



IBM Cúram Social Program Management

Cúram Rules Editor Guide

Version 6.0.4

Note

Before using this information and the product it supports, read the information in Notices at the back of this guide.

This edition applies to version 6.0.4 of IBM Cúram Social Program Management and all subsequent releases and modifications unless otherwise indicated in new editions.

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Chapter 1

Introduction

1.1 Cúram Rules Editor Guide

The Cúram Rules Editor™ is a part of the application which facilitates setting up and maintaining complicated logical conditions (rules) and the results associated with those conditions. This includes creating and maintaining eligibility rule sets, sub rule sets, work allocation rule sets, rule groups, rule list groups, rules, conditions, objective groups, objective list groups, objectives, objective tags, data item assignments.

1.2 Prerequisites

In order to utilize Rules Editor properly, the reader will need the following:

- A basic understanding of Human Service Systems, products and assessments.
- A basic understanding of using a computer, mouse, and web browser.
- A basic understanding of the application and how to use the application including how to log into the application.

1.3 Audience

The administrator and the rules developer are the audience for documentation on the Cúram Rules Editor.

Chapter 2

Rules Editor Navigation

2.1 Introduction

The Rules Editor uses a combination of a tree widget and HyperText Markup Language (HTML) frames to provide enriched navigation between rules components. This chapter looks at the overall structure of the Rules Editor with regard to eligibility rule sets, sub-rule sets, work allocation rule sets and rules data objects.

It also looks at how to navigate with the Rules Editor.

2.2 Using the Rules Editor

The Rules Editor is a part of the Administration Application and is located in the rules editor page group. There are two frames in the Rules Editor: the left-hand frame which shows the tree view, and the right-hand frame which shows the screen that corresponds to the tree node in the left-hand frame. On the front page, clicking on a rule set presents the user with a pop-up window which contains the tree view and rule set.

2.3 The Rules Tree View

The tree view allows you to see at a glance the hierarchical structure of the rule set and it is immediately obvious to the user what page or section they are dealing with. A tree view or an outline view is a graphical user interface element (widget) that presents a hierarchical view of information. Each node can have a number of sub items. An item can be expanded to reveal sub items, if any exist; and collapsed to hide sub items. The HTML frame allows you to see all the details of a particular tree node. Clicking on a node in the tree view will bring up the corresponding rule set page, and vice versa.

Chapter 3

Eligibility Rule Sets

3.1 What is an Eligibility Rule Set?

An eligibility rule set is a hierarchical arrangement of nested objects of different types. It defines the set of rules for a specific period of time for a given product and acts itself as a root of the hierarchy. Other objects like rule list groups, rule groups, objective list groups, objective groups, objectives, objective tags, data item assignments, rules and sub-rule sets can form part of a rule set hierarchy.

The following nodes can be found in the rules tree:

- Eligibility Rule Set
- Objective Group
- Objective List Group
- Objective
- Rule Group
- Rule List Group
- Rule
- Data Item Assignment
- Sub-rule Set

Note however, that not all these nodes may be present in any given rule set.

The following table shows the default screen that is opened on the right-hand panel when a user clicks on any of the above tree items:

Left Click	Default Page
Eligibility Rule Set	Opens the View Eligibility Rule Set page.

Left Click	Default Page
Objective Group	Opens the View Objective Group page.
Objective List Group	Opens the View Objective List Group page.
Objective	Opens the View Objective page.
Rule Group	Opens the View Objective Group Set page.
Rule List Group	Opens the View Rule List Group page.
Objective Group	Opens the View Objective page.
Data Item Assignment	Opens the View Data Item Assignment page.
Sub-rule Set	Opens the View Sub-Rule Set page.

Table 3.1 Default Rule Set Tree Page

Certain items are not shown in the rules tree. These items are navigable by clicking the appropriate link on the right hand frame. These are:

- Expression
- Assessment Objective Tag
- Product Objective Tag
- Objective Tag

3.2 Viewing an Eligibility Rule Set

To view an eligibility rule set you must complete the following steps:

- Navigate to the Eligibility Rule Sets page.
- Click on the expand link beside the rule set you wish to view.

