The default Master Workflow is displayed with all other Workflows for the selected Function. Only one Workflow is active at a time for selected Function.

The steps to include a new application and a new workflow function in the Workflow Manager is detailed in *Appendix, Setting up Application and Workflow Function*.

User Roles and Actions

This section covers the following topics:

- User Role
- Actions

User Role

The Administrator is the only user who manages the Workflow Manager features in an organization. This user configures, maintains, and performs the tasks that are applicable across the organization.

Actions

The Administrator can create, edit, active, or deactive the Workflow. Also, this user can add a new Route Rule, Notification, and Tasks, and map them with user roles/users.

Managing Workflows: The Administrator can create, edit, active, or deactive the Workflow. Also, this user can add a new Route Rule, Notification, and Tasks, and map them with user roles/users.

Process Flow of Workflow

The process flow of the Workflow Manager is explained below:

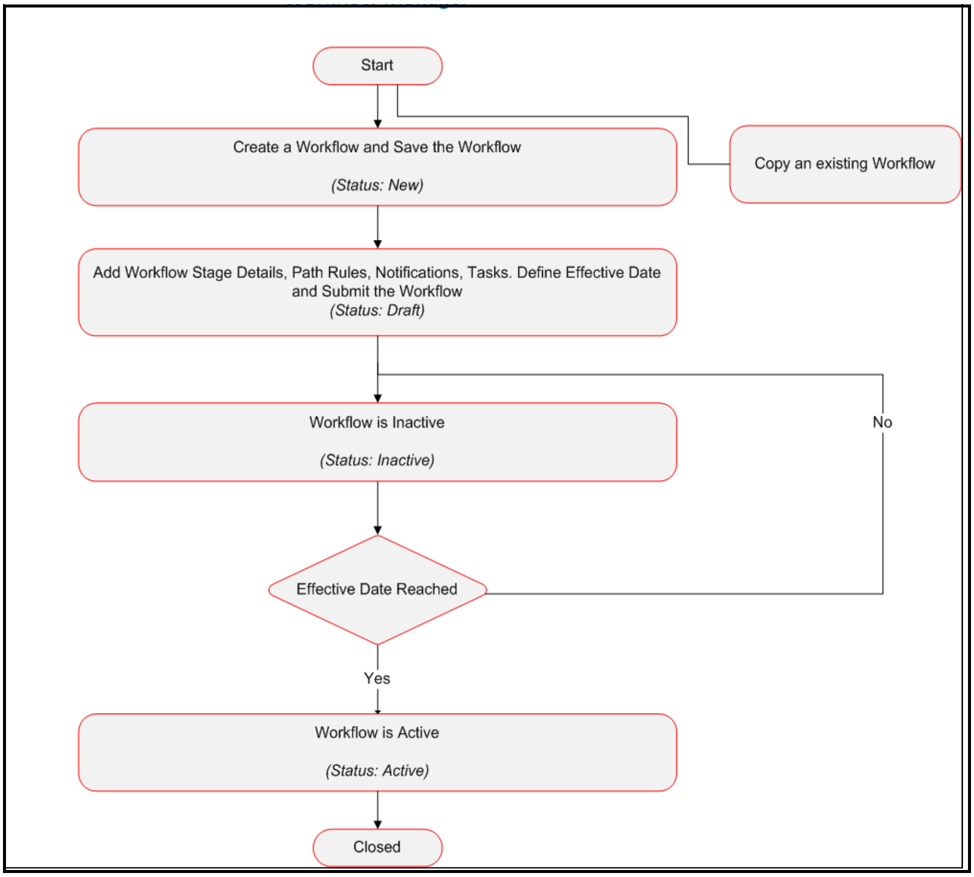

Figure 9. Process Workflow

Managing Workflow Manager

The Workflow Manager feature allows you to configure the process flow of each module of OFSOR from a centralized location. You can also configure Tasks and Notifications sent to each user based on the rules.

This section covers following topics:

- Creating a Workflow
- Managing Workflow Details
- Activating a Workflow
- Deactivating a Workflow
- Searching Workflow

Creating a Workflow

This section explains how to create a new Workflow for a selected function.

The Workflow Search and List page allows you to create a new Workflow for a selected function.

To create a new Workflow, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the Application Name and Workflow Function Name.
3. Click **Create Workflow.** The Workflow Details page is displayed.

   Note: The status of the Workflow is *New*.

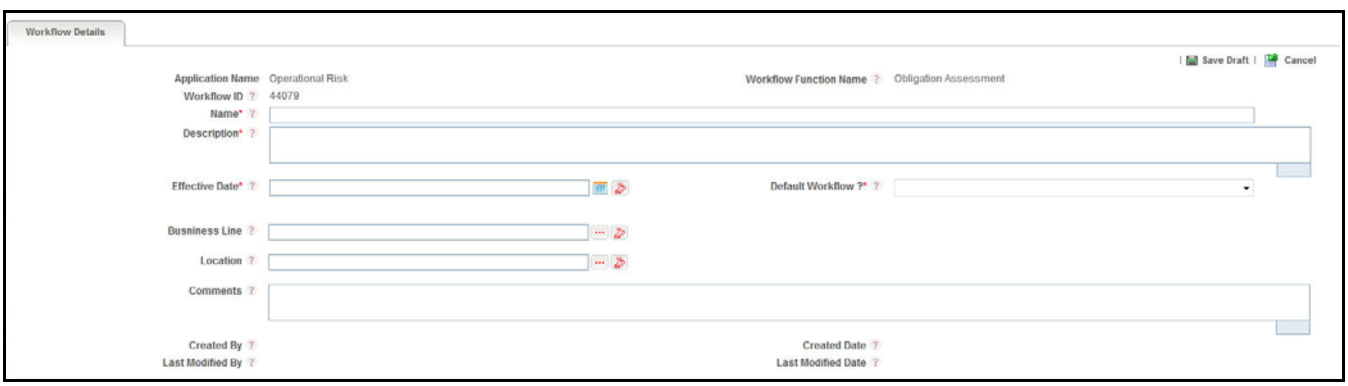

Figure 10. Workflow Details page

4. Enter the following information in the Workflow Details page.

Table 2. Workflow Details

Field	Description
Application Name	This is the application name in which Workflow Manager is installed. The field is auto populated.
Workflow Function Name	This is the Workflow Function name to which Workflow being created. The field will be auto populated.
Workflow ID	Displays the sequential tracking number given to a Workflow. (system generated)
Name	Enter the name of the Workflow. This field allows you to enter a maximum of 300 characters. **Note:** If you try to save the Workflow details without entering the Workflow name, the application displays the following message: *Please enter the Workflow Name.*
Description	Enter a brief description of the Workflow. The description field in the Workflow Details page allows you to enter a maximum of 3000 characters. As you begin entering the comments, the word count displayed below the Description text box keeps decreasing. If you try to enter more than 3000 characters in this field, the following error message is displayed: *Number of characters exceeded*.
Effective Date	Select the date from which Workflow is activated, from the calendar. The Workflow is activated automatically from the defined Effective Date using the Batch run.
Default Workflow	Select the default status of the Workflow Rule as *Yes* or *No*. ● If you select the **Default Workflow** as *Yes*, then the Workflow is applicable to all Business Line and Location. After selecting this option as Yes, Business Line and Location fields is disabled. ● If you select the **Default Workflow** as *No*, then the Workflow is applicable to selected Business Line and Location. After selecting this option as *No*, Business Line and Location fields is enabled to enter the details.
Business Line	Select the business line where the Workflow is applicable from the hierarchy browser. Workflow are mapped to the business line (for example, Product, Corporate, and so on).
Location	Select the location where the Workflow is applicable from the hierarchy browser. Workflow are mapped to the location (for example, London, Bangalore, and so on).
Comments	Enter remarks if applicable. **Note:** If you try to enter more than 3000 characters in the Comment field, the application displays the following message: *Number of characters exceeded*.
Created By	Shows the user's name who created the workflow. This field is auto populated after saving the Workflow.
Created Date	Show the date on which the workflow was created. This field is auto populated after saving the Workflow.
Last Modified By	Shows the user's name who last modified the workflow. This field is auto populated.
Last Modified Date	Shows the date on which the workflow was last modified. This field is auto populated.

5. Click **Save Draft**. A Confirmation dialog box is displayed. If you click **OK**, the Workflow is saved and the Workflow Details page is displayed.

   Note: The status of Workflow is changed to *Draft*.

Submitting a Workflow in Draft Status

A Workflow in *Draft* status can be submitted if all mandatory fields of Workflow Details are entered.

To submit a Workflow, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the Application and Workflow Function Name.
3. Select a Workflow in *Draft* status. The Workflow Details page is displayed.

   The Workflow Details page allows you to perform the following tasks in *Draft* status:

   - Editing Workflow Details
   - Attaching and deleting documents related to Workflow
   - Viewing Workflow
   - Viewing/Creating Workflow Rules
   - Updating Workflow Stage Details

   For more information on these sections, refer to the *Managing Workflow Details* section.
4. Enter the details before submitting the Workflow.
5. Click **Submit**. The following message is displayed: *Update Operation Successful*. The Status of the Workflow changes to *Inactive*.

   Note: If the Effective date of Workflow is today's date, then the Workflow is *Active* from today's date.

Copying Workflow

The Copy Workflow functionality allows you to make a copy of existing Workflow. It copies the Stage details, Routing Rules, Notifications, and Tasks of existing Workflow.

To copy a Workflow, follow these steps:

1. Navigate to Workflow Search and List page.
2. Select the Application and Workflow Function Name. The list of Workflows is displayed.
3. Select a Workflow ID.
4. Click **Copy Workflow**. The Copy Workflow page is displayed.

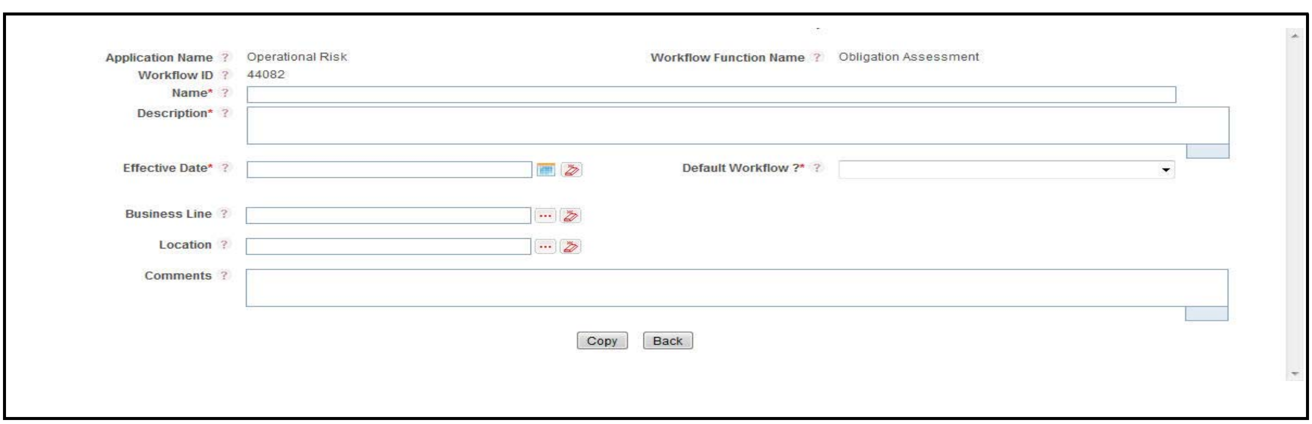

Figure 11. Copying Workflow

5. Enter the following information.

Table 3. Copying Workflow

Field	Description
Application Name	Displays the name of the application.
Workflow ID	Displays the workflow ID.
Workflow Function Name	Displays the function name for the workflow.
Name	Enter the name for the workflow. This is a mandatory field.
Description	Enter the description for the workflow. This is a mandatory field.
Effective Date	Enter the effective date which should be greater or equal to the present date from the calender look-up.
Default Workflow	Select **Yes** or **No** from the drop-down list to indicate if the workflow is default or not.
Business Line	Select the business line from the look-up menu.
Location	Select the location from the look-up menu.
Comments	Enter any additional comments in this section.

6. Click **Copy**. The Workflow Details page is displayed.

The following message is displayed:*Workflow Copied* message is displayed.

7. Click **OK**. The status of the workflow changes to *Draft*.

   Note: The status of the new Workflow is *Draft*, irrespective of the status of the parent Workflow from which it is copied.

Managing Workflow Details

The Workflow Details page allows you to manage functionalities pertaining to the Workflow.

This section explains the following topics:

- Managing Details
- Managing Workflow Rules
- Managing Workflow Stage Details
- Viewing Workflow Process

Managing Details

This tab displays the complete information about the Workflow.

This section allows to perform following tasks:

- Editing Workflow Details
- Attaching and Deleting Documents

Editing Workflow Details

This section describes how to edit and update the existing Workflow details. You can edit the Workflow details when it is in *Draft* status.

The following details can be edited:

- Name
- Description
- Effective Date
- Business Line
- Location
- Default Workflow
- Comments.

Note: You can edit **Business Line** and **Location** fields only if the **Default Workflow** option is selected as *No*.

To edit a Workflow, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the Application and Workflow Function Name.
3. Select a Workflow ID. The Workflow Details page is displayed.
4. Click **Workflow Details** tab.
5. Click **Edit**. The editable fields are enabled in the Workflow Details page.
6. Modify the necessary information. For more information about the Workflow Details page, refer to *Table 2* .
7. Click **Update**. The following message is displayed: *Update Operation Successful.*
8. Click **OK** to confirm the changes. The updated Workflow Details page is displayed.

Attaching and Deleting Documents

The Workflow page allows you to attach or delete documents related to a Workflow.

For more details on attaching and deleting documents, refer to *ORGCM User guide,* General Feature Chapter.

Managing Workflow Rules

This section allows you to manage the Workflow Rules. You can map a rule from Default workflow to another workflow using the Rule repository. If the rule is not defined, then you can create the rule and map it.

This section allows you to perform the following tasks:

- Creating Workflow Rule
- Editing Workflow Rule
- Deleting Workflow Rule
- Searching Workflow

Creating Workflow Rule

You can create a new Workflow Rule using the Create Workflow Rule option. You can map the workflow rule to

Stage details, Notification, or Task, if workflow in draft, inactive, and active status.

