

Oracle Financial Services

Forms Manager 1.0

User Guide



Forms Manager User Guide 1.0

Copyright © 2014, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

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

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

CONTENTS

1	FORMS MANAGER	6
1.1	Installing Forms Manager	6
1.1.1	Prerequisites	6
1.1.2	Installation	6
1.2	Overview	7
1.3	User Interface Components in Forms Manager.....	8
2	ADMINISTRATION.....	13
2.1	Layout Template.....	13
2.1.1	Overview	13
2.1.2	How to Create a Layout Template	14
2.1.3	Layout Maintenance.....	17
2.2	Group Styles.....	18
2.2.1	Overview	18
2.2.2	How to Create a Group Style	18
2.2.3	Sample Group Styles:	19
2.3	Events and Functions	30
2.3.1	Overview	30
2.3.2	How to Define Events and Functions.....	30
2.4	Messages	31
2.4.1	Overview	31
2.4.2	How to Create a Message	31
2.4.3	Messages Usage	32
3	UI CONFIGURATIONS	35
3.1	Landing Page	35
3.1.1	Overview	35
3.1.2	How Landing Page is displayed.....	35
3.1.3	How to Associate Landing Page to Role.....	36
3.1.4	Landing Page Maintenance	36
3.2	Tabs	37
3.2.1	Overview	37
3.2.2	Flow Chart.....	37
3.2.3	How to create a Tab.....	38
3.2.4	Custom Tab Maintenance.....	41

3.3	Forms	42
3.3.1	Overview	42
3.3.2	Form Components	42
3.3.3	Flowchart of Creating a Form	46
3.3.4	How to create a Form	47
3.3.5	How to Create a Container	50
3.3.6	How to Create a Control	53
3.3.7	Forms Maintenance	72
3.3.8	Reordering Containers in a Form.....	73
3.3.9	Reordering Controls in a Container	74
3.3.10	Masking of Container/ Control	75
3.3.11	Validation Rule.....	80
3.3.12	How to Create Processing Rule.....	83
3.3.13	How to invoke a Form?	84
3.4	Menu	89
3.4.1	Overview	89
3.4.2	Menu Details	89
3.4.3	Flowchart	90
3.4.4	How to Create Menu?	90
3.4.5	Menu Maintenance	96
3.5	LHS Tree	97
3.5.1	Overview	97
3.5.2	Flow Chart.....	97
3.5.3	How to create a LHS Tree	98
3.5.4	LHS Tree Maintenance	99
4	GENERATE.....	101
4.1	Generate Menu	101
4.1.1	Overview:	101
4.1.2	How to generate a Menu.....	101
4.2	Generate Forms	102
4.2.1	Overview	102
4.2.2	How to generate a Form	103
4.3	Generate Tab Groups	104
4.3.1	Overview	104
4.3.2	How to generate a Tab Group	104
5	FORMS MANAGER CUSTOMIZATION GUIDELINES.....	105

6	CONFIGURATIONS FOR STYLING.....	106
6.1	Required Configuration for Application Level Skin	106
6.2	Forms Framework Styles Hierarchy	107
6.2.1	Container - GroupStyles	107
6.2.2	Label / Value & Controls	108
6.2.3	Images Configuration.....	108
6.3	Creating a Custom .CSS File	109
6.4	CSS Structure	110
7	APPENDIX	114
7.1	Tutorial for creating a Sample Form	114
7.1.1	Expected Functionality	114
7.1.2	Defining a Form with Form Code as FormRisk.....	114
7.1.3	Defining a Container within the Risk Definition Form.....	115
7.1.4	Defining Controls within the Risk Details Container.....	116
7.1.5	Defining another Container within the Risk Definition Form	119
7.1.6	Defining Controls within the Save Container	120
7.1.7	Reordering Containers within the Risk Definition Form	122
7.1.8	Reordering Controls within the Risk Details Container	123
7.1.9	Creating a Validation Rule	124
7.1.10	Associating the Validation Rule with Save Control	125
7.1.11	Defining a Menu by the name, Risk	126
7.1.12	Generating the Menu	127
7.1.13	Generating the Form.....	127

1 Forms Manager

1.1 Installing Forms Manager

1.1.1 Prerequisites

The minimum patch set level of OFSAAI should be 7.3.2.6.0 and all related software should be installed.

1.1.2 Installation

Refer to the following instructions to install the contents of this Patch.

1. Login to <https://support.oracle.com/> and search for 18496721 under the *Patches & Updates* tab.
2. Download and install the patch by following the instructions in the Readme.txt packaged with it.
3. After installing the above patch, the patch 18671538 needs to be installed. Follow the instructions in the Readme.txt packaged with it.
4. From a client workstation, open the client browser and provide the URL as http or https://<IP address>:<servlet port>/<context-name>/

For example, <http://10.111.222.111:8888/FormsManager/>

NOTE: If https configuration is enabled, the client browser will need to disable the proxy servers through the client browser's internet options.

The Forms Manager login screen is displayed:



NOTE: You need to clear the cache to reflect the changes.
<http://<OFSAAI Application IP>:<PORT>/<CONTEXT>/formsManager/formsrenderer/clearcache.jsp>
For example,
<http://10.184.134.121:8888/FormsManager/formsrenderer/clearcache.jsp>

1.2 Overview

Forms Manager is a utility, which is used to design the application user interfaces supported by Analytical Applications Interface (AAI) Forms Framework.

Using the Forms Manager, you can create or change an application user interface. This utility enables the user to define menus, layouts, and forms and link them together based on the needs of the application.

- Menu- Logical grouping of information/ application functionality or operations.
- Layout- Enables sectioning of screen space flexibly to present information in an optimal, clear, and user friendly manner.
- Form- Presentation of information in different formats (Label-Value Pair, Grid, Tab, and so on.)

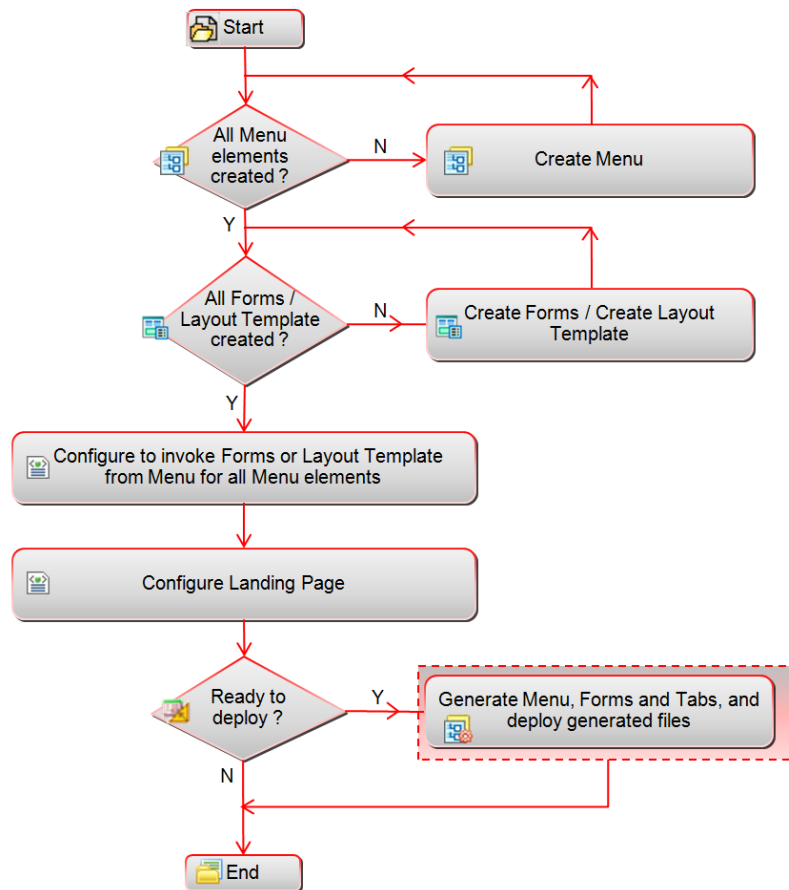


Figure 1. Flowchart of Forms Manager

1.3 User Interface Components in Forms Manager

The user interface components include menu, frame, form, container, control, and so on, that are used for the design of the user interface. More effective and powerful designs can be achieved by masking, enabling, and disabling of the components and adding validations.

Following are the descriptions for some of the user interface components.

- **Menu**– A component that displays a list of commands, presented to a user based on the user role. A menu can have up to three levels. The level determines the parent - child hierarchy of the menu items. It is possible to launch a layout JSP page as well as a form, from a menu.
- **Form**– A component that acts as a background or placeholder for holding smaller components and displaying the objects and data. The smaller components include containers and controls. A form can have one or more containers. A container can have one or more controls.

There are three kinds of forms.

- **Simple forms** – These are static forms, used for the purpose of viewing the data. Since they do not have database access, you cannot add values in them.
- **Forms with database access** – These forms store the input data to the database tables. They have button controls like “Save”.

Following figure displays the layout design of a form with containers and controls.

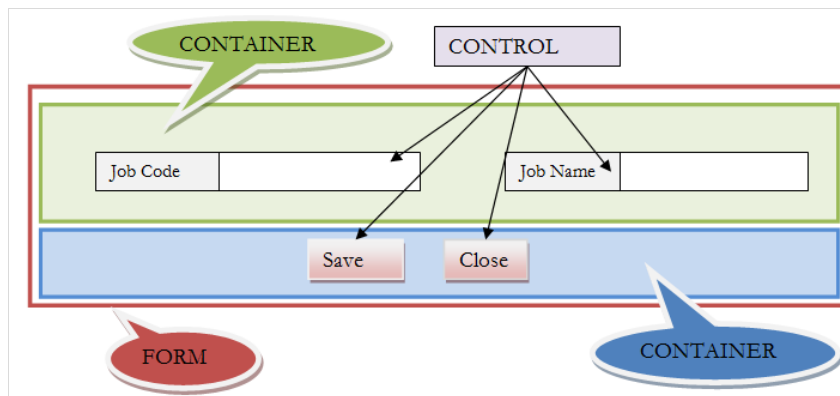


Figure 2. Form with containers and controls

- **Summary forms** – These forms display the results that are stored in the table. They contain controls for the purpose of editing, viewing, adding, and so on. Apart from showing all the results in a table, these forms also display the results based on a search filter criteria.

Following figure displays the layout design of a summary form.

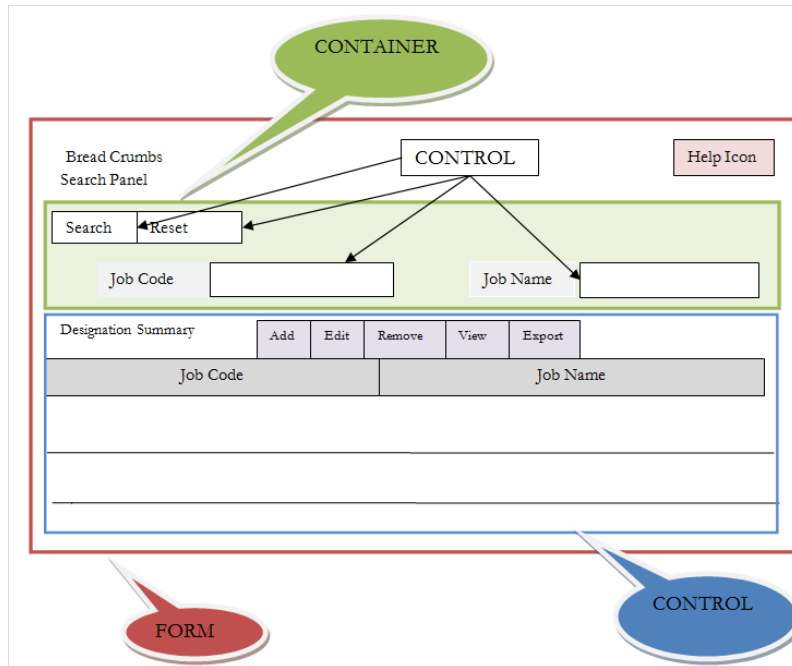


Figure 3. Summary Form

NOTE: Having excessive number of containers in a form or excessive number of controls in a container may degrade the presentation and look of the page, in addition to the performance.

- **Tab**– A component, usually in the shape of a file folder tab, which displays a page of the user interface.
- **Tab Group**– A component that is a collection of tabs.
- **Container** – A component within a form that acts as a background for holding smaller components like other containers and controls. Examples of containers are:
 - Search Container- A container to display search fields with standard controls like Views/Search, and Clear/ Reset.

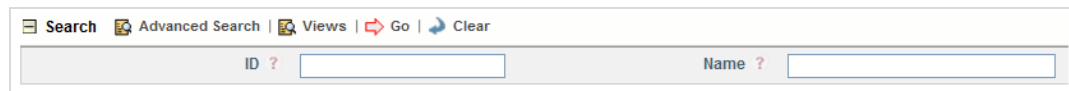


Figure 4. Search Container

- Grid Container- A container to display information in a tabular format.

Code	Name	Component	Hierarchy Type
<input type="checkbox"/> HISS005	Action Criticality	Action	Single Level
<input type="checkbox"/> HKIA003	Aggregation Type	KI	Single Level
<input type="checkbox"/> HCA001	Assessment Rating	Compliance	Single Level

Figure 5. Grid Container

- Tab Container- A container to display different tabs in a form.

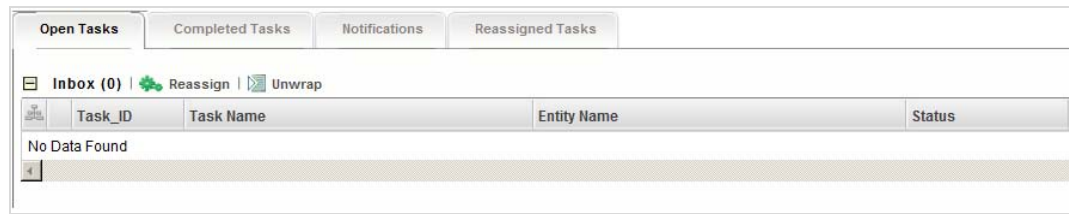


Figure 6. Tab Container

- Difference Container- A container to display the changes between selected records. It will show changes in different color.

Difference		
Name	risk localised	risk localised
ID	27117	27117
Description		
Risk Inventory	Credit Risk	Credit Risk
Risk Event Type	Systems	Systems
Risk Category	Facilities and Infrastructure Risk	Facilities and Infrastructure Risk
SOX	No	No
Reason For Closure		
Created Date	02-May-2014 15:52: 25	02-May-2014 15:52: 25
Created By	Risk Identifier	Risk Identifier
Status	Draft	Open
Last Modified Date		02-May-2014 15:52: 57
Last Modified By		Risk Identifier
Action Comments	Library Risk Created	Risk details Submitted

[Back](#)

Figure 7. Difference Container

- Label Value/ Normal Container- A simple container with a label.

Details

Description ?

Start Date* ? End Date* ?

Figure 8. Label Value/Normal Container

- **Control** – A component within a form or a container that performs various activities like performing an action, displaying the data, and allowing the user to interact with the application.

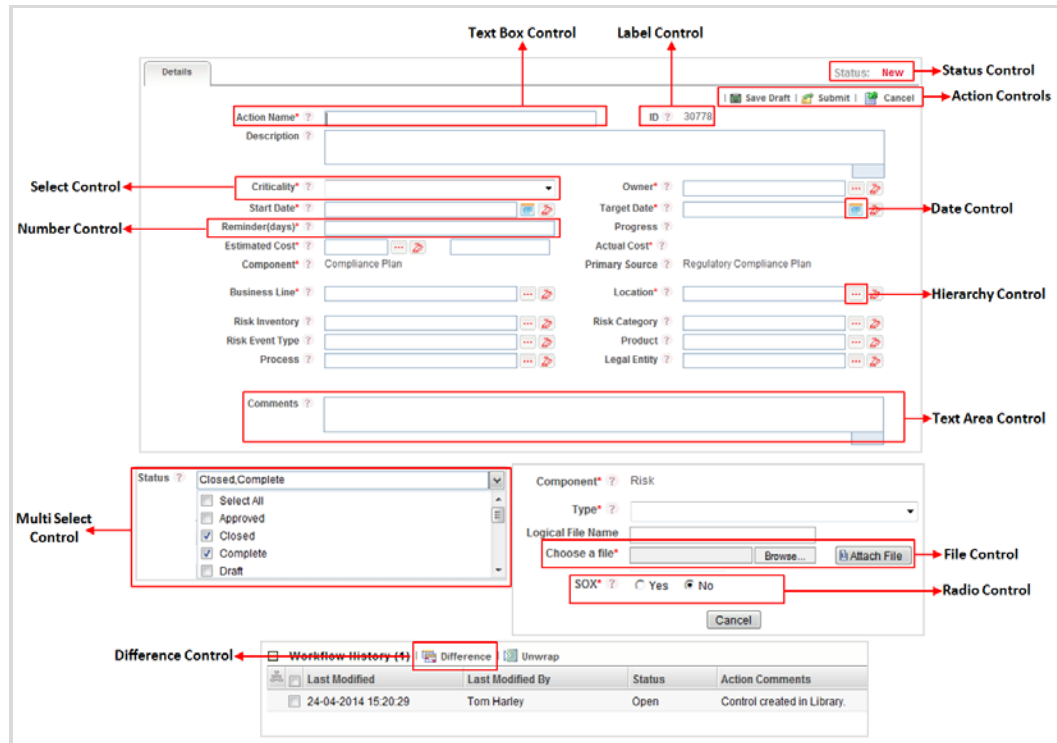


Figure 9. Different Controls

Examples of controls are:

- **Number Control** – A control that expects the entry of data in numeral format only.
- **Text Box Control**– A control that expects the entry of single line data in text format. For example, a control to enter name or short description.
- **Text Area Control**– A control that expects the entry of big data in text format. You can also display the character count. For example, a control to enter a long description or comment.
- **Rich Text Control**– A control that expects the entry of big data in text format and supports the text with rich formatting features.
- **Date Control**– A control that displays the calendar and permits the user to select a date.
- **Label Control** – A control that displays non-editable information.
- **Status Control**– A control that displays the status of a record such as New, Draft, Open or Closed.
- **History Control** – A control that inserts data into history tables.
- **Checkbox Control** – A control which enables selection of multiple options. Each option has a checkbox corresponding to it.

- **Radio Control** – A radio button that when clicked selects an option. It is not possible to select more than one option at the same time.
- **Select Control**– A control that allows single selection from a drop-down of fixed values.
- **Multi Select Control** – A control that displays a list of values as a drop-down from which you can make multiple selections. The selection will fire dynamic query to fetch data.
- **Action Control** – A control for initiating or changing an action. For example, Save/Ok, Cancel and Close.
- **Image Label Control** – A control with an image and a label which when clicked opens another page.
- **Link Label Control** – A control that displays the text as a hyperlink which when clicked opens another page.
- **URL Control**– A control that is used to open another form. This appears in header with an image. For example, control named “Create” when clicked opens the Create form.
- **Difference Control** – A control that calls a function to open a difference container.
- **Grid Control** - A control to call a grid container/ form.
- **Hierarchy Control** – A control that displays data after fetching from hierarchy.
- **File Control**- A control that is used to upload documents.
- **Messages** – Messages are the preferred locale specific text that is displayed to the users. These messages are displayed to communicate the occurrence of an event or on checking of a validation. They are also used for displaying locale sensitive texts on the forms like Bread Crumbs, Header Text, Name of the URL Control, and so on.

2 Administration

2.1 Layout Template

2.1.1 Overview

Layout Template is used to define the Layout of standard template / format that can be used as the framework to create different screens in the application. Details of the frames and JSP to be available in the template can be configured. Sample image of the template can be uploaded for reference. These templates can be chosen while configuring different screens of the application to maintain standard look and feel throughout.

NOTE: The new template name and the associated layouts (JSP) should not overwrite the packaged template name and the associated layouts (JSP).

The frame name used to register should match the frame name used during the development of layout (JSP).

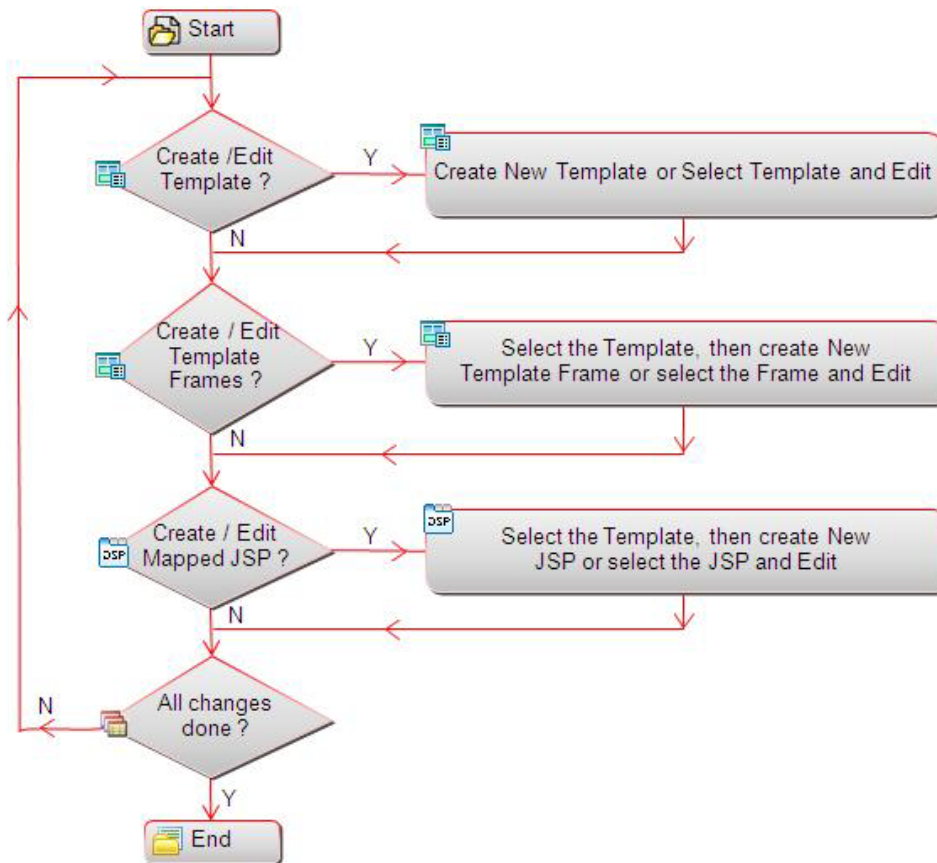


Figure 10. Flowchart of Layout Template

2.1.2 How to Create a Layout Template

This feature allows you to create a new template based on the design of the underlying JSP file. For example, if your underlying JSP contains three frames as shown in the following figure, you have to define three template frames in your template.

Sample Landing Page Layout

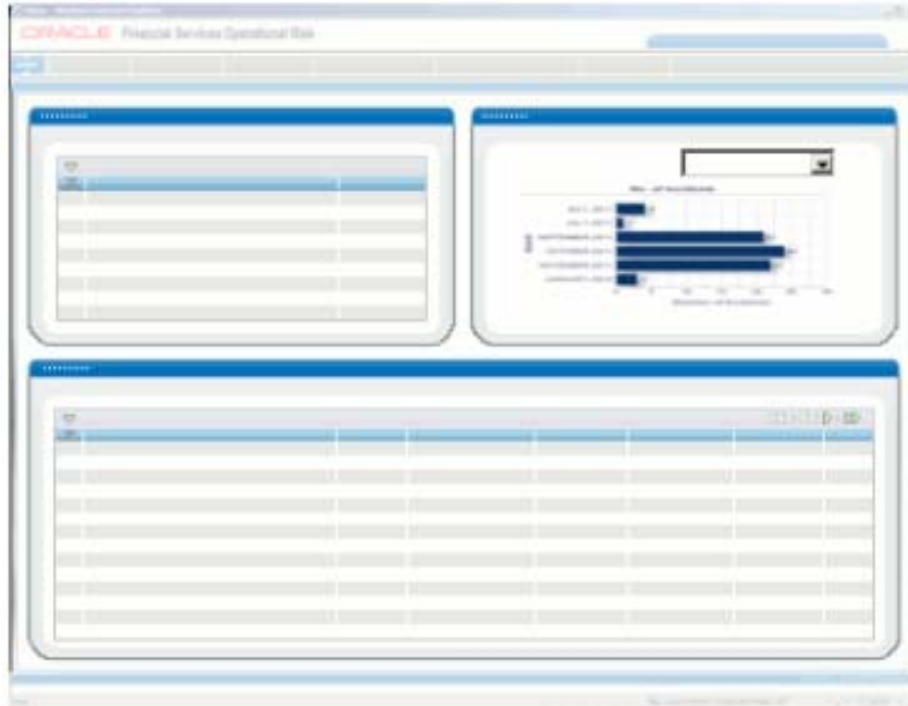


Figure 11. Sample layout

Steps for Template Configuration

1. From the LHS menu, expand **Administration** and click **Layout Upload**. The *Layout Maintenance* window is displayed.
2. Click **New** in the *Templates* toolbar. The *Template Configuration* window is displayed.

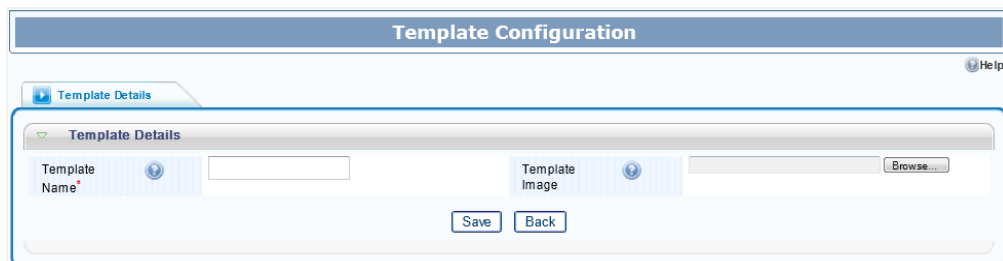


Figure 12. Template Configuration window

Field Name	Description
Fields marked with red asterisk (*) are mandatory.	
Template Name	Enter the name of the template. You should not enter the template name same as packaged templates.
Template Image	Select a sample image for the template from the appropriate location by clicking Browse . The image should be a preview of the template.

3. Click **Save**.

Steps to create a new Template Frame

1. From the *Layout Maintenance* window, select the template to which you want to add a frame and click **New** in the *Template Frames* toolbar. The *Template Frame Configuration* window is displayed.

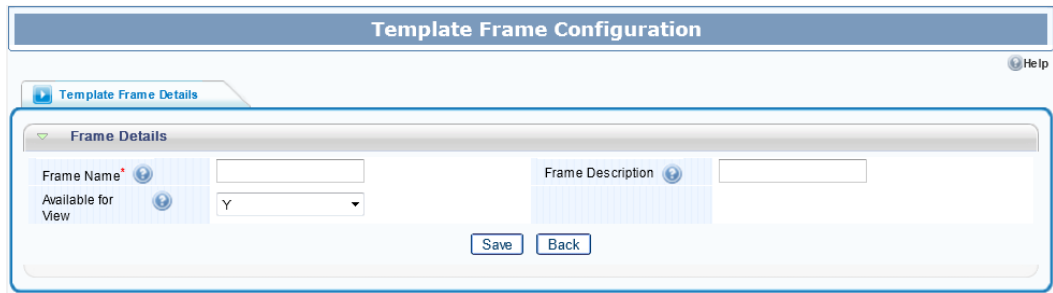


Figure 13. Template Frame Configuration window

Field Name	Description
Fields marked with red asterisk (*) are mandatory.	
Frame Name	Enter the name of the template frame. It is advisable to give some meaningful name to the frame. The frame name should match the exact frame name used during the development of underlying layout (JSP). The new Frame Name should have the prefix "CS_".
Frame Description	Enter the description of the frame. It is advisable to give some meaningful name to the frame.
Available for View	Select Y or N to display or hide the frame in the template layout.

2. Click **Save**.

Steps to create a new Mapped Layout Template

This option is to map the underlying JSP file to the template you are creating. You can attach a prepackaged JSP or a customized JSP file based on your requirements.

1. From the *Layout Maintenance* window, select the template and template frame and click **New** in the *Template Frames* toolbar. The *Layout Template Configuration* window is displayed.

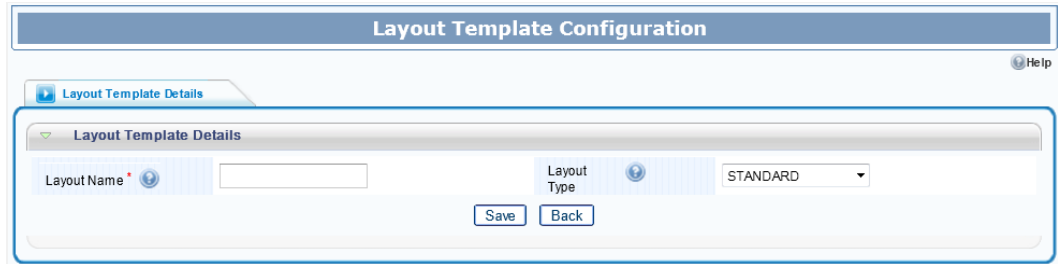


Figure 14. Layout Template Configuration window

Field Name	Description
Fields marked with red asterisk (*) are mandatory.	
Layout Name*	Enter the name of the underlying JSP.
Layout Type	Select the layout type from the drop-down list. This value determines if the user wants to select a prepackaged JSP file or a customized JSP file. The options are Standard and Custom . Standard- Select this option if the JSP file you entered in the Layout Name field is prepackaged along with the product. Custom- Select this option if the JSP file you entered in the Layout Name field is a customized JSP file.

3. Click **Save**.

2.1.3 Layout Maintenance

From the LHS menu, expand **Administration** and click **Layout Upload**. The *Layout Maintenance* window is displayed.

NOTE: When you select a template, the available frames will be displayed under *Template Frames* grid and all mapped layout templates are displayed in the *Mapped Layout Templates* grid.