The following fields are available on the View Eligibility Rule Set page:

Name	Description
Rule Set ID	Unique ID of the eligibility rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.
Name	Name of the eligibility rule set.
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user to understand the legislation behind the eligibility rule set.
Legislation ID	ID of any related legislation information.
Highlight	Highlight indicator. This indicator specifies if the eligibility rule set node should be displayed in a dif-

Name	Description
	ferent color if it fails at runtime.
Success	Result text to be displayed when the eligibility rule set execution is successful.
Failure	Result text to be displayed when the eligibility rule set execution fails.
Items	List of items for this eligibility rule set. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each rule set item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule group, objective group, etc. The Name field contains the name of each rule set item.
Translations	List of translations for the translatable element of the eligibility rule set. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.
Rules Data Objects	List of rules data objects for this eligibility rule set. This list contains three fields: Action, RDO Name and Type. The Action field contains the set of actions possible for each RDO in the list. The RDO Name field contains the name of each RDO in the list. The Type field describes the type of RDO. The Final field denotes whether the RDO is final. Values cannot be assigned to final RDO data items more than once in the rule set execution.
Comments	The Comments field should be used to provide a detailed description of the rule set and its usage.

Table 3.2 Fields and Descriptions

The following links are available on the View Eligibility Rule Set page:

Link	Description	Action
Add Rules Data Object	Add Rules Data Object opens the Rules Data Objects page where a user can search for and select or view a Rules Data Object.	Opens the View Rules Data Objects page
Clone Rule Set	Clones the eligibility rule set. The existing rule set will be copied and the user is required to enter a new Rule-setID and name.	Opens the Clone Rule Set page.

Link	Description	Action
Validate Rule Set	Validates the rule set.	Opens the Validate Rule Set page.
Add Objective Group	Adds a new objective group to this eligibility rule set.	Opens the Create Objective Group page. It is only possible to have one objective group or objective list group at the top level.
Add Objective List Group	Adds a new objective list group to this eligibility rule set.	Opens the Create Objective List Group page. It is only possible to have one objective list group or objective group at the top level.
Add Rule Group	Adds a new rule group to this eligibility rule set.	Opens the Create Rule Group page. It is only possible to have one rule group or rule list group at the top level.
Add Rule List Group	Adds a new rule list group to this eligibility rule set.	Opens the Create Rule List Group page. It is only possible to have one rule list group or rule group at the top level.
Publish Changes	Publishes any changes which may have been made to the rule set since the last publish. The cached version of this rule set will be removed from the cache and the updated version will be picked up by the Rules Engine the next time the rule set is executed.	Opens the Publish Rule Set Changes page.
Create Translation	Creates a new translation for this rule set.	Opens the Create Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Eligibility Rule Set page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the Eligibility Rule Set page and moves the selected item down in the execution order.

Link	Description	Action
View (Translations)	View the eligibility rule set translation.	Opens the View Eligibility Rule Set Translation page.
Edit (Translations)	Modify the eligibility rule set translation.	Opens the Modify Eligibility Rule Set Translation page.
View (Rules Data Objects)	View rules data object.	Opens the View Rules Data Object page.
Remove (Rules Data Objects)	Removes the rules data object from the eligibility rule set.	Opens the Delete Rules Data Object page.

Table 3.3 Links and Actions

The following buttons are available on the View Eligibility Rule Set page:

Button	Description
Edit	Opens the Modify Eligibility Rule Set page.

Table 3.4 Buttons

The following submit validations are available on the View Eligibility Rule Set Page:

Validation	Message
Cannot add more than one rule group to the root level of a rule set.	It is only possible to have only one rule group or rule list group at the root level.
Cannot add more than one rule list group to the root level of a rule set.	It is only possible to have only one rule group or rule list group at the root level.
Cannot add more than one objective group to the root level of a rule set.	It is only possible to have only one objective group or objective list group at the root level.
Cannot add more than one objective list group to the root level of a rule set.	It is only possible to have only one objective group or objective list group at the root level.
The top-level node of a rule set must be a rule group, a rule list group, an objective group or an objective list group.	The top-level node of a rule set must be a rule group, a rule list group, an objective group or an objective list group.

Table 3.5 Submit Validations

3.2.1 Legislation Links

It is possible to create a link from a rules item to related legislation information which may help a user to understand the legislation behind a given rule.

A full link to related legislation consists of two parts: a legislation base and a legislation link.

A legislation base usually specifies a server where the legislation related to a rule set is held. It is specified for a whole rule set. A legislation base can only be specified for eligibility rule sets. A sub-rule set will use the same legislation base as the eligibility rule set to which it was added.

A legislation link usually specifies a relative path where the legislation information specific to the current node is stored on the server. The server is specified in the legislation base field. Alternatively, a legislation link can contain an ID of the related legislation information. A legislation link can be specified for any node which generates output to the rules result text. The following items can have legislation links specified:

- Eligibility rule set
- Sub-rule set
- Objective group
- Objective list group
- Objective
- Rule group
- Rule list group
- Rule

3.2.2 Publishing Changes to a Rule Set

Changes made to rule sets must be published before they can come into effect. When changes are published, the cached version of this rule set will be removed from the cache and the updated version will be picked up by the rules engine the next time the rule set is executed.