To create a Workflow Rule, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Click a Workflow ID. The Workflow Details page is displayed.
4. Click **Workflow Rules.** The Workflow Rule Details page is displayed.
5. Click **Create Workflow Rule**. The Create Workflow Rule fields are displayed.

Figure 12. Workflow Rule Details Page

6. Enter the following information in the Workflow Rule Details page.

Table 4. Components of the Workflow Rule Details Page

Field	Description
Application	This field is auto-populated and shows the selected Application name. You cannot edit this field.
Workflow Function	This field is auto-populated and shows the selected Workflow Function name. You edit the Workflow function name, if required.
Rule ID	This is an auto populated sequential tracking number assigned to Workflow Rules. This field is not editable.
Name	Enter the name of the Workflow Rule. This field allows you to enter a maximum of 300 characters. **Note:** If you try to save the Workflow Rule details without entering the Workflow Rule name, the application displays the following message: *Please enter the Workflow Rule Name.*
Description	Enter a brief description of the Workflow Rule. The description field in the Workflow Rule Details page allows you to enter a maximum of 3000 characters. As you begin entering the comments, the word count displayed below the Description text box keeps decreasing. If you try to enter more than 3000 characters in this field, the following error message is displayed: *Number of characters exceeded*.

Table 4. Components of the Workflow Rule Details Page

Field	Description
Type	Select the type of Workflow rule. The following values are possible for Type drop-down: ● **Routing Rule:** Select the Type of Workflow Rule as *Routing Rule*, if the Rule belongs to any Routing stage. ● **User Decision Rule:** Select the Type of Workflow Rule as *User Decision Rule*, if the Rule belongs to user's decision. ● **User Allocation Rule:** Select the Type of Workflow Rule as *User Allocation Rule*, if the Rule belongs to user's irrespective of User's role. ● **Role Allocation Rules:** Select the Type of Workflow Rule as *Role Allocation Rule*, if the Rule belongs to user's Role allocation irrespective of User.
Status	Enter the Status of the Workflow rule as Enable or Disable. ● **Enable**: If the Workflow Rule is Enabled, then the Workflow Rule is effective for Workflow. ● **Disable**: If the Workflow Rule is Disabled, then the Workflow Rule is not effective for the Workflow.
Rule Logic	Enter the logic of Workflow Rule in standard programming language (SQL Query). If you try to enter more than 3000 characters in the Rule Logic field, the application displays the following message: *Number of characters exceeded*.
Comments	Enter remarks if applicable. **Note:** If you try to enter more than 3000 characters in the Comments field, the application displays the following message: *Number of characters exceeded*.
Notes	Enter the notes, if required. **Note:** If you try to enter more than 3000 characters in the Notes field, the application displays the following message: *Number of characters exceeded*.
Created By	Shows the user's name who created the workflow Rule. This field is auto populated after saving the Workflow.
Created Date	Shows the date on which the workflow Rule was created. This field is auto populated after saving the Workflow.
Last Modified By	Shows the user's name who last modified the workflow Rule.This field is auto populated.
Last Modified Date	Shows the date on which the workflow Rule was last modified. This field is auto populated.

7. Click **Save** button. A confirmation message is displayed: *Add Operation Successful*.
8. Click **OK**. The Workflow Rule is saved.

Editing Workflow Rule

This option allows you to edit or update an existing Workflow Rule.

To edit a Workflow Rule, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Click a Workflow ID. The Workflow Details page is displayed.
4. Click **Workflow Rules.**
5. Select a Rule. The Workflow Rule Details page is displayed.

6. Click **Edit**. Following editable fields are enabled to update: Workflow Function, Name, Description, Type, Status, Rule Logic, Comments, and Notes.
7. Modify the necessary information. For more information about the Workflow Rule Details page, refer *Table 2* .
8. Click **Update**. The following confirmation message is displayed: *Update Operation Successful*.
9. Click **OK** to confirm the update.

Deleting Workflow Rule

You can delete an existing Workflow Rule, which is not required to map to any Stage details, Notification, or Tasks. If the Workflow rule is mapped to any stage details, notification, tasks and you try to delete that workflow rule, then an error message is displayed.

To delete a Workflow Rule, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Select a Workflow ID. The Workflow Details page is displayed.
4. Click **Workflow Rules.**
5. Select a Workflow Rule for which **Stages Associated** field is set as “0” (that shows, the rule is mapped with any stage details, Notification, or Task). You cannot delete Workflow rule, if the **Stage Associated** field of it is set to any other value.
6. Click **Delete Workflow Rule**. The following message is displayed: *Are sure you want to delete this record?*
7. Click **OK**. The following message is displayed: *Delete Operation Successful*.

Searching Workflow Rules

This section explains you how to search and filter the existing Workflow Rules. The Workflow Rule Search and List page allows you to filter the Workflow Rules that you want to view and analyze.

The Workflow Rule search section supports two types of search that is Search by Views, and Search and you can use only one search at a time.

This section explains the following topics:

- Searching Workflow Rules Using Basic Search
- Searching Workflow Rules Using Pre-defined Views

Searching Workflow Rules Using Basic Search

This search is based on limited set of search criteria and helps you to retrieve the relevant Workflow Rules.

To search for a Workflow Rule using the basic search, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select a Workflow ID in *Draft* Status. The Workflow Details page is displayed.
3. Click **Workflow Rules**

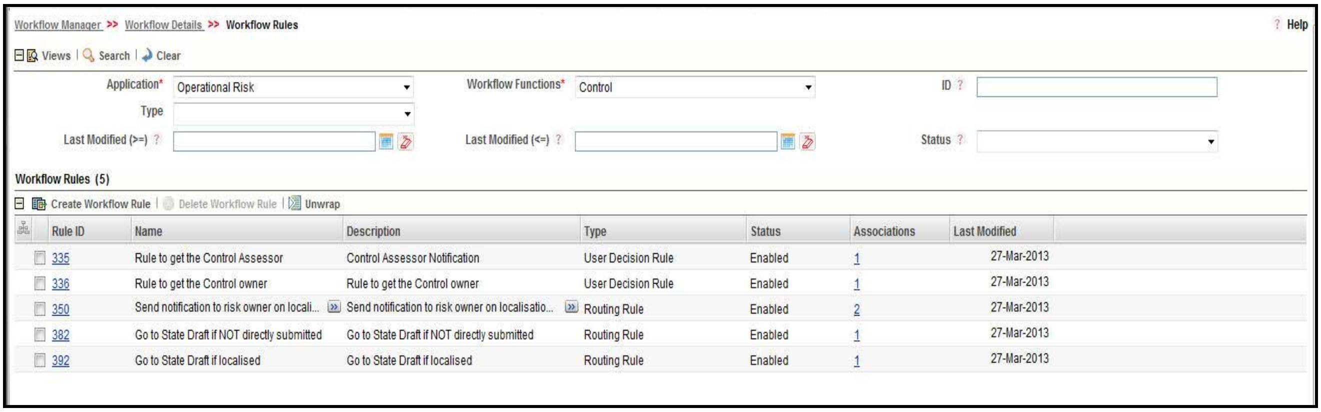

Figure 13. Searching Workflow Rule Using Basic Search

Note: By default, the Workflow Rule Search and List page displays all the Workflow Rules for selected Application and Workflow Function.

4. Enter the following search criteria in the basic search fields to filter the Workflow Rule list.

Table 5. Basic Workflow Rule Search Criteria

Criteria	**Description**
Application	Select the application for which Workflow Manager is installed.
Workflow Function	Select the function of an application. It is enabled after selecting the Application name in Application field.
ID	Enter the sequential tracking number of the Workflow. This field allows you to enter a maximum of 8 numeric values.
Type	Select the category to which the Workflow Rule belongs, from the drop-down list. Following are the possible values for Workflow Rule Type drop-down list: ● Routing Rule ● User Decision Rule ● User Allocation Rule ● Role Allocation Rules
Last Modified From	Select the last modified date from the calendar to display Workflow Rules having modified date greater than or equal to the specified date. **Validations:** If the date entered in **Last Modified From** is later than the date entered in **Last Modified To** the application displays the following message: *Please verify the range selected in Last Modified Date.*

Table 5. Basic Workflow Rule Search Criteria

Criteria	Description
Last Modified To	Select the last modified date from the calendar to display Workflow Rules having modified date less than or equal to the specified date. **Validations:** If the date entered in **Last Modified From** is later than the date entered in **Last Modified To**, the application displays the following message: *Please verify the range selected in Last Modified Date.*
Status	Select the Workflow Rule status from the drop-down Following are the possible values for Status drop-down list: ● Enable ● Disable

5. Click **Go**. The relevant search list is displayed.

   Note: You can click **Clear** to reset the search fields to blank.

   Warning: If there are no matched details with the given search criteria then the Alert pop-up window displays following message: *No records found with the given search criteria*.

Searching Workflow Rules Using Pre-defined Views

Views search represents pre-populated search criteria and helps you to filter the Workflows Rule based on the pre-defined views.

To search for a Workflow Rule using pre-defined views, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the Application and Workflow Function Name.
3. Select a Workflow ID in *Draft* Status. The Workflow Details page is displayed.
4. Click **Workflow Rules**.
5. Click **Views**. The Views drop-down list is displayed

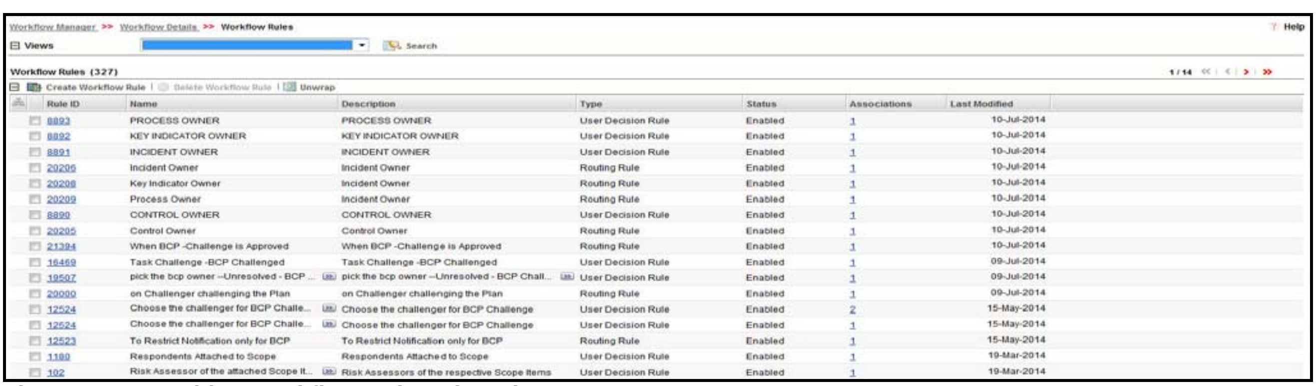

Figure 14. Searching Workflow Rule Using Views

6. Select any of the pre-defined views from the Views drop-down list. The relevant Workflow Rule list page is displayed.

The following table explains the different types of pre-defined views available.

Table 6. Workflow Views

View Type	Description
Active Allocation Rules	Select *Active Allocation Rules* from the Views drop-down list to display the Allocation Workflow Rules which are in enabled status in descending order of the last modified date.
Active Routing Rules	Select *Active Routing Rules* from the Views drop-down list to display the Routing Workflow Rules which are in enabled status in descending order of the last modified date.

Managing Workflow Stage Details

This section allows you to manage the Workflow Stage details. You can define the followings Stages of Workflow, that is how and when Workflow is moved from one stage to another with Notifications and Tasks.

This section allows you to perform following tasks:

- Creating Workflow Stage
- Adding Routing Rules
- Adding Notification
- Adding Tasks
- Mapping of User Roles
- Mapping of Users
- Mapping of User Allocation Rule
- Mapping of Role Allocation Rule
- Mapping of User Decision Rule

Creating Workflow Stage

You can create a new Workflow Stage using the Create Workflow Stage option, when a Workflow is in *Draft, Active,* or *Inactive* status.

To create a Workflow Stage, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Select a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Select the Workflow Stage Details section.
5. Click **Create Workflow Stage.**

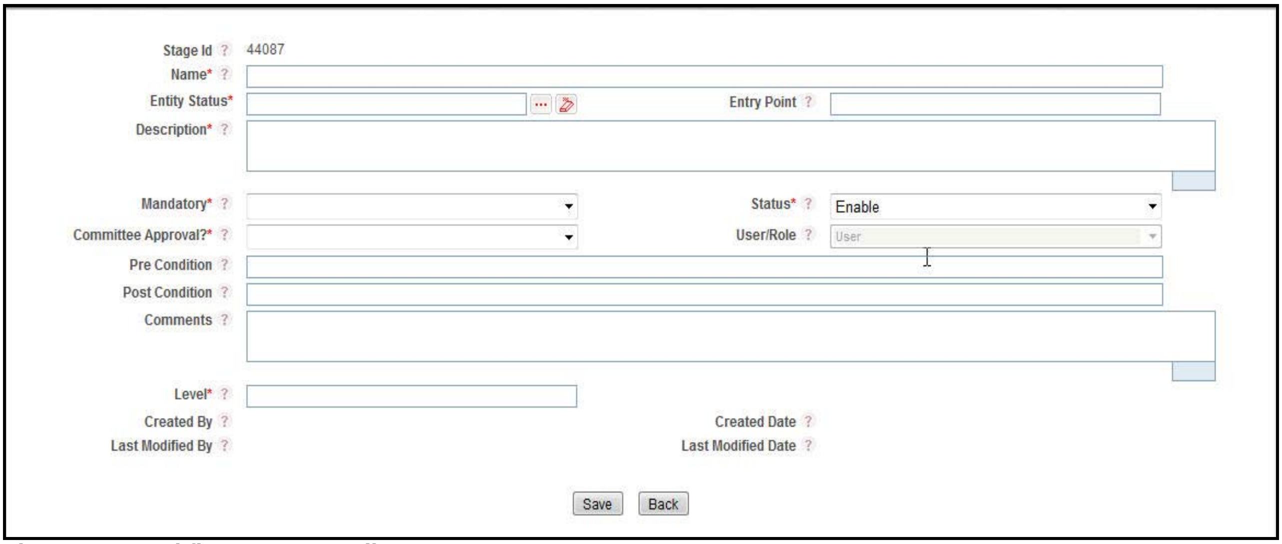

Figure 15. Workflow Stage Details Page

6. Enter the following information in the Workflow Stage Details page.

Table 7. Components of the Workflow Stage Details Page

Field	Description
Application	This field is auto-populated and shows the selected Application name. You cannot edit this field.
Workflow Function	This field is auto-populated and shows the selected Workflow Function name. You cannot edit this field.
Stage ID	This is an auto populated sequential tracking number assigned to Workflow Stages. This field is not editable.
Name	Enter the name of the Workflow Stage. This field allows you to enter a maximum of 300 characters. **Note:** If you try to save the Workflow Stage details without entering the Workflow Stage name the application displays the following message: *Please enter the Workflow Stage name.*
Entity Status	Enter the Entity Status in which the workflow stage is applicable, from hierarchy browser. For example, in case of Incident module, the Entity Status can be New, Closed, Approved, and so on.
Entry Point	Enter the Entry path for the Workflow, that is you can select a path at which the Workflow enters. This field is numeric and the values are set in individual Stages.
Description	Enter a brief description of the Workflow. The description field in the Workflow Details page allows you to enter a maximum of 3000 characters. As you begin entering the comments, the word count displayed below the Description text box keeps decreasing. If you try to enter more than 3000 characters in this field, the following error message is displayed: *Number of characters exceeded*.
Mandatory	Select this field as yes if the stage is to be made mandatory. If You have selected this option as Yes, then workflow cannot skip the stage.