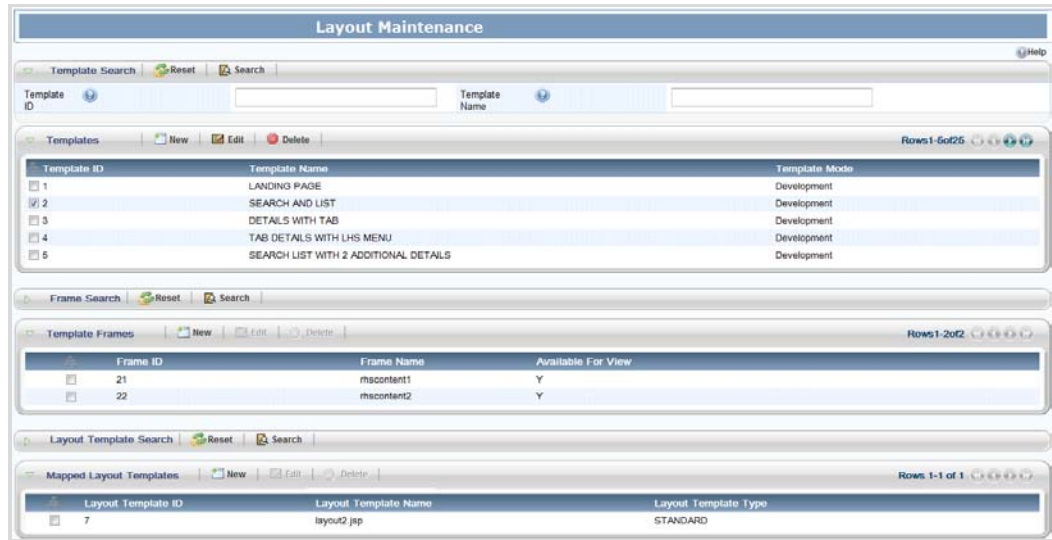


Figure 15. Layout Maintenance window

Action	Description
Search	<p>Search for a template by providing Template ID and Template Name and clicking Search in the Template Search toolbar.</p> <p>Similarly, select a template and provide Frame ID and Frame Name and click Search in the Frame Search toolbar to search for template frame.</p> <p>Select a template and template frame and provide Layout Template ID and Layout Template Name and click Search in the Layout Template Search toolbar to search for layout template.</p>
Modify	<p>Select a template and click Edit in the <i>Templates</i> toolbar to modify a template.</p> <p>Select the template and frame and then click Edit in the <i>Template Frames</i> toolbar to modify a template frame.</p> <p>Select the template and the mapped layout template and then click Edit in the <i>Mapped Layout Templates</i> toolbar to modify a mapped layout template.</p>

Action	Description
Delete	<p>Select a template and click Delete in the <i>Templates</i> toolbar to delete a template.</p> <p>Select the template and frame and then click Delete in the <i>Template Frames</i> toolbar to delete a template frame.</p> <p>Select the template and the mapped layout template and then click Delete in the <i>Mapped Layout Templates</i> toolbar to delete a mapped layout template.</p>

2.2 Group Styles

2.2.1 Overview

A Group Style is a set of styles defined for every element of a container or control. These are the styles which are predefined and packaged along with the Forms Manager.

A group style has pre-defined attributes like background image, border properties (border style, width, and color), font properties (font size, color, weight, style), and so on. These group styles are then associated to the cssclass of the container/control. The stylesheet.css file should have entries for all the group styles available in the Group Style Maintenance window.

2.2.2 How to Create a Group Style

This option allows you to register a new group style which is defined/ available in the stylesheet. Once it is registered, you can use the group styles while you define a container.

Steps to create a Group Style

1. From the LHS menu, expand **UI Configurations** and click **Group Styles**. The *Group Style Maintenance* window is displayed.
2. Click **New** in the *Group Styles* toolbar.

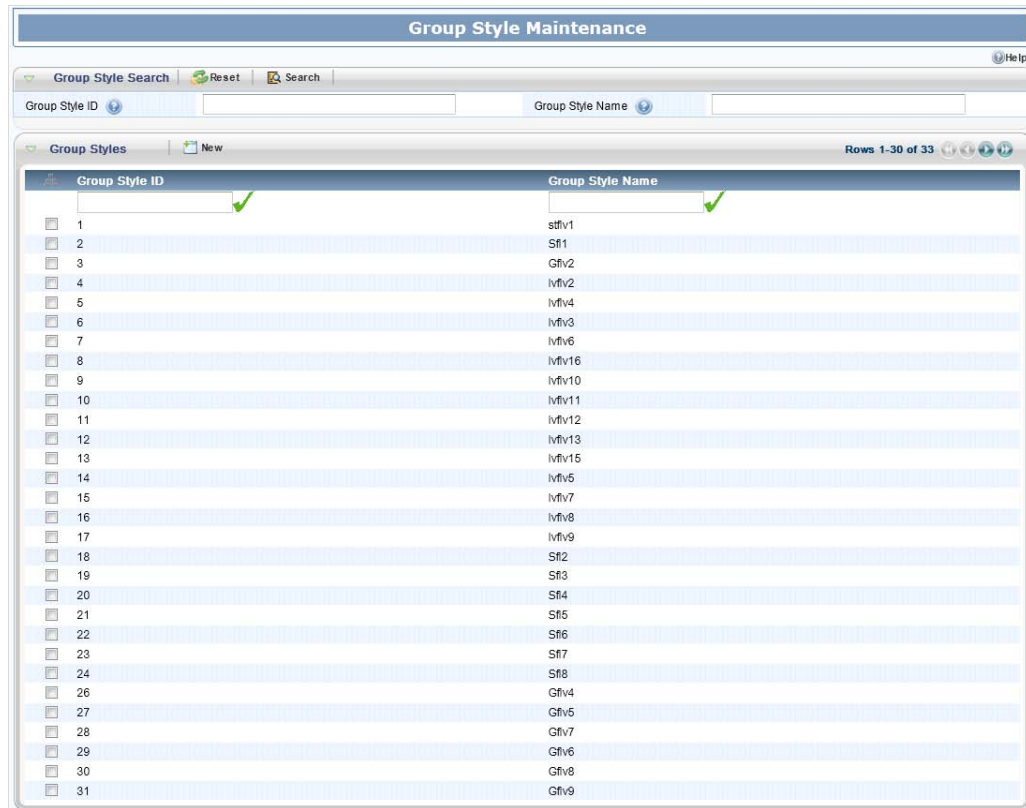


Figure 16. Group Style Maintenance window

Field Name	Description and Remarks
Group Style ID	Enter a unique ID for the group style. It's advisable to put unique ID. However a validation has been done which will restrict the user to save duplicate values.
Group Style Name	Enter the name of the group style.

3. Click **Save**.

2.2.3 Sample Group Styles:

Following figures display different group styles present in the Application Forms. These are the group styles shipped with the standard product.

2.2.3.1 Grid Container (Type = 5)

Grid Group Style: Gfv2

Description- Grid Container without border.

Workflow History (9) Difference						
	Last Modified	Last Modified By	Status	Comments	Action	Comments
<input type="checkbox"/>	21-11-2011 19:57:08	ORMUSER	Draft		Updated	
<input type="checkbox"/>	21-11-2011 19:57:13	ORMUSER	Draft		Updated	
<input type="checkbox"/>	21-11-2011 19:57:24	ORMUSER	Draft		Updated	
<input type="checkbox"/>	21-11-2011 19:59:19	ORMUSER	Draft		Updated	
<input type="checkbox"/>	21-11-2011 19:59:22	ORMUSER	Draft		Updated	

Grid Group Style: Gflv4

Description- Grid Container without Border and Toolbar.

Additional XML Configuration: Header should not be present. **Note:** Transpose should not be configured in menu, since we cannot return back to Grid view when we do a transpose.

ID	Name	Parent Process	Owner	Attestation	Last Attested	Last Assessment Rating	Last Assessment	Status	Last Modified
81307004	9789	dfgdfg	Process Owner	No				Open	30-Jan-2013
81312744	fdgdfgdfg	12123131	Process Creator	No				Open	30-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81312684	12123131		Process Creator	No		Medium	31-Jan-2013	Open	24-Jan-2013
81313241	Entering 'BE as of Date' is ...	12123131	Tom Harley	No		Medium	24-Jan-2013	Open	24-Jan-2013
81312859	dfgdfg	fdgdfgdfg	Process Owner	No		Medium	22-Jan-2013	Open	22-Jan-2013
81312511	1234		Process Creator	Yes				Open	22-Jan-2013
81307013	1209		Tom Harley	No				Open	21-Jan-2013
81285216	22		Process Owner	No				Open	16-Jan-2013
81290817	98989		Process Owner	No				Open	11-Jan-2013
81290806	fcv@88		Process Owner	No				Draft	11-Jan-2013
81254388	dddddd		Workflow Business User	Yes	10-Jan-2013			Open	09-Jan-2013
81282125	bwrcvcb		Tom Harley	No				Open	02-Jan-2013
81260132	3252423342sddsdsdsds		Central admin	No				Open	31-Dec-2012
81260091	dhhghgh		Process Owner	No				Open	31-Dec-2012
81259799	325		Tom Harley	No				Open	31-Dec-2012
81259779	wer		Tom Harley	No				Open	31-Dec-2012

Grid Group Style: Gflv5

Description- Grid Container without Border, Toolbar, and Header.

Additional XML Configuration: Header should not be present.

81307004	9789	dfgdfg	Process Owner	No				Open	30-Jan-2013
81312744	fdgdfgdfg	12123131	Process Creator	No				Open	30-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81312684	12123131		Process Creator	No		Medium	31-Jan-2013	Open	24-Jan-2013
81313241	Entering 'BE as of Date' is ...	12123131	Tom Harley	No		Medium	24-Jan-2013	Open	24-Jan-2013
81312859	dfgdfg	fdgdfgdfg	Process Owner	No		Medium	22-Jan-2013	Open	22-Jan-2013
81312511	1234		Process Creator	Yes				Open	22-Jan-2013
81307013	1209		Tom Harley	No				Open	21-Jan-2013
81285216	22		Process Owner	No				Open	16-Jan-2013
81290817	98989		Process Owner	No				Open	11-Jan-2013
81290806	fcv@88		Process Owner	No				Draft	11-Jan-2013
81254388	dddddd		Workflow Business User	Yes	10-Jan-2013			Open	09-Jan-2013
81282125	bwrcvcb		Tom Harley	No				Open	02-Jan-2013
81260132	3252423342sddsdsdsds		Central admin	No				Open	31-Dec-2012
81260091	dhhghgh		Process Owner	No				Open	31-Dec-2012
81259799	325		Tom Harley	No				Open	31-Dec-2012
81259779	wer		Tom Harley	No				Open	31-Dec-2012

Grid Group Style: Gflv6

Description- Grid Container with Border and toolbar.

Delegation (4)							
Delegator	Delegate	Start Date	End Date	Last Modified	Created By	Status	
grcuser	Admin	16-Oct-2012	24-Oct-2012	09-Oct-2012	grcuser	Draft	
grcuser	Akank	09-Oct-2012	25-Oct-2012	09-Oct-2012	grcuser	Draft	
grcuser	Akanksha	09-Oct-2012	31-Oct-2012	09-Oct-2012	grcuser	Draft	
grcuser	Action Assessor	11-Sep-2012	13-Sep-2012	04-Sep-2012	grcuser	Draft	

Grid Group Style: Gflv7

Description- Grid Container with toolbar, but no border and header.

Processes (18)

Create Process | Delete Process | Assess Process | Attest Process | Export | Expand All

ID	Name	Parent Process	Owner	Attestation	Last Attested	Last Assessment Rating	Last Assessment	Status	Last Modified
81307004	9789	dfgdfg	Process Owner	No				Open	30-Jan-2013
81312744	fdgdfgdfg	12123131	Process Creator	No				Open	30-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81312684	12123131		Process Creator	No		Medium	31-Jan-2013	Open	24-Jan-2013
81313341	Entering 'BE as of Date' is ...	12123131	Tom Harley	No		Medium	24-Jan-2013	Open	24-Jan-2013
81312659	dfgdfg	fdgdfgdfg	Process Owner	No		Medium	22-Jan-2013	Open	22-Jan-2013
81312511	1234		Process Creator	Yes				Open	22-Jan-2013
81307013	1209		Tom Harley	No				Open	21-Jan-2013
81295216	22		Process Owner	No				Open	16-Jan-2013
81290817	98989		Process Owner	No				Open	11-Jan-2013
81290806	hcz888		Process Owner	No				Draft	11-Jan-2013
81254389	dddddd		Workflow Business User	Yes	10-Jan-2013			Open	09-Jan-2013
81262125	bxwcbvcb		Tom Harley	No				Open	02-Jan-2013
81260132	3252423342sddsdsdsds		Central admin	No				Open	31-Dec-2012
81280091	dnhghgh		Process Owner	No				Open	31-Dec-2012
81259799	325		Tom Harley	No				Open	31-Dec-2012
81259779	wer		Tom Harley	No				Open	31-Dec-2012

Grid Group Style: Gflv8

Description- Grid Container with Border, but no Toolbar.

Additional XML Configuration: Header should not be present. **Note:** Transpose should not be configured in menu, since we cannot return back to Grid view when we do a transpose

ID	Name	Parent Process	Owner	Attestation	Last Attested	Last Assessment Rating	Last Assessment	Status	Last Modified
81307004	9789	dfgdfg	Process Owner	No				Open	30-Jan-2013
81312744	fdgdfgdfg	12123131	Process Creator	No				Open	30-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No				Draft	29-Jan-2013
81312684	12123131		Process Creator	No		Medium	31-Jan-2013	Open	24-Jan-2013
81313341	Entering 'BE as of Date' is ...	12123131	Tom Harley	No		Medium	24-Jan-2013	Open	24-Jan-2013
81312659	dfgdfg	fdgdfgdfg	Process Owner	No		Medium	22-Jan-2013	Open	22-Jan-2013
81312511	1234		Process Creator	Yes				Open	22-Jan-2013
81307013	1209		Tom Harley	No				Open	21-Jan-2013
81295216	22		Process Owner	No				Open	16-Jan-2013
81290817	98989		Process Owner	No				Open	11-Jan-2013
81290806	hcz888		Process Owner	No				Draft	11-Jan-2013
81254389	dddddd		Workflow Business User	Yes	10-Jan-2013			Open	09-Jan-2013
81262125	bxwcbvcb		Tom Harley	No				Open	02-Jan-2013
81260132	3252423342sddsdsdsds		Central admin	No				Open	31-Dec-2012
81280091	dnhghgh		Process Owner	No				Open	31-Dec-2012
81259799	325		Tom Harley	No				Open	31-Dec-2012
81259779	wer		Tom Harley	No				Open	31-Dec-2012

Grid Group Style: Gflv9

Description- Grid Container with Border, but no Toolbar and Header.

Additional XML Configuration: Header should not be present.

<input type="checkbox"/>	81307004	9789	dfgdfg	Process Owner	No			Open	30-Jan-2013
<input type="checkbox"/>	81312744	fdgdfgdfg	12123131	Process Creator	No			Open	30-Jan-2013
<input type="checkbox"/>	81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No			Draft	29-Jan-2013
<input type="checkbox"/>	81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No			Draft	29-Jan-2013
<input type="checkbox"/>	81312864	12123131		Process Creator	No	Medium	31-Jan-2013	Open	24-Jan-2013
<input type="checkbox"/>	81313341	Entering 'BE as of Date' is ...	12123131	Tom Harley	No	Medium	24-Jan-2013	Open	24-Jan-2013
<input type="checkbox"/>	81312859	dfgdfg	fdgdfgdfg	Process Owner	No	Medium	22-Jan-2013	Open	22-Jan-2013
<input type="checkbox"/>	81312511	1234		Process Creator	Yes			Open	22-Jan-2013
<input type="checkbox"/>	81307013	1209		Tom Harley	No			Open	21-Jan-2013
<input type="checkbox"/>	81295216	22		Process Owner	No			Open	16-Jan-2013
<input type="checkbox"/>	81290817	98989		Process Owner	No			Open	11-Jan-2013
<input type="checkbox"/>	81290806	fcz088		Process Owner	No			Draft	11-Jan-2013
<input type="checkbox"/>	81254388	dddddd		Workflow Business User	Yes		10-Jan-2013	Open	09-Jan-2013
<input type="checkbox"/>	81262126	bwcbvcb		Tom Harley	No			Open	02-Jan-2013
<input type="checkbox"/>	81260132	3252423342sddsdsdsds		Central admin	No			Open	31-Dec-2012
<input type="checkbox"/>	81260091	dhtghgh		Process Owner	No			Open	31-Dec-2012
<input type="checkbox"/>	81259799	325		Tom Harley	No			Open	31-Dec-2012
<input type="checkbox"/>	81259779	wer		Tom Harley	No			Open	31-Dec-2012

Grid Group Style: Gflv10

Description- Grid Container with Border, Toolbar, and Header.

Additional XML Configuration: Header should not be present.

Processes (18)									
<input type="checkbox"/> Create Process <input type="checkbox"/> Delete Process <input type="checkbox"/> Assess Process <input type="checkbox"/> Attest Process <input type="checkbox"/> Export <input type="checkbox"/> Expand All									
<input type="checkbox"/>	81307004	9789	dfgdfg	Process Owner	No			Open	30-Jan-2013
<input type="checkbox"/>	81312744	fdgdfgdfg	12123131	Process Creator	No			Open	30-Jan-2013
<input type="checkbox"/>	81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No			Draft	29-Jan-2013
<input type="checkbox"/>	81328634	dfgdfgdfg	Entering 'BE as of Date' is ...	Tom Harley	No			Draft	29-Jan-2013
<input type="checkbox"/>	81312864	12123131		Process Creator	No	Medium	31-Jan-2013	Open	24-Jan-2013
<input type="checkbox"/>	81313341	Entering 'BE as of Date' is ...	12123131	Tom Harley	No	Medium	24-Jan-2013	Open	24-Jan-2013
<input type="checkbox"/>	81312859	dfgdfg	fdgdfgdfg	Process Owner	No	Medium	22-Jan-2013	Open	22-Jan-2013
<input type="checkbox"/>	81312511	1234		Process Creator	Yes			Open	22-Jan-2013
<input type="checkbox"/>	81307013	1209		Tom Harley	No			Open	21-Jan-2013
<input type="checkbox"/>	81295216	22		Process Owner	No			Open	16-Jan-2013
<input type="checkbox"/>	81290817	98989		Process Owner	No			Open	11-Jan-2013
<input type="checkbox"/>	81290806	fcz088		Process Owner	No			Draft	11-Jan-2013
<input type="checkbox"/>	81254388	dddddd		Workflow Business User	Yes		10-Jan-2013	Open	09-Jan-2013
<input type="checkbox"/>	81262126	bwcbvcb		Tom Harley	No			Open	02-Jan-2013
<input type="checkbox"/>	81260132	3252423342sddsdsdsds		Central admin	No			Open	31-Dec-2012
<input type="checkbox"/>	81260091	dhtghgh		Process Owner	No			Open	31-Dec-2012
<input type="checkbox"/>	81259799	325		Tom Harley	No			Open	31-Dec-2012
<input type="checkbox"/>	81259779	wer		Tom Harley	No			Open	31-Dec-2012

Grid Group Style: Gflv11

Description- Grid Container without any styling & Toolbar.

Additional XML Configuration: Header should not be present.

ID	Name	Risk Event Type	Risk Category	Status	Last Modified
<input type="checkbox"/> 81622698	Verity Locale Master Entries	Business Disruption and System Failures	b	Open	07-Feb-2013
<input type="checkbox"/> 81622669	Submit should move the Record to OPEN	Business Disruption and System Failures	b	Closed	07-Feb-2013
<input type="checkbox"/> 81622419	INSERT INTO HSFACT_RISK_LIBRARY (V_C...	Business Disruption and System Failures	b	Open	07-Feb-2013
<input type="checkbox"/> 81622361	INSERT INTO HSFACT_RISK_LIBRARY (V_C...	Business Disruption and System Failures	b	Open	07-Feb-2013
<input type="checkbox"/> 81621953	Quick Check on Risk Library	Business Disruption and System Failures	b	Open	07-Feb-2013
<input type="checkbox"/> 81620857	Verifying the bugs fixed on Feb 6th and F...	Business Disruption and System Failures	b	Draft	07-Feb-2013
<input type="checkbox"/> 81620770	Verifying the bugs fixed on Feb 6th and F...	Business Disruption and System Failures	b	Draft	07-Feb-2013
<input type="checkbox"/> 81620704	Verifying the bugs fixed on Feb 6th and Feb 7th	Clients, Products and Business Practices	Credit Cards	Open	07-Feb-2013
<input type="checkbox"/> 81619664	ijklj	Clients, Products and Business Practices		Open	07-Feb-2013
<input type="checkbox"/> 81619652	jkjklj	Business Disruption and System Failures	Credit Cards	Open	06-Feb-2013
<input type="checkbox"/> 81619640	koko	Business Disruption and System Failures	b	Open	06-Feb-2013
<input type="checkbox"/> 81619617	kkk	Business Disruption and System Failures	Credit Cards	Open	06-Feb-2013
<input type="checkbox"/> 81619468	feb6	Business Disruption and System Failures	Credit Cards	Open	06-Feb-2013
<input type="checkbox"/> 81353837	Risk Test	Clients, Products and Business Practices	Platinum Cards	Open	06-Feb-2013
<input type="checkbox"/> 81340943	dfss	Business Disruption and System Failures	Credit Cards	Open	05-Feb-2013
<input type="checkbox"/> 81346543	Creating Risk Library on Feb 4thCreating ...	Internal Fraud	Platinum Cards	Closed	04-Feb-2013
<input type="checkbox"/> 81346524	Creating Risk Library on Feb 4th	Business Disruption and System Failures	Credit Cards	Closed	04-Feb-2013
<input type="checkbox"/> 81342253	asdasd	Clients, Products and Business Practices		Closed	31-Jan-2013
<input type="checkbox"/> 81342246	asdasdasdad	Clients, Products and Business Practices		Closed	31-Jan-2013

2.2.3.2 Label Value/ Normal Container (Type = 1)

Label Value Group Style: Ivflv2

Description- Header with Underline

Views | Clear | Go

ID	Name	Predictive / Lag
Type	Enterprise KI <input type="radio"/> Yes <input type="radio"/> No	
Status	Last Modified(>=)	Last Modified(<=)

Label Value Group Style: Ivflv15

Description- Header without Underline

Search | Views | Clear | Go

ID ?	Name ?	Risk Event Type ?
SOX ? <input type="radio"/> Yes <input type="radio"/> No		
Status ?	Last Modified From ?	Last Modified To ?

Label Value Group Style: Ivflv4

Description- Rounded border with grey header.

Additional Configuration: BORDERREQUIRED="Y"

The screenshot shows a form window with a grey header bar containing 'Save' and 'Cancel' buttons. The form contains the following fields:

- Name*: 9789
- ID: 81307004
- Description: 9789
- Objectives: 789
- Critical Success Factors: 879
- Critical: Yes No
- Attestation in Scope: Yes No
- Reason for Criticality: 123123
- Owner: Process Owner
- Parent Process: dfgdfg

Label Value Group Style: Ivflv7

Description- Single shade Grey container with Row lines.

In edit mode, all Input types in the container will not have borders.

Additional Configuration: BORDERREQUIRED="N"

The screenshot shows a table titled 'Insurance Policy Details' with the following structure:

Name	ID
Description	8588
Type	Start Date
Expiry Date	Date of Inception
Renewal Date	CCY
Expiry Reminder Days	Premium Amount
Cover Amount	Max Single Claim Amount
Deductible	Reference Number
Issuer	Broker
Probability of Payout (%)	

Label Value Group Style: Ivflv10

Description- Double shade Grey container with Row lines.

In edit mode, all Input types in the container will not have borders.

Additional Configuration: BORDERREQUIRED="N"

Insurance Policy Details	
Name	ID 8588
Description	
Type	Start Date
Expiry Date	Date of Inception
Renewal Date	CCY
Expiry Reminder Days	Premium Amount
Cover Amount	Max Single Claim Amount
Deductible	Reference Number
Issuer	Broker
Probability of Payout (%)	

Label Value Group Style: Ivflv11

Description- Rounded border & yellow background.

Additional Configuration: BORDERREQUIRED="Y"

Save | Cancel

Name	9789	ID	81307004
Description	9789		
Objectives	789		
Critical Success Factors	879		
Critical	<input checked="" type="radio"/> Yes <input type="radio"/> No	Attestation in Scope	<input type="radio"/> Yes <input checked="" type="radio"/> No
Reason for Criticality	123123		
Owner	Process Owner	Parent Process	dfgdfg

Label Value Group Style: Ivflv12

Description- Rounded border & white background.

Additional Configuration: BORDERREQUIRED="Y"

Save | Cancel

Name	9789	ID	81307004
Description	9789		
Objectives	789		
Critical Success Factors	879		
Critical	<input checked="" type="radio"/> Yes <input type="radio"/> No	Attestation in Scope	<input type="radio"/> Yes <input checked="" type="radio"/> No
Reason for Criticality	123123		
Owner	Process Owner	Parent Process	dfgdfg

Label Value Group Style: lvflv13

Description- Rounded border & grey background.

Additional Configuration: BORDERREQUIRED="Y"

A screenshot of a form with rounded borders and a grey background. The form contains several input fields and radio buttons. At the top right, there are 'Save' and 'Cancel' buttons. The fields are: Name* (9789), ID* (81307004), Description* (9789), Objectives* (789), Critical Success Factors* (879), Critical* (Yes/No), Reason for Criticality* (123123), and Owner* (Process Owner). There are also fields for Attestation in Scope* (Yes/No) and Parent Process* (dfgdfg).

2.2.3.3 Search Container (Type 11)

Search Group Style: Sfl1

A screenshot of a search container with a white background and rounded corners. It features search filters for ID, Name, Predictive Lag, Last Modified, and Enterprise KI. A red box highlights the Enterprise KI radio buttons (Yes/No), with an arrow pointing to the text 'Radio control'.

Search Group Style: Sfl2

Description- Grey background with Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

A screenshot of a search container with a grey background and a header with an underline. It features search filters for ID, Name, Risk Event Type, SOX, Status, Last Modified From, and Last Modified To.

Search Group Style: Sfl3

Description- Blue background with Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

A screenshot of a search container with a blue background and a header with an underline. It features search filters for ID, Name, Risk Event Type, SOX, Status, Last Modified From, and Last Modified To.

Search Group Style: Sfl4

Description- Yellow background with Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

Search | Views | Clear | Go

ID ?	Name ?	Risk Event Type ?
SOX ? <input type="radio"/> Yes <input type="radio"/> No		
Status ?	Last Modified From ?	Last Modified To ?

Search Group Style: Sfl5

Description- White background with Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

[Edit](#)

Name*	9789	ID	81307004
Description	9789		
Objectives	789		
Critical Success Factors	879		
Critical	Yes	Attestation in Scope	No
Reason for Criticality	123123		
Owner*	Process Owner	Parent Process*	dfgdfg

Search Group Style: Sfl6

Description- White background without Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

Search | Views | Clear | Go

ID ?	Name ?	Risk Event Type ?
SOX ? <input type="radio"/> Yes <input type="radio"/> No		
Status ?	Last Modified From ?	Last Modified To ?

Search Group Style: Sfl7

Description- Blue background without Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

Search | Views | Clear | Go

ID ?	Name ?	Risk Event Type ?
SOX ? <input type="radio"/> Yes <input type="radio"/> No		
Status ?	Last Modified From ?	Last Modified To ?

Search Group Style: Sfl8

Description- Yellow background without Border & Header with Underline.

Additional Configuration: BORDERREQUIRED="N"

Search | Views | Clear | Go

ID ? Name ? Risk Event Type ?

SOX ? Yes No Last Modified From ?

Status ? Last Modified To ?

Search Group Style: Ivflv8

As on : 23/12/2012

Risks ? 0

Controls ? 0

Incidents ? 0

Actions ? 2

KI ? 0

BCM ? 0

GL Account ? 0

Search Group Style: Ivflv9

Risks ? 0

Controls ? 0

Incidents ? 0

Actions ? 2

KI ? 0

BCM ? 0

GL Account ? 0

2.2.3.4 Tab Container (Type = 10)

Tab Group Style: Ivflv4

Tab with border- Forms XML configuration

Open Tasks									
Completed Tasks									
Notifications									
Reassigned Tasks									
Inbox (17) Reassign Expand All									
Task ID_DND	Task Name	Received On	Completion By	Task Type	From	Reassigned	Reassigned On	Status	
<input type="checkbox"/> 81631950	Challenge for gthkmgplhgllkj;ku	11-Feb-2013	16-Feb-2013	Control Definition	Challenger	No	16-Feb-2013	Open	
<input type="checkbox"/> 81626834	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81629900	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81627245	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81628162	Challenge for GJUGJGJGJ	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81621354	Challenge for dfgdgdfgdg	07-Feb-2013	12-Feb-2013	Control Definition	Challenger	No	12-Feb-2013	Open	
<input type="checkbox"/> 81625981	Challenge for GJUGJGJGJ	07-Feb-2013	12-Feb-2013	Risk Definition	Challenger	No	12-Feb-2013	Open	
<input type="checkbox"/> 81338915	Challenge for 29 jan testing	31-Jan-2013	05-Feb-2013	Risk Definition	Challenger	No	05-Feb-2013	Open	
<input type="checkbox"/> 81333465	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81330771	Challenge for Test for challenge	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81333789	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81333754	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81330371	Challenge for Test for challenge	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81332559	Challenge for Today is Jan 4th	29-Jan-2013	03-Feb-2013	Risk Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81329264	Im in miscellaneous menu	28-Jan-2013	02-Feb-2013	Information Libraries	Library Creator	No		Pending Approval	
<input type="checkbox"/> 81330057	Challenge for Today is Jan 4th	28-Jan-2013	02-Feb-2013	Risk Definition	Delila Chang	No	02-Feb-2013	Open	
<input type="checkbox"/> 81329466	Challenge for cvbc/bcv	28-Jan-2013	02-Feb-2013	Risk Definition	Challenger	No	02-Feb-2013	Open	

Tab Group Style: Ivflv2

Tab without border. Forms XML configuration

Open Tasks									
Completed Tasks									
Notifications									
Reassigned Tasks									
Inbox (17) Reassign Expand All									
Task ID_DND	Task Name	Received On	Completion By	Task Type	From	Reassigned	Reassigned On	Status	
<input type="checkbox"/> 81631950	Challenge for gthkmgplhgllkj;ku	11-Feb-2013	16-Feb-2013	Control Definition	Challenger	No	16-Feb-2013	Open	
<input type="checkbox"/> 81626834	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81629900	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81627245	Challenge for On Submit, Leading to Link...	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81628162	Challenge for GJUGJGJGJ	08-Feb-2013	13-Feb-2013	Risk Definition	Challenger	No	13-Feb-2013	Open	
<input type="checkbox"/> 81621354	Challenge for dfgdgdfgdg	07-Feb-2013	12-Feb-2013	Control Definition	Challenger	No	12-Feb-2013	Open	
<input type="checkbox"/> 81625981	Challenge for GJUGJGJGJ	07-Feb-2013	12-Feb-2013	Risk Definition	Challenger	No	12-Feb-2013	Open	
<input type="checkbox"/> 81338915	Challenge for 29 jan testing	31-Jan-2013	05-Feb-2013	Risk Definition	Challenger	No	05-Feb-2013	Open	
<input type="checkbox"/> 81333465	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81330771	Challenge for Test for challenge	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81333789	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81333754	Challenge for dtdtdtd	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81330371	Challenge for Test for challenge	29-Jan-2013	03-Feb-2013	Control Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81332559	Challenge for Today is Jan 4th	29-Jan-2013	03-Feb-2013	Risk Definition	Challenger	No	03-Feb-2013	Open	
<input type="checkbox"/> 81329264	Im in miscellaneous menu	28-Jan-2013	02-Feb-2013	Information Libraries	Library Creator	No		Pending Approval	
<input type="checkbox"/> 81330057	Challenge for Today is Jan 4th	28-Jan-2013	02-Feb-2013	Risk Definition	Delila Chang	No	02-Feb-2013	Open	
<input type="checkbox"/> 81329466	Challenge for cvbc/bcv	28-Jan-2013	02-Feb-2013	Risk Definition	Challenger	No	02-Feb-2013	Open	

2.2.3.5 Stylesheet GroupStyles

Following figures display different types of Stylesheet GroupStyles.