The following buttons are available on the Publish Rule Set Changes page:

Button	Description
Yes	Publishes the changes and returns the user to the Eligibility Rule Set page.
No	Does not publish the changes, dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.6 Buttons

3.2.3 Viewing a Rules Data Object

To navigate to the View Rules Data Object page a user must complete the following steps:

- Click on the View link in the Rules Data Object pane of the Eligibility Rule Set page.
- Click on the Rules Data Object Name attribute on the Rules Data Objects page.

The following links are available on the View Rules Data Object pane of the Eligibility Rule Set page:

Link	Description	Action
View	View the Rules Data Object, opens the Rules Data Object page where a user can view details and attributes associated with the Rule Data Object.	Opens the View Rules Data Object Details page.
Remove	Removes the Rules Data Object from the Rule Set.	Opens the Remove Rules Data Object page.

Table 3.7 Links and Actions

The following fields are available on the View Rules Data Object page:

Name	Description
Name	RDO Name
Type	RDO Type
Final	Denotes whether the RDO is final. Values cannot be assigned to the final RDO data items more than once in the rule set execution.
Name (Attributes)	RDO Attribute Name.
Type (Attributes)	RDO Attribute Type, either "Singleton" or "List".

Table 3.8 Fields

3.2.4 Adding a Rules Data Object to a Rule Set

To navigate to the Add Rules Data Object page you must complete the following steps:

- Open the Eligibility Rule Set page.
- Click on the Add Rules Data Object link.

The following buttons are available on the Add Rules Data Object page:

Button	Description
Save	Creates a new rules data object and returns the user to the Eligibility Rule Set page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.9 Buttons

The following links are available on the Add Rules Data Object page:

Link	Description	Action
Search Rule Data Object	Opens the Rules Data Object Search page. A pop up page appears where a user searches for Rules Data Objects, selects a rules data object and pastes the rules data object into the Add Rules Data Object page.	Opens the Rules Data Object Search page.
Clear	Clears out any current rule data object.	Resets the rules data object field.
Final	Denotes whether the RDO is final.	

Table 3.10 Links and Actions

After an RDO is assigned to a rule set, that RDO can be used in rule expressions, objectives, objective tags, and data item assignments and success and failure texts in the rule set. RDOs assigned to a rule set also can be associated with rule list groups or objective list groups.

To add an RDO to a rule set you must choose the Add Rules Data Object option on one of the following pages:

- Eligibility Rule Set
- Sub-Rule Set

To use a data item anywhere in a rule set you must assign a rules data object containing the data item to that rule set. To navigate to the relevant Rules Data Object page a user must complete the following steps:

- Navigate to the Eligibility Rule Sets page. The User is then presented with a list of eligibility rule sets.
- Click on the relevant eligibility rule set.
- Click on the Rules Data Object link and the rules data objects associated with that rule set will be displayed.

The following button is available on the View Rules Data Object Details page:

Button	Description
Close	Closes the page and returns the user to the Eligibility Rule Set page.

Table 3.11 Buttons

The following fields are available on the View Rules Data Object Details page:

Name	Description
Name	RDO Name.
Type	RDO Type.
Final	Denotes whether the RDO is final. Values cannot be assigned to the final RDO data items more than once in the rule set execution.
Name (Attributes)	RDO Attribute Name.
Type (Attributes)	RDO Attribute Type.

Table 3.12 Fields

3.2.5 Removing a Rules Data Object from a Rule Set

To remove a rules data object from a rule set, you must complete the following step:

- Click the Remove link in the Rules Data Object pane on the Eligibility Rule Set page.

The following buttons are available on the Remove Rules Data Object Page:

Button	Action
Yes	Removes this rule data object and returns the user to the Eligibility Rule Set page.
No	Cancel the operation and returns the user to the Eligibility Rule Set page.

Table 3.13 Buttons

3.2.6 Cloning a Rule Set

Cloning a rule set allows you to copy the existing rule set and requires you to enter a new RulesetID and name. To clone an eligibility rule set, you must open the Clone Rule Set page. To do this you must complete the fol-

Following step:

- Click on the Clone Rule Set link on the Eligibility Rule Set page.

The following fields are available on the Clone Rule Set page:

Field	Description	Default	Mandatory
Rule Set ID	Unique ID of the cloned eligibility rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.		Yes
Name	Name of the cloned eligibility rule set.		Yes

Table 3.14 Fields

The following buttons are available on the Clone Rule Set page:

Button	Description
Save	Saves the cloned eligibility rule set and returns the user to the Eligibility Rule Set page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.15 Buttons

The following submit validations are available on the Clone Rule Set page:

Validation	Message
Rule Set ID must be entered.	'Rule Set ID' must be entered.
Rule Set ID must be alphanumeric with no spaces.	'Rule Set ID' must be alphanumeric with no spaces.
Rule Set ID must be unique.	'Rule Set ID' must be unique.
Name must be entered.	'Name' must be entered.