Table 7. Components of the Workflow Stage Details Page

Field	Description
Status	Enter the Status of the Workflow Stage as Enable or Disable.
Committee Approval	Select this option as yes or No. If you select this option as yes then a committee approval is required to move to next stage, that is Workflow does not proceed until all the users of task have worked on it.
User/Role	If this is selected as user, then all the tasks for which the user is the assigned user is completed on completion of any one related task in stage. If this is selected as Role, then all the tasks with roles similar to the logged in user is completed on completion of any one related task in stage.
Pre Condition	Enter the name of procedural condition which should be satisfied, before reaching this stage.
Post Condition	Enter the name of procedural condition which is to be checked, to reach the next stage.
Level	Enter the Level to which the Workflow Stage belongs. This field accepts only numeric values.
Comments	Enter remarks if applicable. **Note:** If you try to enter more than 3000 characters in the Comment field, the application displays the following message: *Number of characters exceeded*.
Created By	Shows the user’s name who created the Workflow Stage. This field is auto populated after saving the Workflow.
Created Date	Show the date on which the Workflow Stage was created. This field is auto populated after saving the Workflow.
Last Modified By	Shows the user’s name who last modified the Workflow Stage.This field is auto populated.
Last Modified Date	Shows the date on which the Workflow Stage was last modified. This field is auto populated.

7. Click **Save** button. The Workflow Stage is saved and is displayed under *Workflow Stages* section.

Adding Routing Rules

Routing rules are the criteria to determine how a workflow moves between stages. This is performed with the help of adding routing rules which have the logic defined for moving the next stage.

To map a routing rule to a Workflow Stage from the Workflow Details window, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Click a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Select the **Workflow Stage Details** tab.
5. Select the Workflow **Stage ID**, to which you want to map a routing rule.
6. Click **Map Rules** button in the *Routing Rules* grid.
7. The *Workflow Rule Details* window is displayed.

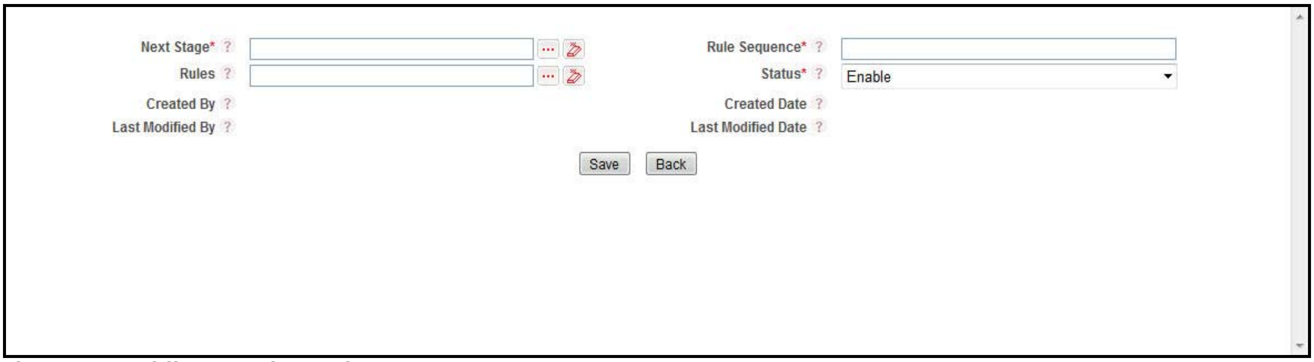

Figure 16. Adding Routing Rules

Enter the following details in the Routing Rules page:

Table 8. Adding Routing Rules

Field	Description
Next Stage	Select the Next Stage to where Workflow should move from the current selected stage, from Hierarchy Browser.
Rule Sequence	Enter the rule execution sequence number. This is the order/sequence in which the Rule has to be executed in comparison with the other rules available.
Rules	Select the Routing Rule from Hierarchy Browser. For example, for Incident Module, **Approval** is a Rule.
Status	Select **Enable** if the rule is to be enabled on the Workflow Stage and **Disable** otherwise. By default, it is set to **Enable**.
Created By	This field is auto populated with the name of the user, who created this rule.
Created Date	This field is auto populated with the date on which the rule is created.
Last Modified By	This field is auto populated with the name of the user, who modified the rule.
Last Modified Date	This field is auto populated with the date on which the rule is last modified.

8. Click **Save** button.
   The rule is mapped to the Stage and is displayed under *Routing Rules* section.
   You can click the **Rule ID** to view and edit the rule definition details.

   You can also select the check box adjacent to a Rule ID and perform the following:

- Click **Enable Rule** button from the *Routing Rules* grid to enable the selected rule.
  This button is enabled only if you have selected a disabled rule.
- Click **Disable Rule** button from the *Routing Rules* grid to disable the selected rule.
  This button is enabled only if you have selected an enabled rule.

Adding Notification

You can create notifications to be generated, during the entry to a Stage, in the Stage, or during exit from a Stage.

- **on Exit** option:

  For example, in case of Incident module, the Incident Owner receives a Notification after approval of the Incident.

- **on Entry** option:

  For example, in case of Incident module, the Incident Approver receives a Notification to approve the Incident.

- **on Stage** option:

  For example, in case of Incident module, the Obligation Owner receives a Notification, that the Obligation is linked with the Incident.

To add a notifications from the *Workflow Details* window, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Select a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Click Workflow Stage Details tab
5. Select the Workflow Stage.
6. Click **Notifications**.The *Notifications* grid is displayed.
7. Click **Create Notification** button. The *Workflow Notifications Details* page is displayed with the details such as Application Name, Workflow Function Name, and Stage Name.

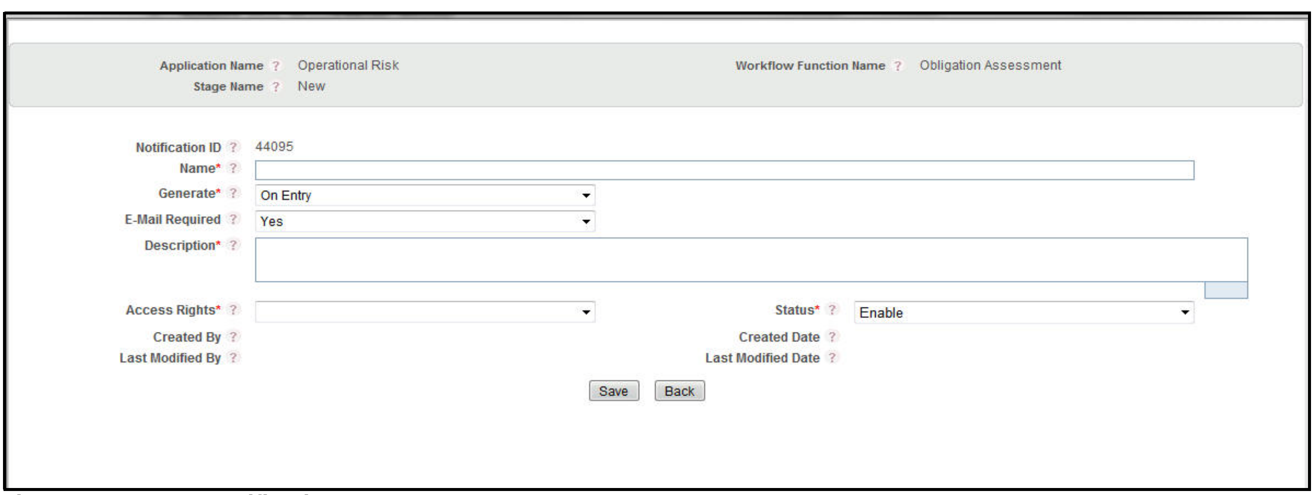

Figure 17. Create Notification Page

Enter the following details in the Notification page.

Table 9. Creating Notification

Field	Description
Notification ID	This is an auto populated sequential tracking number assigned to the Notifications. This field is not editable.
Name	Enter the name of the notification. This field is alphanumeric and the maximum allowed characters are 300.
Generate	Select from the drop down list, when to display the notification. The available values are: ● **On Entry:** If this option is selected, then notification is generated on the entry of Stage of Workflow. For example, in case of Incident module, the Incident Owner receives a notification about the Pending Owner status. ● **On Exit:** If this option is selected, then notification is generated on the exit of Stage of Workflow. For example, in case of Incident module, the Incident Owner receives a notification about the Approved status. ● **On Stage:** If this option is selected, then notification is generated during the Stage of Workflow. For example, in case of Incident module, the Incident Owner receives a notification about the Pending Approval status.
Description	Enter the description for the notification. This field is alphanumeric and the maximum allowed characters are 3000.
Access Rights	Select the access rights from the drop down list. The available values are: ● **Single:** In Single, you can add only one role. Users of a specific role (for example, in case of Incident module, it can be Approvers and so on) can be selected and rules can be mapped for those users. ● **Multi:** In Multi, multiple roles can be added and branching of users can be done. Rules can be added from the repository to choose which role should be given for notification access based on defined conditions. ● **User Defined:** In User Defined, the behavior is as defined from the front-end. ● **Default Access:** Default Access overrides all conditions of that Workflow and provides Stage access to the selected role and users. For example, in case of Incident module, the Incident moves to the default user irrespective of user.
Status	Select the status of the notification as **Enable** or **Disable.** If the status of Notification is set as Enable, then only the Notification is generated.
Created By	This field is auto populated with the name of the user, who created this notification.
Created Date	This field is auto populated with the date on which the notification is created.
Last Modified By	This field is auto populated with the name of the user, who last modified the notification.
Last Modified Date	This field is auto populated with the date on which the notification is last modified.

8. Click **Save** button. The notification is saved. After saving a Notification, you can perform the following functions based on the access right selected:
   - **Mapping of User Role:** This option allows you to map a notification with a User Role. For more information on Mapping of User Role, refer to *Mapping of User Roles* section.
   - **Mapping of Users:** This option allows you to map a user to the notification. For more information on Mapping of Users, refer to *Mapping of Users* section.

- **Mapping of Role Allocation Rule:** This option allows you to map a Rule to a Role. For more information on Mapping of Role User Allocation Rule, refer to *Mapping of Role Allocation Rule* section.
- **Mapping of User Allocation Rule:** This option allows you to map a Rule to a User. For more information on User Allocation Rule, refer to *Mapping of User Allocation Rule* section.
- **Mapping of User Decision Rule:** This options allows you to map a decision Rule to a Role. For more information on Mapping of User Decision Rule, refer to *Mapping of User Decision Rule* section.

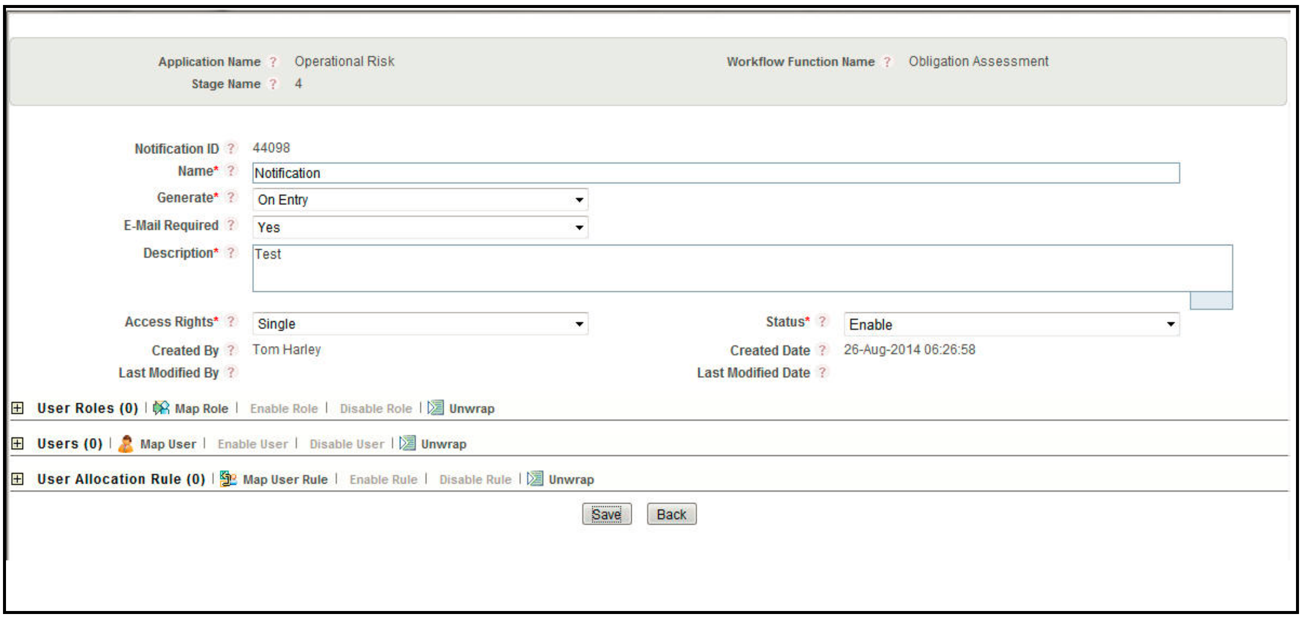

Figure 18. Create Notification Page

9. Click **Back** to navigate the Workflow Stage Details page. Here, you can perform following functions in the Notification grid:
   - **Enable Notification:** If the Notification is set to enable, then only the Notification will be generated. Click **Enable Notification** button from the *Notifications* grid to enable the selected notification. Only Disabled Notification can be Enabled. After clicking on **Enable Notification**, a message is displayed: *Update Operation Successful*. Click **OK**.
   - **Disable Notification:** Click **Disable Notification** from the *Notifications* grid to disable the selected notification. Only Enabled Notification can be Disabled. After clicking on **Disable Notification**, a message is displayed: *Update Operation Successful*. Click **OK.**
   - **Mapping of Rule to Notification:** Click **Map Rule** from the *Notification Rules* grid to map and link a Notification to a rule. For more information, refer to *Mapping of Notification to Rule* section.
   - **Enable Rule:** Click **Enable Rule** from the *Notification Rules* grid to enable the selected rule.Only Disabled Rule can be Enabled. After clicking on **Enable Rule**, a message is displayed: *Update Operation Successful*. Click **OK**. You can enable only one Active Rule at a time.**Disable Rule:** Click **Disable Rule** button from the *Notification Rules* grid to enable the selected rule. Only Enabled Rule can be Disabled. After clicking on **Disable Rule**, a message is displayed: *Update Operation Successful*. Click **OK**.
   - **View Language:** This option allows you to change the langauge of the Notification as per locale. Select a language under the *Language Manager* grid to select and save a language in which the notification has to be displayed. You can modify the Notification name if required as per locale. This grid is active only after selecting a Notification ID from Notification grid. By default, the language is set to english. You can edit the same to other languages if the langauge pack is available.