Component Name	Referred location in Forms Manager to configure the component
Group Style : Gflv2	Forms -> Container -> Group Style-> Gflv2
Group Style : Ivflv2	Forms -> Container -> Group Style-> Ivflv2
Group Style : Ivflv3	Forms -> Container -> Group Style-> Ivflv3
Group Style : Ivflv4	Forms -> Container -> Group Style-> Ivflv4
Group Style : Ivflv6	Forms -> Container -> Group Style-> Ivflv6
Group Style : Sfl1	Forms -> Container -> Group Style-> Sfl1
Radio control	Forms -> Container -> Control -> Control Type -> Radio control

2.3 Events and Functions

2.3.1 Overview

This feature allows the user to upload new events and functions that are supported by platform.

Event: A JavaScript can be executed when an event occurs, like when a user clicks on an HTML element. Examples of events are onclick, onerror, onfinish, onfocus, and onselect.

Function: A function is a block of code that will be executed when it is called. Examples of functions are gethierarchycode, readOnly, getSelectedRows, openPopupForm, and UpdateGrid.

2.3.2 How to Define Events and Functions

To define an event:

1. From the LHS menu, expand **Administration** and click **Form Events**. The *Events and Functions Maintenance* window is displayed.
2. Click **New** in the *Events* toolbar.

Event ID	Event Name
<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	4
<input type="checkbox"/>	5
<input type="checkbox"/>	6
<input type="checkbox"/>	7
<input type="checkbox"/>	8
<input type="checkbox"/>	9
<input type="checkbox"/>	10

Figure 17. Events window

Field Name	Description and Remarks
Event ID	Enter a unique ID for the event. This is a mandatory field. It's advisable to put unique ID. However a validation has been done which will restrict the user to save duplicate values.
Event Name	Enter the name of the event.

3. Enter **Event ID** and **Event Name** in the respective fields.

To define a function

1. From the LHS menu, expand **Administration** and click **Form Events**. The *Events and Functions Maintenance* window is displayed.
2. Click **New** from the *JS Functions* toolbar.

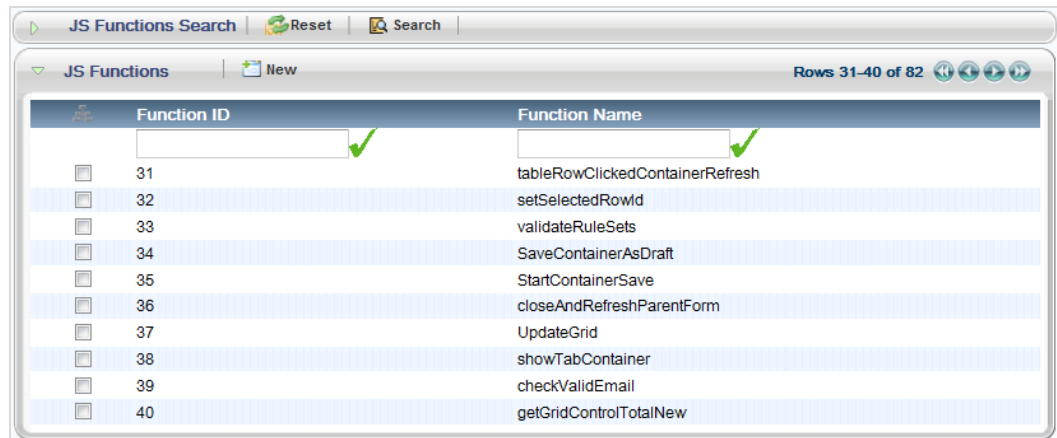


Figure 18. Functions window

Field Name	Description and Remarks
Function ID	Enter a unique ID for the event. This is a mandatory field. It's advisable to put unique ID. However a validation has been done which will restrict the user to save duplicate values.
Function Name	Enter the name of the function.

3. Enter **Function ID** and **Function Name** in the respective fields.

2.4 Messages

2.4.1 Overview

Messages refer to the preferred locale specific text that is displayed to the users. These messages are displayed to communicate the occurrence of an event or the checking of a validation. These are also used for displaying locale sensitive texts on the screen like Bread Crumbs, Header Text, Name of the URL Control, and so on.

2.4.2 How to Create a Message

Steps to create a message

1. From the LHS menu, expand **Administration** and click **Messages**. The *Messages Maintenance* window is displayed.
2. Click **New** in the *Messages* toolbar.



Figure 19. Messages window

Field Name	Description and Remarks
Message Identifier	Enter a unique ID for the message. This is a mandatory field. It's advisable to put unique ID. However a validation has been done which will restrict the user to save duplicate values.
Message Type	Select the message type from the drop-down list. L denotes Label Messages, M denotes Popup Messages, and S denotes Solution Specific Messages.
Message Description	Enter the message that needs to be displayed to the user.

2.4.3 Messages Usage

Following example displays how the messages can be created and tagged with the validations, header text and so on.

2.4.3.1 To use a Message in a Validation

To call a message in a validation, navigate to the validation new/ edit screen and start typing in the Message Description field as shown. The list of defined messages matching the user's suggestion will be displayed. For more information, see [How to Create Validation Rules](#) section.

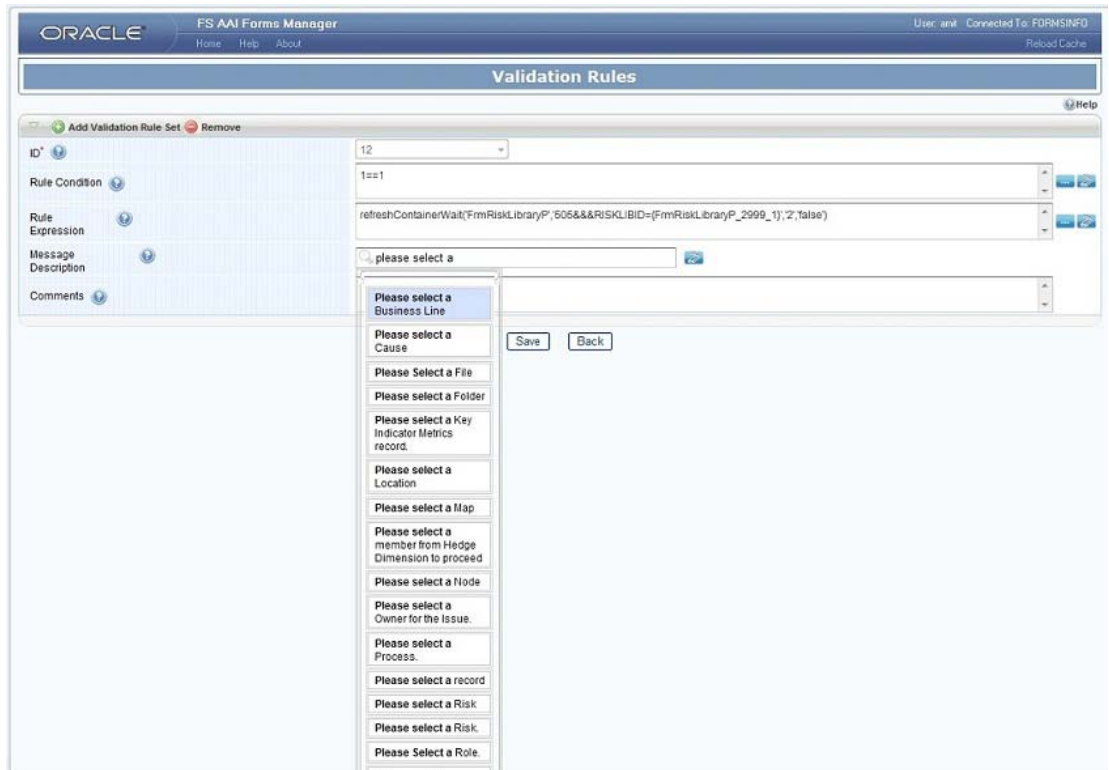


Figure 20. Message in Validation Rule

2.4.3.2 To use a Message in a URL Control

To display a message in a URL Control, navigate to the URL control new/ edit screen and start typing in the **Text Along With Image** field as shown in the following figure. The list of defined messages matching the user's suggestion will be displayed.

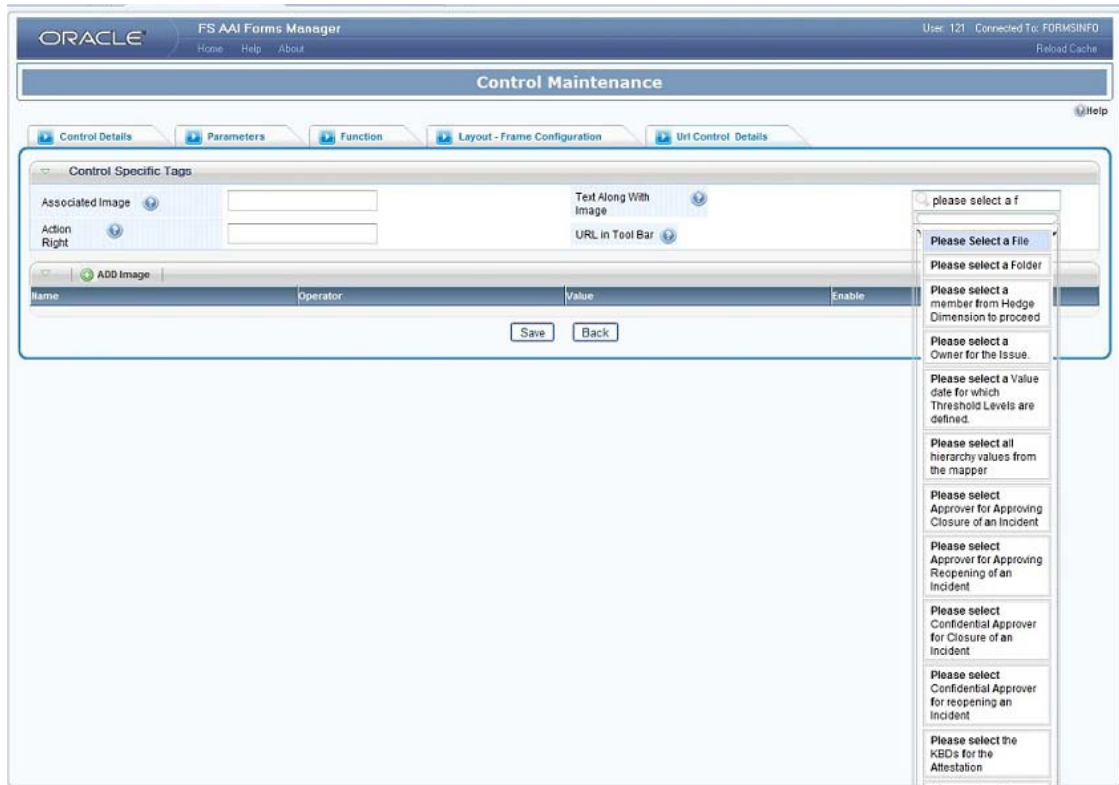


Figure 21. Message in URL Control

3 UI Configurations

3.1 Landing Page

3.1.1 Overview

The user will be directed to application Home page on login. This option allows configuring the landing page or default page on login based on the user's role.

- Specific menu/ submenu options or functionality can be configured as landing page for a role.
- Precedence is used to decide the landing page for a user having multiple roles.

3.1.2 How Landing Page is displayed

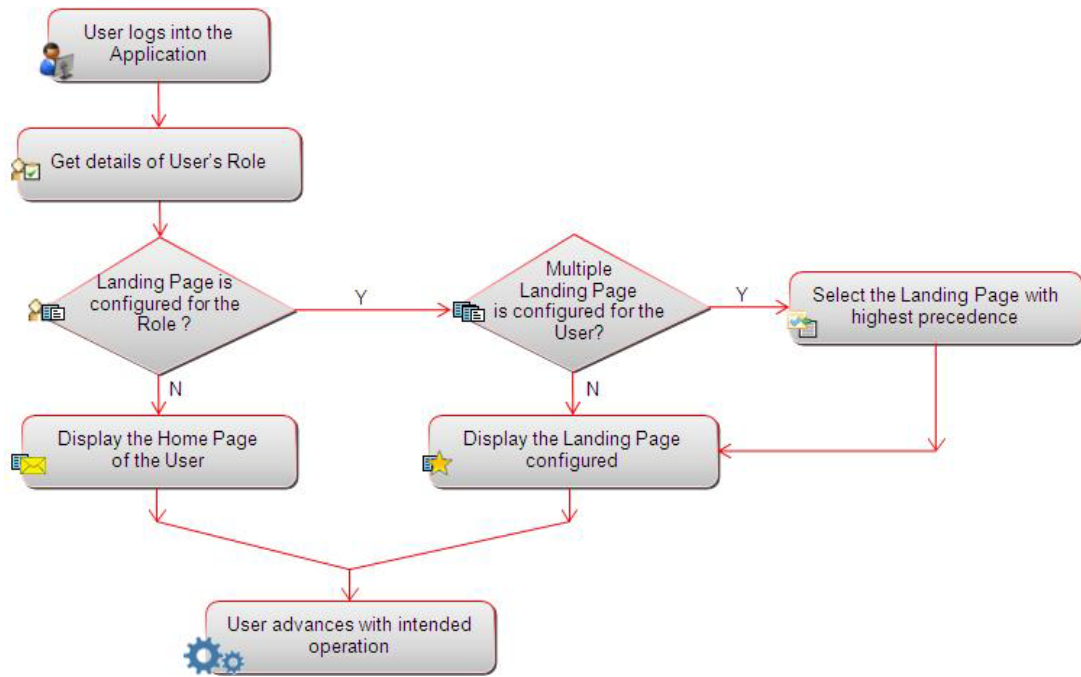


Figure 22. Flowchart of how a landing page is displayed

3.1.3 How to Associate Landing Page to Role

Steps to associate a landing page to a role

1. From the LHS menu, expand **UI Configurations** and click **Landing Page**.
2. Click **New** in the *Landing Page* Toolbar. The *Landing Page* window is displayed.

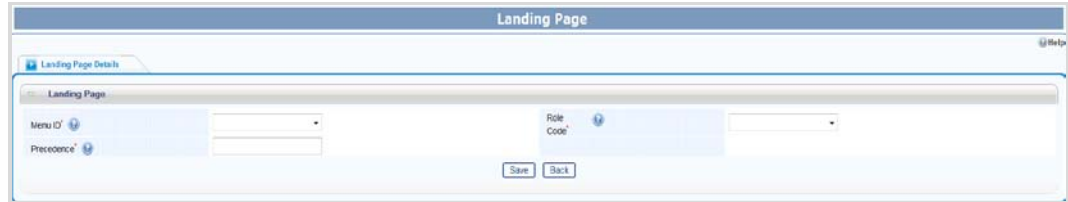


Figure 23. Landing Page window

Field Name	Description and Remarks
Menu ID	Select the menu id from the drop-down list. The selected menu will be displayed as the landing page.
Role Code	Select the role code from the drop-down list. For the selected role, the selected menu will be displayed as the landing page.
Precedence	Out of several landing pages assigned to a role, enter the precedence of the current landing page.

3. Click **Save**.

3.1.4 Landing Page Maintenance

From the LHS menu, expand **UI Configurations** and click **Landing Page**. The *Landing Page* window is displayed.

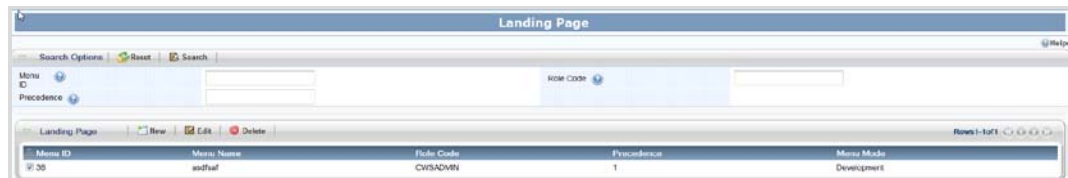


Figure 24. Landing Page window

Action	Description
Search	Enter Menu ID , Role Code , and Precedence . Click Search in the <i>Search Options</i> Toolbar.
Edit	Select a menu and click Edit in the <i>Landing Page</i> Toolbar to edit a menu.
Delete	Select a menu and click Delete in the <i>Landing Page</i> Toolbar to delete a menu.

3.2 Tabs

3.2.1 Overview

This option allows you to create tabs to be displayed in the application screen.

A Tab Group is a collection of tabs. You can define a tab group in the Tab Group Master. After creating the tab group, you need to create the tabs for the tab group. You can modify (add/ remove / re-order tabs) at any point of time. Tab groups can be mapped to multiple forms.

3.2.2 Flow Chart

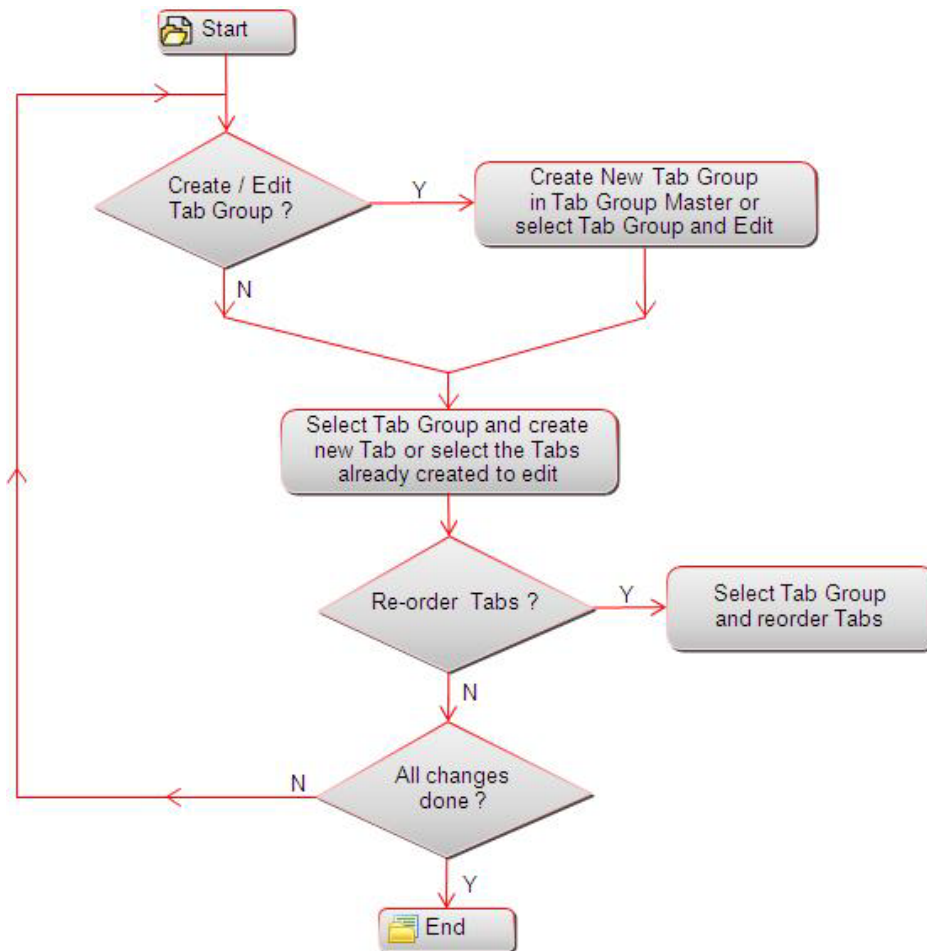


Figure 25. Flowchart of Tab

3.2.3 How to create a Tab

Steps to create a Tab Group

1. From the LHS menu, expand **UI Configurations** and click **Tabs**. The *Custom Tab Maintenance* window is displayed.
2. Click **New** in the *Tab Group Master* Toolbar.



Figure 26. Custom Tab Maintenance window

Field Name	Description and Remarks
Tab Group Name	Enter the name of the Tab Group. This is a mandatory field. The Tab Group name should have a prefix "CS_".
Tab Group Description	Enter the description of the Tab Group.

3. Click **Save**.

Steps to create a Tab Master

1. Select the Tab Group to which you want to add tab masters and click **New** in the *Tab Master* Toolbar.



Figure 27. Tab Master Details tab

Action	Description
Tab Name	Enter the name of the tab. This is a mandatory field. The Tab name should have a prefix "CS_".
Tab Description	Enter the description of the tab.
Calling Method	Select JSP or Form from the drop-down list.
Tab Frame	Enter the frame which is linked to the tab. This is a mandatory field.

Action	Description
Tab Form Parameter	Enter the parameter to be passed to the tab form. This is a mandatory field.
Tab Refresh Required	Select Y or N to configure if the tab should be refreshed or not.

2. Click the **Parameters** tab.

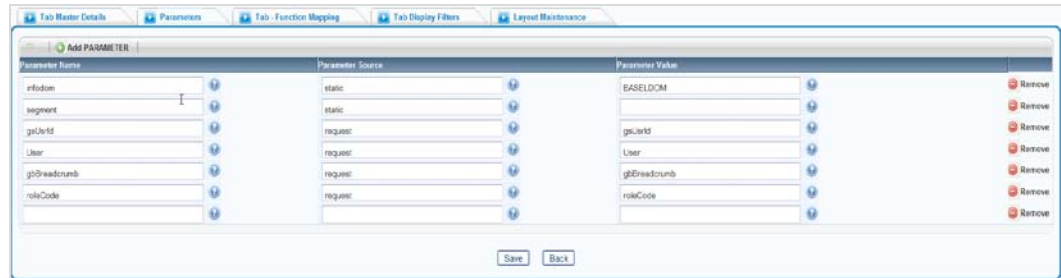


Figure 28. Parameters tab

Field Name	Description and Remarks
Name	Enter the name of the parameter to be passed to the layout template. The new parameter name should have a prefix "CS_". The parameter names are case sensitive.
Source	Enter the name of the Tab Group. This is a mandatory field.
Value	Enter the value of the parameter.
Function Code	Enter the function code. After typing characters in the text field, function codes similar to the entered values will be popped up in the suggestion box.

3. Click the **Tab Function Mapping** tab.

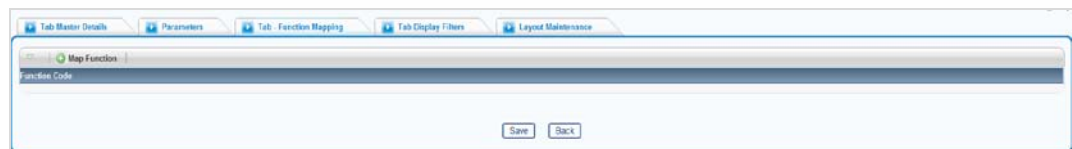


Figure 29. Tab Function Mapping tab

4. Click **Map Function** and enter the function code to be mapped with the tab. The users with this function code mapped can only access the tab.

After typing characters in the text field, function codes similar to the entered values will be popped up in the suggestion box.

5. Click the **Tab Display Filters** tab and then click **Add Combination**.



Figure 30. Tab Display Filters window

Field Name	Description and Remarks
Set ID	Enter the id of the set.
Parameter Name	Enter the name of the parameter.
Parameter Value	Enter the value of the parameter.
Operator	Select the operator type from the drop-down list. The operators are AND and OR .

6. Click the **Layout Maintenance** tab.

Figure 31. Layout Maintenance tab

Field Name	Description and Remarks
Template Name	Select the template from the drop-down list.
Layout Type	Select Layout type from the drop-down list. The available values are Standard and Custom .
Layout Name	Select the name of the JSP satisfying the selected JSP template and Type from the drop-down list.
Help URL	Enter the location of the help file. Note: Refers to the location, which is the server path in which the help file is kept. For example, the path will be like, << CONTEXTPATH >>/help/help_<<LOCALE>>/
Help File	Enter the name of the help file.
Context	Enter the name of the context.
Topic	Enter unique id of the help topic which needs to be displayed for the tab.

7. Click **Save**.

3.2.4 Custom Tab Maintenance

From the LHS menu, expand **UI Configurations** and click **Tabs**. The *Custom Tab Maintenance* window is displayed.

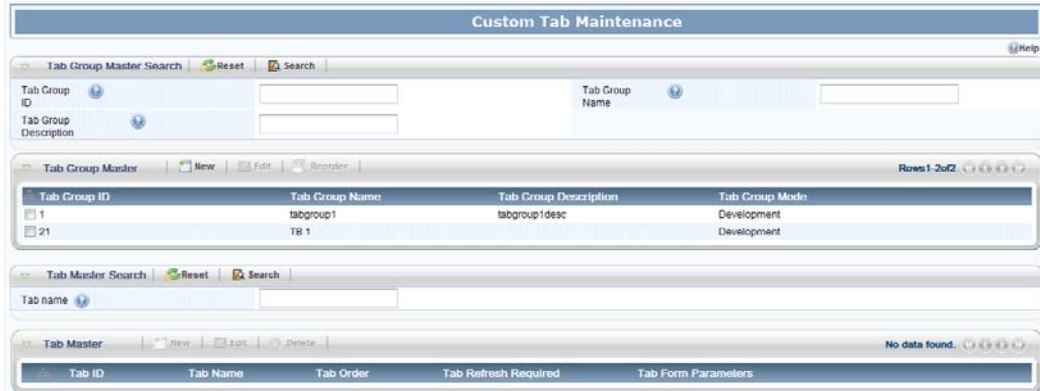


Figure 32. Custom Tab Maintenance window

Action	Description
Search	Search for a tab group by providing Tab Group ID , Tab Group Name , and Tab Group Description and then clicking Search in the <i>Tab Group Master Search</i> toolbar. Similarly, select a tab group and provide Tab Name, and then click Search in the <i>Tab Master Search</i> toolbar to search for a tab.
Modify	Select a tab group and click Edit in the <i>Tab Group Master</i> toolbar to modify a tab group. Select the tab group and tab, and then click Edit in the <i>Tab Master</i> toolbar to modify a tab.
Delete	Select the tab group and tab, and then click Delete in the <i>Tab Master</i> toolbar to delete a tab.
Reorder	Select a tab group and click Reorder in the <i>Tab Group Master</i> toolbar to change the order in which the tab should be displayed.

3.3 Forms

3.3.1 Overview

Forms are used to present application information in different formats using containers, and controls. Forms are placeholders for containers and the controls are embedded into containers.

There can be multiple containers inside a form. Similarly there can be multiple controls in a container.

NOTE: Having excessive number of Containers in Form or excessive number of Controls in a Container may degrade the presentation / look of the page in addition to performance.

3.3.2 Form Components

Following figures display different components present in the Application Forms. For more information on form components, see [User Interface Components in Forms Manager](#) section.