Table 3.16 Submit Validations

3.3 Creating an Eligibility Rule Set

To create an eligibility rule set, you must open the Create Eligibility Rule Set page. To do this you must complete the following steps:

- Open the Eligibility Rules Sets page by clicking Rules Editor in the System menu.

- Click the New button.

The following fields are available on the Create Eligibility Rule Set page:

Field	Description	Default	Mandatory
Rule Set ID	Unique ID of the eligibility rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.		Yes
Name	Name of the eligibility rule set.		Yes
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user understand the legislation behind the eligibility rule set.		No
Legislation ID	ID of any related legislation information.		No
Highlight	Highlight indicator. This indicator specifies if the eligibility rule set node should be displayed in a different color if it fails at runtime.	Off	No
Success	Result text to be displayed if the eligibility rule set execution is successful.		No
Failure	Result text to be displayed if the eligibility rule set execution fails.		No
Comments	The Comments field should be used to provide a detailed description of the rule set and its usage.		No

Table 3.17 Fields

The following buttons are available on the Create Eligibility Rule Set page:

Button	Description
Save	Creates a new eligibility rule set from the information entered on the page and returns the user to the Eligibility Rule Set page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.18 Buttons

The following submit validations are available on the create Eligibility Rule Set page:

Validation	Message
Rule Set ID must be entered.	'Rule Set ID' must be entered.
Rule Set ID must be alphanumeric with no spaces.	'Rule Set ID' must be alphanumeric with no spaces.
Rule Set ID must be unique.	'Rule Set ID' must be unique.
Name must be entered.	'Name' must be entered.

Table 3.19 Submit Validations

3.4 Modifying an Eligibility Rule Set

To edit the details of an eligibility rule set, click on the edit button on the Rule Set homepage.

The following fields are available on the Modify Eligibility Rule Set page:

Field	Description	Default	Mandatory
Name	Name of the eligibility rule set.		Yes
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user to understand the legislation behind the eligibility rule set.		No
Legislation ID	ID of any related legislation information.		No
Highlight	Highlight indicator. This indicator specifies if this eligibility rule set should be displayed in a different color if it fails at runtime.		No
Success	Result text to be displayed when the eligibility rule set execution is successful.		No
Failure	Optional help text to be displayed at runtime for this rule.		No
Comments	The Comments field should be used to provide a detailed		No

Field	Description	Default	Mandatory
	description of the rule set and its usage.		

Table 3.20 Fields

The following buttons are available on the Modify Eligibility Rule Set page:

Button	Description
Save	Saves the modified eligibility rule set and returns the user to the Eligibility Rule Set page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.21 Buttons

The following submit validations are available on the Modify Eligibility Rule Set page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 3.22 Submit Validations

3.5 Deleting an Eligibility Rule Set

To delete an eligibility rule set, you must open the Delete Eligibility Rule Set page. To do this you must complete the following step:

- Press the Delete button on the Eligibility Rule Sets page.

Button	Description
Yes	Deletes the eligibility rule set and returns the user to the Eligibility Rule Sets page.
No	Dismisses the page and returns the user to the Eligibility Rule Sets page.

Table 3.23 Buttons

3.6 Translating an Eligibility Rule Set

Eligibility rule sets are initially created using the default Cúram Rules language defined in the property administration section of the application. However, eligibility rule set elements can be translated so that a single eli-

gibility rule set can potentially be executed in multiple languages without the need to develop an entirely new eligibility rule set. This section describes how to translate eligibility rule sets using the Rules Editor.

3.6.1 Creating an Eligibility Rule Set Translation

To create a translation for a rule set, you must complete the following step:

- Click on the Create Translation link on the Eligibility Rule Set page.

The following fields are available on the Create Eligibility Rule Set Translation page:

Field	Description	Mandatory
Language	Language of this eligibility rule set translation. Codetable Locale.	Yes
Eligibility Rule Set Name	Translation of the associated eligibility rule set name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text. If blank, the failure text for the default language will be used.	No

Table 3.24 Fields

The following buttons are available on the Create Eligibility Rule Set Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Eligibility Rule Set page.
Save & New	Saves the new rule translation. Clears all fields, and returns to the Create Eligibility Rule Set Translation page.
Delete	Discards changes made on this page. Returns to the Eligibility Rule Set page.