Mapping of Rule to Notification

After adding a Notification, you can map an existing workflow rule to notification. You can map a Rule to Notification when the Workflow is in Draft, Active, or Inactive status.

To map a notification to a rule, follow the steps given below:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Select a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Click the **Workflow Stage Details** tab.
5. Select the defined Workflow Stage ID.
6. Select the Notification to which you want to map the rule. For more information on adding a Notification, refer to *Adding Notification* section.

   Note: You should select a Notification from Notification grid before mapping a rule, else following message is displayed: *Please select a Notification rules.* At least one rule should be mapped to the notification with enable status. If you want to map any another rule to that notification, then first you will have to disable the existing rule.
7. Click **Map Rule** button from the *Notification Rules* grid. The *Map Rule* window is displayed.
8. In Map Rule window, select the Rule and click **Link**. You can map only one active rule to a notification. For more information on Workflow Rule, refer to Managing Workflow Rules section.

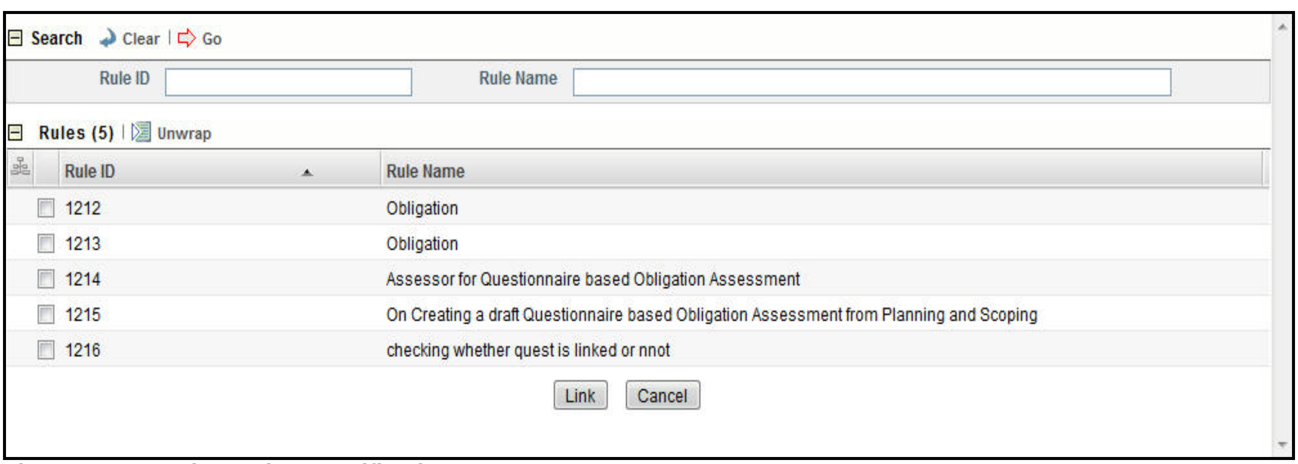

Figure 19. Mapping Rule to Notification

Adding Tasks

You can pre-define tasks to be executed during the entry to a Stage, in the Stage, or during exit from a Stage.

- **on Exit** option:

  For example, in case of Incident module, the Incident Owner receives a Task with Approval status after approval of the Incident.

- **on Entry** option:

  For example, in case of Incident module, the Incident Approver receives a Task with Pending Approval status to approve the Incident.

- **on Stage** option:

  For example, in case of Incident module, the Obligation Owner receives a Task, that the Obligation is linked with the Incident.

To create a task from the *Workflow Details* window, follow these steps:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Click a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Click the Workflow Stage Details tab.
5. Select the Workflow Stage **ID**.
6. Click **Tasks**. The *Tasks* grid is displayed.
7. Click **Create Task**. The *Workflow Tasks* Details page is displayed with the details such as Application Name, Workflow Function Name, and Stage Name.

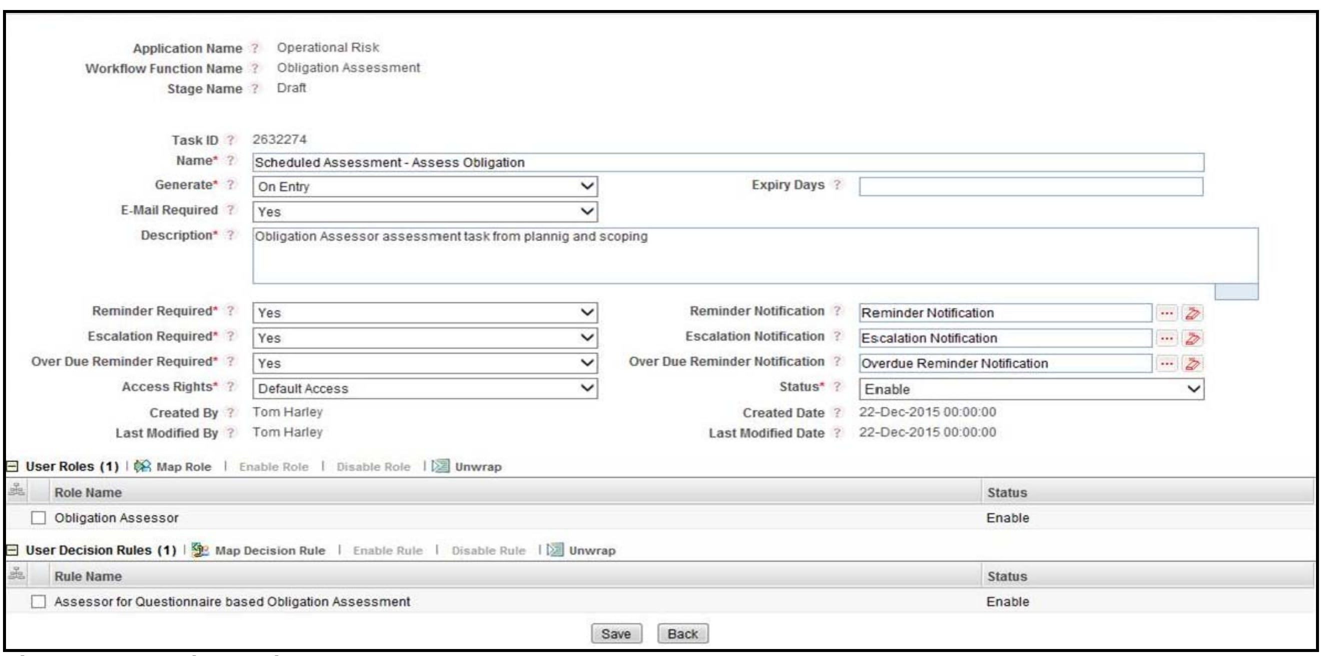

Figure 20. Creating Task Page

The following table describes the fields of the Task page.

Table 10. Creating Tasks

Field	Description
Task ID	This is an auto populated sequential tracking number assigned to tasks. This field is not editable.
Name	Enter the name of the task. This field is alphanumeric and the maximum allowed characters are 300.
Sequence	Enter the sequence in which you want the task to be executed.
Generate	• **On Entry:** If this option is selected, then notification is generated on the entry of Stage of Workflow. • **On Exit:** If this option is selected, then notification is generated on the exit of Stage of Workflow. • **On Stage:** If this option is selected, then notification is generated during the Stage of Workflow.
Description	Enter the description for the task. This field is alphanumeric and the maximum allowed characters are 3000.
Reminder Required	Select **Yes** or **No** from the Reminder Required drop-down list. Based on the selection set for reminder, the reminder is sent to the resective user.
Reminder Notification	If selected **Yes** in the above, the notication is displayed. Select the notification from the hierarchy box accordingly.
Escalation Required	Select **Yes** or **No** from the Escalation Required drop-down list. Based on the selection set for escalation, the escalation is sent to the resective user.
Escalation Notification	If selected **Yes** in the above, the escalation is displayed. Select the escalation from the hierarchy box accordingly.
Over Due Reminder Required	Select **Yes** or **No** from the Over Due Reminder Required drop-down list. Based on the selection set for over due reminder, the over due reminder is sent to the resective user.
Over Due Reminder Notification	If selected **Yes** in the above, the over due reminder is displayed. Select the notification over due reminder from the hierarchy box accordingly.
Access Rights	Select the access rights from the drop down list. The available values are: • **Single:** In Single, you can add only one role. Users of a specific role (for example, in case of Incident module, it can be Approvers and so on) can be selected and rules can be mapped for those users. • **Multi:** In Multi, multiple roles can be added and branching of users can be done. Rules can be added from the repository to choose which role should be given for notification access based on defined conditions. • **User Defined:** In User Defined, the behavior is as defined from the front-end. • **Default Access:** Default Access overrides all conditions of that Workflow and provides Stage access to the selected role and users. For example, in case of Incident module, the Incident moves to the default user irrespective of user.
Status	Select the status of the task from the drop down list as **Enable** or **Disable**. If the status of Task is set as Enable, then only the Task is generated.
Created By	This field is auto populated with the name of the user, who created this task.
Created Date	This field is auto populated with the date on which the task is created.

Table 10. (Continued)Creating Tasks

Field	Description
Last Modified By	This field is auto populated with the name of the user, who modified the task.
Last Modified Date	This field is auto populated with the date on which the task is last modified.

8. Click **Save** button. The task is saved. After saving a Task, you can perform the following functions:
   - **Mapping of User Role:** This option allows you to map a notification with a Role. For more information on Mapping of User Role, refer to *Mapping of User Roles* section.
   - **Mapping of Users:** This option allows you to map a user to the Task. For more information on Mapping of Users, refer to *Mapping of Users* section.
   - **Mapping of Role Allocation Rule:** This option allows you to map a Rule to a Role. For more information on Mapping of Role User Allocation Rule, refer to *Mapping of Role Allocation Rule* section.
   - **Mapping of User Allocation Rule:** This option allows you to map a Rule to a User. For more information on User Allocation Rule, refer to *Mapping of User Allocation Rule* section.
   - **Mapping of User Decision Rule:** This options allows you to map a decision Rule to a Role.

   For more information on Mapping of User Decision Rule, refer to *Mapping of User Decision Rule* section.
9. Click **Back** to navigate the Workflow Stage Details page. Here, you can perform following functions from Task grid:
   - **Enable Task:** Click **Enable Task** button from the *Tasks* grid to enable the selected notification. Only Disabled Task can be Enabled. After clicking on **Enable Task**, a message is displayed: *Update Operation Successful*. Click **OK**.
   - **Disable Task:** Click **Disable Task** button from the *Tasks* grid to disable the selected notification. Only Enabled Task can be Disabled. After clicking on **Disable Task**, a message is displayed: *Update Operation Successful*. Click **OK**.
   - **Mapping of Rule to Task:** Click **Map Rule** button from the *Task Rules* grid to map and link a Task to a rule.
   - **Enable Rule:** Click **Enable Rule** button from the *Task Rules* grid to enable the selected rule. Only Disabled Rule can be Enabled. After clicking on **Enable Rule**, a message is displayed: *Update Operation Successful*. Click **OK**. You can enable only one Active Rule at a time.
   - **Disable Rule:** Click **Disable Rule** button from the *Task Rules* grid to enable the selected rule. Only Enabled Rule can be Disabled. After clicking on **Disable Rule**, a message is displayed: *Update Operation Successful*. Click **OK**.
   - **View Language:** This option allows you to change the langauge of the Task as per locale. Select a language under the *Task Manager* grid to select and save a language in which the notification has to be displayed. You can modify the Notification name if required as per locale. This grid will be active only after selecting a Task ID from Task grid.

Mapping of Rule to Task

After adding a Task, you can map an existing workflow rule to the Task. You can map a Rule to the Task, when the status of Workflow is Draft, Active, or Inactive.

To map a Rule to a Task, follow the steps given below:

1. Navigate to the Workflow Search and List page.
2. Select the **Application Name** and **Workflow Function Name**.
3. Select a Workflow ID from the Workflow Search and List page. The Workflow Details page is displayed.
4. Select the Workflow Stage Details tab.
5. Select the defined Workflow Stage ID.
6. Select the Task to which you want to map the rule. For more information on adding a Task, refer to *Adding Task* section.