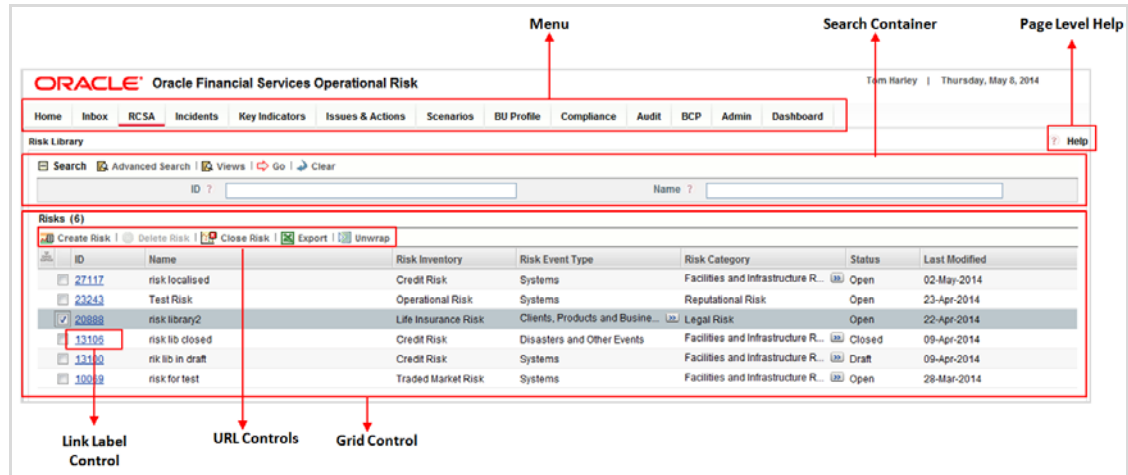


Figure 33. Form with different components

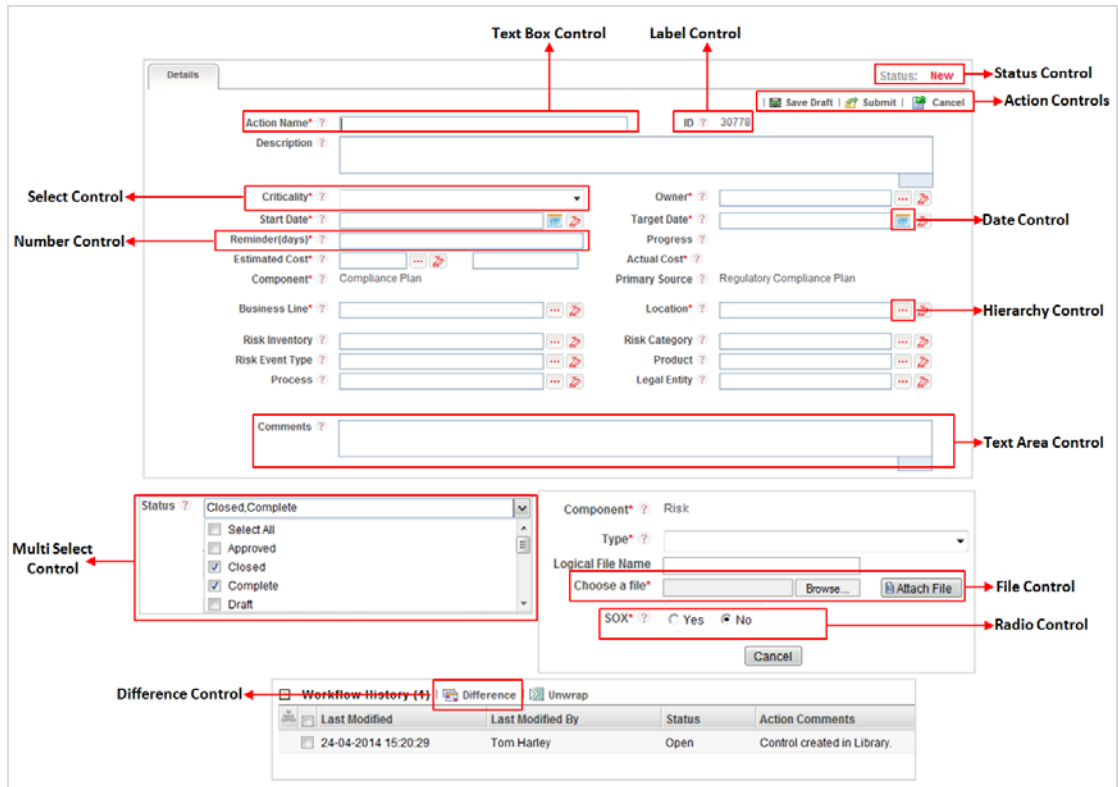


Figure 34. Form with different Controls



Figure 35. Frames and Scrollbars

Component Name	Referred location in Forms Manager to configure the component
Frame	Menu -> JSP Configurations -> Frames (In menu select Calling Method as JSP to get this screen)
Menu	Menu
Search & Filter Container	Forms -> Container -> Type Of Container -> Search Container
Grid Container	Forms -> Container -> Type Of Container -> Grid Container
Tab Container	Forms -> Container -> Type Of Container -> Tabbed Container
Difference Container	Forms -> Container -> Type Of Container -> Difference Container
Label Value Container	Forms -> Container -> Type Of Container -> Label Value Container
Button Container	Forms -> Container -> Type Of Container -> Button Container
Hierarchy Control	Forms -> Container -> Control -> Control Type -> Hierarchy Control
Checkbox Control	Forms -> Container -> Control -> Control Type -> Checkbox Control
URL Control (Hyperlink)	Forms -> Container -> Control -> Control Type -> URL Control
Label Control	Forms -> Container -> Control -> Control Type -> Label Control
Page Level Help	Forms -> Help URL + Help File Name
Number Control	Forms -> Container -> Control -> Control Type -> Number Control
Date Control	Forms -> Container -> Control -> Control Type -> Date Control
Grid Pagination	Forms -> Container -> Control -> Control Type -> Grid Control ->Pagination Option
List Control	Forms -> Container -> Control -> Control Type -> Select Control
Grid Toolbar	Forms -> Container -> Type Of Container -> Grid Toolbar
Link Label Control	Forms -> Container -> Control -> Control Type -> Link Label Control
Frame	Menu -> JSP Configurations -> Frames (In menu select Calling Method as JSP to get this screen)
Grid Toolbar	Forms -> Container -> Type Of Container -> Grid Toolbar
Link Label Control	Forms -> Container -> Control -> Control Type -> Link Label Control
Expand/ Collapse control	Forms -> Container -> Control ->Grid Control ->Collapse
Dropdown Control	Forms -> Container -> Control -> Control Type -> Dropdown Control
Textbox Control	Forms -> Container -> Control -> Control Type -> Textbox Control
Popup Form	Forms -> Overlay Form - Select 'N'
Text Area Control	Forms -> Container -> Control -> Control Type -> Text Area Control

Component Name	Referred location in Forms Manager to configure the component
Button Control	Forms -> Container -> Control -> Control Type -> Action Control
Difference Control	Forms -> Container -> Control -> Control Type -> Difference Control
Multi select Control	Forms -> Container -> Control -> Control Type -> Multi select Control
Grid HTMLABLE Control	Forms -> Container -> Control -> Control Type -> Grid HTMLABLE Control
Select Control	Forms -> Container -> Control -> Control Type -> Select Control
Audit Panel	Forms -> Container -> Type Of Container -> Audit Panel
File Control	Forms -> Container -> Control -> Control Type -> File Control
Action Tool Bar	Forms -> Container -> Type Of Container-> Grid Tool Bar
Textbox Control	Forms -> Container -> Control -> Control Type -> Textbox Control
Action Control	Forms -> Container -> Control -> Control Type -> Action Control
Expression Control	Forms -> Container -> Control -> Control Type -> Expression Control
Tool Tip	Forms -> Container -> Control -> Tool Tip
Contextual Help	Forms -> Container -> Control -> Context Help

3.3.3 Flowchart of Creating a Form

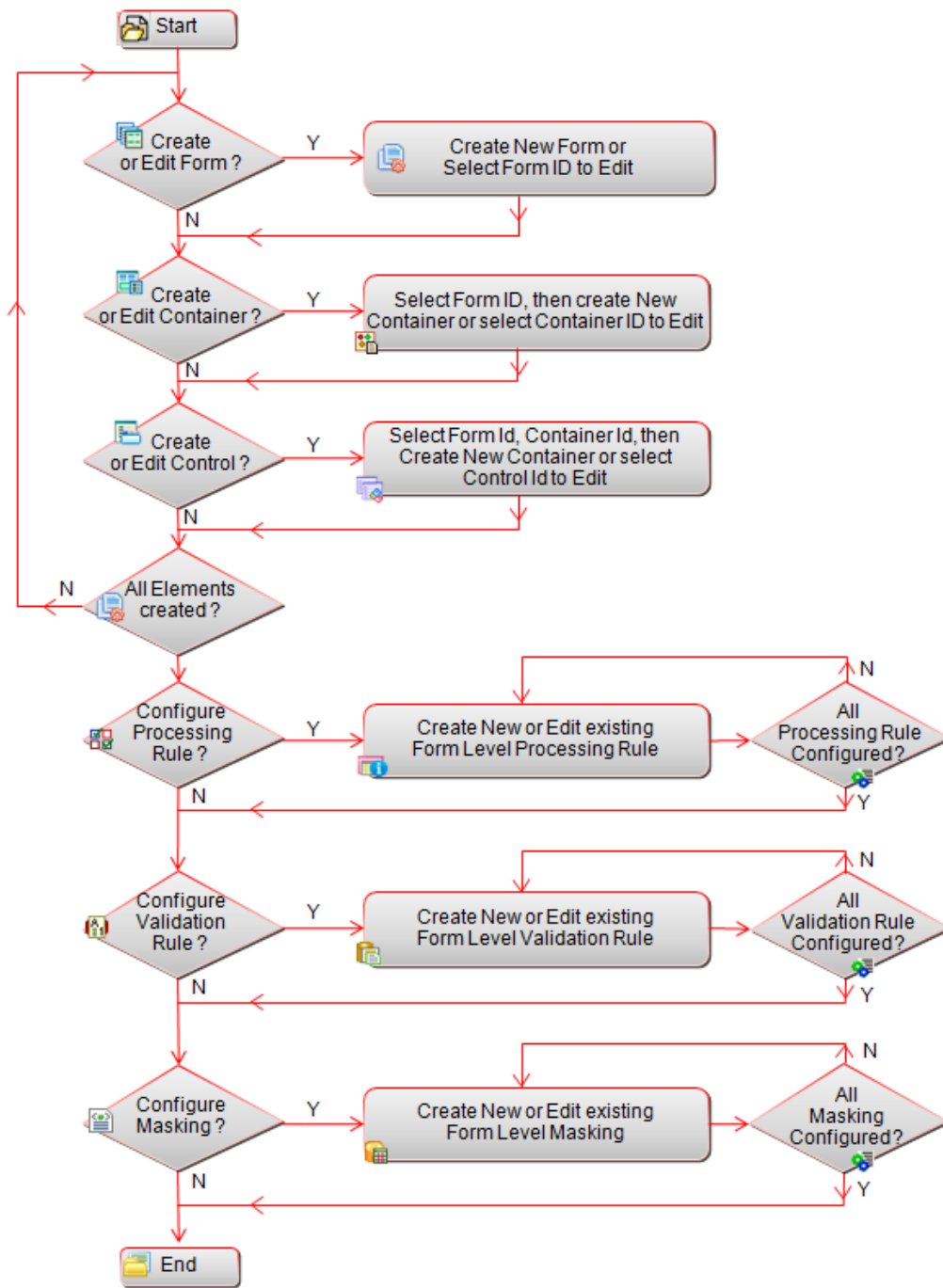


Figure 36. Flowchart of creating a Form

NOTE: Grid level Masking (Record based Masking) can be done through application front end. The above diagram includes Form level masking through Forms Manager Utility.

3.3.4 How to create a Form

Steps to create a new Form

1. From the LHS menu, expand **UI Configurations** and click **Form**. The *Forms Maintenance* window is displayed.
2. Click **New** in the *Forms* toolbar. The *Forms Maintenance* window is displayed.

The screenshot shows the 'Forms Maintenance' window with the following sections:

- Form Definition:** Contains fields for Form Code*, Overlay Form (dropdown), Dataset Entities, Dataset Filter, Order By, Navigation Path Required (dropdown), Form Name*, Print Required (dropdown), Map Name, and Is Child Form (dropdown).
- Form Security:** Contains Security DS Entities and Security DS Filters.
- Form Help:** Contains Help URL and Help File Name.

Buttons for 'Save' and 'Back' are located at the bottom of the window.

Figure 37. Forms Maintenance window

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Form Details	
Form Code*	<p>Enter the unique code to identify the form.</p> <p>The form code for all Parent Forms should end with _P and for all pop up Forms it should end with _OPR.</p> <p>The form code should have a prefix "CS_".</p> <p>The form code/ID should not be more than 12 characters including "CS_".</p>
Form Name*	<p>This is the short and long description of form which will appear as a title of browser window.</p> <p>It is advisable to give some meaningful name with relevance to the function of the form.</p>

Field Name	Description and Remarks
Overlay Form	Select Y if you want to overlay this form on another form, from the drop-down list. This is used if you want to go back to the previous form (from where this form is launched).
Print Required	Select Y if print icon needs to be displayed on top right side of the page for printing the page.
Dataset Entities	Enter the "From" clause of the database select query to retrieve the data for containers presented in the form and in case of Child Form to retrieve the data for grid. (Length of this column is 4000 bytes so for big query extra space should not be there, indentation is not required).
Dataset Filter	Enter the "Where" clause of the database select query to filter data while fetching from database. (Length of this column is 4000 bytes so for big filter condition extra space should not be there, indentation is not required.)
Order By	Enter the "Order By" clause of the database select query .Data in the grids will be sorted based on the order by condition.
Map Name	<p>The mapper is used to filter the form data for security purposes. The mapper is defined through the Mapper Maintenance section in Unified Metadata Manager > Business Metadata Management module. For more details, see <i>OFSAAI User Guide</i>.</p> <p>Select the mapper code. After typing characters in the text field, mapper codes similar to the entered values will be popped up in the suggestion box.</p> <p>For example, suppose you have data for two regions, namely Mumbai and Delhi. And you want to display the data of Mumbai region to the users belonging to Mumbai region only. You can create a mapper based on this scenario and call that mapper here.</p>
Navigation Path Required	Select Y if you want to display the navigation path, from the drop-down list.
Is Child Form	<p>Select Y if the form you are creating is a child form, from the drop-down list.</p> <p>For a grid form or difference form, it should be always a child form.</p>
Security DS Entities	<p>Enter the list of entities which are involved in fetching the user roles. You can enter entities separated by comma or combined by Join conditions.</p> <p>For example, "select de_cssms_group_role_map.V_ROLE_CODE HROLE from de_cssms_group_role_map inner join user_group_map on user_group_map.V_GROUP_CODE = de_cssms_group_role_map.V_GROUP_CODE". For this query, the entry will be "de_cssms_group_role_map inner join user_group_map".</p>

Field Name	Description and Remarks
Security DS Filters	Enter the filter conditions used by "Security DS Entities" to filter roles for current user. For example, "user_group_map.V_USR_ID= '%USER_ID%')". These two fields are used to apply security settings for the form based on user roles.
Help URL	Enter the location of the help file.
Help File Name	Enter the help file name.

3. Click the **Custom Messages** tab and click **Add**. There will be default messages available with the product. For example, if you search for a particular item and it is not present, then by default the message "No Data Found" will be displayed. If you want to replace that message with "No Data Found for this Search Criteria", you can define it here. You need to create the custom message from *Messages Maintenance* window.

Figure 38. Forms Maintenance- Custom Messages tab

Field Name	Description
Custom Message ID	Enter a unique id for the custom message.
Message Identifier	Select the locale specific message. This should be defined from the Messages Maintenance window.
Replace Message	Select Yes if you want to replace the platform message with user defined/ application message. You can also give locale specific messages here.
Message Code	This field is displayed only if you have selected Yes in the Replace Message field. Select the platform message, which you want to replace with the custom/ application message defined in Message Identifier field.
Message Type	Select the message type from the drop-down list. The options are Warning, Error, Failure, Success, Confirm, Information, and Message.

Field Name	Description
Parameters	
Click Add Parameter in the <i>Parameters</i> toolbar. You can remove a parameter by clicking the Remove button corresponding to the parameter entry.	
Name	Enter the name of the parameter.
Value	Enter the value of the parameter.

4. Click **Save**.

3.3.5 How to Create a Container

1. From the *Forms Maintenance* window, select the form to which you want to add a container and click **New** in the *Containers* toolbar. The *Container Maintenance* window is displayed.

Figure 39. Container Maintenance window

Field Name	Description
Fields marked with red asterisk (*) are mandatory.	
Container Details	
Form Code	Displays the code of the selected form.

Field Name	Description
Container ID*	Enter a unique id for the container. The Container ID should follow a sequence range from the number 200000 onwards.
Container Name	Enter the name of the container.
Type Of Container*	<p>Select the type of the container from the drop-down list. The options are:</p> <ul style="list-style-type: none"> ▪ DIFFERENCE CONTAINER (Type 7) - To show the changes between selected records. It will show changes in different colors. For example, you can use this container to show the differences between audit records. Note: In this container, you should add only one Difference Control. You should not add any other controls. ▪ GRID CONTAINER (Type 5) - To draw grid in a form. This container can have only one Grid Control. ▪ GRID SPECIFIC TOOLBAR (Type 8) - To show controls in grid header. This container should be defined only in child forms, which are associated to the parent grid control. ▪ GRID HTMLTABLE CONTAINER (Type 6) - To define all the controls for a grid. This container should be defined only in child forms, which are associated to the parent grid control. ▪ BUTTON CONTAINER (Type 3) - To show Action button in a form without any border and header. Action button can be aligned left, middle, or right through this container. ▪ TABBED CONTAINER (Type 10) - To create tabs in a form. ▪ SEARCH CONTAINER (Type 11) - To draw search container which will show Clear/ Reset button with each control. ▪ NORMAL CONTAINER (Type 1) - To draw simple label value container. ▪ AUDIT PANEL- To show the audit details like created by, created date, last modified by and last modified date.
Container Mode	<p>Select the container render mode from the drop-down list. The options are:</p> <p>Editable- You can edit the container details.</p> <p>Viewable- You can only view the container, you cannot edit it.</p> <p>Hidden- The container will not be displayed in the form.</p> <p>Note: It is supported only for those containers, for which masking is not applied. UI rule validations need to be added/ reviewed according to the modified Render mode. In the case of non-editable to editable mode, required Save operation needs to be implemented.</p>

Field Name	Description
No of Columns*	Enter the number of columns to be displayed in the container. When you are changing the number of columns in an existing Container and grouping the containers, take care of the alignment.
Tab layout	This field is displayed if you have selected Tabbed Container. Enter the tab group id. This is used to group tabbed containers into one group.
Container Style	
Group Style	Select the group style from the drop-down list. For information on available group styles, see Sample Group Styles . When you are changing an existing Group Style for a container and increasing the number of columns, ensure that control widths are modified accordingly.
Border	Select Y to display border to the container.
Collapse	Select Y to display the collapse button for the container. The Collapse property is not selected as N for the container that is already minimized on load. When you add or remove the collapse property of a Container, the group styles that are specific to the container type is added.
Header	Select Y to display header to the container.
Horizontal Group ID	Enter a unique id for all the horizontally aligned containers. Enter the same id to group the containers.
Container Width	Enter the width of the container.
Container Query	
Dataset Entities	For Container level query in a form. "From" clause of database select query to retrieve the data for the containers presented in the form .Length of this column is 4000 bytes, so for big query extra space should not be there and indentation is not required. When you are changing the Dataset Entities of a Container, do not unmap mandatory controls. Here, the business logic is changed to include or remove the controls. This applicable only if the forms query is used and no container queries are present.
Filter Condition	"Where" clause of database select query to filter data for the above Dataset Entities while fetching from database. Length of this column is 4000 bytes, so for big query extra space should not be there and indentation is not required.

2. Click **Save**.

3.3.6 How to Create a Control

Steps to create a new Control

1. From the *Forms Maintenance* window, select the form and the container to which you want to add a control, and click **New** in the *Controls* toolbar. The *Control Maintenance* window is displayed.

The screenshot shows the 'Control Maintenance' window with the following sections:


- Control Details:** Fields for Control ID, Control Name*, Table Name, Column Name, Control Type*, Is Primary Key, PK Sequence, Insert Batch Index, Db Operation Mode, Row Number*, Is Used in Db Operation, Control Label Width, and Control Text Width.
- Control Query Details:** Fields for Select, From, Where, and Dim Entity PKs.
- Masking and Display:** Fields for Masking Req, Code For Masking, Transpose, Wrap, Group By, Is Sort By, Column Display, and Field Chooser.
- Render and Format:** Fields for Render Mode, Default Value, Mandatory, Format Req, Format, Default Readonly Value, Tab Order, CSS Class Name, and Column Mandatory.
- Other:** Fields for Tool Tip and Context Help.

Buttons for 'Save' and 'Back' are located at the bottom of the window.

Figure 40. Control Maintenance window

Field Name	Description
Fields marked with red asterisk (*) are mandatory.	
Control Details	
Form Code	Displays the code of the selected form.

Field Name	Description
Container ID	<p>Displays the unique id of the selected container.</p> <p>Note: New Control Id should follow a Sequence Range from the number 200000 onwards. If a new control is added in the grid column container, then ensure to update the number of columns in the parent form grid control specific properties.</p> <p>While you are adding new control in normal LV containers, ensure that the widths are modified according to the control placements, and it should not create distortion in screen.</p>
Control ID*	Enter a unique id for the control.
Control Name*	Enter the name of the control.
Control Type*	<p>Select the type of the control from the drop-down list. The options are:</p> <ul style="list-style-type: none"> ▪ STATUS CONTROL- To display and highlight record status. It will not work in case of frame. Type 42 ▪ RADIO CONTROL- To show radio box. Type 1 ▪ CHECKBOX CONTROL- To show checkbox. Type 2 ▪ SELECT CONTROL- Single select drop-down with fixed values. Type 3 ▪ TEXTBOX CONTROL- Simple text box control. Type 7 ▪ TEXTAREA CONTROL- To enter big data. Type 39 ▪ NUMBER CONTROL- Allows to enter numbers only. Type 10 ▪ DATE CONTROL- To show control with calendar. Type 11 ▪ LABEL CONTROL- Non editable text control. Type 13 ▪ ACTION CONTROL- Simple action button used without any image. Type 22 ▪ URL CONTROL- Action button to show in header with image. Type 25 ▪ LINK LABEL CONTROL- To show a text as link. Type 38 ▪ HIERARCHY CONTROL- To show data after fetching from hierarchy. Type 41 ▪ FILE CONTROL- To upload a document. Type 44 ▪ HISTORY CONTROL- To insert data in history table while performing DML operation. Type 66 ▪ DIFFERENCE CONTROL- URL control and it calls a particular function to open difference container. Type 99 ▪ MULTISELECT CONTROL- Drop-down control which will fire dynamic query to fetch data. Type 102 ▪ GRID CONTROL- To call grid form. Type 50 ▪ EXPRESSION CONTROL- To show count with an image. Type 71.

Field Name	Description
	<ul style="list-style-type: none"> ▪ IMAGE LABEL CONTROL- ▪ RICHTEXT CONTROL- To enter rich text. <p>Based on the control type you select, the corresponding control details tab is displayed.</p>
Table Name	Enter the name of the table to which the control points for DB operations.
Column Name	Enter the name of the column of table to which the control points for DB operations.
Insert Batch Index	<p>Enter an index number to group controls.</p> <p>Controls can be grouped based on table and based on their DB action. For example, all the controls with Insert Batch index =1 belongs to table 1 or can perform insert action. All the controls with insert Batch index =2 belongs to table 2 or can perform update action.</p>
Is Primary Key	<p>Select Y to specify if the control is a primary key. Default sequence for primary key is "Tasks".</p> <p>When you are changing the Control Primary Key attribute, the corresponding changes has to be done in the database.</p>
PK Sequence	<p>Enter the sequence number if the Primary key has been selected from a specified sequence.</p> <p>Note: For LV container, sequence should be maintained in container definition and also should specify the corresponding row number in each control definition. If a change is made in the order of one control, all the controls need to be arranged accordingly. The control widths also should be changed accordingly.</p>
Is Used In Db Operation	Select Y if this control is used in database operation.
Db Operation Mode	Click  and select the DB operation mode from the popup. The available modes are Select, Insert, Delete, and Update.
Row Number*	<p>Enter the row number of the control. For example, if you want the control to appear in the 3rd row in the container, enter Row Number as 3.</p> <p>When you are changing the Row number of control, ensure to modify the control width in control definition.</p> <p>Data: To change the width of text</p> <p>Label : To change the width of label</p> <p>Note : In each row, the total width of controls should not be more than 100 or else, the alignment will be affected.</p>

Field Name	Description
Sequence*	<p>Enter the sequence of the control in the row. For example, if you want the control to appear as 2nd item in the 3rd row, enter Row Number as 3 and Sequence as 2.</p> <p>When you are changing the Sequence of control, ensure to modify the control width in control definition.</p> <p>Data: To change the width of text.</p> <p>Label : To change the width of label.</p> <p>Note : In each row, the total width of controls should not be more than 100 or else, the alignment will be affected.</p>
Control Label Width	Enter the width of the control's label.
Control Text Width	Enter the width of the control's text.
Control Query Details	
Select	Mention the columns or values to be selected from database.
From	Mention the database tables / views from where data should be fetched.
Where	Mention the selection / filter criteria while fetching data from database.
Dim Entity PKs	Primary key of the reference table used for hierarchy.
Masking	
Masking Required	<p>Select Y if masking is required for the control. Change the Render mode along with this option.</p> <p>This is to apply masking based on the masking rights for each role.</p>
Code For Masking	Enter the masking Code which is present in the masking rights table.
Group By	<p>Select Y if you want to add Group By clause while generating the page query.</p> <p>Data will be presented as Grouped by this control. This is applicable for controls in a grid container.</p> <p>For example, you have a status control in a grid container which has 3 statuses such as Open, Draft and Closed. If you enable Group By and you right click on the Status column and select Group By Tree, then it will display three tree structures, each tree for each status.</p> <p>The description expression configured for the Control should not be a sub query.</p> <p>It is not required to configure for controls with unique values, URL controls, and expression controls.</p>

Field Name	Description
Is Sort By	<p>Select Y if you want to add Order By clause while generating the page query. Data will be sorted based on this control. This is applicable for controls in a grid container.</p> <p>If you are changing order of the control from N to Y, then it is not required to configure for controls with URL controls and expression controls.</p> <p>If you are changing order of the control from N to Y, then it is not required to configure for controls with URL controls and expression controls.</p>
Transpose	<p>Select Y if you want to transpose the grid. This is applicable for controls in a grid container.</p>
Field Chooser	<p>Select Y if you want the control to be present among the list of field chooser. This is applicable for controls in a grid container only.</p> <p>If this is enabled, you can right click on the control and choose whether to display this control or not.</p>
Column Display	<p>Select Y to display the control as a column in the grid. This is applicable for controls in a grid container only.</p> <p>When you are changing Column Display from Y to N, ensure that there are no validation defined on the column before changing to Y to N.</p>
Wrap	<p>Select Y to wrap the control.</p> <p>Note: Wrap can be done only on Text Area (Type 39).</p> <p>If it is set as Y, then TOOLTIPREQUIRED should be N. Both, Wrap and Tool Tip should not be together enabled.</p> <p>NUMBEROFCHAR is used to specify after how many characters wrap should happen for a column</p>
Render Mode	<p>Select the render mode from the drop-down list. The available options are:</p> <p>Editable- The configured user can edit the control.</p> <p>Viewable- The configured user can only view the control, cannot edit it.</p> <p>Hidden- The control will be hidden.</p> <p>Make required changes in masking as well.</p>
Default Value	<p>Enter the default value assigned to the control. Select the correct default value, based on the control type.</p>
Mandatory	<p>Select Y to specify the control is mandatory.</p>
Format Req	<p>Select Y if a format is required for the control. This is applicable for Date Control.</p>
Format	<p>Enter the format for the control if you have selected Y for Format Req field.</p> <p>For example, you can select DD/MM/YYYY format.</p>

Field Name	Description
Tab Order	Specifies the control belongs to tab select.
Css Class Name	Enter the style sheet class applicable for the control.
Default Readonly Value	Enter the default value to be displayed for the control. If the control is not part of the select query, value defined here will be displayed in the UI.
Tool Tip	Enter the tool tip to be displayed for the control.
Context Help	Enter the context help of the control.

2. Click the **Parameters** tab and click **Add Parameter**. The *Control Maintenance-Parameters* window is displayed.

NOTE: The reserved parameters are infodom, segment, gsUsrId, usrLocale, and roleCode. These parameters are used in every call to any object in the Forms Manager, whose name, value, and source should not be modified or removed.



Figure 41. Control Maintenance- Parameters tab

Field Name	Description
ID	Enter a unique Id of the parameter.
Name	Enter the name of the parameter. For example, you need to pass the hierarchy to be called as a new parameter if you are using a hierarchy control. To apply validation rule for a control, you can add it as a parameter here. The new parameter name should have a prefix "CS_". The parameter names are case sensitive. Use session scope parameters to pass logged in user id.
Scope	Select the scope of the parameter from the drop-down list. The options are Static, Form, Request, and Session.
Value	Enter the value of the parameter.
Remove	Click Remove corresponding to the parameter you want to remove.

3. Click the **Function** tab and click **Add Functions**. The *Control Maintenance-Function* window is displayed.

Event Name	Value	Parameters
onClick	openPDF	4343

Field Name	Description
Event Name	<p>Enter the name of the event which will call the required function.</p> <p>For example, for action control for saving a form, you need to call the event <code>onClick</code>.</p> <p>You can call platform or application specific functions and user defined functions.</p> <p>It is not advised to change the existing functions. However, if you still need to change a function, the impact should be properly analyzed.</p> <p>Pass the necessary parameters for the function.</p>
Value	<p>Enter the function name.</p> <p>For example, for action control for saving a form, you need to call the function <code>SaveContainerAsDraft</code>.</p>
Parameters	<p>Enter the function parameter id.</p> <p>Note: Reserved parameters should be passed by the added functions.</p>
Remove	Click Remove corresponding to the function you want to remove.

4. Click **Save**.

3.3.6.1 Grid Control

Figure 42. Grid Control Details tab

Field Name	Description
Row Count	<p>Enter the number of rows to be displayed at a time in the grid.</p> <p>For example, if there are 20 records present and you give row count as 10, first 10 records will be displayed in the first page. You have to go to the next page to view the remaining 10 records.</p> <p>Ensure the pagination option is enabled in the grid.</p>
Col Count	<p>Enter the number of columns to be displayed in the grid.</p> <p>The number of columns should not be greater than associated number of controls used in Grid table Container (Type 6).</p>
Is Child Form	Select Y if the grid will be linked to a child form.
Child Form Id	Select the Id of the child form to be linked to the grid control.
Group Style	Select the style sheet class applicable for the grid control. See the Available grid container stylesheets .
Is Tooltip Req	Select Y if tooltip is required.
Is Editable	Select Y if the grid needs to be editable.
Do Group By	Select Y if data in the grid will be grouped by.
Is Group By Tab	<p>Select Y if grid columns will be grouped and displayed as tabs.</p> <p>If this is enabled, you will get Group By Tab option when you right-click on the grid.</p>
Do Transpose	<p>Select Y if grid columns will be transposed.</p> <p>In this view, the grid columns will be displayed in the left hand side as a fixed column and you can view the records by scrolling horizontally.</p>
Role Code Col	Enter the column name in which the role code is stored. You need to specify this if you want to apply masking for each grid row.
Status Col	Enter the column name in which the status of the record is stored. You need to specify this if you want to apply masking for each grid row.
Mask Rights Col	<p>Enter the masking rights available for the particular row in the format "CONTROL_FORM_ID_CONTROLID".</p> <p>You need to specify this if you want to apply masking for each grid row.</p>
Check Box Req	Select Y if checkbox is required.
Check Box Display Req	Select Y if checkbox display is required.
Nav Req	Select Y if you want to show the navigation path.