Table 3.25 Buttons

The following submit validations are available on the Create Eligibility Rule Set Translation page:

Validation	Message
Only one translation allowed in a single language per eligibility rule set. If on insert a translation record already exists for this eligibility rule set ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this eligibility rule set for language <Language>. An eligibility rule set can only have one Translation per Language.

Table 3.26 Submit Validations

3.6.2 Viewing an Eligibility Rule Set Translation

To view a translation for a rule set you must complete the following step:

- Click on the View link beside the relevant element in the Translations list on the Eligibility Rule Set page.

The following fields are available on the View Eligibility Rule Set Translation page:

Field	Description
Language	Language of this eligibility rule set translation. Codetable Locale.
Eligibility Rule Set Name	Translation of the associated eligibility rule set name in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 3.27 Fields

The following buttons are available on the View Eligibility Rule Set Translation page:

Button	Description
Edit	Edit this eligibility rule set translation. Opens the Modify Eligibility Rule Set Translation page.
Delete	Delete this rule translation. Opens the Delete Eligibility Rule Set Translation page.
Close	Close this page. Returns to the Eligibility Rule Set page.

Table 3.28 Buttons

3.6.3 Modifying an Eligibility Rule Set Translation

To modify a translation for a rule you must complete either of the following steps:

- Click on the Edit link beside the relevant item in the Translations list on the Eligibility Rule Set page.
- Press the Edit button on the View Eligibility Rule Set Translation page.

The following fields are available on the Modify Eligibility Rule Set Translation page:

Field	Description	Mandatory
Eligibility Rule Set Name	Translation of the associated eligibility rule name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 3.29 Fields

The following buttons are available on the Modify Eligibility Rule Set Translation page:

Button	Description
Save	Saves the new rule set translation. Returns to the Eligibility Rule Set page.
Cancel	Discards changes made on this page. Returns to the Eligibility Rule Set page.

Table 3.30 Buttons

The following submit validations are available on this page:

Validation	Message
Only one translation allowed in a single language per eligibility rule set. If on modify a translation record already exists for this eligibility rule set ID and language and Language combination, an error should be	A Translation already exists for this eligibility rule set for language <Language>. An eligibility rule set can only have one Translation per Language.

Validation	Message
	thrown and the modify should not complete successfully.

Table 3.31 Submit Validations

3.6.4 Deleting an Eligibility Rule Set Translation

To delete a translation for a rule you must complete the following step:

- Press the Delete button on the View Eligibility Rule Set Translation page.

The following buttons are available on the Delete Eligibility Rule Set Translation page:

Button	Action
Yes	Deletes the rule translation and returns the user to the Eligibility Rule Set page.
No	Cancel the operation and returns the user to the Eligibility Rule Set page.

Table 3.32 Buttons

3.7 Publishing Changes to a Rule Set

To publish changes to the rule set you must open the Publish Rule Set Changes page. Publishing changes to a rule set removes the cached version of the rule set from the cache. The updated version will be picked up by the Rules Engine the next time the rule set is executed.

To publish changes to a rule set you must complete the following step:

- Click the Publish Changes link on the Eligibility Rule Set page to open the Publish Rule Set Changes page.

The following buttons are available on the Publish Rule Set Changes page:

Button	Description
Yes	Publishes the changes to the rule set and returns the user to the Eligibility Rule Set page.
No	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 3.33 Buttons

3.8 Validating a Rule Set

Most rules items are validated before they are added to the rule set. The Rules Editor performs validations of data item assignments, objective tag formulas, rules expressions, RDO names for rule list groups and objective list groups.

To perform validation of all the rules in an eligibility rule set, you must open the Eligibility Rule Set page. To do this, you must complete the following steps:

- Open the Eligibility Rule Sets page.
- Click the View link on the appropriate row to open the relevant Eligibility Rule Set page.
- Click the Validate Rule Set link to validate the rule set.

The following fields are available in a table on the Validate Rule Set page:

Field	Description
Name	Hyperlink name of data item assignments, objective tag formulas, rules expressions, RDO names for rule list groups and objective list groups. Links to selected item.
Problem	Text description of the problem.

Table 3.34 Fields

Chapter 4

Objective Groups

4.1 What is an Objective Group?

An objective group is a group of objectives combined in specific manner. Every eligibility rule set must have a single top-level objective group. This is effectively a “root” objective group, and usually consists of a further sub-tree of objective groups as well as rule groups.

An objective group can be added to any of the following rule set nodes:

- Eligibility rule set
- Sub rule set
- Objective list group
- Objective group



Note

At the top level of an eligibility rule set there can be one and only one objective group or objective list group.