   Note: You should select a Task from Task grid before mapping a rule, else following message is displayed: *Please select a Task rules. You should map* at least one rule Task with enable status. If you want to map another rule to the Task, then disable the existing rule.
7. Click **Map Rule** button from the *Task Rules* grid. The *Map Rule* window is displayed.
8. In Map Rule window, select the Rule and click **Link**. You can map only one active rule to a Task.For more information on Workflow Rule, refer to *Managing Workflow Rules* section

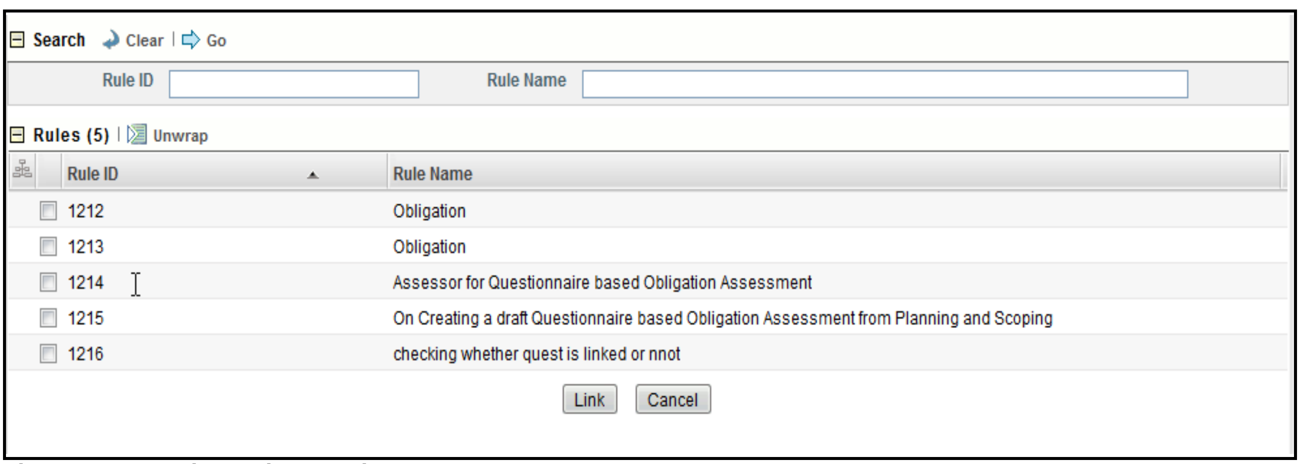

Figure 21. Mapping Rule to Task

Mapping of User Roles

You can map a Role to a Notification or a Task.

For example:

For Incident module, if you want an Incident Owner to receive a notification after approval of Incident by Incident Approver, then you can map the Incident Owner (Role) to the particular Notification. Here, the status of the Notification should be Enabled, and the Notification should be mapped to a Rule.

This option is available when you select the **Access Right** as Single, Multi, or Default Access on **Create Notification** or **Create Task** page.

To map a Role to Notification or a Task, follow the steps given below:

1. Access the Notification Details page or Task Details page, to which you want to map the Role.
   For more information on Adding Notification, refer to Adding Notification section. For more information on *Adding Tasks* section.

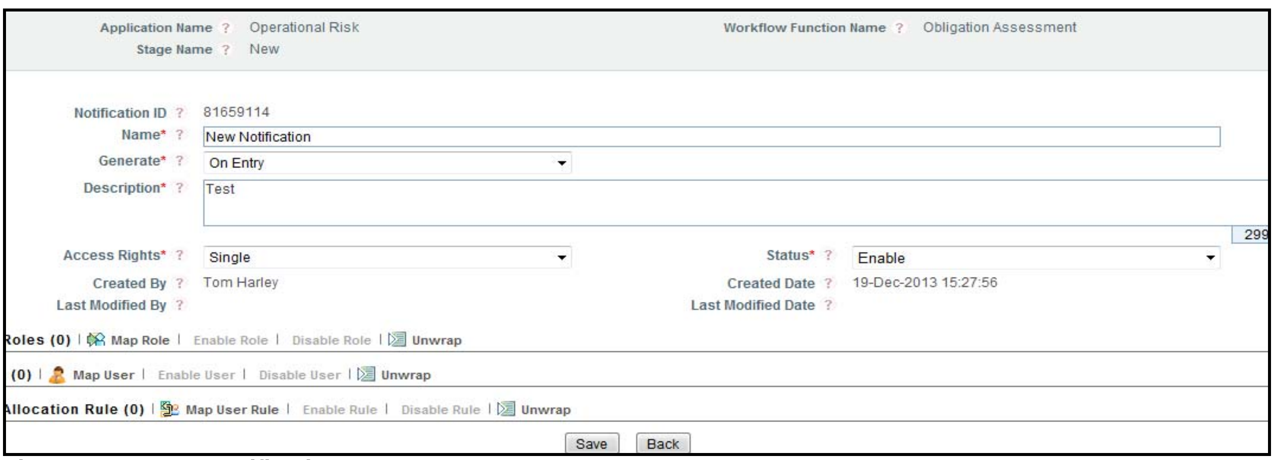

Figure 22. Create Notification Page

2. Click **Map Role** in User Roles grid. The list of User Roles is displayed. This list shows only those roles which are mapped to the Business Line and Location selected for a workflow. If the Workflow is set to default, then all roles is displayeded in this list.

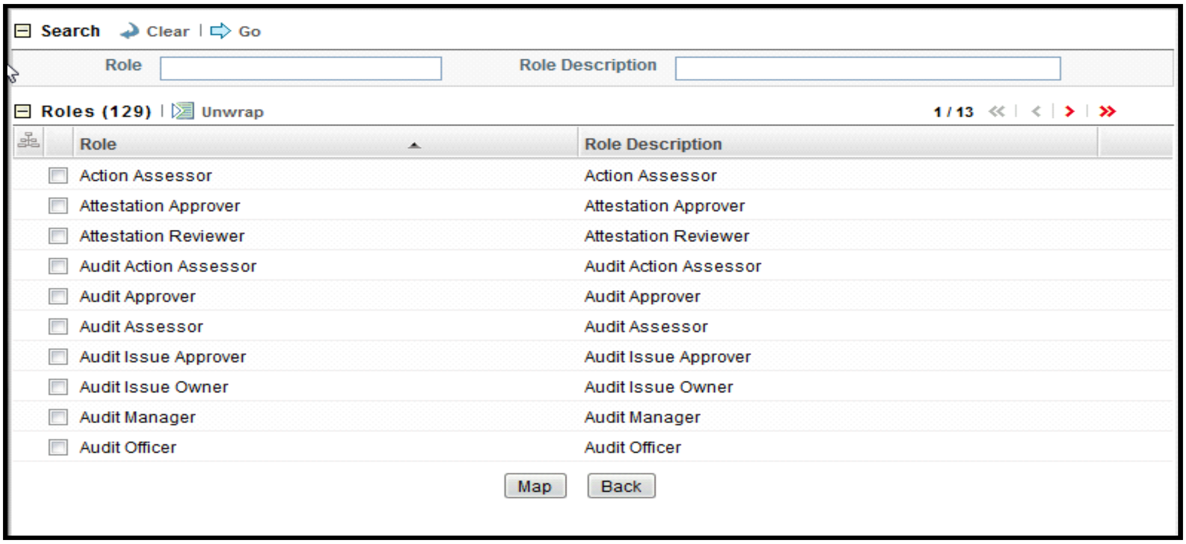

Figure 23. List of User Roles

3. Select a Role and click **Map**. A Confirmation message is displayed.

Mapping of Role Allocation Rule

This option allows you to add a new Role Allocation Rule. You can map a Role with a Rule.

For example:
For Incident module, if you have defined a rule for approval, then you can map this rule to Incident Approval role. In this case, the Incident Owner receives a notification, when the Approval condition is satisfied by the Incident Approver.

This option is available when you select the **Access Right** as Multi on **Create Notification** or **Create Task** page.

To add a User Allocation Rule, follow the steps given below:

1. Access the Notification Details page or Task Details page, to which you want to map the Role.
   For more information on Adding Notification, refer to Adding Notification section. For more information on Adding Task, refer to *Adding Tasks* section.

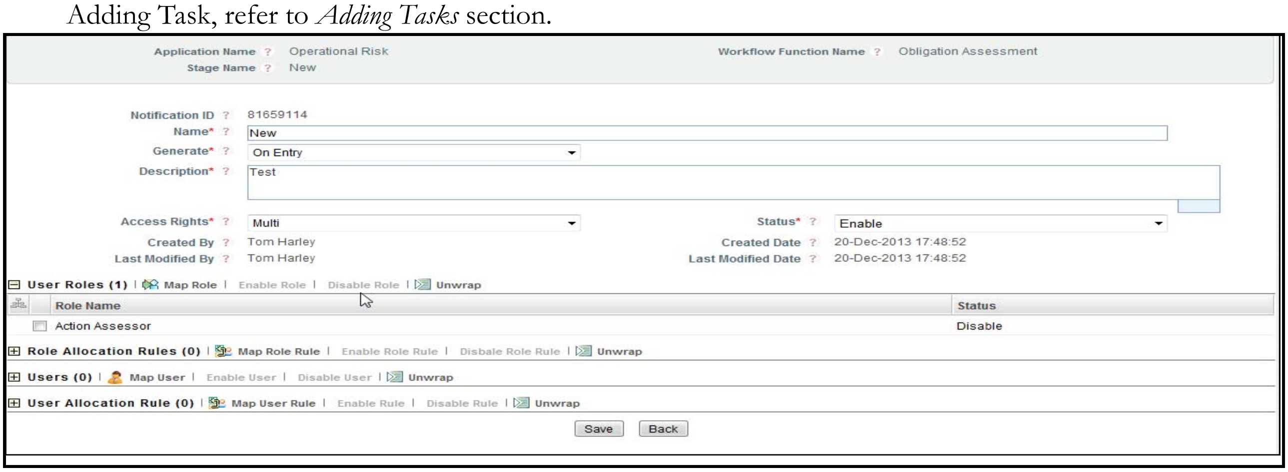

Figure 24. Create Notification Page

2. Select a **User Role**. If a User Role is not selected, then following message is displayed: *Please select a Role to Map Rule*.
3. Click **Map Role Rule**. The list of Role Allocation Rules is displayed. This list shows all the rules which are role allocation rules

.

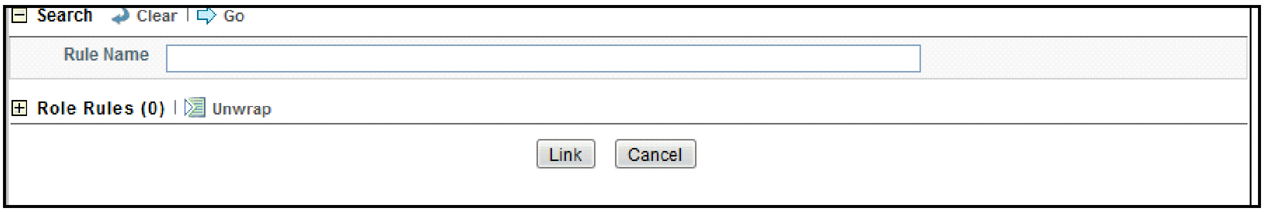

Figure 25. List of Role Rules

4. Select the Role Rule and click **Link**. A Confirmation message is displayed and you are directed back to **Create Notification** or **Create Task** page.
   After selecting a User Role and User, the corresponding linked User Rule is displayed in *User Allocation Rule* grid.

Mapping of Users

This option allows you to map a new user for a Role in a Notification or a Task.

For example,
For Incident module, Incident Approver is a Role and Tom is a User. You can assign the Incident Approver Role to Tom. In this case, Tom receives the Notification for Incident Approval, since Tom is mapped to Incident Approver Role.
This option is available when you select the **Access Right** as Single or Multi on **Create Notification** or **Create Task** page.

To add a user in Notification or a Task, follow these steps:

1. Access the Notification Details page or Task Details page, to which you want to map the Role.
   For more information on Adding Notification, refer to *Adding Notification* section. For more information on Adding Task.

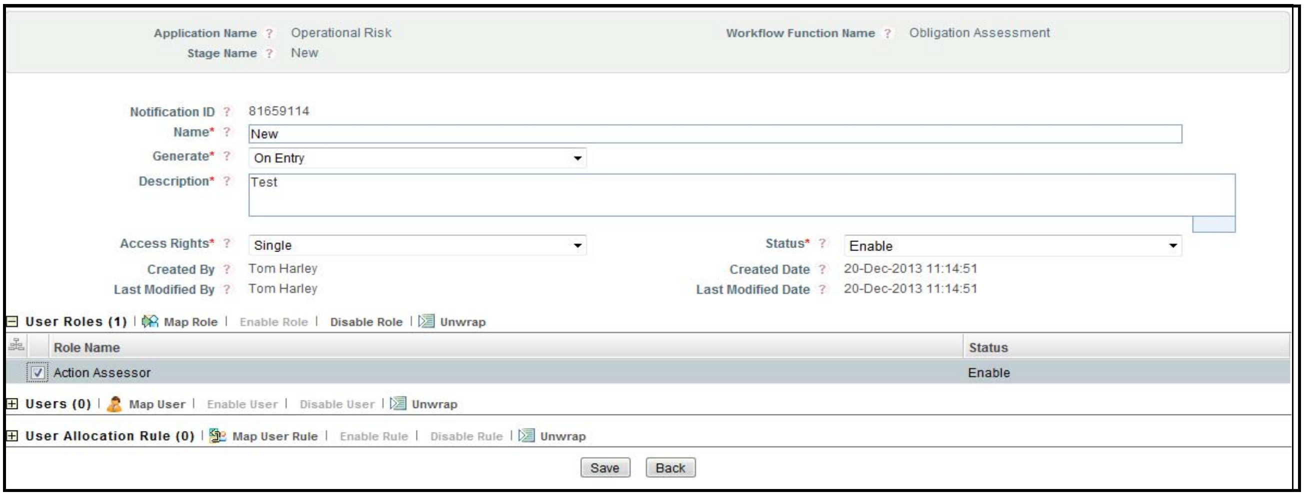

Figure 26. Create Notification Page

2. Select a **User Role** in **User Roles** grid. If a User Role is not selected, then following message is displayed: *Please select a Role to Map Rule.*
3. Click **Map User in Users grid**. The list of users are displayed. This list shows all the users which are mapped to the selected Role.