Field Name	Description
Persist Selected Row Id	Select Y if selected control id will be used as tracker variable.
Grid Border Req	Select Y if border is required for the grid. Border will not be enabled, only if selected group style is not supporting the same.
Message	Enter the message to be displayed when no data is fetched in the grid.
Collapse Button Req	Select Y if Collapse button is required for the grid. This option should not be removed, if the Container is displayed in minimized mode.
Pagination Option	Select Y if pagination is required.
Multi Select Req	Select Y if Multi Select is required for the grid.
Grid Level Wrap	Select Y if Grid level wrap button is required for the grid. Ensure to add the same entry in Headers, if applicable, while changing from N to Y.
Grid UnWrap Image	Enter the name of the grid level unwrap image.
Grid Wrap Image	Enter the name of the grid level wrap image.
Checkbox Action Req	Select Y if checkbox action is required.
Grid Validation Req	Select Y if grid validation is required.
No Page Border Req	Select Y if page border is required. This should not be changed if the page border is not present.
Row Action Req	Select Y if action is required on clicking the row. When Action required is made from Y to N, ensure Checkbox option is used. When Action required is made from N to Y, the knowledge about the called unit and the necessary parameters to be passed for proper functioning is required.
Distinct Clause	Select Y to avoid duplicate values.
Grid Minimize Req	Select Y to display the grid minimization button. When you are changing from N to Y, ensure that the Collapse option is used.
Autofit	Select Y to enable auto fit.
Autofit Max Cols	Enter the maximum number of columns if auto fit is enabled. The maximum number column should not be more than the number of Columns.
Group By	Select Y if you want to add Group By clause while generating the query. Data will be presented as Grouped by certain column.

Field Name	Description
Sort By	Select Y if you want to add Order By clause while generating the query. Data will be sorted based on certain column. Note: Ensure that Sort By is used in Form Filter condition.
Grid CSS Required	Select Y if style sheet is required for the grid.
Grid Status	Enter the status of the grid.
Col Span Present	Select Y if colspan is present in the grid. If column span is made from N to Y, then all the controls in that grid are required to be put under a span tag. That is, even if a control is not required to be under a span, a dummy span is created without any label and the control is put under that.

Click the **Grid Header Details** tab.

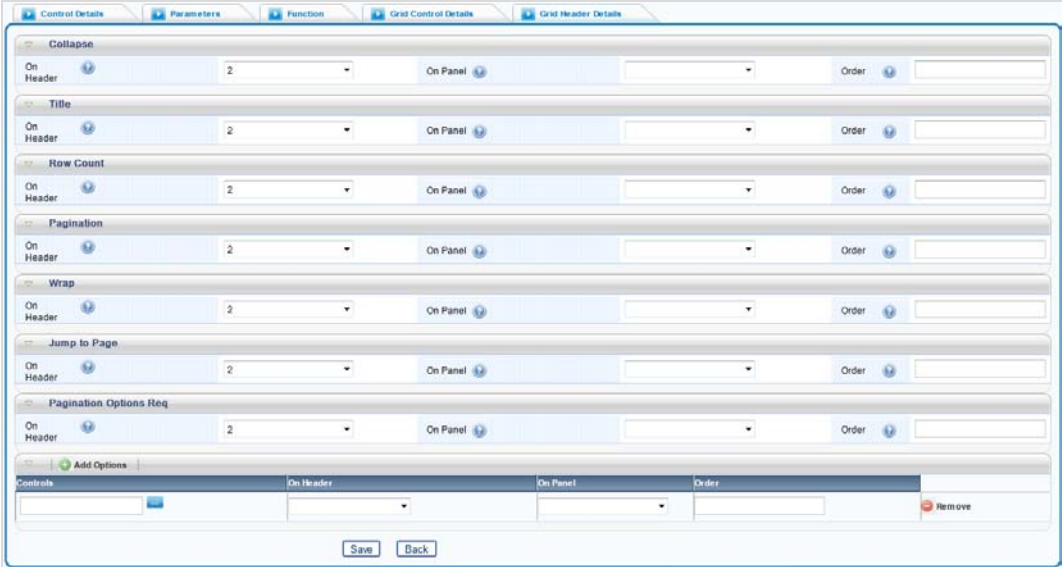



Figure 43. Grid Header Details tab

Field Name	Description
Collapse	<p>Select the position of the Collapse button on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Collapse button in the panel of the grid header in the Order field.</p> <p>Collapse image should not be placed on Header 3, which is, Content Header.</p>
Title	<p>Select the position of the Title on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Title in the panel of the grid header in the Order field.</p>
Row Count	<p>Select the position of the Row Count field on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Row Count field in the panel of the grid header in the Order field.</p>
Pagination	<p>Select the position of the Pagination field on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Pagination field in the panel of the grid header in the Order field.</p>
Wrap	<p>Select the position of the Wrap field on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Wrap field in the panel of the grid header in the Order field.</p>
Jump to Page	<p>Select the position of the Jump to Page field on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Jump to Page field in the panel of the grid header in the Order field.</p> <p>Ensure Pagination option is used and to add the same entry in Headers, if applicable, while changing from N to Y.</p>

Field Name	Description
Pagination Options Req	<p>Select the position of the Pagination Options Req button on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the Pagination Options Req button in the panel of the grid header in the Order field.</p> <p>Ensure Pagination option is used and to add the same entry in Headers, if applicable, while changing from N to Y.</p>
<p>Add Options</p> <p>If you want to add a new control in the grid header, click Add Options and enter the control details.</p>	
Controls	<p>Click  and enter the control name in the popup.</p> <p>Select the position of the control on the header and on the panel (left, middle, or right) of the header from the On Header and On Panel drop-down lists respectively.</p> <p>Enter the order of the control in the panel of the grid header in the Order field.</p> <p>When you are adding a header, ensure that it does not create any distortion to headers, and suggested to use Type 25.</p>

3.3.6.2 CheckBox/ Radio Control

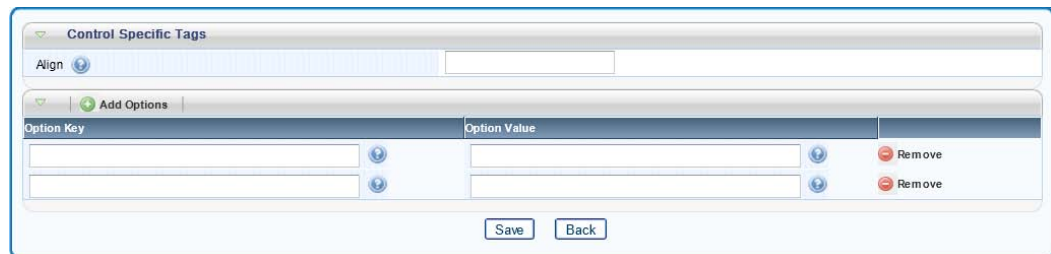


Figure 44. CheckBox/ Radio Control Details tab

Field Name	Description
Align	Enter the alignment of the checkbox/ radio control in the form namely left, center, or right.
<p>Add Options</p> <p>Click Add Options to add the optional values for the checkbox/ radio control and enter the details of the options.</p>	

Field Name	Description
Option Key	Enter a unique id to the checkbox/ radio control. When you are changing/removing the Option Key Values, ensure that change does not impact the rule validation, in case, any rule validations are applied to the Option Keys.
Option Value	Enter the value corresponding to the checkbox/ radio control.

3.3.6.3 Date Control

Figure 45. Date Control Details tab

Select **Y** if you want the user to enter the date in addition to select the date from the calendar.

3.3.6.4 Difference Control

Figure 46. Difference Control Details tab

Field Name	Description
Is Child Form	Select Y if the difference control is a child form.
Child Form ID	Enter the child form id if you have selected Y in the Is Child Form drop-down list.

3.3.6.5 Hierarchy Control

Figure 47. Hierarchy Control Details tab

Field Name	Description
Max Nodes	Enter the maximum number of nodes to be displayed in the hierarchy. Maximum number is applicable only when the hierarchy is displayed in drop-down mode.
Node Identifier	Enter the construct node identifier. The values are Y or N.
Is Multi SelectControl Toolbar	Select Y to enable the Multi SelectControl toolbar.
Is Hierarchy Main Toolbar	Select Y to enable the Hierarchy Main toolbar.
Is DropDown	Select Y to display the Hierarchy data as drop-down list. This is applicable only when the hierarchy is displayed in drop-down mode. When you are changing the Hierarchy Display mode to drop-down from Y to N and N to Y, ensure that it would not cause any issue in the existing functionality.
Is Multi Select	Select Y to enable multiple selections of hierarchies.
Is Suggest Req	Select Y if suggest option is required.
Suggest Size	Enter the size of the suggestion list.
Link to Open	Link to open (e.g. JSP Name)

Click the **Dynamic Filter Condition** tab. Click **Add**.



Figure 48. Dynamic Filter Condition tab

Field Name	Description
ID	Enter a unique Id of the dynamic filter to be invoked.
Name	Enter the condition expression of the dynamic filter.
Scope	Enter the scope of the dynamic filter.
Value	Enter the value to be passed to the dynamic filter.

3.3.6.6 Image Label Control

Figure 49. Image Label Control Details tab

Field Name	Description
Minimum Length	Enter the minimum length of the image label.
Maximum Length	Enter the maximum length of the image label.
Label Image	Select the label image.
No of Columns	Enter the number of columns.

3.3.6.7 Action/ Link Label Control

Figure 50. Layout- Frame Configuration tab

Field Name	Description
Template Name	Select the JSP template from the drop-down list.
Layout Type	Select JSP type from the drop-down list. This value determines if the user wants to create a new JSP following a standard template or a customized JSP. The available values are Standard and Custom .
Layout Name	Select the name of the JSP satisfying the selected JSP template and Type from the drop-down list.
Help URL	Enter the location of the help file. This refers to the location, which is the server path in which the help file is kept. For example, the path will be like, << CONTEXTPATH>>/help/help_<<LOCALE>>/
Help File	Enter the name of the help file.
Context	Enter the name of the context.

Field Name	Description
Topic	Enter unique id of the help topic which needs to be displayed for the menu.

3.3.6.8 Multi Select Control

Figure 51. MultiSelect Control Details tab

Field Name	Description
Dropdown Height	Specify the drop-down height for the MultiSelect Control.
Ctrl Behavior	Based on this value, format of the dropdown will change. (0- multi-select with control, 1- multi-select, 2- single select).
Dropdown Width	Specify the width of the drop-down.
Value Col Name	Specify the table in which the values of the drop-down list are stored. This should be in <table_name>.<column_name> format.

3.3.6.9 Number Control

Figure 52. Number Control Details tab

Field Name	Description
Minimum Value	Enter the minimum value that is allowed for the control. Note: Care needs to be taken if the value is going to be inserted in the database. The column datatype should match with the changed maximum value.
Maximum Value	Enter the maximum value that is allowed for the control. Note: Care needs to be taken if the value is going to be inserted in the database. The column datatype should match with the changed maximum value.
No Of Digits After Decimal	Enter the number of digits allowed after the decimal point.
Currency Group ID	Enter the currency group id.

3.3.6.10 Rich Text Control

Figure 53. Rich Text Area Control Details tab

Field Name	Description
No of Columns	Enter the number of columns to be displayed in the text area. The number of columns to be displayed in RichText can be modified based on the screen width.
No of Rows	Enter the number of rows to be displayed in the text area.

3.3.6.11 Select Control

Figure 54. Select Control Details tab

Field Name	Description
Multiselect	Select Y if multi select is required.
Add Options Click Add Options to add the optional values for the select control and enter the details of the options.	
Option Key	Enter a unique id to the select control.
Option Value	Enter the value corresponding to the select control.

3.3.6.12 Status Control

Figure 55. Status Control Details tab

Field Name	Description
Is Child Form	Select Y if the Status control to be displayed from a child form.

Field Name	Description
Child Form ID	Enter the child form id if you have selected Y in the Is Child Form drop-down list.
Entity Type	Enter the unique identifier for the module in the application.

3.3.6.13 Text Area Control

The screenshot shows a configuration window titled "Control Specific Tags". It contains the following fields and options:

- No of Columns:** A text input field.
- Maximum length:** A text input field.
- Expand:** A dropdown menu with the value "Y" selected.
- No of Rows:** A text input field.
- No Of Characters:** A text input field.
- Char Count Req:** A dropdown menu with the value "Y" selected.
- Minimum Length:** A text input field.
- Is Tool Tip Required:** A dropdown menu with the value "Y" selected.

At the bottom of the window are "Save" and "Back" buttons.

Figure 56. Text Area Control Details tab

Field Name	Description
No of Columns	Enter the number of columns to be displayed in the text area. Care needs to be taken when you are changing the number of columns to be displayed in Text Area. This may hamper the alignment of other controls in the LV container.
No of Rows	Enter the number of rows to be displayed in the text area.
Minimum Length	Enter the minimum length of the text area.
Maximum Length	Enter the maximum length of the text area.
No Of Characters	Maximum number of character that can be typed in the text area.
Is Tool Tip Required	Select Y to display Tool tip for the control.
Expand	Select Y if the text area is expandable. If wrap is required, then make WRAP tag as Y and TOOLTIPREQUIRED as N. Both, Wrap and Tool Tip should not be enabled together. NUMBEROFCHAR is used to specify after how many characters wrap should happen for a column.
Char Count Req	Select Y to display the character count. If wrap is required, then make WRAP tag as Y and TOOLTIPREQUIRED as N. Both, Wrap and Tool Tip should not be enabled together. Applicable for grid column controls only.

3.3.6.14 Text Box Control

Figure 57. Text Box Control Details tab

Field Name	Description
Minimum Length	Enter the minimum length of the text box.
Maximum Length	Enter the maximum length of the text box.
Currency Group ID	Enter the currency group id.

3.3.6.15 URL Control

Figure 58. URL Control Details tab

Field Name	Description
Associated Image	Configure the image that is displayed with the URL.
Text Along With Image	Enter the text that is displayed with the URL.
Action Right	Used for Masking
Url in Tool Bar	Select Y to display URL in toolbar. It refers to the location, which is the server path in which the help file is kept. For example, the path will be like, << CONTEXTPATH >>/help/help_<<LOCALE>>/
Add Image	
Name	Enter the name of the image
Operator	Enter the operator.
Value	Enter the value.
Enable	Select Y to enable the control.

3.3.7 Forms Maintenance

From the LHS menu, expand **UI Configurations** and click **Forms**. The *Forms Maintenance* window is displayed.

NOTE: When you select a form, all containers available in the form will be displayed under *Containers* grid. Similarly, when you select a form and a container, all controls defined in the container are displayed in the *Controls* grid.

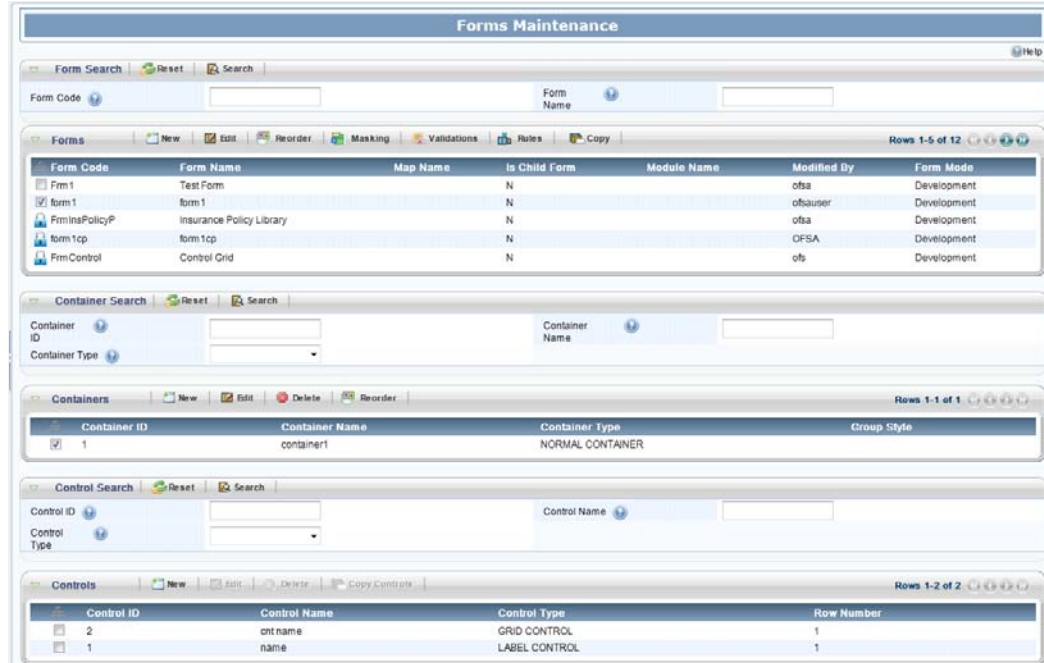


Figure 59. Forms Maintenance window

Action	Description
Search	<p>Search for a form by providing Form Code and Form Name and clicking Search in the <i>Form Search</i> toolbar.</p> <p>Similarly, select a form, provide Container ID, Container Name, and Container Type, and click Search in the <i>Container Search</i> toolbar to search for container.</p> <p>Select a form and container, provide Control ID, Control Name, and Control Type, and click Search in the <i>Control Search</i> toolbar to search for control.</p>
Modify	<p>Select a form and click Edit in the <i>Forms</i> toolbar to modify a form.</p> <p>Select the form and container and then click Edit in the <i>Containers</i> toolbar to modify a container.</p> <p>Select the form, container, and control and then click Edit in the <i>Controls</i> toolbar to modify a control.</p>

Action	Description
Delete	<p>Select a form and click Delete in the <i>Forms</i> toolbar to delete a form.</p> <p>Select the form and container and then click Delete in the <i>Containers</i> toolbar to delete a container.</p> <p>Note: It is recommended to hide the Container instead of deleting.</p> <p>Select the form, container, and control and then click Delete in the <i>Controls</i> toolbar to delete a control.</p>
Reorder	<p>Select a form and click Reorder to change the order of the already created containers within the form. See Reordering Containers in a Form.</p> <p>Select a container and click Reorder to change the order of the already created controls within a container. See Reordering Controls in a Container.</p>
Masking	<p>Select a form and click Masking to apply masking rules to a container/ control.</p> <p>See Masking of Container/ Control.</p>
Validation	<p>Select a form and click Validation to apply validation rule to the selected form.</p> <p>See Validation Rule.</p>
Rules	<p>Select a form and click Validation to apply processing rules to the selected form. See</p>
Copy	<p>Select a form and click Copy to create a form based on another form. Enter a Form Code and change the details as required to create a copy of form.</p>

3.3.8 Reordering Containers in a Form

1. From the *Forms Maintenance* window, select the form whose containers you want to reorder and click **Reorder** in the *Forms* toolbar. The *Reorder Container* window is displayed.



Figure 60. Reorder Container window

2. Click and drag to reorder the containers.

3. Click **Save**.

3.3.9 Reordering Controls in a Container

1. From the *Forms Maintenance* window, select the container whose controls you want to reorder and click **Reorder** in the *Containers* toolbar. The *Reorder Controls* window is displayed.

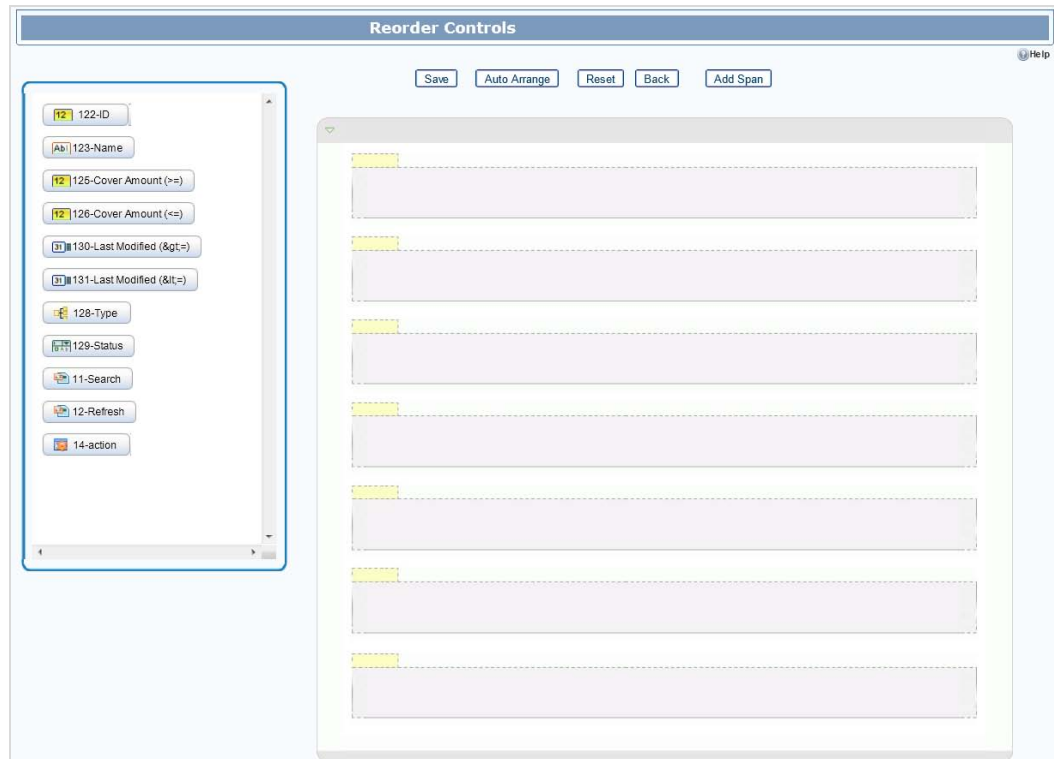


Figure 61. Reorder Controls window

2. Click and drag each control appearing on the left side to the required container.
3. Click **Auto Arrange** to arrange the controls based on the order defined during creating the control.
4. Click **Add Span** to add a span area. You can drag a control to the span area.
5. Click **Save**.

3.3.10 Masking of Container/ Control

This feature allows you to apply masking in container level or control level based on user roles, form status, parent mode and parent status.

Steps to apply masking

1. From the *Forms Maintenance* window, select a form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.

Figure 62. Masking Parameters window

Field Name	Description
Form Id	Displays the unique Form Code of the form selected for masking.
Roles	Select the role from the drop-down lists. Users with the selected role only will have access to the form.
Form Status	Enter the form status, which will define a set of masking for all the controls for a role. If this is not set, it will be taken as NULL. For example, for status "Open" we can set Form Status = 1 and it will apply masking set 1 for role 1. For status "Close" we can set Form Status =2 and it will apply masking set 2 for role 1.
Parent Mode	Select 1 or 2 to apply form level masking from the drop-down list. Select 1 to make all controls in the form in Read only or View mode. Select 2 to make all controls in the form in editable mode. Note: Hidden controls will be always hidden irrespective of Parent Mode.
Parent Status	Enter the Parent status, which will define a set of masking for all the controls for a role. If this is not set, it will be taken as NULL. For example, for Type ""T1"" we can set Parent Status = 12 and it will apply masking set 1 for role 1. For Type ""T2"" we can set Parent Status =13 and it will apply masking set 2 for role 1.

Field Name	Description
Mask By (Container/Control)	<p>Select the Container/ Control and click the checkbox under Editable, Disabled, or Hidden based on how you want to configure.</p> <p>If you want to apply masking on container level, select the required checkbox corresponding to the container.</p> <p>If you want to apply masking on control level, expand the container and select the required checkbox corresponding to the control.</p> <p>Note: If the render mode of container or control (defined during its creation) is Hidden, then making it Editable or Disabled from this screen does not have any impact.</p> <p>Even though the render mode of a container or control is defined as Viewable while you create it, if you make it Editable from this screen</p>

2. Click **Save**.

3.3.10.1 Scenario 1

Consider a Risk Application.

Note: This scenario does not take the Parent Status, Parent Mode, and Form Status into consideration.

User Roles:

- Risk Owner- can create risk, modify risk, and delete risk.
- Risk Assessor- can assess risk.
- Challenger- can challenge a risk assessment.

Applying Masking Rules for the form, “RiskForm”

Suppose when a menu called “Risks” is clicked, the form called “RiskForm” is invoked. This “RiskForm” contains the following containers:

- Search Container
- Risks(grid container)
- Risks (grid specific toolbar container)
- Create Risk(URL Control)
- Delete Risk(Action Control)
- Assess Risk (URL Control)

You need to define the masking rules for each role.

Steps to apply masking for the “Risk Owner” role

1. From the *Forms Maintenance* window, select “Risks” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Risk Owner” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Editable** for all controls in the Search container since the Risk Owner can search and view risks.
4. Select the checkbox corresponding to **Editable** for Risks grid container (this has only one grid control).
5. Select the checkbox corresponding to **Editable** for Risks grid specific toolbar container.
6. Select the checkbox corresponding to **Editable** for Create Risk control and Delete Risk control.
7. Select the checkbox corresponding to **Disabled** for Assess Risk control since a risk owner cannot assess a risk.

Steps to apply masking for the “Risk Assessor” role

1. Select “Risk Assessor” from the **Roles** drop-down list.
2. Select the checkbox corresponding to **Editable** for all controls in the Search container since the Risk Owner can search and view risks.
3. Select the checkbox corresponding to **Editable** for Risks grid container (this has only one grid control).
4. Select the checkbox corresponding to **Editable** for Risks grid specific toolbar container.
5. Select the checkbox corresponding to **Disabled** for Create Risk control and Delete Risk control since a risk assessor cannot create or delete risks.
6. Select the checkbox corresponding to **Enabled** for Assess Risk control since a risk assessor can assess a risk.

Steps to apply masking for the “Challenger” role

1. Select “Risk Assessor” from the **Roles** drop-down list.
2. Select the checkbox corresponding to **Editable** for all controls in the Search container since the Risk Owner can search and view risks.
3. Select the checkbox corresponding to **Editable** for Risks grid container (this has only one grid control).
4. Select the checkbox corresponding to **Editable** for Risks grid specific toolbar container.

5. Select the checkbox corresponding to **Disabled** for Create Risk control and Delete Risk control since a risk assessor cannot create or delete risks.
6. Select the checkbox corresponding to **Enabled** for Assess Risk control since a risk assessor can assess a risk.

Suppose when the URL control “Create Risk” is clicked, it opens the form by the name “Create Risk Details” and when the URL control “Assess Risk” is clicked, it opens the form by the name “Assess Risk Details”.

Applying Masking Rules for the form, “Create Risk Details”

The “Create Risk Details” contains the following containers and controls:

- Risk Details (Normal container)
 - Risk ID (Label control)
 - Risk Name (Text Box control)
 - Business Line (Hierarchy control)
- Save (Button container)
 - Save (Action control)
 - Cancel (Action control)

Steps to apply masking for the “Risk Owner” role

1. From the *Forms Maintenance* window, select “Create Risk Details” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Risk Owner” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Editable** for Risk Details normal container and all its associated controls since the risk owner can create risk.
4. Select the checkbox corresponding to **Editable** for the Save button container and all its associated controls.

Steps to apply masking for the “Risk Assessor” role

1. From the *Forms Maintenance* window, select “Create Risk Details” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Risk Assessor” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Disabled** for all the containers and controls since a risk assessor cannot create a risk.

Steps to apply masking for the “Challenger” role

1. From the *Forms Maintenance* window, select “Create Risk Details” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Challenger” from the **Roles** drop-down list.

3. Select the checkbox corresponding to **Disabled** for all the containers and controls since a challenger cannot create a risk.

Applying Masking Rules for the form, “Assess Risk”

The “Assess Risk” form contains the following containers and controls:

- Risk Details (Normal container)
 - Risk ID (Label control)
 - Risk Name (Text Box control)
 - Business Line (Hierarchy control)
- Assessment Details (Normal container)
 - Number of Events per Annum(Number control)
 - Likelihood Rating(Select control)
 - Impact Rating(Select control)
- Save (Button container)
 - Save (Action control)
 - Challenge Assessment(Action Control)
 - Cancel(Action Control)

Steps to apply masking for the “Risk Owner” role

1. From the *Forms Maintenance* window, select “Assess Risk” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Risk Owner” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Disabled** for Risk Details normal container and all its associated controls since all the fields should be displayed as Readonly.
4. Select the checkbox corresponding to **Disabled** for Assessment Details normal container and all its associated controls since a risk owner cannot assess a risk.
5. Select the checkbox corresponding to **Disabled** for the Save button container and all its associated controls since a risk owner cannot assess a risk.

Steps to apply masking for the “Risk Assessor” role

1. From the *Forms Maintenance* window, select “Assess Risk” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Risk Assessor” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Disabled** for Risk Details normal container and all its associated controls since all the fields should be displayed as Readonly.

4. Select the checkbox corresponding to **Enabled** for Assessment Details normal container and all its associated controls since a risk assessor can assess a risk.
5. Select the checkbox corresponding to **Enabled** for Save and Cancel controls in the Save button container.
6. Select the checkbox corresponding to **Disabled** for Challenge Assessment control since an assessor cannot challenge an assessment.

Steps to apply masking for the “Challenger” role

1. From the *Forms Maintenance* window, select “Assess Risk” form and click **Masking** in the *Forms* toolbar. The *Masking Parameters* window is displayed.
2. Select “Challenger” from the **Roles** drop-down list.
3. Select the checkbox corresponding to **Disabled** for Risk Details normal container and all its associated controls since all the fields should be displayed as Readonly.
4. Select the checkbox corresponding to **Disabled** for Assessment Details normal container and all its associated controls since a challenger cannot assess a risk.
5. Select the checkbox corresponding **Disabled** for Save and Cancel controls in the Save button container since a challenger cannot save an assessment.
6. Select the checkbox corresponding to **Enabled** for Challenge Assessment control since a challenger can challenge an assessment.

3.3.11 Validation Rule

3.3.11.1 Overview

Validation rules are used for performing actions in a page, based on the predefined conditions. These rules get invoked on any of the HTML events in the form such as onClick, onFocus, onBlur, and so on. The validation rules are executed on the client machine.