4.2 Viewing an Objective Group

To view an objective group, you must open the Objective Group page. There are two ways to navigate to this page:

- Click on the objective group node in the tree view.
- Click on the expand link in the Items pane on the Eligibility Rule Set, Objective List Group or Objective Group page.

The following fields are available on the View Objective Group page:

Name	Description
Name	Name of the objective group.
Highlight	Highlight indicator. This indicator specifies if the objective group should be displayed in a different color if it fails.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the <code>RULEID</code> codetable.
Legislation ID	ID of any related legislation information.
Conjunction	Logical objective conjunction for the objective group. The following objective conjunction values are available: <i>All Objectives</i> : Returns all the successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.
Priority	Priority of the objective group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.
Highlight	Highlight indicator. This indicator specifies if the objective group should be displayed in a different color if it fails.
Success	Result text to be displayed if the objective group execution is successful.
Failure	Result text to be displayed if the objective group execution fails.
Items	List of items for this objective group. This list contains three fields, Action, Name and Type. The Action field contains the set of actions possible for each item in the list e.g., view, edit, etc. The Name field contains the name of each item in the list e.g., objective. The Type field describes the type of item, e.g., objective.
Translations	List of translations for this objective group. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.

Name	Description
Comments	The Comments field should be used to provide a detailed description of the objective group and its usage.

Table 4.1 Fields

The following links are available on the View Objective Group page:

Link	Description	Action
Add Objective	Adds a new objective to this objective group.	Opens the Create Objective page.
Add Objective Group	Adds a new objective group to this objective group.	Opens the Create Objective Group page.
Add Objective List Group	Adds a new objective list group to this objective group.	Opens the Create Objective List Group page.
Add Rule Group	Adds a new rule group to this objective group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this objective group.	Opens the Create Rule List Group page.
Add Sub Rule Set	Adds a new sub rule set to this objective group.	Opens the Add Sub-rule Set page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this objective group.	Opens the Create Objective Group Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Objective Group page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the Objective Group page and moves the selected item down in the execution order.
View (Translations)	View the objective group translation.	Opens the View Objective Group Translation page.
Edit (Translations)	Modify the objective group translation.	Opens the Modify Objective Group Translation page.

Table 4.2 Links & Actions

The following buttons are available on the View Objective group page:

Button	Description
Edit	Opens the Modify Objective Group page.
Delete	Opens the Delete Objective Group page.

Table 4.3 Buttons

4.3 Creating Objective Groups

To add an objective group to a rule set node, you must open the Create Objective Group page. To do this you must complete the following steps:

- Click on the rule set node you want as the parent of the new objective group.
- Click on the Add Objective Group link on the Eligibility Rule Set, Objective List Group or Objective Group page.

There can be only one objective list group or objective group at the root level.

The following fields are available the Create Objective Group page:

Field	Description	Default	Mandatory
Name	Name of the objective group.		Yes
Highlight	Highlight indicator. This indicator specifies if the objective group should be displayed in a different color if it fails.	Off	No
Rule ID	Rule item identifier. This identifier is used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers are defined in the RuleID codetable.	Blank	No
Legislation ID	ID of the related legislation information.		No
Conjunction	Logical objective conjunction for the objective group. The following objective conjunction values are available: <i>All</i>	All Objectives	No

Field	Description	Default	Mandatory
	<p><i>Objectives</i> : Returns all successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.</p>		
Priority	Priority of the objective group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	0	No
Success	Result text to be displayed if the objective group execution is successful.		No
Failure	Result text to be displayed if the objective group execution fails.		No
Comments	The Comments field should be used to provide a detailed description of the objective group and its usage.		No

Table 4.4 Fields

The following buttons are available on the Create Objective Group page:

Button	Description
Save	Creates a new objective group from the information entered on the page.
Save & New	Creates a new objective group from the information entered on the page and resets the page allowing an additional objective group to be created with the same parent as the newly saved one.

Button	Description
Cancel	Dismisses the page and returns the user to the previous page.

Table 4.5 Buttons

The following submit validations are available on the Create Objective Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
It is only possible to have one objective group or objective list group at the root level.	It is only possible to have one objective group or objective list group at the root level.

Table 4.6 Submit Validations

4.4 Modifying an Objective Group

To edit an objective group, you must open the Modify Objective Group page. To do this you must complete either of the following steps:

- Press the Edit button on the Objective Group page.
- Click on the Edit link on the Items pane beside the relevant objective group on the Eligibility Rule Set, Objective Group or Objective List group page.