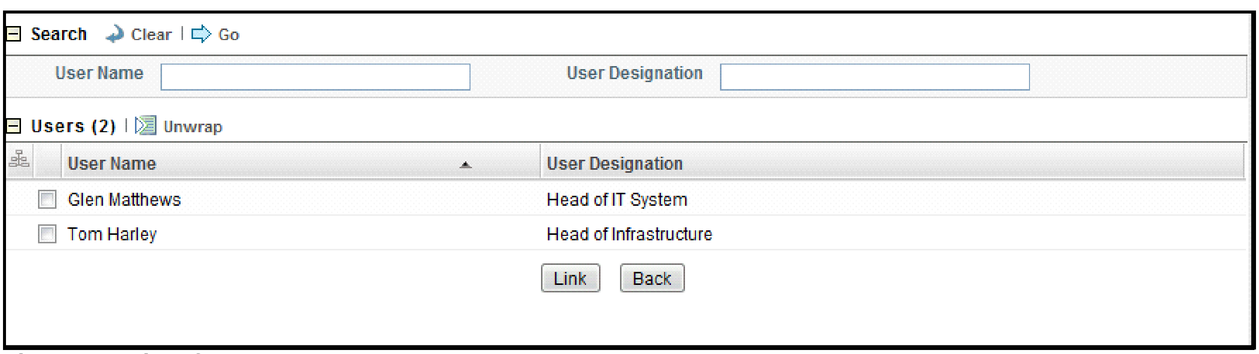

Figure 27. List of Users

4. Select a User and click **Link**. A Confirmation message is displayed and you are directed back to previous window.

After selecting a Role, the corresponding linked User name is displayed in *Users* grid.

Mapping of User Allocation Rule

This option allows you to add a new rule to the user. That is, the user receive the Notification or Task only when the condition defined in the Rule is satisfied.

For example:
For Incident module, the Incident Owner receives the notification after approval of Incident by Incident Owner. In this case, you can create a rule where it picks up the user who satisfies the Approval condition.

This option is available when you select the **Access Right** as Single, or Multi on **Create Notification** or **Create Task** page.

Note: Only one active user allocation rule can be mapped to a user.

To add a User Allocation Rule, follow the steps given below:

1. Access the Notification Details page or Task Details page, to which you want to map the Role.
   For more information on Adding Notification, refer to *Adding Notification* section.

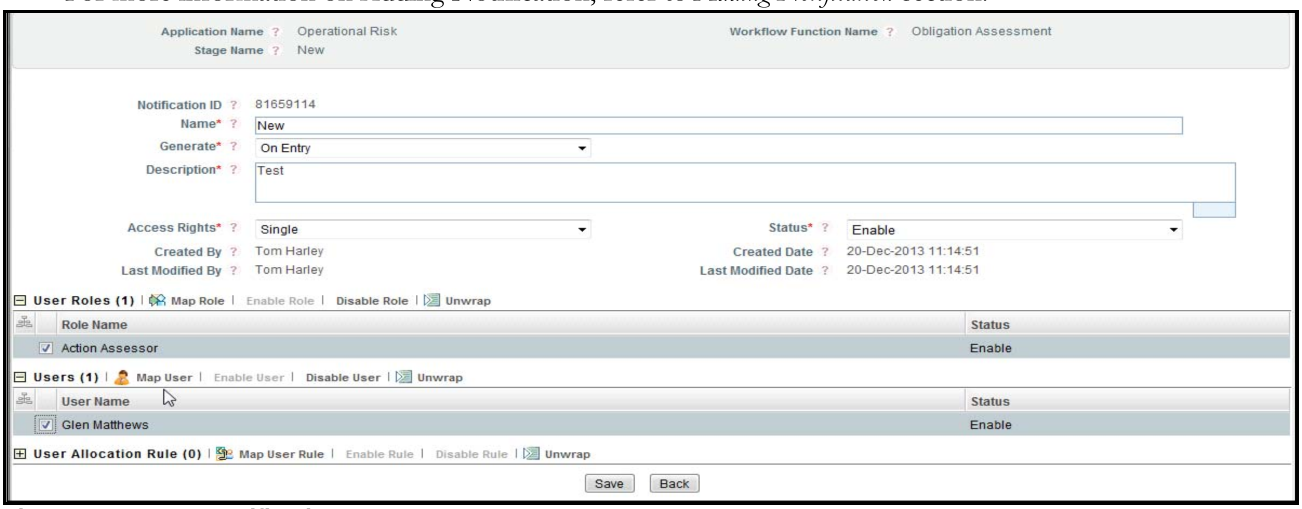

Figure 28. Create Notification Page

2. Select a **User Role**. If a User Role is not selected, then following message is displayed: *Please select a Role to Map Rule.*
3. Select the corresponding **User**. If a User is not selected, then following message is displayed: *Please select a User.*
4. Click **Map User Rule**.

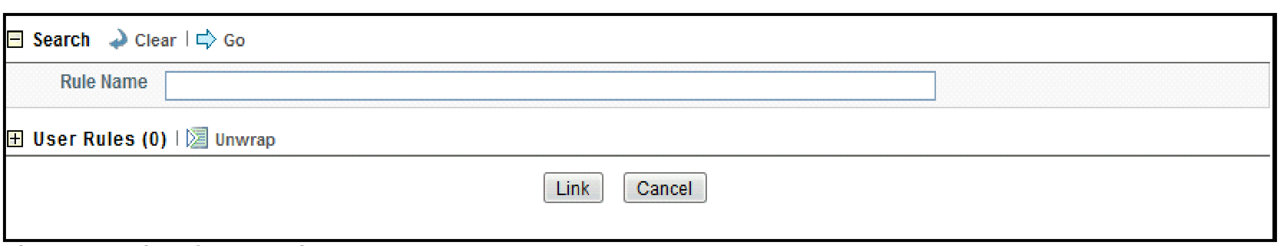

Figure 29. List of User Rules

5. Select the User Rule and click **Link**. A Confirmation message is displayed and you are directed back to **previous window.**

After selecting a User Role and User, the corresponding linked User Rule is displayed in *User Allocation Rule* grid.

Mapping of User Decision Rule

This option allows you to add a new User Decision Rule. You can map a User with a decision Rule.

For example:
For incident, if you want to send the incident to a particular Incident Owner who has created that Incident. In this case, you can create a Rule where it picks up that particular Incident Owner and mapped it to notification or task. This option is available only if you have selected **Default User** option from **Access Rights** drop-down list in **Create Notification** or **Create Task** window.

To add a User Decision Rule, follow the steps given below:

1. Access the Notification Details page or Task Details page, to which you want to map the Role.
   For more information on Adding Notification, refer to *Adding Notification* section.

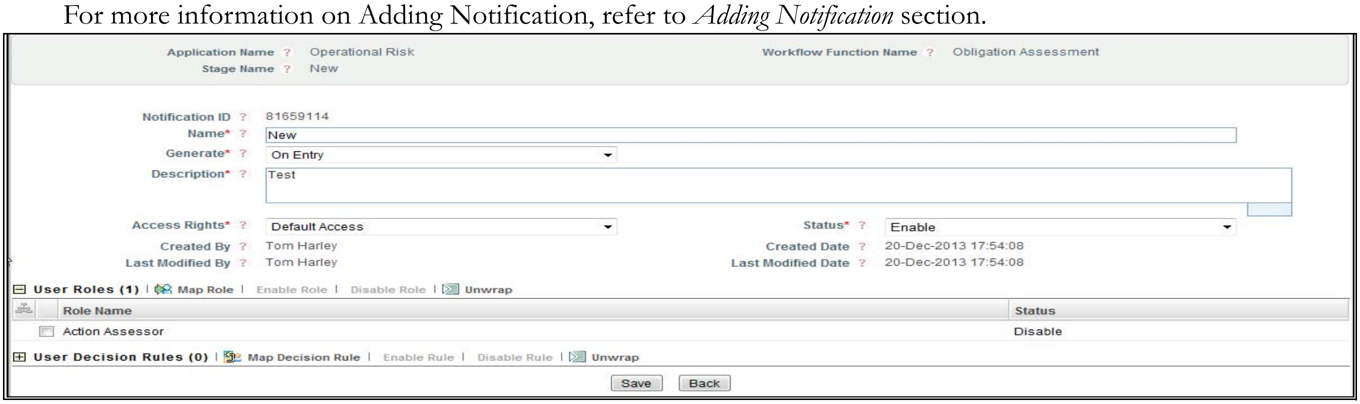

Figure 30. Create Notification Page

2. Click **Map Decision Rule**. The list of user decision rules is displayed.

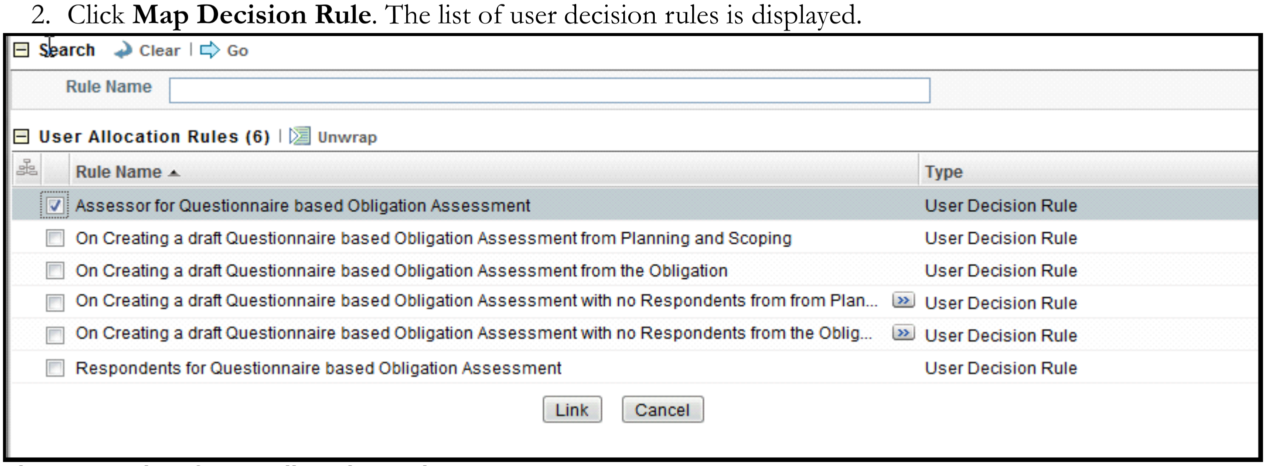

Figure 31. List of User Allocation Rules

3. Select the User Allocation Rule and click **Link**. A Confirmation message is displayed and you are directed back to **Create Notification** or **Create Task** page.

Viewing Workflow Process

The View Workflow option allows you to view the process flow of Workflow in graphical format.

To view the Workflow, follow the steps given below:

1. Navigate to Workflow Search and List page.
2. Select a Workflow ID in *Draft, Active, Inactive,* or *Deactive* status.
3. Click **View Workflow**.

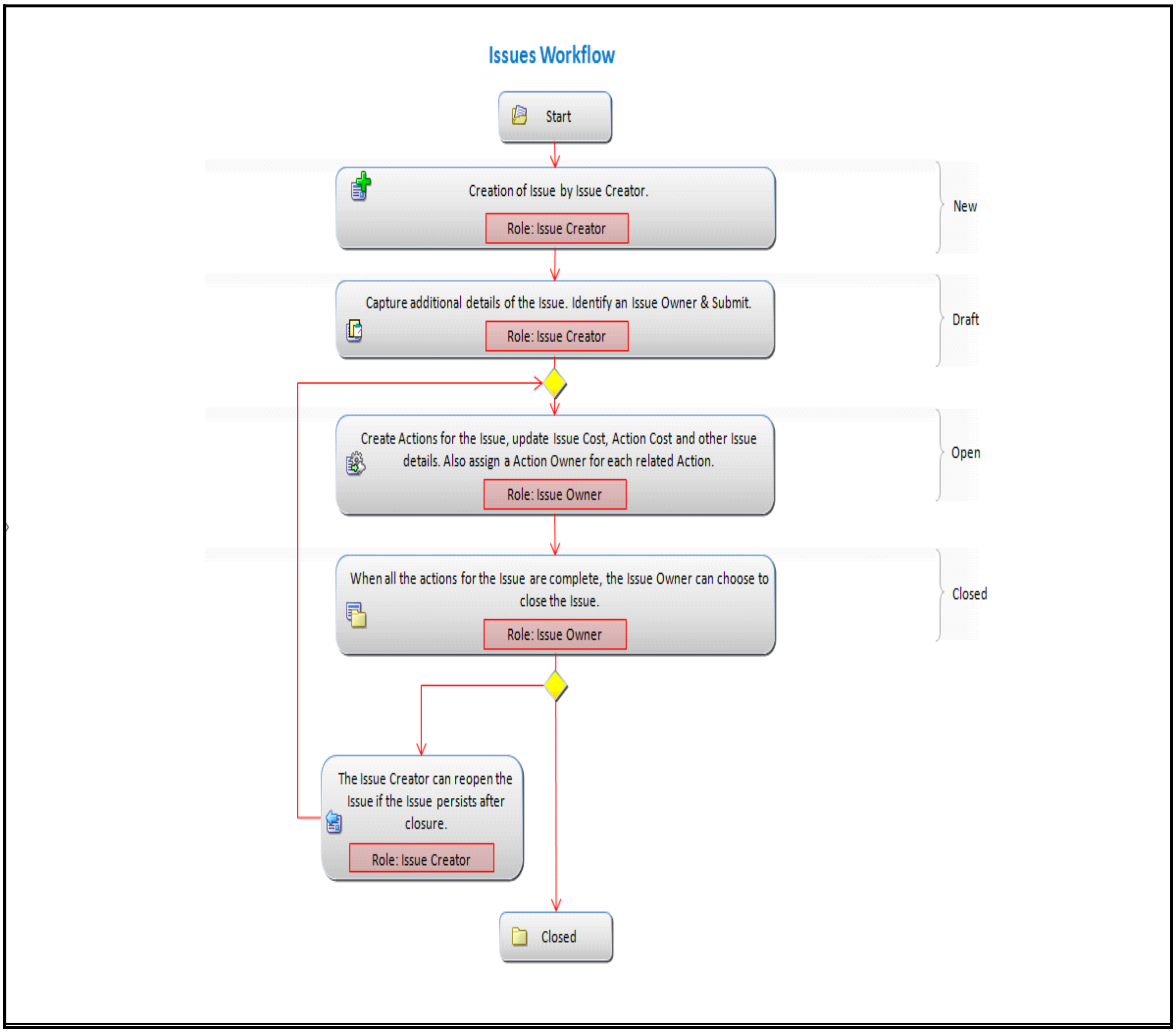

Figure 32. Viewing Workflow

Activating a Workflow

The Workflow is automatically active from Inactive status to Active through a batch run. It will be active from the date that is defined in **Effective Date** field during the Workflow Creation. While activating a draft status workflow, if the effective date matches to current date, the workflow directly moves into Active status.

Note: On a particular workflow being activated all other workflows existing for the same business line and location moves into *Deactive* status.