Validation rule comprises of three components:

- **Condition-** It provides the provision to enter the condition for the rule. Condition returns true when it is satisfied.
- **Consequence-** It provides the provision to enter the message which is displayed when the expression is satisfied.
- **Expression** - It provides the provision to enter the result (java script function/ method) which will be invoked when the condition is satisfied.

3.3.11.2 Steps:

Validation rules can be defined in two ways:

- **Rule with consequence**

Once the condition is satisfied, the message defined in the consequence will be displayed.

To get the value of a control, the control id needs to be preceded with form name and ~. For e.g. [-CM_CASE_SEARCHN.717.1]

Example 1:			
	CONDITION =	"([-CM_CASE_SEARCHN.717.1]== '%')"	CONSEQUENCE =
			"[[RENDERER.CM_WC_SRCH]]"
Example 2:			
	CONDITION=	"1==1"	CONSEQUENCE=
			"[[RENDERER.ROR545]]"

NOTE: The condition clause should be placed in parenthesis (angular brackets).

- **Rule with Expression**

Once the condition is satisfied, the expression will be executed. The expressions can be invoking a java script method, assigning a value to a field, disabling a field and so on.

Example 1:	To assign a value to a control		
	CONDITION =	"[-CM_CUST_ACTA.131.1]== 'Yes'"	CONSEQUENCE =
			"[-CM_CUST_ACTA.111.1]= '3'"
Example 2:	To invoke a java script method to hide a field		
	CONDITION =	"1==1"	CONSEQUENCE =
			"hideTitle('FrmActionE_OPR','1)'"
Example 3:	To invoke a java script method to hide a container		
	CONDITION =	"([-FrmActionE_OPR.70.1]==4)"	CONSEQUENCE =
			"hideTabContainer('FRMACTIONE_OPR','1221)'"
Example 4:	To disable a field		
	CONDITION =	"([-FrmActionE_OPR.74.1])=[-FrmActionE_OPR.72.1])"	CONSEQUENCE =
			"[~-FrmActionE_OPR.20.1].disabled=true"/>
Example 5:	To assign the selected value from the hierarchy to another field		
	CONDITION =	"1==1"	CONSEQUENCE =
			"([-FrmKl_OPR.1233.1])=getHierarchyCode([-FrmKl_OPR.121.1])"

3.3.11.3 How to Create Validation Rules

1. From the *Forms Maintenance* window, select a form and click **Validation** in the *Forms* toolbar. The *Validation Rules* window is displayed.



Figure 63. Validation Rules window

2. Click **New** in the *Validation Rules* toolbar. The *Validation Rules* window is displayed.

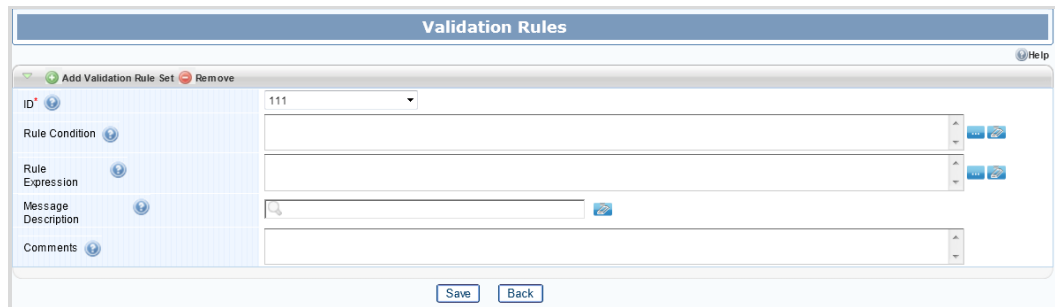



Figure 64. Validation Rules- New window

Field Name	Description
ID	<p>Click Add Validation Rule Set and enter a new unique rule set id in the Item ID field. Click Save.</p> <p>From the ID drop-down list, select the rule set id you want to add.</p> <p>You should use the specific range while adding custom messages. This should follow a sequence range from the number 200000 onwards. The Message Identifier should have a prefix "CS_". For example, CS_ADD_OPERATION_SUCCESSFUL.</p>
Rule Condition	<p>Enter the condition when the Rule will be applicable or click ... and form the condition by selecting the appropriate Function, Control, and Operator.</p> <p>Try to reuse the existing product supplied validations.</p> <p>New validations can be created using existing Java Script. If a new Java Script function is created, it has to be added to custom.js. The newly created function will not be supported.</p> <p>For complete list of standard Java Script functions, see to Appendix.</p>

Field Name	Description
Rule Expression	Enter the details of the rule to be executed if the rule condition is satisfied. Click  and form the expression by selecting the appropriate Function , Control , and Operator .
Message Description	Enter the message which will pop up when a rule condition is satisfied.
Comments	Enter any comments if required. This will be used for audit purpose only.

3. Click **Save**.

NOTE: After creating validation rules, you have to go to *Control Maintenance* window and add parameter with **Name** as ValidationRuleSet, **Scope** as Static, and **Value** as the Ruleset ID of the validation rule you want to invoke.

3.3.12 How to Create Processing Rule

NOTE: The processing rules are executed on the server.

1. From the *Forms Maintenance* window, select a form and click **Rules** in the *Forms* toolbar. The *Processing Rules* window is displayed.

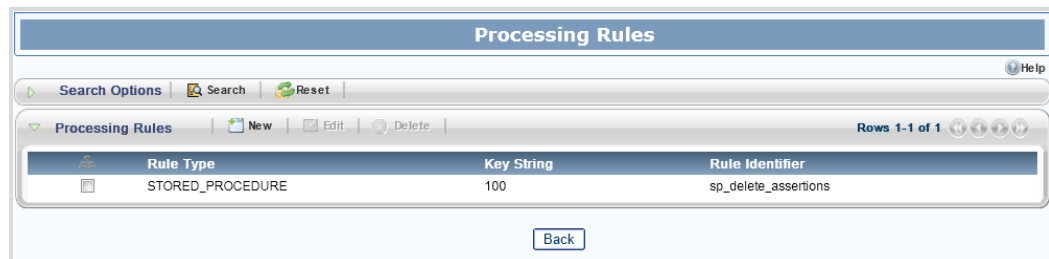


Figure 65. Processing Rules window

2. Click **New** in the *Processing Rules* toolbar. The *Processing Rules* window is displayed.



Figure 66. Processing Rules- New window

Field Name	Description
Key String	Enter a unique ID for the processing rule.
Rule Identifier	Enter the name of the processing rule.
Rule Type	Select the type of the rule to be executed from the drop-down list. STORED_PROCEDURE - to call any stored procedure. RUN RULE - to call any PR2 fire run.
Event Type	Select Before or After from the drop-down list. Before - Select this to call the processing rule before Forms refresh or save. After - Select this to call the processing rule after Forms refresh or save.
Stop On Error	Select Y if you want the server side to be aborted on failure.
Error Message	Enter the message to be popped up if there is an error.
Input Parameters	Enter the parameters required for rule to get executed.
Output Parameters	Enter the expected output parameter of the rule.

3.3.13 How to invoke a Form?

Form can be accessed or invoked from

- Menu/ menu options.
- Frames of the layout. (Layouts are done in JSP and are referred as Hosting JSP).
- Action icon/ control/ processing button.

Form can be embedded in another form too. (For example, grid container is a form by itself).

3.3.13.1 Invoke Form through Menu

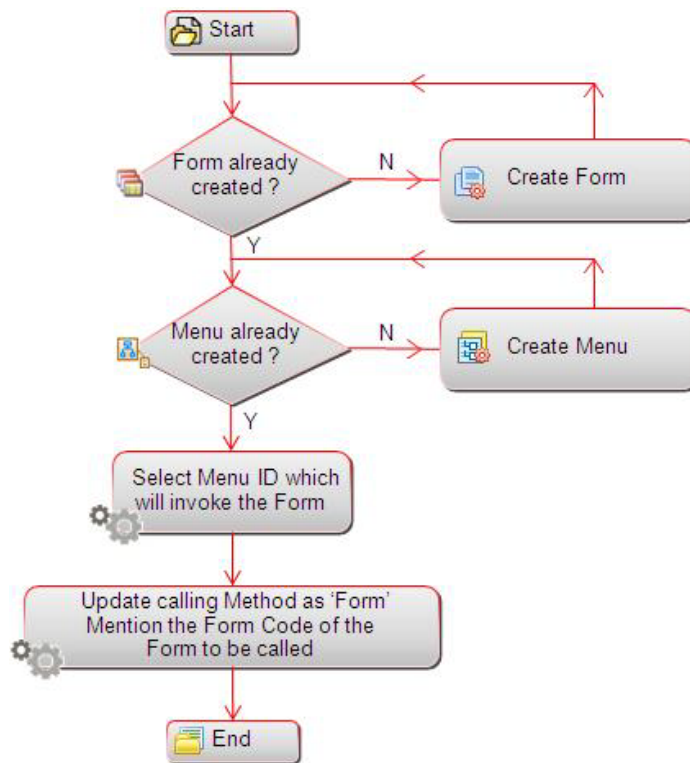


Figure 67. Flowchart to invoke form through menu

3.3.13.2 Mapping Forms to Layout Template

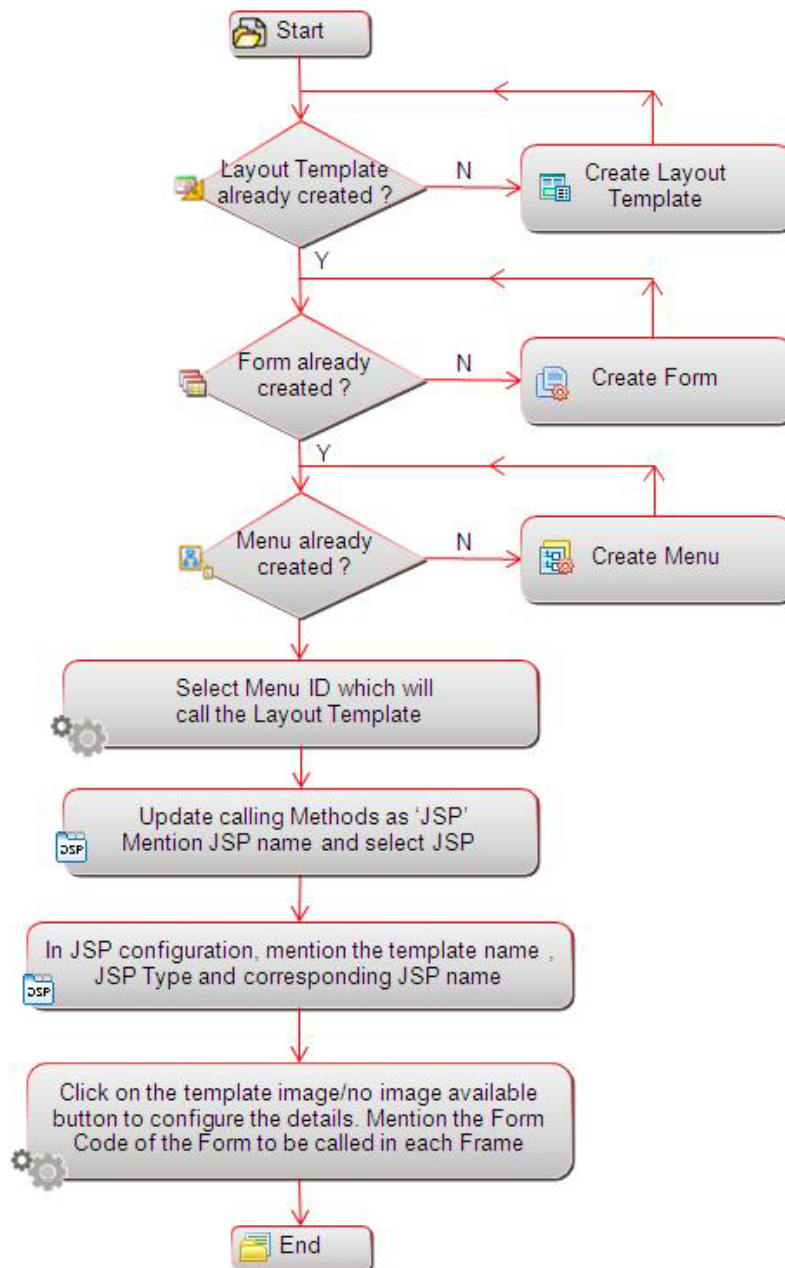


Figure 68. Flowchart to map form to layout template

3.3.13.3 Invoking a Form from another Form

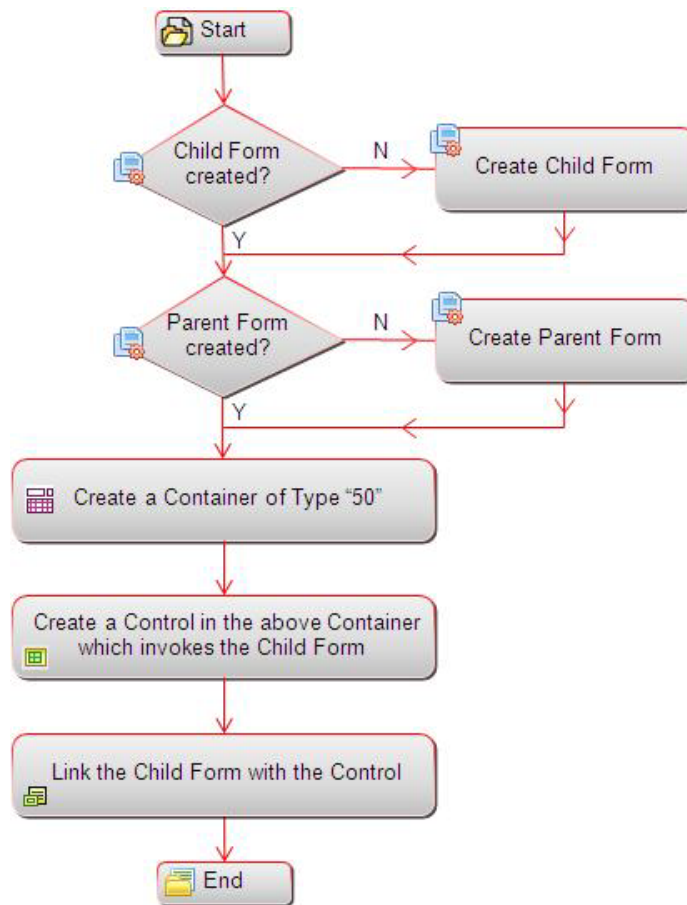


Figure 69. Flowchart to invoke a form from another form

Note the following:

- Child Form refers to the form which is being invoked. Parent Form refers to the form through which the child form is invoked.
- A child form can be embedded in certain types of container present in the parent form. It will be linked to a control in this container. On clicking the control, the child form will open within the parent form.

3.3.13.4 Invoking a Form through Action Control

In this case, the child form is linked with the Action Control present in a container in the parent form. On clicking the Action Control, the child form opens as a pop-up form or an overlay form.

List of Action Controls:

- Hyperlink - Type 38
- Button - Type 22
- Button inside a Grid - Type 25 (New/ Edit)

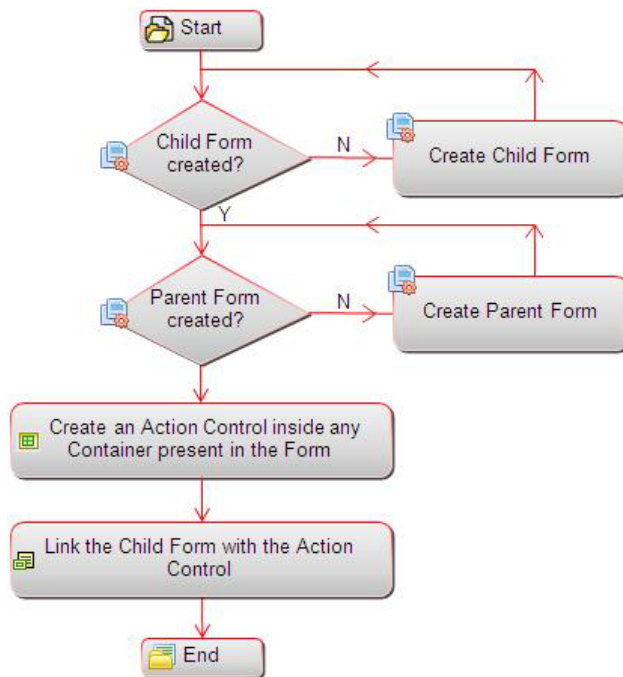


Figure 70. Flowchart to invoke a form through action control

3.4 Menu

3.4.1 Overview

Menu is a list of application operations or functionality presented to you based on your role / right. Menu elements can be defined in different levels. Level determines the parent - child hierarchy of the menu items.

3.4.2 Menu Details

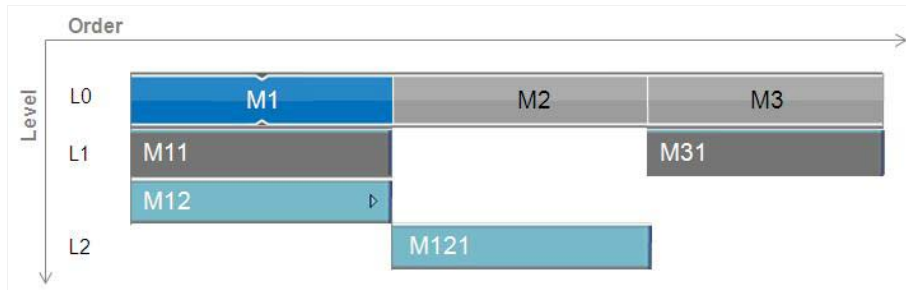



Figure 71. Menu items with different levels

- M1 menu is in horizontal order 1. It is in level '0' (L0) and it has 3 levels.
 - M11 and M12 are children of M1. These are in level '1' (L1)
 - M11 does not have any child.
 - M121 is the child of M12. It is in level 2 (L2).
- M2 menu is in horizontal order 2. It is in level '0' (L0). It does not have any child.
- M3 menu is in horizontal order 3. It is in level '0' (L0)
 - M31 is child of M3. It is in level '1' (L1)

More on Menu:

- Maximum number of levels supported is 3 (i.e. L0,L1,and L2).
- Maximum number of children a parent can have -> No limitation. But it is advisable to keep the maximum number of children around 5 for better representation of the page.
- For L0 elements, order means horizontal (→) order.
- For L1/L2 elements, order means vertical (↓) order.
- If there are more number of menu elements present than the configured number of menu to be displayed at a time, then the rest of the menu will be displayed on clicking  icon.

3.4.3 Flowchart

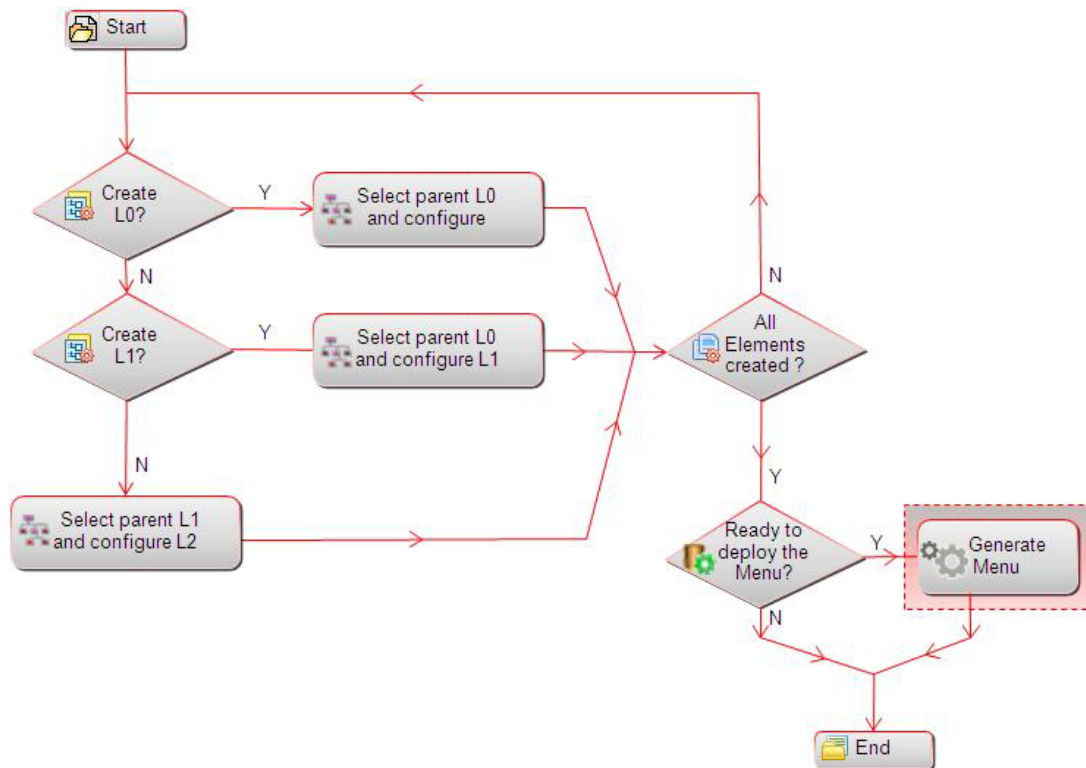


Figure 72. Flowchart of Menu

3.4.4 How to Create Menu?

Steps to create a new Menu

1. From the LHS menu, expand **UI Configurations** and click **Menu**. The *Menu Maintenance* window is displayed.
2. Click **New** in the *Menu Items* toolbar. The *Menu Maintenance* window is displayed.

The screenshot shows the 'Menu Maintenance' window with the 'Menu Definition' tab selected. The window contains the following fields:

Menu Definition	
Menu ID	49
Parent Name	<input type="text"/>
Menu Order	3
Launch Mode	Layouts
Menu Name*	<input type="text"/>
Menu Level	0
Is it Home	N
Layout Name	solution/ <input type="text"/>

Buttons: Save, Back

Figure 73. Menu Maintenance window

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Menu Details	
Menu ID	Id corresponding to the menu. It's a system generated unique number to identify the menu.
Menu Name*	Enter the name of the menu to be displayed in the application.
Parent Name	Enter/ select the name of the parent menu if you want to create a menu of Level 1 or 2. If this field is left blank, a menu of level 0 is created. After typing characters in the text field, parents name similar to the entered values will be popped up in the suggestion box.
Menu Level	Level determines the parent /child hierarchy of the menu. Currently maximum number of levels supported is 3. If Parent Name is not selected, the level will be 0 by default. If a parent of level 0 is selected, then the level value will be 1 and if a parent of level 1 is selected, then the level value will be 2 . When you are modifying the levels of an existing Menu, then the corresponding parent and /or child levels changes is not automatic. You need to make the level changes for the corresponding parent and /or levels need to be modified using the same option for each of the corresponding menu items that will get affected.
Menu Order	Enter the order of the menu. Based on this order, the menu will be displayed compared to other menu in the same level. For example, if you want to display two menus namely Administration and Generate, specify the menu order of Administration as 1 and Generate as 2 so that Administration will be the first menu available and Generate will be the second menu available.
Is it Home	Select Y from the drop-down list to make this page as home page for the menu. The available values are Y and N .

Field Name	Description and Remarks
Launch Mode	<p>Select whether you want to call a layout template or Form from the menu, from the drop-down list.</p> <p>Layouts- If you select this option, you can have multiple frames/forms to be called from the menu. The page which will be displayed on clicking the menu will be based on the layout template you select. You have to configure each frame in the layout template.</p> <p>Form- If you select this option, you can have only form to be called from the menu.</p> <p>Note: If you are changing the Called Unit from the Menu item (Form/Layout) then it is recommended to unmap the existing menu node and create a new menu item to access the expected called unit.</p>
Form Name	<p>This field is available only if Launch Mode is selected as Form.</p> <p>Enter the name of the form to be called from the menu. After typing characters in the text field, form name similar to the entered values will be popped up in the suggestion box.</p>
Layout Name	<p>This field is available only if Launch Mode is selected as Layouts.</p> <p>Enter the JSP name underlying the layout template.</p> <p>After typing characters in the text field, JSP name similar to the entered values will be popped up in the suggestion box. This is the JSP/ Layout name which is entered in the Layout Template Details tab of the <i>Layout Template Configuration</i> window.</p>
Page Context	<p>This field is available only if Launch Mode is selected as Layouts.</p> <p>Enter the server location (where installation has been done) where the JSP page is stored.</p>

8. Click the *Function Mapping* tab.

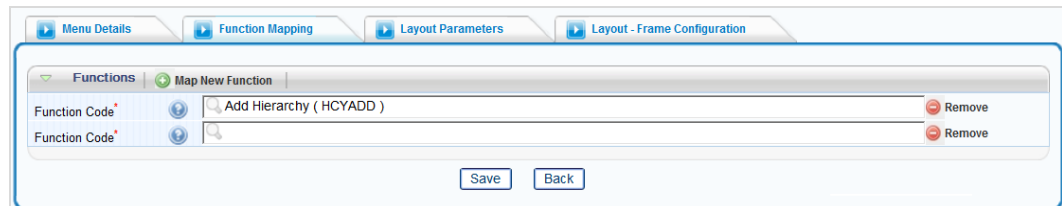


Figure 74. *Function Mapping* tab

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	

Field Name	Description and Remarks
Function Code*	<p>Click Map New Function in the <i>Functions</i> toolbar and enter the function code to be mapped with the menu. The users with this function code mapped can only access the menu.</p> <p>After typing characters in the text field, function codes similar to the entered values will be popped up in the suggestion box.</p> <p>For more information on Function creation, see <i>OFSAAI User Guide</i>.</p>

9. Click the *Form Parameters* tab. This tab will be available only if **Launch Mode** is selected as **Form**.

Figure 75. *Form Parameters* tab

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Form Status	<p>Enter the form status.</p> <p>Combination of Form Status, Parent Status, and Parent Mode is used in masking.</p>
Parent Status	<p>Enter the parent status.</p> <p>Combination of Form Status, Parent Status, and Parent Mode is used in masking.</p>
Parent Mode	<p>Enter the parent mode.</p> <p>Combination of Form Status, Parent Status, and Parent Mode is used in masking.</p>
Entity Type	<p>Enter the unique id for each entity like risk, or control. Based on this value the flow of operation will be determined.</p>
Hidden Containers	<p>Enter the ID of the containers which should be made hidden on loading this page, separated by comma.</p>
Additional Parameters	<p>Enter any additional parameters. These parameters will be passed to the query while fetching data.</p> <p>Note: If you want to pass some additional parameter/ logic while fetching data, you can configure it here.</p>

10. Click the *Layout Parameters* tab. This tab will be available only if **Launch Mode** is selected as **Layout**.



Figure 76. Layout Parameters tab

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Parameter Name*	Enter the name of the parameter to be passed in the JSP. The parameter name should have a prefix "CS_". The parameter names are case sensitive.
Parameter Value*	Enter the value of the parameter mentioned in the Parameter Name field.
Parameter Source*	Enter the source of the parameter mentioned in the Parameter Name field.

- Click the *Layout- Frame Configuration* tab. This tab will be available only if **Launch Mode** is selected as **Layout**.

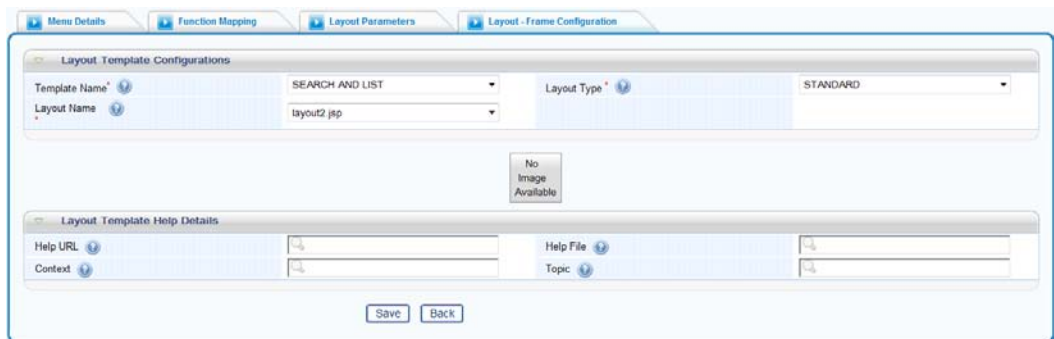


Figure 77. Layout- Frame Configuration tab

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Template Name*	Select the JSP template from the drop-down list.
Layout Type*	Select JSP type from the drop-down list. This value determines if the user wants to select a standard or customized JSP. Standard- prepackaged JSP Custom- customized JSP
Layout Name*	Select the name of the JSP satisfying the selected Template and Layout Type, from the drop-down list.

Field Name	Description and Remarks
Help URL	Enter the location of the help file which needs to be invoked on clicking the menu. Refers to the location, which is the server path in which the help file is kept. For example, the path can be << CONTEXTPATH >>/help/help_<<LOCALE>>/
Help File	Enter the name of the help file.
Context	Enter the server location (where installation has been done) where the help file is stored.
Topic	Enter unique id of the help topic which needs to be displayed for the menu.

12. Once you select the **Layout Name**, the image associated to that layout is displayed.
Click the image to configure each frame available in the layout.

13. Expand the Details of Frame grid and enter the details as tabulated:

Figure 78. Layout- Frame Configuration tab

Field Name	Description and Remarks
Fields marked with red asterisk (*) are mandatory.	
Frame Name	Displays the name of the frame configured in the JSP selected as the Layout Name in JSP Configurations. Select proper Frame to configure the JSP properly.
Header Text	Enter the text to be displayed in the header for the frame selected.
Page Border	Select True or False to configure if page border needs to be displayed or not.
Menu Required	Select True or False to configure whether menu is required for the frame selected.
Footer	Select True or False to configure whether footer will be set for the frame.
Header	Select True or False to configure whether header will be set for the frame.
Row No	Enter the number of maximum rows to be displayed within the frame.
Show Bread Crumb	Select True or False to configure whether to displayed bread crumb to be displayed or not.

Field Name	Description and Remarks
Bread Crumb	Enter the detailed value of the Bread Crumb to be shown.
Launch Mode	Select whether you want to display a layout template, form, or report in the selected frame, from the drop-down list. The available options are: Form- You can select the form to be displayed in the Frame from the Form Name field. Layout Template- You can select the layout template to be displayed in the Frame from the Layout Name field. Report- You can select the report to be displayed in the Frame from the Report Name field.
Is in Frame	
BG Color	Set the background color of the frame.
Tab Type	

14. Similarly, enter the details for other frames also and click **Save**. Click **Back** and return to the *Menu Maintenance* window.