The following fields are available on the Modify Objective Group page:

Field	Description	Mandatory
Name	Name of the objective group.	Yes
Highlight	Highlight indicator. This indicator specifies if the objective group should be displayed in a different color if it fails.	No
Rule ID	Rule item identifier. This identifier is used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers are defined in the RuleID codetable.	No
Legislation ID	ID of the related legislation information.	No
Conjunction	Logical objective conjunction for the objective group. The following objective conjunc-	No

Field	Description	Mandatory
	tion values are available: <i>All Objectives</i> : Returns all successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.	
Priority	Priority of the objective group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	No
Success	Result text to be displayed if the objective group execution is successful.	No
Failure	Result text to be displayed if the objective group execution fails.	No
Comments	The Comments field should be used to provide a detailed description of the objective group and its usage.	No

Table 4.7 Fields

The following fields are available on the Modify Objective Group page:

Button	Description
Save	Saves the modified objective group details and returns the user to the Objective Group page.
Cancel	Dismisses the page and returns the user to the Objective Group page.

Table 4.8 Buttons

The following submit validations are available on the Modify Objective Group page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 4.9 Submit Validations

4.5 Deleting an Objective Group

To delete an objective group, you must open the Delete Objective Group page. To do this you must complete the following step:

- Press the Delete button on the Objective Group page.

The following buttons are available on the Delete Objective Group page:

Button	Description
Yes	Deletes the objective group.
No	Dismisses the page and returns the user to the previous page.

Table 4.10 Buttons

4.6 Translating an Objective Group

Objective groups are initially created using the default Cúram Rules language as defined in the property administration section of the application. However; translations can be created for objective groups so that a single objective group can potentially be executed in multiple languages without the need to develop an entirely new objective group. This section describes how to translate objective groups using the Rules Editor.

4.6.1 Creating an Objective Group Translation

To create a translation for a Objective Group you must complete the following step:

- Select the Create Translation link on the Objective Group page.

The following fields are available on the Create Objective Group Translation page:

Field	Description	Mandatory
Language	Language of this objective group translation.	Yes
Objective Group Name	Translation of the associated objective group name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the fail-	No

Field	Description	Mandatory
	ure text for the default language will be used.	

Table 4.11 Fields

The following buttons are available on the Create Objective Group Translation page:

Button	Description
Save	Saves the new objective group translation. Returns to the Objective Group page.
Save & New	Saves the new objective group translation. Clears all fields, and returns to the Create Objective Group Translation page.
Cancel	Discards changes made on this page. Returns to the Objective Group page.

Table 4.12 Buttons

The following submit validations are available on the Create Objective Group Translation page:

Validation	Message
Only one translation allowed in a single language per objective group. If on insert a translation record already exists for this objective group ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this objective group for language <Language>. An objective group can only have one Translation per Language.

Table 4.13 Submit Validations

4.6.2 Viewing an Objective Group Translation

To view a translation for an objective, you must complete the following step:

- Click on the View link beside the relevant element in the Translations list on the Objective Group page.

The following fields are available on the View Objective Group Translation page:

Field	Description
Language	Language of this objective group translation. Codetable <code>Locale</code> .
Objective Group Name	Translation of the associated objective group name in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 4.14 Fields

The following buttons are available on the View Objective Group Translation page:

Button	Description
Edit	Edit this objective group translation. Opens the Modify Objective Group Translation page.
Delete	Delete this objective group translation. Opens the Delete Objective Group Translation page.
Close	Close this page. Returns to the Objective Group page.

Table 4.15 Buttons

4.6.3 Modifying an Objective Group Translation

To modify a translation for an objective group, you must complete either of the following steps:

- Click on the Edit link beside the relevant item in the Translations list on the Objective Group page.
- Press the Edit button on the View Objective Group Translation page.

The following fields are available on the Modify Objective Group Translation page:

Field	Description	Mandatory
Objective Group Name	Translation of the associated objective group name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if	No

Field	Description	Mandatory
	different across languages. If blank, the failure text for the default language will be used.	

Table 4.16 Fields

The following buttons are available on the Modify Objective Group Translation page:

Button	Description
Save	Saves the new objective group translation. Returns to the Objective Group page.
Cancel	Discards changes made on this page. Returns to the Objective Group page.

Table 4.17 Buttons

The following submit validations are available on the Modify Objective Group Translation page:

Validation	Message
Only one translation allowed in a single language per objective group. If on insert a translation record already exists for this objective group ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this objective group for language <Language>. An objective group can only have one Translation per Language.

Table 4.18 Submit Validations

4.6.4 Deleting an Objective Group Translation

To delete a translation for a rule you must complete the following step:

- Press the Delete button on the View Objective Group Translation page.

The following buttons are available on the Delete Objective Group Translation page:

Button	Action
Yes	Delete this objective group translation and return to the Objective Group page.
No	Cancel operation and return to the Objective Group page.