Deactivating a Workflow

This option allows you to deactive the Workflow. Before Deactivating a workflow, make sure that at least one active workflow should be there for Application.
To deactivate a Workflow, follow the steps given below:

1. Navigate to Workflow Search and List page.
2. Select a Workflow ID, which you want to deactive.

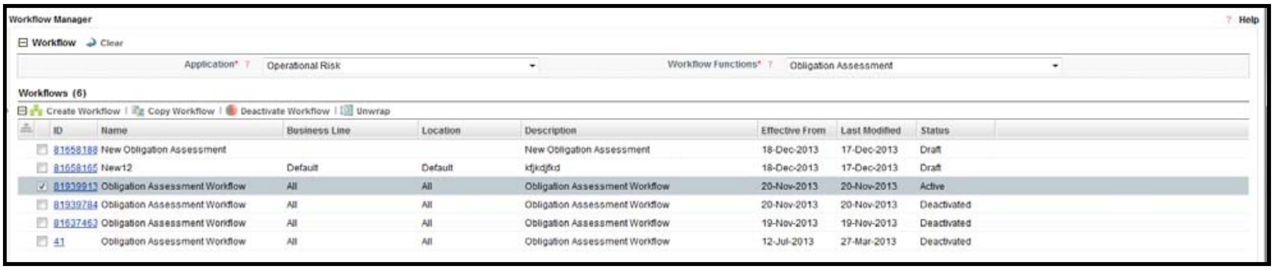

Figure 33. Deactivating Workflow

3. Click **Deactivate Workflow**.

Note: You can deactive the Workflow, which is in active state.

Searching Workflow

This section explains you how to search and filter the existing Workflow. The Search and List page allows you to filter the Workflow that you want to view and analyze.

To search Workflow, follow these steps:

1. Navigate to the Workflow Search and List page.

Figure 34. Searching Workflow

2. Enter the following details in the Search fields to filter the Workflow list.

   The following table provides a list of the search criteria that display in the Workflow Search section:

Table 11. Search Criteria

Criteria	Description
Application	Select the application for which Workflow Manager is installed.
Workflow Functions	Select the function of an application for which Workflows are to be defined. It is enabled after selecting the Application name in Application field. • If you select Application name as Operational Risk application, then following values are applicable for Workflow Function field: ■ Change Management ■ Process ■ KI Assessment ■ Key Indicators ■ KI Library ■ Planning and Scoping ■ Issues ■ Actions ■ Scenario ■ Control Assessment ■ Control Definition ■ External Incident Management ■ BU Risk Profile ■ Information Libraries ■ Insurance Policies ■ Challenge ■ Business Environment ■ Obligation ■ Risk Definition ■ Risk Assessment ■ KI Aggregation ■ Obligation Library ■ Risk Library ■ Test Plan ■ Incident Management ■ Regulation/Polices ■ Control Library ■ Obligation Assessment ■ Regulation Assessment

Table 12. Search Criteria

Criteria	Description
Workflow Functions	• If you select Application name as Governance and Compliance Management application, then following options are also applicable for Workflow Function field: ▪ Audit Assessment ▪ Audit Tasks ▪ Audit Plans ▪ Business Continuity Plan ▪ Compliance Plan ▪ Compliance Plan Attestation

APPENDIX A *Setting up Application and Workflow Function*

This Appendix details the steps involved in creating and configuring an Application and/or its corresponding Workflow Functions in the Workflow Manager.

This enables defining the complete workflow for the Application and the Workflow function.

This appendix lists the following sections:

- Configuring a New Application
- Configuring a New Workflow Function
- Mapping Workflow Function to Application
- Mapping Component Status to Workflow function
- Creating Workflow Action
- Associating Workflows to Workflow Functions
- Conclusion

Configuring a New Application

To configure a new application in workflow manager, the following entries should be made in the tables `DIM_APP_INFO` and `DIM_APP_INFO_MLS`.

TABLE NAME	`DIM_APP_INFO`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores basic information regarding the application(s). Like Application Name, Application Code, and so on.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_APP_KEY	A unique number to identify the Application.	NUMBER	5	Yes
V_APP_CODE	A unique code to identify the Application.	VARCHAR	OFS_BANK	Yes
V_APP_NAME	Name of the Application.	VARCHAR	Banking Management	Yes
V_APP_DESC	Brief description about the Application.	VARCHAR	Banking Management	No
D_RECORD_START_DATE	Application is valid from the start date.	DATE	4/1/2015 11:00:00 AM	Yes
D_RECORD_END_DATE	Application is valid to the end date.	DATE	4/1/9999 11:00:00 AM	Yes

TABLE NAME	`DIM_APP_INFO_MLS`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores the locale specific entries for the application(s) name.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_APP_KEY	A unique number to identify the Application. This key is as specified in the DIM_APP_INFO table.	NUMBER	5	Yes
V_APP_NAME	Name of the Application.	VARCHAR	Banking Management	Yes
DESCLOCALE	Locale (en_US, es_ES, and so on.)	VARCHAR	en_US	Yes

Configuring a New Workflow Function

To configure a new workflow function in workflow manager, the following entries should be made in the tables `SETUP_COMPONENTS` and `SETUP_COMPONENTS_MLS`.

TABLE NAME	`SETUP_COMPONENTS`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores basic information regarding the workflow function(s). Like Function Name, Function Key, Physical Fact table name and so on.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_ENTITY_KEY	A unique number to identify the Workflow Function.	NUMBER	200	Yes
V_ENTITY_NAME	Name of the Workflow Function.	VARCHAR	Credit Banking	Yes
V_ENTITY_DESC	Brief description about the Workflow Function.	VARCHAR	Manage the Credit Banking facility	No
V_FCT_TABLENAME	The primary FACT table of the Workflow Function	VARCHAR	FCT_CREDIT_BANK	Yes
D_RECORD_START_DATE	Workflow Function is valid from the start date.	DATE	4/1/2015 11:00:00 AM	Yes
D_RECORD_END_DATE	Workflow Function is valid to the end date.	DATE	4/1/9999 11:00:00 AM	Yes

TABLE NAME	`SETUP_COMPONENTS_MLS`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores the locale specific entries for the workflow functtion(s) name.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_ENTITY_KEY	A unique number to identify the Workflow Function. This key is as specified in the SETUP_COMPONENTS table.	NUMBER	200	Yes

V_ENTITY_NAME	Name of the Workflow Function.	VARCHAR	Credit Banking	Yes
DESCLOCALE	Locale (en_US, es_ES, and so on.)	VARCHAR	en_US	Yes

Once the workflow configuration is completed using Workflow Manager, the UI action buttons need to be configured to invoke the configured workflow.

Mapping Workflow Function to Application

To map the new or existing Workflow Function(s) to the new or existing Application, an entry should be made in the `FCT_APP_COMPONENT_MAP` table.

Table 13. Mapping workflow function to application

TABLE NAME	`FCT_APP_COMPONENT_MAP`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores the mapping between application & workflow function(s).			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_APP_COMP_KEY	A unique number to identify the mapping between Workflow Function and Application	NUMBER	1000	Yes
N_APP_KEY	Unique key that identifies the Application. This key is as specified in the DIM_APP_INFO table	NUMBER	5	Yes
N_ENTITY_KEY	Unique key that identifies the Workflow Function. This key is a specified in the SETUP_COMPONENTS table	NUMBER	200	Yes

Mapping Component Status to Workflow function

To map the component status to the respective workflow function, the following entries should be made in the table `SETUP_COMPONENT_STATUS_MAP`.

Table 14. Mapping component status to workflow function

TABLE NAME	`SETUP_COMPONENT_STATUS_MAP`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table stores the mapping between workflow functions and their respective statuses.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_OR_STATUS_CD	The status of the component. This key is as defined in DIM_OR_STATUS table	NUMBER	13	Yes
N_ENTITY_KEY	Unique key that identifies the Workflow Function. This key is a specified in the SETUP_COMPONENTS table	NUMBER	200	Yes
N_SORT_ORDER	The sequence in which the status needs to be displayed	NUMBER	1	Yes

Creating Workflow Action

To enable create workflow functionality(Create Workflow) for the new Application and workflow function, following entries should be made to the table.

Note: This step is required only when a new application is being included in the workflow manager. It is not necessary to follow this step if a new workflow function is being added to an existing application.

Table 15. Create workflow action

TABLE NAME	`FORMS_VIEW_MAPPING`		
SCHEMA NAME	Configuration		
DESCRIPTION	This table contains the masking definition for the form control Create Workflow.		
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**MANDATORY**
FORM_CODE	Name of the Physical File that displays the list of Work flows configured for a Workflow Function. The form code is as specified in the FORMS_MASTER table in the configuration schema.	VARCHAR	Yes
FORM_VERSION	Identifies if the configuration is enabled or disabled. (0 – Enable, 1 - Disable)	NUMBER	Yes
DSN_ID	The Information Domain name.	VARCHAR	Yes
CONTROL_ID	The identification number provided to identify a field in the UI. This information is available in the FORMS_MAP_ITEMS table in the configuration schema.	NUMBER	Yes
VIEW_ID	A unique identifier provided for a specific ROLE against a specific Workflow Function status.	NUMBER	Yes
PARENT_VALUE	A computed value which is a product of Workflow Function Status and render mode.	NUMBER	Yes
CONTAINER	This flag identifies if the above mentioned CONTROL_ID, identifies a specific control or a specific container (0 – control, 1-container)	NUMBER	Yes
CONTROL_STATUS	The visibility mode that needs to be applied to the control/container. (1 – Enabled, 2 – Disabled, 3 - Hidden)	NUMBER	Yes

The below values are to be seeded mandatorily.

FIELD NAME	ROW 1	ROW 2	ROW 3	ROW 4
FORM_CODE	FrmWFMaster	FrmWFMaster	FrmWFMaster	FrmWFMaster
FORM_VERSION	0	0	0	0
DSN_ID	OFSINFODOM	OFSINFODOM	OFSINFODOM	OFSINFODOM
CONTROL_ID	2	233	231	3
VIEW_ID	29007	29007	29007	29007
PARENT_VALUE	2005*	2005*	2005*	2005*
CONTAINER	0	0	0	0
CONTROL_STATUS	1	1	1	1

* 2005 is a computed value = (2000 + Application Key)

Associating Workflows to Workflow Functions

To associate the workflows created through Workflow Manager to its appropriate Workflow Function, the following entires should be made in the `WFM_LIST` table.

Table 16. Associating workflows to workflow functions

TABLE NAME	`WFM_LIST`			
SCHEMA NAME	Atomic			
DESCRIPTION	This table associates the workflows created through workflow manager to its respective workflow function.			
FIELD NAME	**DESCRIPTION**	**DATA TYPE**	**SAMPLE VALUE**	**MANDATORY**
N_WFM_LIST_ID	Unique Identification number to identify the workflow function within the Workflow Manager	NUMBER	2000	Yes
V_DSN_ID	The Information Domain name.	VARCHAR	OFSINFODOM	Yes
V_SEGMENT_ID	Segment in which the solution is installed.	VARCHAR	OFSSEGMENT	Yes
N_WFM_FN_ID	Workflow Function ID as specified in SETUP_COMPONENTS table.	NUMBER	200	Yes
V_WFM_FN_NAME	Name of the Workflow Function.	VARCHAR	Credit banking	No
N_KBD_1_REQD	Is Key Business Dimension 1 required? 1 - Yes/ 0 – No	NUMBER	1	Yes
N_KBD_2_REQD	Is Key Business Dimension 2 required? 1 - Yes/ 0 – No	NUMBER	1	Yes
N_KBD_3_REQD	Is Key Business Dimension 3 required? 1 - Yes/ 0 – No	NUMBER	0	Yes
N_KBD_4_REQD	Is Key Business Dimension 4 required? 1 - Yes/ 0 – No	NUMBER	0	Yes
V_KBD_1_LABEL	If KBD 1 required, then give the KBD label name. (Business Line, Location, others)	VARCHAR	Business Line	No

Table 16. Associating workflows to workflow functions

V_KBD_2_LABEL	If KBD 2 required, then give the KBD label name. (Business Line, Location, others)	VARCHAR	Location	No
V_KBD_3_LABEL	If KBD 3 required, then give the KBD label name. (Business Line, Location, others)	VARCHAR		No
V_KBD_4_LABEL	If KBD 4 required, then give the KBD label name. (Business Line, Location, others)	VARCHAR		No

Conclusion

You have successfully completed the setup process to define a workflow for a new application or workflow function using workflow manager.
Log into the application and started defining the workflow for the new application or workflow function.

APPENDIX B *Invoking Configured Workflow from Forms XML*

This Appendix details the steps involved in configuring an UI button in the Forms XML, which invokes the configured workflow.

This Appendix covers the following topics:

- Server Side Rule
- User Interface Button

Server Side Rule

The server side rule points to the corresponding database object in the atomic schema, which is responsible for rendering the configured workflow.

Initiate Workflow

To initiate a workflow, enter the server-side rule tag within the forms XML as shown below.

```
<RULESET ID="100" TYPE="STORED_PROCEDURE">
    <IDENTIFIER>PKG_WORKFLOW_ENGINE.SP_INITIATE_WORKFLOW_WFM</IDENTIFIER>
    <INPUT_PARAM>
    P_LOG_USER_ID,P_LOCALE,P_ENTITY_TYPE,P_STAGE_SEQ_ID,P_ENTITY_ID,P_ENTITY_STATUS_KEY,
    P_ROLE_CODE,P_USER_ID,P_CHANGE_DT,P_APPR_REJ, P_DSN_ID, P_SEGMENT_ID, P_SEQUENCE,P_KBD1_KEY,P_KBD2_KEY,
    P_KBD3_KEY,P_KBD4_KEY,P_PARENT_ID,P_PARENT_TYPE,P_PARENT_STATUS,P_DUE_DATE,P_DUE_DAYS,P_BUS_CAL_FLAG,
    P_TASK_STATUS,P_SCHEDULE_ID
    </INPUT_PARAM>
    <OUTPUT_PARAM>P_OUT_MESG</OUTPUT_PARAM>
    <EVENT_TYPE>after</EVENT_TYPE>
    <STOP_ON_ERROR>Y</STOP_ON_ERROR>
    <ISSYNCHRONOUS>Y</ISSYNCHRONOUS>
</RULESET>
```

Continue Workflow

To continue on an initiated workflow, enter the server-side rule tag within the forms XML as shown below.

```
<RULESET ID="200" TYPE="STORED_PROCEDURE">
    <IDENTIFIER>PKG_WORKFLOW_ENGINE.SP_NXT_STG_WORKFLOW</IDENTIFIER>
    <INPUT_PARAM>
    P_LOG_USER_ID,P_LOCALE,P_ENTITY_TYPE,P_ENTITY_ID,P_ENTITY_STATUS_KEY,
    P_ROLE_CODE,P_USER_ID,P_CHANGE_DT,P_APPR_REJ, P_SEQUENCE,P_KBD1_KEY,P_KBD2_KEY,
    P_KBD3_KEY,P_KBD4_KEY,P_PARENT_ID,P_PARENT_TYPE,P_PARENT_STATUS,P_DUE_DATE,P_DUE_DAYS,
    P_BUS_CAL_FLAG,P_TASK_STATUS,P_SCHEDULE_ID
    </INPUT_PARAM>
    <OUTPUT_PARAM>P_OUT_MESG</OUTPUT_PARAM>
    <EVENT_TYPE>after</EVENT_TYPE>
    <STOP_ON_ERROR>Y</STOP_ON_ERROR>
    <ISSYNCHRONOUS>Y</ISSYNCHRONOUS>
</RULESET>
```

To continue the workflow the following entries should be made in the server-side rule tag.