15. Click **Save**.

3.4.5 Menu Maintenance

From the LHS menu, expand **UI Configurations** and click **Menu**. The *Menu Maintenance* window is displayed.

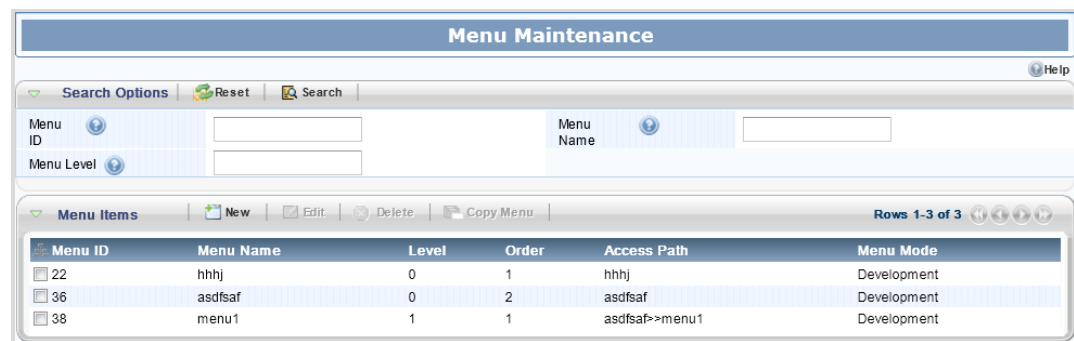


Figure 79. Menu Maintenance window

Action	Description
Search	Enter Menu ID , Menu Name , and Menu Level and click Search in the <i>Search Options</i> toolbar.
Modify	Select a menu and click Edit in the <i>Menu Items</i> toolbar to modify a menu.

Action	Description
Copy Menu	Select a menu and click Copy Menu in the <i>Menu Items</i> toolbar to copy a menu.
Delete	Select a menu and click Delete in the <i>Menu Items</i> toolbar to delete a menu.

3.5 LHS Tree

3.5.1 Overview

This option allows you to create LHS Tree group to be displayed in the application screen.

A LHS Tree Group is a collection of LHS Tree items. You can define an LHS tree in the *LHS Tree Maintenance* screen. After creating the LHS Tree Group, you need to create LHS tree items for the LHS Tree Group. You can modify (add/ remove / re-order LHS tree items) at any point of time. A single LHS Tree Group can be mapped to multiple forms.

3.5.2 Flow Chart

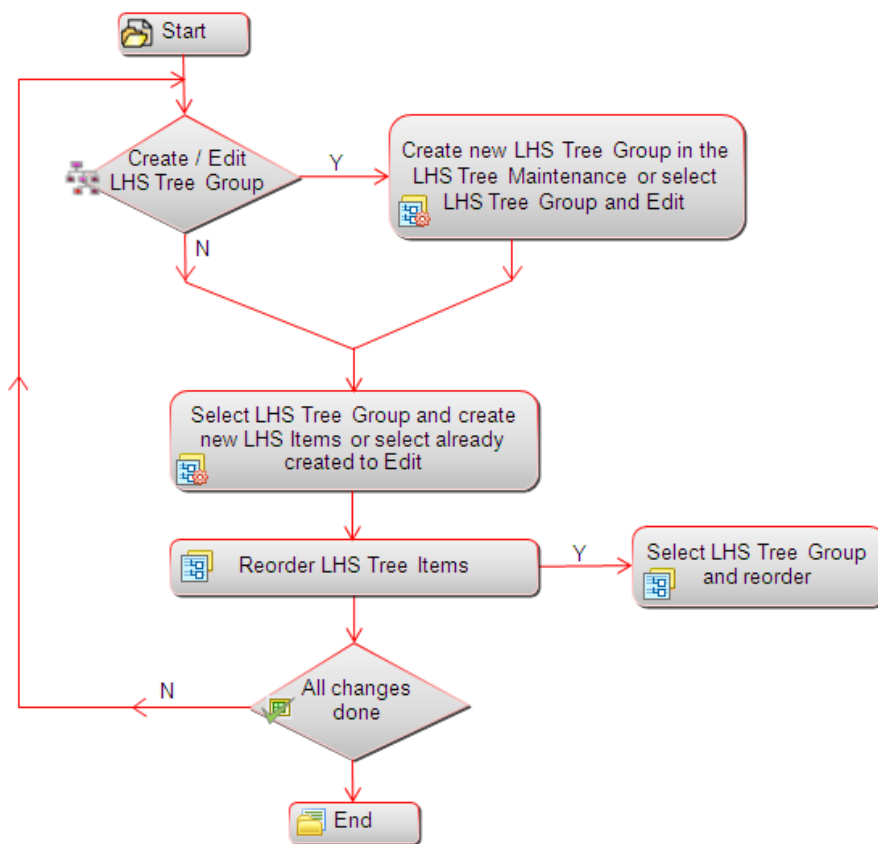


Figure 80. Flowchart of LHS Tree

3.5.3 How to create a LHS Tree

Steps to create a LHS Tree Group

1. From the LHS menu, expand **UI Configurations** and click **LHS Tree**. The *LHS Tree Maintenance* window is displayed.
2. Click **New** in the *LHS Tree Group* Toolbar. The *LHS Tree Maintenance* window is displayed.



Figure 81. LHS Tree Maintenance window

Field Name	Description and Remarks
LHS Tree Group ID	Enter a unique ID for the LHS tree group. This is a mandatory field.
LHS Tree Group Name	Enter the name of the LHS Tree Group. This is a mandatory field.

Steps to create a LHS Tree Master

1. Select the LHS Tree Group to which you want to add LHS tree masters and click **New** in the *LHS Tree Master* toolbar. The *Custom LHS Tree Maintenance* window is displayed.

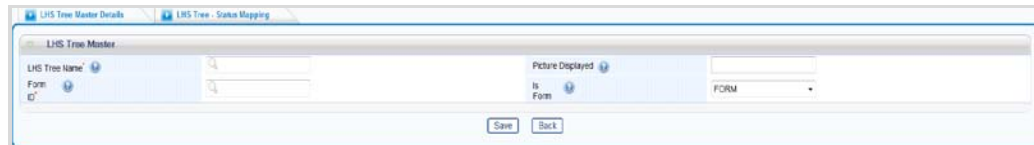


Figure 82. LHS Tree Master Details tab

Field Name	Description and Remarks
LHS Tree Name	Enter the name of the LHS tree item. This is a mandatory field.
Picture Displayed	Select the picture that should be displayed with the LHS tree item.
Form ID	Enter the ID of the form that is to be called on clicking this LHS tree item. This is a mandatory field.
Is Form	Select Layout Template or Form from the drop-down list.

2. Click the **LHS Tree Status Mapping** tab.

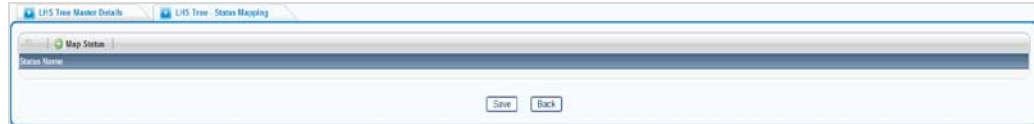


Figure 83. LHS Tree Status Mapping window

3. Click **Map Status**.
4. Enter the name of the status of the mapping.
5. Click **Save**.

3.5.4 LHS Tree Maintenance

From the LHS menu, expand **UI Configurations** and click **LHS Tree**. The *LHS Tree Maintenance* window is displayed.

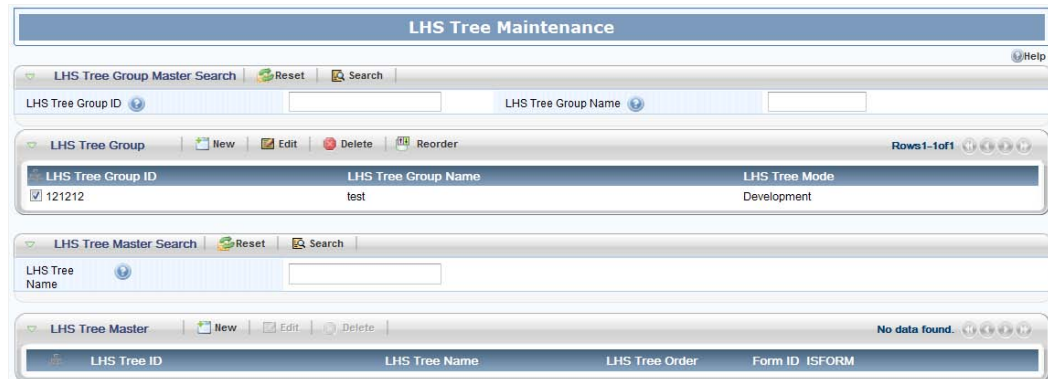


Figure 84. LHS Tree Maintenance window

Action	Description
Search	<p>Search for a LHS Tree group by providing LHS Tree Group ID and LHS Tree Group Name, and then clicking Search in the <i>LHS Tree Group Master Search</i> toolbar.</p> <p>Similarly, select a LHS Tree group and provide LHS Tree Name, and then click Search in the <i>LHS Tree Master Search</i> toolbar to search for a LHS tree.</p>
Modify	<p>Select a LHS Tree group and click Edit in the <i>LHS Tree Group</i> toolbar to modify it.</p> <p>Select the LHS Tree group and LHS Tree, and then click Edit in the <i>LHS Tree Master</i> toolbar to modify the LHS tree.</p>
Delete	<p>Select a LHS Tree group and click Delete in the <i>LHS Tree Group</i> toolbar to delete it.</p> <p>Select the LHS Tree group and LHS Tree, and then click Delete in the <i>LHS Tree Master</i> toolbar to delete the LHS tree.</p>

Action	Description
Reorder	Select a LHS Tree group and click Reorder in the <i>LHS Tree Group</i> toolbar to change the order in which the LHS tree should be displayed.

4 Generate

4.1 Generate Menu

4.1.1 Overview:

Generate Menu option is used to deploy the application menu created / modified using Forms Manager. On generating the menu, the menu definitions (all levels and sub levels for the application information domain) are deployed in the Information Domain after moving the previous version of the application menu / Information Domain specific menu to history tables along with the comments supplied for audit purpose. It also generates the dependent Tab Groups and LHS Trees that are being called from the menus.

4.1.2 How to generate a Menu

Steps to generate a Menu

1. From the LHS menu, expand **Generate** and click **Menu**. The *Generate Menu* window is displayed.

Menu ID	Menu Name	Level	Order	Access Path	Menu Mode
22	hhhj	0	1	hhhj	Development
36	asdfsaf	0	2	asdfsaf	Development
38	menu1	1	1	asdfsaf->menu1	Development

Figure 85. Generate Menu window

Field Name	Description and Remarks
Menu Id	Displays the Id corresponding to the menu.
Menu Name	Displays the name of the menu.
Menu Level / Level	Displays the level of the menu. It can be 0, 1, or 2.
Order	Displays the order of the menu. For menu of level 0, order means →Horizontal order and for level 1 and level 2, menu order means ↓Vertical order.
Access Path	Displays the path to access the menu.
Menu Mode	Displays the mode of the menu.

Field Name	Description and Remarks
Label	Enter the label to identify the change. It's advisable to put appropriate label for tracking purpose.
Comments	Enter any comments you want to add while generating the menu. It's advisable to put appropriate comments for tracking purpose.

2. Click **Generate**.

While generating the menu, data in the work-in-progress table for all menu items along with tab groups and LHS trees will be moved to application tables. The same data will be moved to history tables with version number and comments to keep track of changes in the menu along with its dependent tab groups and LHS trees.

NOTE: Search for a menu by providing the **Menu Id**, **Menu Name**, and **Menu Level** in the Search Options Toolbar.

4.2 Generate Forms

4.2.1 Overview

Generate Form is used to deploy the forms created / modified using Forms Manager. You can generate and deploy all forms pertaining to an application, selected forms, or a single form based on the need. On generating the form(s), the form definitions (DB scripts and XML files) are deployed in the Information Domain after making a copy of the definition for audit/ tracking purposes. It also generates the corresponding Tab Groups and LHS trees that are being called from the forms you are generating.

- XML files will be backed up in the YYYYMMDDHHMISS directory under the directory configured for copying the latest XML definition.
- New set of definitions for the form(s) will be copied with the required privilege in the directory configured for copying the latest XML definition.
- DB scripts will be deployed in the AAI Config Schema after moving the older version to the history tables along with the comments entered during the *Generate Forms* option.
- By default, the dependent Tab Groups and LHS Trees will be moved to the platform application tables.

4.2.2 How to generate a Form

Steps to generate a Form

1. From the LHS menu, expand **Generate** and click **Forms**. The *Generate Forms* window is displayed.

Form Code	Form Name
<input type="checkbox"/> FmInsPolicyP	Insurance Policy Library
<input type="checkbox"/> Fm1	Test Form
<input type="checkbox"/> Fom1	form1
<input type="checkbox"/> form1cp	form1cp
<input type="checkbox"/> FmControl	Control Grid
<input type="checkbox"/> TestForm1	TestForm1
<input type="checkbox"/> form2	form2
<input type="checkbox"/> FmLossTopP	Incident Top 5 page
<input type="checkbox"/> FmRiskCM	Change Management
<input type="checkbox"/> FmAddress123	FmAddress123
<input type="checkbox"/> form3	form3
<input type="checkbox"/> form1cp	formNew1cp

Figure 86. Generate Forms window

Field Name	Description and Remarks
Form Code	Displays the unique identifier of the form.
Form Name	Displays the name of the form.
Label	Enter the label to identify the change. It's advisable to put appropriate label for tracking purpose.
Comments	Enter any comments you want to add while generating the form. It's advisable to put appropriate comments for tracking purpose.
Path	Displays the path where the form will be generated.

2. Select the checkbox corresponding to the Form Code(s) of the forms you want to generate.
3. Enter the appropriate information in the fields as tabulated above.
4. Click **Generate**.

While generating forms, data in the work-in-progress table for the selected forms and their respective Tab Groups and LHS Trees will be moved to application tables. The same data will be moved to history tables with version number and comments, to keep track of changes in the forms and its entities.

NOTE: Search for a form by providing the **Form Code**, **Form Name**, **Generation Date**, and **Form Level** in the Search Options Toolbar.

4.3 Generate Tab Groups

4.3.1 Overview

Generate Tab Group is used to deploy the tab groups and the tabs associated with the tab group, which are created / modified using Forms Manager. On generating the tab group, the tab group definitions are deployed in the Information Domain after moving the previous version of the tab group to history tables along with the comments supplied for audit purpose.

4.3.2 How to generate a Tab Group

Steps to generate a Tab Group

1. From the LHS menu, expand **Generate** and click **Tabs**. The *Generate Tab Groups* window is displayed.



Figure 87. Generate Tab Groups window

Field Name	Description and Remarks
Tab Group ID	Displays the unique identifier of the tab group.
Tab Group Name	Displays the name of the tab group.

2. Select the checkbox corresponding to the Tab Group(s) you want to generate.
Or
3. Select **Mark All** if you want to generate all tab groups.
4. Click **Generate**.

NOTE: Search for a tab group by providing the **Tab ID** and **Tab Name** in the *Search Options* toolbar.

5 Forms Manager Customization Guidelines

Refer to the FMConfigurationGuidelines.xlsx for information about configuration and support of each feature in Forms Manager. It also lists out the guidelines to be followed for each operation.



FMConfigurationGuid
elines.xlsx

6 Configurations for Styling

6.1 Required Configuration for Application Level Skin

All applications using Forms Framework can be configured with a custom CSS file. This helps application developers and clients to define their own custom look and feel within the application.

The user can configure skins for the following levels:

1. The configurability is decided at the time of choosing the Application link from the AAI LHS menu.
 - Configuration changes are made to the LHS Menu (locale specific) xml file, using the “cssFileName” parameter.

For example, if bankXYZ requires a particular customized version of the skin, they can create their own version of the CSS file named bankXYZ.css (see [Creating a custom .CSS File](#)). This CssFileName parameter can then be set in the LHS Menu XML for a particular application, where the paraname key is “cssFileName”, with the paraname value “bankXYZ”.
 - If the “cssFileName” parameters are not defined, then the default AAI CSS file is loaded.
 - This configuration is applicable to both Application CSS and the FormsFramework CSS files.
2. What happens when an application directly lands to the application landing page, without having to choose the application link from AAI LHS menu. This will occur if the application user selects the AAI “Make my Home Page” select box option, in the AAI home page.
 - To change the skin, you will have to modify the Database values. The above parameter configurations “cssFileName” paraname key and the paraname value are appended to the field “START_PAGE_URL” in Table cssms_start_page_master.
 - If the “cssFileName” parameters are not defined, then the default AAI CSS file is loaded.
 - This configuration is applicable to both Application CSS and the FormsFramework CSS files.
3. Login Page, AAI Home Page CSS Configuration.

NOTE: The below configuration feature for AAI stylesheet, is available only in the forthcoming OFSAAI 8.0.0.0 release. For any installation prior to this release, the user has to override his changes to the existing stylesheetAAI.css file (see: List of CSS files with paths).

Login Page, AAI Home Page, and AAI Modules can be customized using the below steps:

1. Create a new configurable stylesheet. For example, XYZ_stylesheetAAI.css. The XYZ_stylesheetAAI.css stylesheet will be configurable and will be decided during product installation.
2. Configure the required style in Configuration table for the paraname key 'DEFAULT_AAICSS_INFO'. Specify the paraname value as the new customized XYZ_stylesheetAAI.css.

This configuration is applicable to the AAI CSS file.

6.2 Forms Framework Styles Hierarchy

Forms Framework Styles can be configured at a

- Macro level – for example, Application skin.
- Micro level- for example, containers, container rows, and container controls.

Macro level changes are explained in [Required Configuration for Application Level Skin](#) section.

The Micro level Style configuration can be configured in the Form XML pages. These settings will override the Macro level style settings. These can be classified as:

- Container - GroupStyles
- Row - Label/ Value & Controls

6.2.1 Container - GroupStyles

Containers are used to group controls. This is also a logical grouping of controls. Containers have GUI definitions, so that the look and feel of the containers can be set.

GUI Definition is achieved through a XML definition.

An XML file is created for each form. The name of the XML file is same as the form code with the extension xml. The HTML properties of containers and controls in a form are defined in the XML file.

Container Groupstyles are a grouping of CSS rules. These Groupstyles are applied to the container. For a particular GroupStyle, all child CSS rule definitions are appended with the Groupstyle Name.

For example, consider GroupStyle “Gflv2” has got CSS rule definitions such as rowHead, TRrow2, and TRrow3. These ClassNames belonging to the GroupStyle “Gflv2” will now be defined as rowHeadGflv2, TRrow2Gflv2, TRrow3Gflv2, and so on.

Example for GroupStyle Configuration in XML:

```
<CONTAINER GROUP_STYLE="Gflv2" ID="5" NAME="RiskDetails" TYPE="5"
VIEWMODE="1" COLLAPSEREQUIRED="N"></CONTAINER>
```

6.2.2 Label / Value & Controls

A container row having input fields can contain any number of Label-Value pairs. Each Label-Value pair can have a ClassName assigned to the Label and a ClassName assigned to the Value. This can be configured using the following Configuration in XML:

```
<CSSCLASSNAME TD_LABEL_STYLE="className_1"  
TD_DATA_STYLE="className_2"></CSSCLASSNAME >
```

Controls can be assigned to their own ClassNames. This can be configured using the following configuration in XML:

```
< CSSCLASSNAME="formlegend" ></CSSCLASSNAME >
```

6.2.3 Images Configuration

This configuration is for controls of TYPE 25 and TYPE 41 that make use of image icons in XML configuration.

```
<IMAGE IMAGE_TEXT="RENDERER.ROR_ADD_IMG"> images/gridtoolbar_  
add.gif</IMAGE>
```

The following steps explain how this new image can be included in the FormsFramework CSS file, which can be later utilized by the XML configuration.

1. Define a new Rule in your FormsFramework CSS file as shown below:

```
.gridtoolbar_add{width:23px;height:15px; background-image: URL  
(../images/icon_common.gif); background-repeat: no-repeat; background-  
position:-140px -400px;}
```

- The ClassName should be the same as the image name without the file extension (.css).
- The width and height for toolbar images should be 23px X 15px.
- The icon-image should be present in the sprited image: icon_common.gif (see [List of Sprited images and Paths](#))
- The background-repeat should be no-repeat.
- Calculate the x, y co-ordinate values for the sprited image background-position. The block size of each image icon- width * height = 70px * 80px as shown in the following figure.

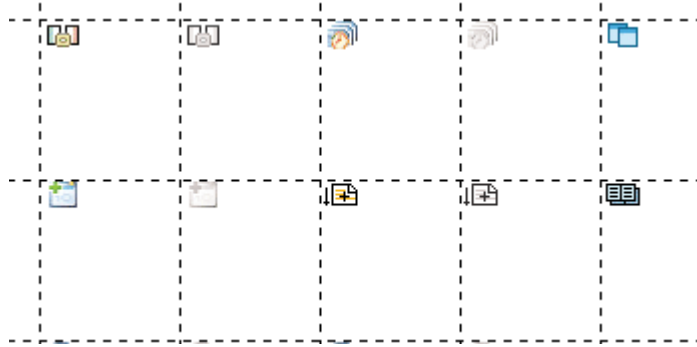


Figure 88. An example of sprited image

- The newly created CSS Rule Definition can now be utilized in the XML configuration:

```
<IMAGE IMAGE_TEXT="RENDERER.ROR_ADD_IMG">images/gridtoolbar_
add.gif</IMAGE>
```

6.2.3.1 List of Sprited images with Paths

#	Module	Path	Sprited Image Names	
			Image name	Description
1	AAI	//OFSAAI /images/	bg_cvd.gif	Used for layout elements
2	Applications (Example: ROR)	//OFSAAI/solution/ROR/imag es/	bg_hzl.gif	Used for layout elements horizontal repeat
3	FormsFramework	//OFSAAI/formsFramework/f ormsrenderer/images/	bg_vtl.gif	Used for layout elements vertical repeat
			lhsmenu_icon.gif	Used for Tree Icons
			icon_common.gif	Toolbar Icons
			hierarchy_icons.gif	Used in Hierarchy Browser

6.3 Creating a Custom .CSS File

List of CSS files with paths:

#	Module	Path	CSS File Name	Comments	Usage
1	AAI	//OFSAAI /css/	stylesheetAAI.css		Login Page, AAI-Home Page & AAI Modules,
2	Applications (Example: ROR)	//OFSAAI/solution/ROR /css/	CSS_OFSAAI.css		Application files

#	Module	Path	CSS File Name	Comments	Usage
3	FormsFrame work	//OFSAAI/formsFrame work/formsrenderer/css /	CSS_OFSAAI.css (This file name should have the same Name as the above Solution file Name)	This file has a CSS file import for icons used in the application: @import URL('CSS_ICON_OFSAAI.css')	Forms Framework Components

The required customization can be achieved by following the below set of steps.

1. Create a copy of the required CSS file.
2. Do not change or alter any existing CSS Rule Name defined in the CSS file.
3. Changes can be made to the attributes for a particular CSS Rule Name, until the required visual effect is achieved.

6.4 CSS Structure

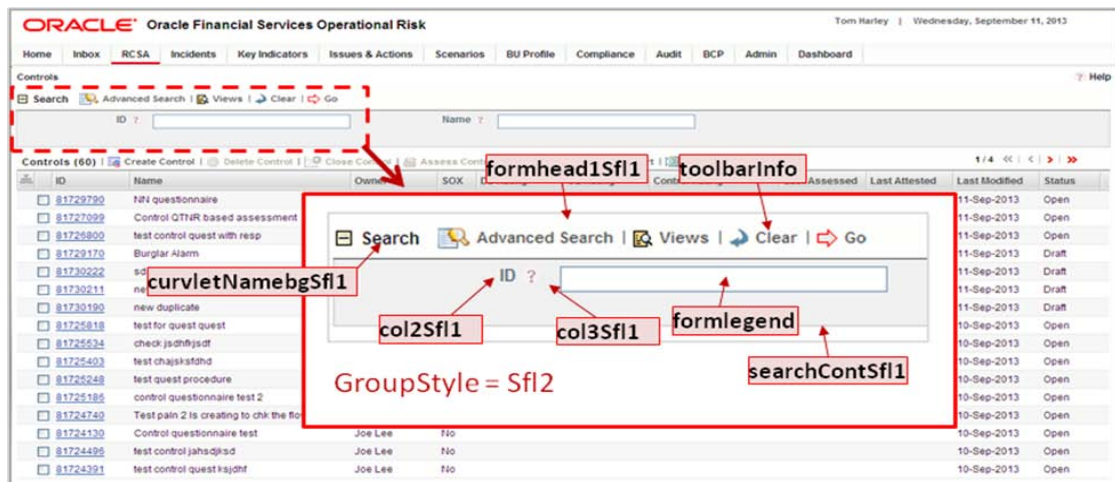


Figure 89. Search Container with a GroupStyle with ClassNames

In the above example, the GroupStyle "Sf" is applied to the search container. All ClassNames belonging to the GroupStyle are appended with the GroupStyle name. For example, SearchContSf1, col2Sf1, col3Sf1 and so on.

Any changes to these ClassNames will affect all containers where the GroupStyle has been applied.

The below table shows commonly used GroupStyles:

#	GroupStyle ID	Container Type	Description
1	Sfl1	Search Container	Applied to Search Container
2	Gflv2	Data Table	Applied to Data Table Grid
3	lvflv2	Label Value Container	Applied to Label Value Container
4	lvflv4	Tab Container	Applied to Tab Container

The screenshot shows a web application interface for Oracle Financial Services Operational Risk. A data table grid is displayed with columns for ID, Name, Owner, SOX, and DE. Several annotations are present:

- toolbarInfo**: Points to the top toolbar area.
- topheaderGGflv2**: Points to the top header of the table.
- curvletMainTextGflv2**: Points to the main text area of the table.
- rowHeadGflv2**: Points to the header row of the table.
- TRow2Gflv2**: Points to a specific data row.
- TRow3Gflv2**: Points to another specific data row.
- GroupStyle = Gflv2**: A red text annotation indicating the GroupStyle applied to the table grid.

Figure 90. Showing a Data Table Grid Container GroupStyle with ClassNames

The screenshot shows a detailed view of a control record in the Oracle Financial Services Operational Risk application. The record details include Name, Description, Business Line, Library Reference, Risk Inventory, Product, Risk Category, Requires Attestation, Cost, Assessment Type, DE Questionnaire, OE Questionnaire, Comments, SOX, Location, Control Category, Risk Event Type, Process, Owner, Nature, Legal Entity, Control Assessor, Respondents, and SOX. Annotations include:

- col3lvflv2**: Points to the Name field.
- col2lvflv2**: Points to the Description field.
- toolbarInfo**: Points to the Edit button in the top right.
- GroupStyle = lvflv2**: A red text annotation indicating the GroupStyle applied to the label value container.

Figure 91. Showing a Label Value Container GroupStyle with ClassNames

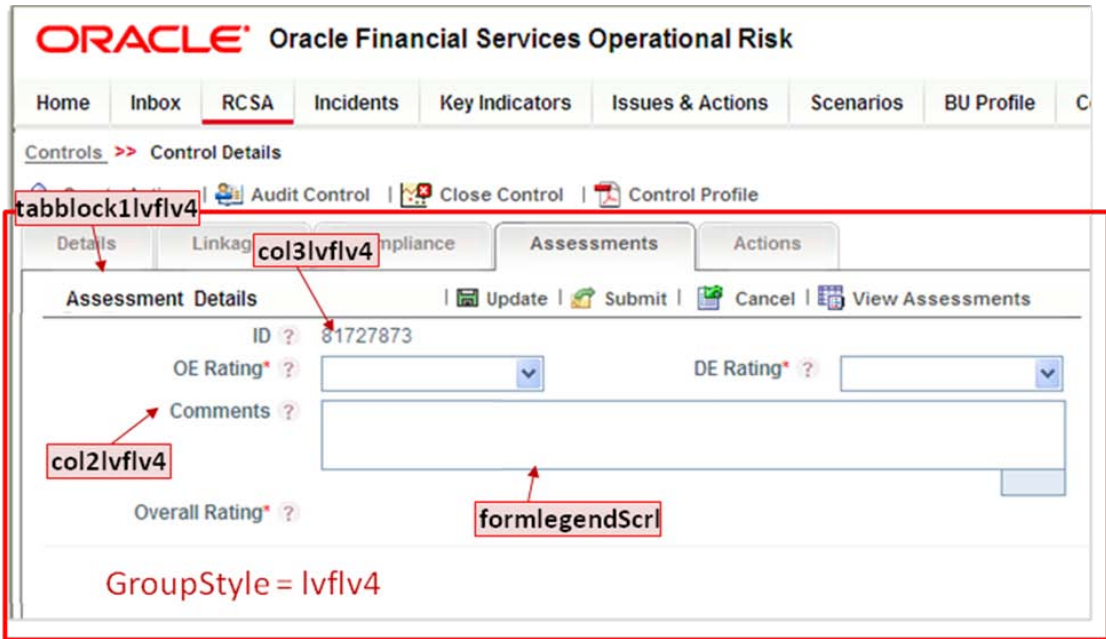


Figure 92. Showing a Tab Container GroupStyle with ClassNames

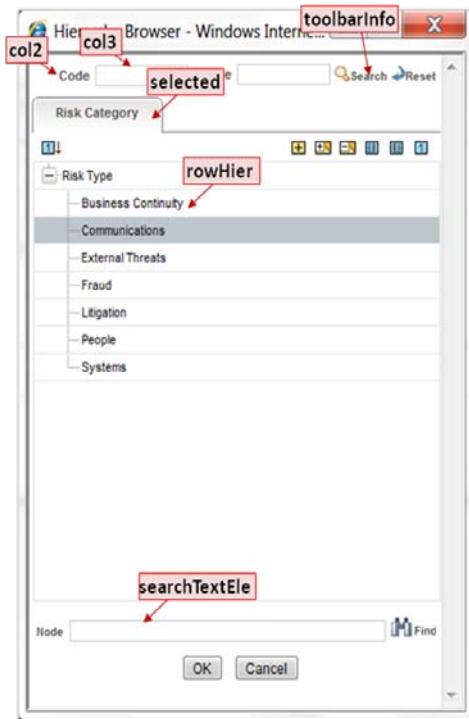


Figure 93. Showing Hierarchy Browser ClassNames

Hierarchy related CSS files are located in the following folder:

//OFSAAI/formsFramework/formsrenderer/hiercss

Hierarchy related Image files are located in the following folder:

//OFSAAI/formsFramework/formsrenderer/hierimages

appttl

welbg

ORACLE Oracle Financial Services Operational Risk Tom Harley | Wednesday, September 11, 2013

Home Inbox RC SA Incidents Key Indicators Issues & Actions Scenarios BU Profile Compliance Audit BCP Admin Dashboard

Controls Search Advanced Search Views Clear Go menuParent

brdcNonSel Name

Controls (60) Create Control Delete Control Close Control Assess Control Attest Control Export Unwrap 1/4 << >>

ID	Name	Owner	SOX	DE Rating	OE Rating	Control Rating	Last Assessed	Last Attested	Last Modified	Status
81729790	NI questionnaire	Joe Lee	No						11-Sep-2013	Open
81727099	Control QTR based assessment	Joe Lee	No	Qualified	Effective	Qualified	11-Sep-2013	11-Sep-2013	11-Sep-2013	Open
81725800	test control quest with resp	Joe Lee	No						11-Sep-2013	Open
81729170	Burglar Alarm		No						11-Sep-2013	Draft
81730222	sdsd		No						11-Sep-2013	Draft
81730211	new duplicate		No						11-Sep-2013	Draft
81730190	new duplicate		No						11-Sep-2013	Draft
81725818	test for quest quest	Business	No						10-Sep-2013	Open
81725534	check jsdhsjsdr	Joe Lee	No						10-Sep-2013	Open
81725403	test chajskafnd	Joe Lee	No						10-Sep-2013	Open
81725248	test quest procedure	Tom Harley	No						10-Sep-2013	Open
81725185	control questionnaire test 2	Joe Lee	No						10-Sep-2013	Open
81724740	Test pain 2 is creating to chk the flow	Tom Harley	No						10-Sep-2013	Open
81724130	Control questionnaire test	Joe Lee	No						10-Sep-2013	Open
81724486	test control jahdksd	Joe Lee	No						10-Sep-2013	Open
81724391	test control quest kjdht	Joe Lee	No						10-Sep-2013	Open

ffwpagebcyp

© Oracle. All rights reserved

Figure 94. Showing Header and Footer ClassNames

7 Appendix

7.1 Tutorial for creating a Sample Form

In this tutorial, we will see how a sample form is created with containers and controls within the containers. This form will be invoked, when a menu is clicked and can be saved after making the changes.