Table 17. Entry in the server-side rule tag

XML Tag	Description
RULESET	A unique ID must be given to the Server-Side Rule
IDENTIFIER	The tag specifies the database object that needs to be triggered on performing and UI action.
INPUT_PARAM	The tag specifies the list of input parameters that needs to be passed to the database object. The order must be same as defined in the database.
OUTPUT_PARAM	The tag specifies the output parameter that needs to be passed to the data base object.

Table 17. Entry in the server-side rule tag

XML Tag	Description
STOP_ON_ERROR	The tag specifies if the execution must be stopped in case there is an error.
ISSYNCHRONOUS	The tag specifies if the named database object be executed in a synchronous manner.

User Interface Button

Click the UI Button to trigger the execution of the server-side rule and pass the required parameters.

Initiate Workflow

To initiate a workflow, make entry in the parameters list of the button control within the forms XML as shown below.

```
<PARAMETERS>
    <!-- Server-Side Rule -->
    <PARAMETER ID="1" NAME="executeServerSideRule" SCOPE="" VALUE="100"/>
    <!-- Parameters for WF -->
    <PARAMETER ID="1" NAME="P_LOG_USER_ID" SCOPE="session" VALUE="gsUsrID"/>
    <PARAMETER ID="1" NAME="P_LOCALE" SCOPE="session" VALUE="lclPostFix"/>
    <PARAMETER ID="1" NAME="P_ENTITY_TYPE" SCOPE="" VALUE="108"/>
    <PARAMETER ID="1" NAME="P_STAGE_SEQ_ID" SCOPE="" VALUE="1"/>
    <PARAMETER ID="1" NAME="P_ENTITY_ID" SCOPE="form" VALUE="[FrmERA_OPR_1_1]"/>
    <PARAMETER ID="1" NAME="P_ENTITY_STATUS_KEY" SCOPE="" VALUE="4"/>
    <PARAMETER ID="1" NAME="P_ROLE_CODE" SCOPE="request" VALUE="roleCode"/>
    <PARAMETER ID="1" NAME="P_USER_ID" SCOPE="session" VALUE="gsUsrID"/>
    <PARAMETER ID="1" NAME="P_CHANGE_DT" SCOPE="form" VALUE="[FrmERA_OPR_999_1]"/>
    <PARAMETER ID="1" NAME="P_APPR_REJ" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DSN_ID" SCOPE="request" VALUE="infodom"/>
    <PARAMETER ID="1" NAME="P_SEGMENT_ID" SCOPE="request" VALUE="segment"/>
    <PARAMETER ID="1" NAME="P_SEQUENCE" SCOPE="form" VALUE="[FrmERA_OPR_888_1]"/>
    <PARAMETER ID="1" NAME="P_KBD1_KEY" SCOPE="" VALUE="1"/>
    <PARAMETER ID="1" NAME="P_KBD2_KEY" SCOPE="" VALUE="1000"/>
    <PARAMETER ID="1" NAME="P_KBD3_KEY" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_KBD4_KEY" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_ID" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_TYPE" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_STATUS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DUE_DATE" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DUE_DAYS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_BUS_CAL_FLAG" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_TASK_STATUS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_SCHEDULE_ID" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_OUT_MESG" SCOPE="" VALUE="OUT"/>
</PARAMETERS>
```

The following entires should be made to initiate the Workflow.

Table 18. Entries in the Parameter List to Initiate the work flow

Parameter Name	Description	Sample Data	Mandatory
executeServerSideRule	The value for this parameter should match with the ID provided for the Server-Side rule identifying the database object.	100	Yes
P_LOG_USER_ID	The user ID of the user who has logged into the application.	ORMUSER	Yes
P_LOCALE	The locale ID which was selected while logging into the application.	en_US	Yes

Table 18. Entries in the Parameter List to Initiate the work flow

Parameter Name	Description	Sample Data	Mandatory
P_ENTITY_TYPE	The ID of the entity for which the workflow is being initiated. This value corresponds to the entry made in SETUP_COMPONENTS table for the entity	200 (Credit Banking)	Yes
P_STAGE_SEQ_ID	The entry point ID which identifies the initial workflow stage for initiation.	1	Yes
P_ENTITY_ID	The instance ID of the entity for which the workflow is being initiated. A system generated value	123321	Yes
P_ENTITY_STATUS_KEY	The status of the entity instance at the time of workflow initiation.	4 (New)	No
P_ROLE_CODE	The role code for which Task/Notification is to be processed during initiation of workflow. This parameter is required only if there are Tasks/Notifications of the type ‘User Defined’.	CCO (Chief Compliance Officer)	No (Yes if there are Tasks/Notifications of the type ‘User Defined’)
P_USER_ID	The user for whom Task/Notification is to be processed during initiation of workflow. This parameter is required only if there are Tasks/Notifications of the type ‘User Defined’.	LH (Legal Head)	No (Yes if there are Tasks/Notifications of the type ‘User Defined’)
P_CHANGE_DT	Current System Date in the date format (dd/mm/yyyy)	25/06/2015	Yes
P_APPR_REJ	The flag which is used in defining business rules	A	No
P_DSN_ID	The Information Domain Name	OFSINFODOM	Yes
P_SEGMENT_ID	The Segment in which the solution is installed.	OFSSEGMENT	Yes
P_SEQUENCE	A unique error ID generated with the sequence ***seq_error_log.***	1001	Yes
P_KBD1_KEY	Key Business Dimension 1	1	Yes (If Application is using Key Business Dimension 1)
P_KBD2_KEY	Key Business Dimension 2	1000	Yes (If Application is using Key Business Dimension 2)
P_KBD3_KEY	Key Business Dimension 3		Yes (If Application is using Key Business Dimension 3)
P_KBD4_KEY	Key Business Dimension 4		Yes (If Application is using Key Business Dimension 4)

Table 18. Entries in the Parameter List to Initiate the work flow

Parameter Name	Description	Sample Data	Mandatory
P_PARENT_ID	The entity instance of the parent entity in case where Workflow is initiated for a child entity.		Yes (If workflow is initiated for a Child entity)
P_PARENT_TYPE	The entity type of the parent entity in case where Workflow is initiated for a child entity.		Yes (If workflow is initiated for a Child entity)
P_PARENT_STATUS	The status of the parent entity instance at the time of workflow initiation for a child entity.		Yes (If workflow is initiated for a Child entity)
P_DUE_DATE	The due date for the Tasks being processed during workflow initiation.	30/06/2015	No
P_DUE_DAYS	The due days for the Tasks being processed during workflow initiation.	5	No
P_BUS_CAL_FLAG	Business Days ‘B’/Calendar Days ‘C’. The due days passed is considered as Calendar days by default. If workflow needs to consider it as Business Days, then flag ‘B’ should be passed.	B	No
P_TASK_STATUS	The status of the task being processed.		No
P_SCHEDULE_ID	The schedule ID, if workflow is being initiated through Planning and Scoping		Yes (If workflow is initiated through Planning and Scoping)
P_OUT_MESG	The output value that is returned post execution of the workflow.		No

Continue Workflow

To continue on an initiated workflow, enter the parameters list of the button control within the forms XML as shown below.

```
<PARAMETERS>
    <!-- Server-Side Rule -->
    <PARAMETER ID="1" NAME="executeServerSideRule" SCOPE="" VALUE="200"/>
    <!-- Parameters for WF -->
    <PARAMETER ID="1" NAME="P_LOG_USER_ID" SCOPE="session" VALUE="gsUsrID"/>
    <PARAMETER ID="1" NAME="P_LOCALE" SCOPE="session" VALUE="lclPostFix"/>
    <PARAMETER ID="1" NAME="P_ENTITY_TYPE" SCOPE="" VALUE="108"/>
    <PARAMETER ID="1" NAME="P_ENTITY_ID" SCOPE="form" VALUE="[FrmERA_OPR_1_1]"/>
    <PARAMETER ID="1" NAME="P_ENTITY_STATUS_KEY" SCOPE="" VALUE="4"/>
    <PARAMETER ID="1" NAME="P_ROLE_CODE" SCOPE="request" VALUE="roleCode"/>
    <PARAMETER ID="1" NAME="P_USER_ID" SCOPE="session" VALUE="gsUsrID"/>
    <PARAMETER ID="1" NAME="P_CHANGE_DT" SCOPE="form" VALUE="[FrmERA_OPR_999_1]"/>
    <PARAMETER ID="1" NAME="P_APPR_REJ" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DSN_ID" SCOPE="request" VALUE="infodom"/>
    <PARAMETER ID="1" NAME="P_SEGMENT_ID" SCOPE="request" VALUE="segment"/>
    <PARAMETER ID="1" NAME="P_SEQUENCE" SCOPE="form" VALUE="[FrmERA_OPR_888_1]"/>
    <PARAMETER ID="1" NAME="P_KBD1_KEY" SCOPE="" VALUE="1"/>
    <PARAMETER ID="1" NAME="P_KBD2_KEY" SCOPE="" VALUE="1000"/>
    <PARAMETER ID="1" NAME="P_KBD3_KEY" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_KBD4_KEY" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_ID" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_TYPE" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_PARENT_STATUS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DUE_DATE" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_DUE_DAYS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_BUS_CAL_FLAG" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_TASK_STATUS" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_SCHEDULE_ID" SCOPE="" VALUE=""/>
    <PARAMETER ID="1" NAME="P_OUT_MESG" SCOPE="" VALUE="OUT"/>
</PARAMETERS>
```

The following entires should be made in the Parameter List to continue the Workflow.

Table 19. Entry in the Parameter List to Continue the Workflow

Parameter Name	Description	Sample Data	Mandatory
executeServerSideRule	The value for this parameter should match with the ID provided for the Server-Side rule identifying the database object.	200	Yes
P_LOG_USER_ID	The user ID of the user who has logged into the application.	ORMUSER	Yes
P_LOCALE	The locale ID which was selected while logging into the application.	en_US	Yes
P_ENTITY_TYPE	The ID of the entity for which the workflow is being invoked. This value corresponds to the entry made in SETUP_COMPONENTS table for the entity	200 (Credit Banking)	Yes
P_ENTITY_ID	The instance ID of the entity for which the workflow is being invoked. A system generated value	123321	Yes

Parameter Name	Description	Sample Data	Mandatory
P_ENTITY_STATUS_KEY	The status of the entity instance at the time of workflow invocation.	3 (Draft)	No
P_ROLE_CODE	The role code for which Task/Notification is to be processed during invocation of workflow. This parameter is required only if there are Tasks/Notifications of the type ‘User Defined’.	CCO (Chief Compliance Officer)	No (Yes if there are Tasks/Notifications of the type ‘User Defined’)
P_USER_ID	The user for whom Task/Notification is to be processed during invocation of workflow. This parameter is required only if there are Tasks/Notifications of the type ‘User Defined’.	LH (Legal Head)	No (Yes if there are Tasks/Notifications of the type ‘User Defined’)
P_CHANGE_DT	Current System Date in the date format (dd/mm/yyyy)	25/06/2015	Yes
P_APPR_REJ	The flag which is used in defining business rules	A	No
P_DSN_ID	The Information Domain Name	OFSINFODOM	Yes
P_SEGMENT_ID	The Segment in which the solution is installed.	OFSSEGMENT	Yes
P_SEQUENCE	A unique error ID generated with the sequence ***seq_error_log.***	1001	Yes
P_KBD1_KEY	Key Business Dimension 1	1	Yes (If Application is using Key Business Dimension 1)
P_KBD2_KEY	Key Business Dimension 2	1000	Yes (If Application is using Key Business Dimension 2)
P_KBD3_KEY	Key Business Dimension 3		Yes (If Application is using Key Business Dimension 3)
P_KBD4_KEY	Key Business Dimension 4		Yes (If Application is using Key Business Dimension 4)
P_PARENT_ID	The entity instance of the parent entity in case where Workflow is invoked for a child entity.		Yes (If workflow is invoked for a Child entity)
P_PARENT_TYPE	The entity type of the parent entity in case where Workflow is invoked for a child entity.		Yes (If workflow is invoked for a Child entity)
P_PARENT_STATUS	The status of the parent entity instance at the time of workflow invocation for a child entity.		Yes (If workflow is invoked for a Child entity)
P_DUE_DATE	The due date for the Tasks being processed during workflow invocation.	30/06/2015	No

Parameter Name	Description	Sample Data	Mandatory
P_DUE_DAYS	The due days for the Tasks being processed during workflow invocation.	5	No
P_BUS_CAL_FLAG	Business Days ‘B’/Calendar Days ‘C’. The due days passed is considered as Calendar days by default. If workflow needs to consider it as Business Days, then flag ‘B’ should be passed.	B	No
P_TASK_STATUS	The status of the task being processed.		No
P_SCHEDULE_ID	The schedule ID, if workflow is being invoked through Planning and Scoping		Yes (If workflow is invoked through Planning and Scoping)
P_OUT_MESG	The output value that is returned post execution of the workflow.		No

Note: An entity instance once initiated should not be initiated again. Post initiation, 'PKG_WORKFLOW_ENGINE.SP_NXT_STG_WORKFLOW' must be invoked from the UI button for that instance of the entity.