Following are the specifications.

- Menu name – Risk
- Form name - Risk Definition Form
- Container name - Risk Details, Save
- Controls within the Container, Risk Details – Risk ID, Risk Name, Created Date, Risk Business Line

NOTE: In this tutorial, filling of mandatory fields and minimum details are only given. You can add more details according to your requirement.

7.1.1 Expected Functionality

The Risk Definition Form will be invoked by clicking the menu, Risk, which has a risk identification function mapped to it. Risk Definition Form will have two containers by the names Risk Details and Save Risk Details. Risk Details is a normal container with different controls inside that. Save Risk Details is a button container that has the Save and Cancel controls with respective functions mapped to them. When the Save button is clicked, the risk details get saved with the changes made to the controls in its Risk Details container.

7.1.2 Defining a Form with Form Code as FormRisk

We will begin by creating the form that gets invoked on the click of the menu, Risk.

1. From the LHS menu of the Forms Manager, expand **UI Configurations** and click **Forms**. The *Forms Maintenance* window appears.
2. To define the form, click **New** in the *Forms* toolbar. The *Form Details* tab appears.
3. Enter the **Form Code** as “FormRisk”. This will be the name that is entered for the **Form Name** field while defining the menu.
4. Enter the **Form Name** as “Risk Definition Form”. See the following screenshot.

The screenshot shows the 'Forms Maintenance' application window. The 'Form Definition' section is active, displaying the following fields:

- Form Code: FormRisk
- Form Name: Risk Definition Form
- Dataset Entities: (empty list)
- Dataset Filter: (empty)
- Order By: (empty)
- Print Required: N
- Overlay Form: Y
- Module Name: (empty)
- Map Name: (empty)
- Is Child Form: N
- Navigation Path Required: Y
- Sub Module Name: (empty)

Below the Form Definition section are sections for 'Form Security' (Security DS Entities and Security DS Filters) and 'Form Help' (Help URL and Help File Name). 'Save' and 'Back' buttons are visible at the bottom.

5. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.3 Defining a Container within the Risk Definition Form

We will create a container within the form by the name, Risk Details.

1. From the *Forms Maintenance* window, select earlier created Form, FormRisk and click **New** in the *Containers* toolbar. The *Container Maintenance* window is displayed.
2. Enter the **Container ID** as “200001”.
3. Enter the **Container Name** as “Risk Details”.
4. Select the **Type of Container** as NORMAL CONTAINER.
5. Select the **Container Mode** as Editable.
6. Enter **No of Columns** as “2”. See the following screenshot.

The screenshot shows the 'Container Maintenance' application window. The 'Container Details' section is active, displaying the following fields:

- Container ID: 200001
- Container Name: Risk Details
- Type of Container: NORMAL CONTAINER
- No of Columns: 2
- Container Mode: Editable

Below the Container Details section are sections for 'Container Style' (Group Style, Collapse, Horizontal Group ID, Border, Header, Container Width) and 'Container Query' (Dataset Entities, Filter Condition). 'Save' and 'Back' buttons are visible at the bottom.

7. Click **Save**.

7.1.4 Defining Controls within the Risk Details Container

7.1.4.1 Defining Risk ID Control

We will create a control within the container by the name Risk ID.

1. From the *Forms Maintenance* window, select the earlier created Form, FormRisk, and the earlier created Container, Risk Details.
2. Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Enter the Control ID as “200001”.
4. Enter the **Control Name** as “Risk ID”.
5. Enter the Control Type as “TEXTBOX CONTAINER”.
6. Enter the Row Number as “1”.
7. Enter the Sequence as “1”. See the following screenshot.

The screenshot shows the 'Control Details' section of a software application. The fields are as follows:

Field	Value
Control ID	200001
Control Name	Risk ID
Control Type	TEXTBOX CONTROL
Row Number	1
Sequence	1

Other sections visible include 'Control Query Details', 'Masking Req', and 'Render Mode', all of which are currently empty or set to default values.

8. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.4.2 Defining Risk Name Control

We will create a control within the container by the name Risk Name.

1. From the *Forms Maintenance* window, select the earlier created Form, FormRisk, and the earlier created Container, Risk Details.

2. Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Enter the Control ID as “200002”.
4. Enter the **Control Name** as “Risk Name”.
5. Enter the Control Type as “TEXTBOX CONTAINER”.
6. Enter the Row Number as “1”.
7. Enter the Sequence as “2”.

The screenshot shows the 'Control Maintenance' window with the following details:

- Control Details:** Control ID: 200002, Control Name: Risk Name, Control Type: TEXTBOX CONTROL, Row Number: 1, Sequence: 2.
- Control Query Details:** Select, From, Where, Dim Entity Pks (all empty).
- Masking Req:** Code For Masking, Group By, Field Chooser (all empty).
- Render Mode:** Format Req, Format, Default Readonly Value, Mandatory, Tab Order, Column Mandatory (all empty).
- Tool Tip:** Context Help (both empty).

8. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.4.3 Defining Created Date Control

We will create a Date control within the container by the name Created Date.

1. From the *Forms Maintenance* window, select the earlier created Form, FormRisk, and the earlier created Container, Risk Details.
2. Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Enter the Control ID as “200003”.
4. Enter the **Control Name** as “Created Date”.
5. Enter the Control Type as “DATE CONTROL”.
6. Enter the Row Number as “2”.
7. Enter the Sequence as “1”.

8. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.4.4 Defining Risk Business Line Hierarchy Control

We will create a hierarchy control within the container by the name Risk Business Line.

1. From the *Forms Maintenance* window, select the earlier created Form, FormRisk, and the earlier created Container, Risk Details.
2. Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Enter the Control ID as “200004”.
4. Enter the **Control Name** as “Risk Business Line”.
5. Enter the Control Type as “HIERARCHY CONTROL”.
6. Enter the Row Number as “2”.
7. Enter the Sequence as “2”.

8. Click the *Parameters* tab and click **Add Parameter**.
9. Enter **ID** as “1”, **Name** as “hierarchy”, **Scope** as “Static” and **Value** as “HREF001”.
10. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.5 Defining another Container within the Risk Definition Form

We will create a container within the form by the name, Save Risk Details.

1. From the *Forms Maintenance* window, select earlier created Form, FormRisk and click **New** in the *Containers* toolbar. The *Container Maintenance* window is displayed.
2. Enter the **Container ID** as “200002”.
3. Enter the **Container Name** as “Save Risk Details”.
4. Select the **Type of Container** as “BUTTON CONTAINER”.
5. Select the **Container Mode** as “Editable”.
6. Enter **No of Columns** as “2”. See the following screenshot.

7. Click **Save**.

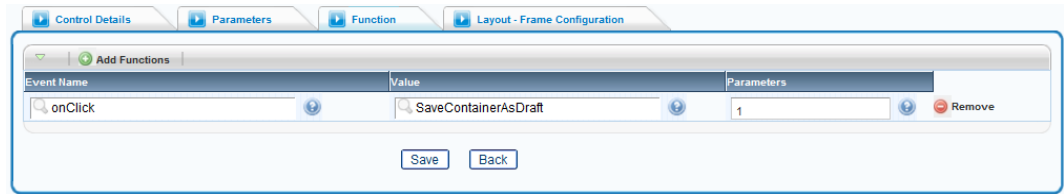
7.1.6 Defining Controls within the Save Container

7.1.6.1 Defining Save Control

We will create a Date control within the container by the name Created Date.

1. From the *Forms Maintenance* window, select the earlier created Form, FormRisk and the earlier created Container, Save.
2. Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Enter the Control ID as “200005”.
4. Enter the **Control Name** as “Save”.
5. Enter the Control Type as “ACTION CONTROL”.
6. Enter the Row Number as “1”.
7. Enter the Sequence as “1”.

8. Click the *Function* tab and click **Add Functions**.
9. Enter **EventName** as “onClick”, **Value** as “SaveContainerAsDraft”, and **Parameters** as “1”.

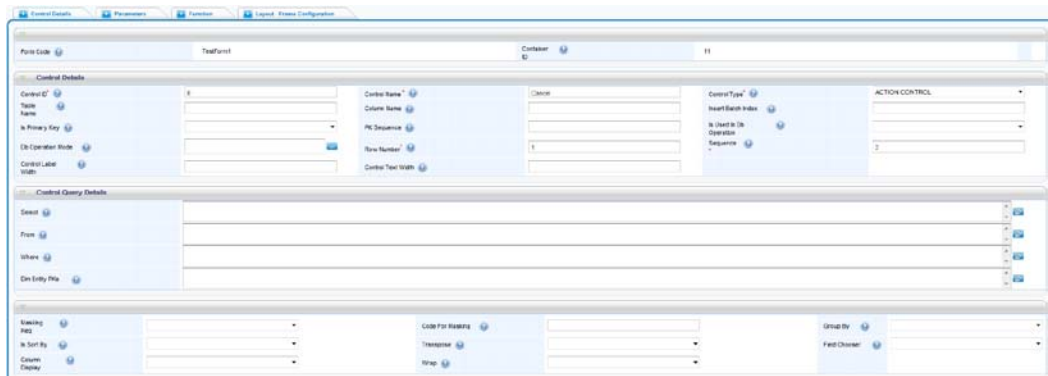


- Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.6.2 Defining Cancel Control

We will create a Date control within the container by the name Created Date.

- From the *Forms Maintenance* window, select the earlier created Form, FormRisk and the earlier created Container, Save.
- Click **New** in the *Controls* toolbar. The *Control Maintenance* window appears.
- Enter the Control ID as “200006”.
- Enter the **Control Name** as “Cancel”.
- Enter the Control Type as “ACTION CONTROL”.
- Enter the Row Number as “1”.
- Enter the Sequence as “2”.



- Click the *Function* tab and click **Add Functions**.
- Enter **EventName** as “onClick”, **Value** as “closeWindow”, and **Parameters** as “1”.

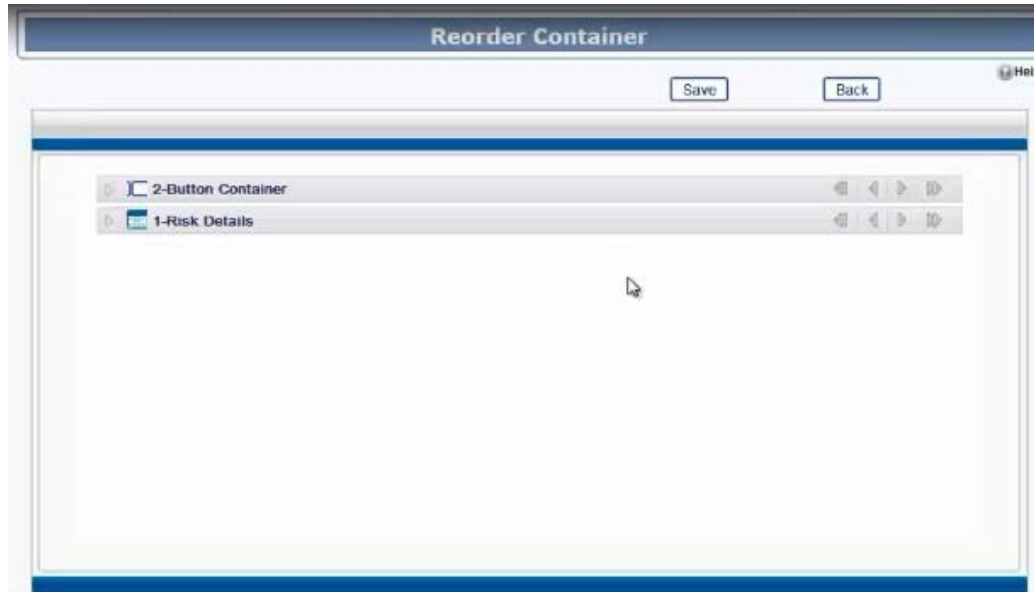


- Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

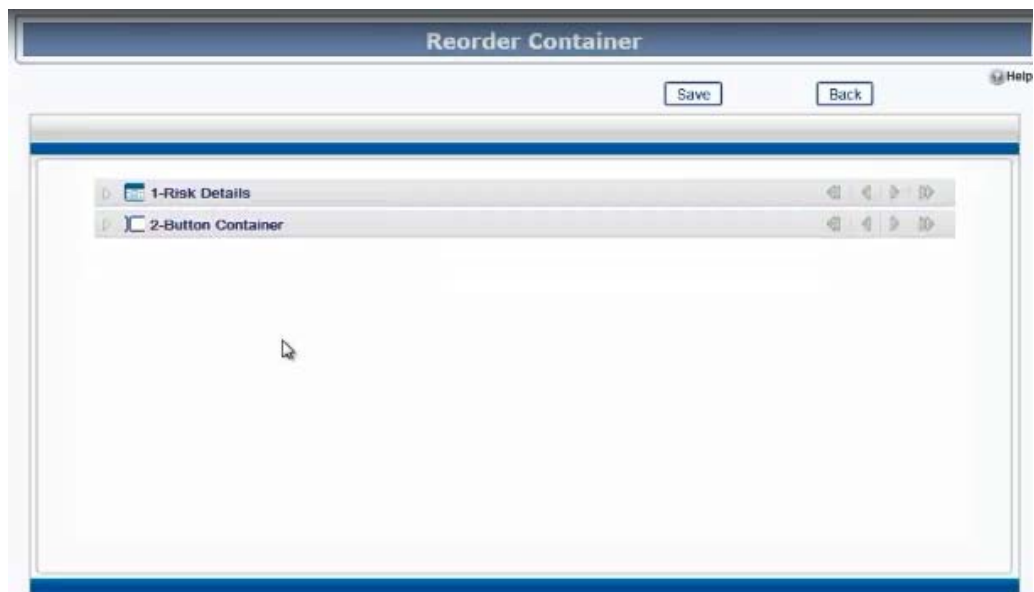
7.1.7 Reordering Containers within the Risk Definition Form

We will reorder the containers within the Risk Definition form.

1. From the *Forms Maintenance* window, select earlier created Form, FormRisk, and click **Reorder** in the *Forms* toolbar. The *Reorder Container* window appears.



2. Drag the Risk Details container and make it appear first as shown in the following screenshot.

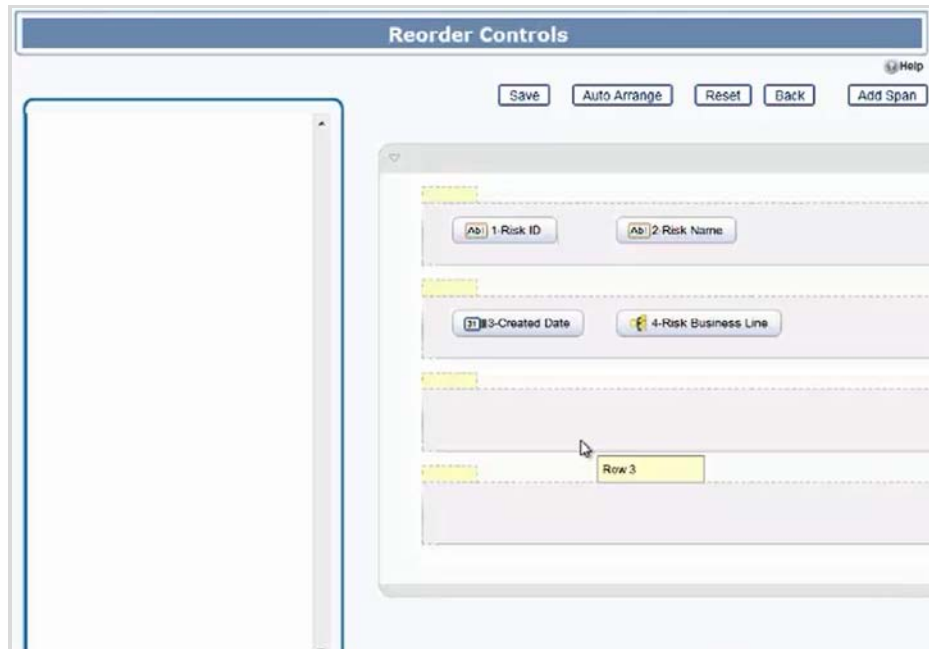


3. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

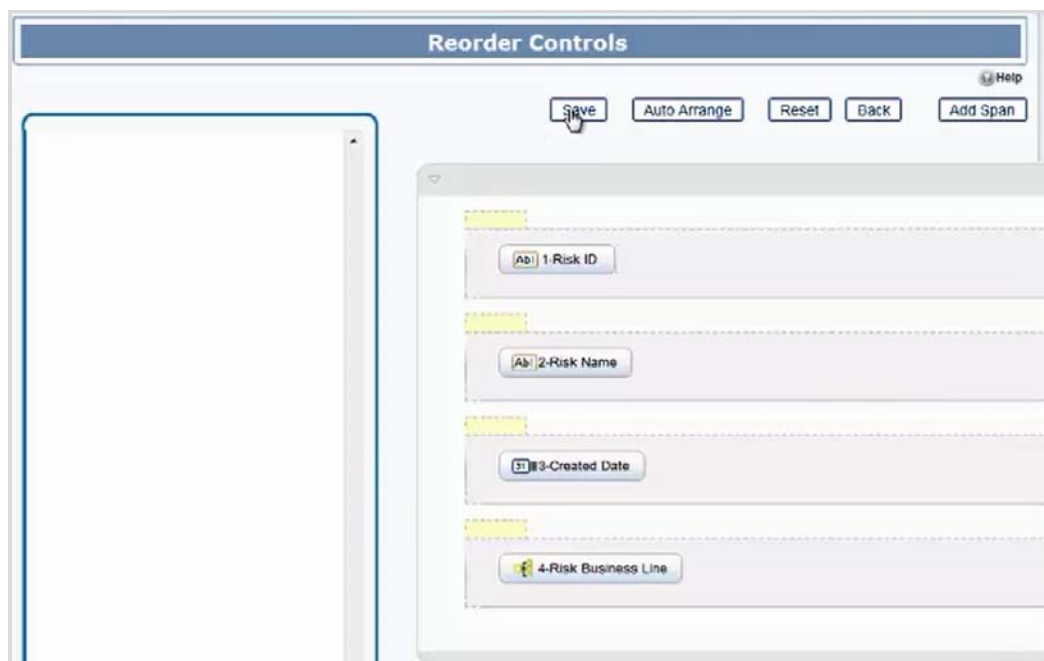
7.1.8 Reordering Controls within the Risk Details Container

We will reorder the controls within the Risk Details container.

1. From the *Forms Maintenance* window, select “FormRisk” form and select “Risk Details” container, and then click **Reorder** in the *Containers* toolbar. The *Reorder Controls* window appears.



2. Drag the controls so that each control appears in separate rows as shown in the following screenshot.

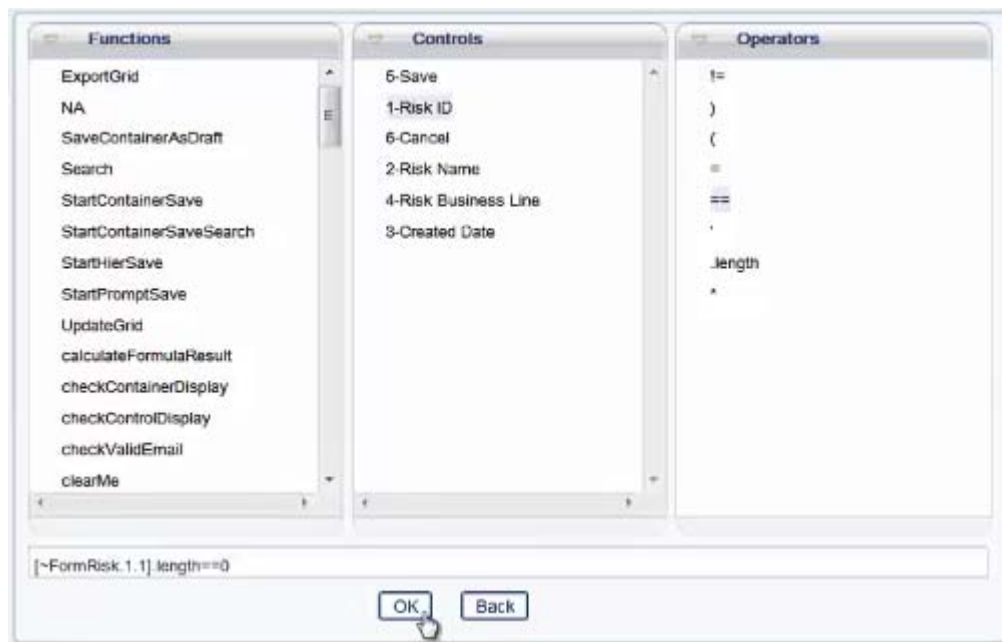


3. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.9 Creating a Validation Rule

We will create a validation rule to display a message to prompt the user to enter Risk Name.

1. From the *Forms Maintenance* window, select “FormRisk” form and click **Validations** in the *Forms* toolbar. The *Validation Rules* window appears.
2. Click **New** in the *Validation Rules* toolbar.
3. Click **Add Validation Rule Set** and enter **Item ID** as “100”. Click **Save**.
4. Select “100” from the **ID** drop-down list.
5. Click **...** in the **Rule Condition** field and form the condition by selecting the appropriate Function, Control, and Operator as shown in the screenshot.



6. Click Ok.
7. Enter **Message Description** as “Please Enter Name of the Risk” as shown in the screenshot.

The screenshot shows a 'Validation Rules' configuration window. The title bar reads 'Validation Rules'. Below the title bar, there are two buttons: 'Add Validation Rule Set' (with a green plus icon) and 'Remove' (with a red minus icon). The main area contains several fields:

- ID:** A dropdown menu showing '100'.
- Rule Condition:** A text box containing the expression '[-FormRisk.4.1].length==0'.
- Rule Expression:** An empty text box.
- Message Description:** A text box containing the text 'Please Enter Name of the Risk'.
- Comments:** An empty text box.

 At the bottom of the window, there are two buttons: 'Save' and 'Back'.

8. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.10 Associating the Validation Rule with Save Control

We will associate the validation rule with the Save control.

1. From the *Forms Maintenance* window, select “FormRisk” form and select “Save” container, and select “Save” control.
2. Click **Edit** in the *Controls* toolbar. The *Control Maintenance* window appears.
3. Click the *Parameters* tab and click **Add Parameter**.
4. Enter **ID** as “1”.
5. Enter **Name** as “validationRuleSet”.
6. Enter **Scope** as “Static”.
7. Enter **Value** as “100”. See the following screenshot.

The screenshot shows the 'Add PARAMETER' window with a table of parameters. The window title is 'Add PARAMETER'. The table has the following columns: ID, Name, Scope, and Value. The data in the table is as follows:

ID	Name	Scope	Value
1	infodom	Request	infodom
1	segment	Request	segment
1	gstUsrid	Request	gstUsrid
1	User	Request	User
1	validationRuleSet	Static	100

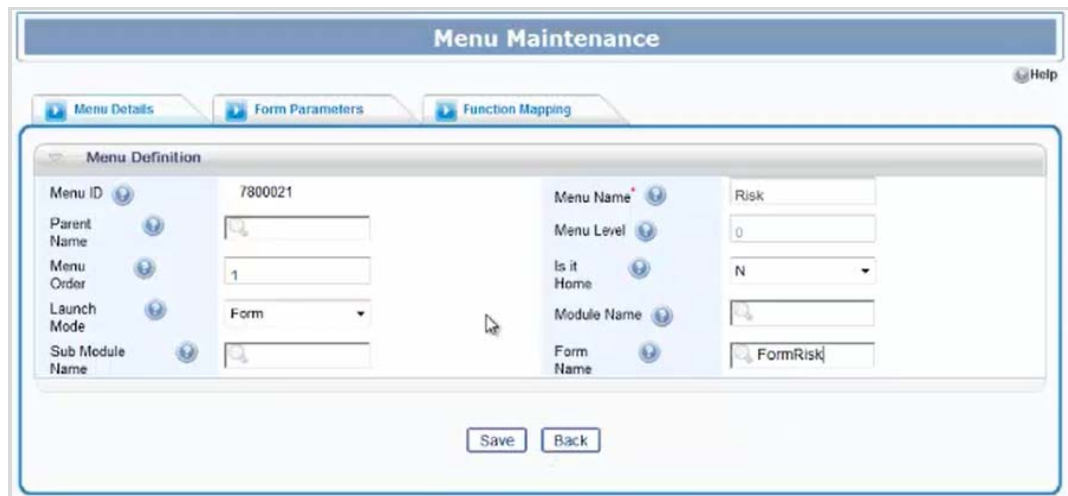
At the bottom of the window, there are two buttons: 'Save' and 'Back'.

8. Click **Save**.

7.1.11 Defining a Menu by the name, Risk

We will create a Menu by the name, Risk which when clicked will invoke the “FormRisk” form.

1. From the LHS menu of the Forms Manager, expand **UI Configurations** and click **Menu**. The *Menu Maintenance* window appears.
2. Click **New** in the *Menu Items* toolbar. The *Menu Maintenance* window is displayed. The Menu ID is seen generated automatically.
3. Enter the **Menu Name** as “Risk”.
4. Select **Launch Mode** as Form.
5. Enter the **Form Name** as “FormRisk”. This is the **Form Code** of the form we created earlier. See the following screenshot.

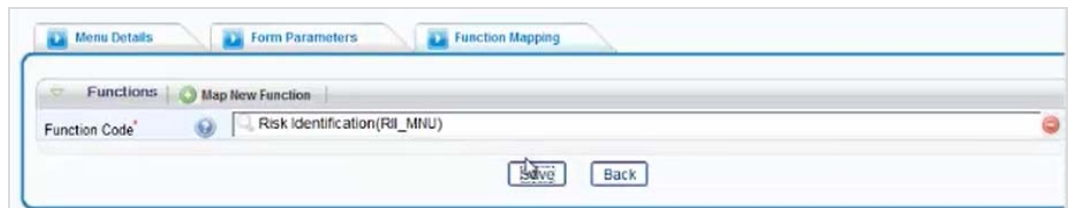


The screenshot shows the 'Menu Maintenance' window with the 'Menu Definition' tab selected. The form contains the following fields and values:

Field	Value
Menu ID	7800021
Parent Name	
Menu Order	1
Launch Mode	Form
Sub Module Name	
Menu Name	Risk
Menu Level	0
Is it Home	N
Module Name	
Form Name	FormRisk

Buttons: Save, Back

6. To associate a function to the menu, click the *Function Mapping* tab.
7. Click **Map New Function**.
8. Enter the **Function Code** as Risk Identification (RII_MNU). See the following screenshot.



The screenshot shows the 'Menu Maintenance' window with the 'Function Mapping' tab selected. The 'Map New Function' dialog is open, showing the 'Function Code' field with the value 'Risk Identification(RII_MNU)'. Buttons: Save, Back

9. Click **Save**. On successful save, you will receive the confirmation message that your changes are saved.

7.1.12 Generating the Menu

We will generate the "Risk" menu we created.

1. From the LHS menu, expand **Generate** and click **Menu**. The *Generate Menu* window appears.

Menu ID	Menu Name	Level	Order	Access Path	Menu Mode
7800021	Risk	0	1	Risk	Development

2. Click **Generate**.

7.1.13 Generating the Form

We will generate the "FormRisk" form we created.

1. From the LHS menu, expand **Generate** and click **Forms**. The *Generate Forms* window appears.

Generate Forms

Search Options Reset Search

Form Code

Generation Date

Form Name

Label

Forms Mark All

Form Code	Form Name
<input checked="" type="checkbox"/> FormRisk	Risk Definition Form

Label

Comments

Path

2. Select "FormRisk" form and click **Generate**.