Table 4.19 Buttons

Chapter 5

Objective List Group

5.1 What is an Objective List Group?

The functionality of an objective list group is similar to an objective group. However, it is used to evaluate a group of objectives a number of times for a set of data contained in a List RDO assigned to the objective list group. An objective list group succeeds whenever an objective group for at least one of data records in the List RDO succeeds.

An objective list group can be added to any of the following rule set nodes:

- Eligibility rule set
- Sub-rule set
- Objective group
- Objective list group

5.2 Viewing an Objective List Group

To view an objective list group, you must open the Objective List Group page. To do this you can complete either of the following steps:

- Click on the Objective List Group node in a rule set in the tree view.
- Click on the expand link in the Items pane of an Eligibility Rule Set, Objective List Group or Objective Group page.

The following fields are available on the View Objective List Group page:

Name	Description
Name	Name of the objective list group
Legislation ID	ID of the related legislation information.

Name	Description
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Conjunction	Logical objective conjunction for the objective list group. The following objective list group conjunction values are available: <i>All Objectives</i> : Returns all the successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value. User should note that this happens for each iteration after the List RDO.
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.
Highlight	Highlight indicator. This indicator specifies if this objective list group should be displayed in a different color if it fails.
List Rules Data Object	Name of the list RDO to be used for iteration.
Success	Result text to be displayed if the objective list group execution is successful.
Failure	Result text to be displayed if the objective list group execution fails.
Items	List of items for this objective list group. The list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each objective list group item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., objective. The Name field contains the name of each objective list group item.
Translations	List of translations for this objective list group. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The language field contains the language of each item in the list.
Comments	The Comments field should be used to provide a de-

Name	Description
	tailed description of the objective list group and its usage.

Table 5.1 Fields

The following links are available on the View Objective List Group page:

Link	Description	Action
Add Objective	Adds a new objective to this objective list group.	Opens the Create Objective page.
Add Objective Group	Adds a new objective group to this objective list group.	Opens the Create Objective Group page.
Add Objective List Group	Adds a new objective list group to this objective list group.	Opens the Create Objective List Group page.
Add Rule Group	Adds a new rule group to this objective list group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this objective list group.	Opens the Create Rule List Group page.
Add Sub Rule Set	Adds a new sub-rule set to this objective list group.	Opens the Add Sub-rule Set page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this objective list group.	Opens the Create Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Objective List Group page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the Objective List Group page and moves the selected item down in the execution order.
View (Translations)	View the objective list group	Opens the View ob-

Link	Description	Action
	translation.	jective List Group Translation page.
Edit (Translations)	Modify the objective list group translation.	Opens the Modify Objective List Group Translation page.

Table 5.2 Links & Actions

The following buttons are available on the View Objective List Group page:

Button	Description
Edit	Opens the Modify Objective List Group page.
Delete	Opens the Delete Objective List Group page.

Table 5.3 Buttons

5.3 Creating an Objective List Group

To add an objective list group to a rule set node, you must open the Create Objective List Group page. To do this you must complete the following steps:

- Click on the Objective List Group node in a rule set in the tree view.
- Click on the Add Objective List Group link on the Eligibility Rule Set, Objective List Group, or Objective Group page.

There can be only one objective list group or objective group at the root level.

The following fields are available on the Create Objective List Group page:

Field	Description	Default	Mandatory
Name	Name of the objective list group.		Yes
Legislation ID	ID of the related legislation information.		No
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No

Field	Description	Default	Mandatory
Conjunction	Logical objective conjunction in the objective list group. The following objective conjunction values are available: <i>All Objectives</i> : Returns all the successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.	“All Objectives”	No
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	0	No
Highlight	Highlight indicator. This indicator specifies if this objective list group should be displayed in a different color if it fails.	Off	No
List Rules Data Object	Name of the list RDO to be used for iteration.		Yes
Success	Result text to be displayed if the objective list group execution is successful.		No
Failure	Result text to be displayed if the objective list group execution fails.		No
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.		No

Table 5.4 Fields

The following buttons are available on the Create Objective List Group page:

Buttons	Description
Save	Creates a new objective list group from the information entered on the page and returns the user to the Objective List Group page.
Save & New	Creates a new objective list group from the information entered on the page and resets the page allowing an additional objective list group to be created.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set page.

Table 5.5 Buttons

The following submit validations are available on the Create Objective List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.
It is only possible to have one objective group or objective list group at the root level.	It is only possible to have one objective group or objective list group at the root level.

Table 5.6 Submit Validations

5.4 Modifying an Objective List Group

To edit an objective list group, you must open the Modify Objective List Group page. To do this complete either of the following steps:

- Press the Edit button on the View Objective List Group page.
- Click on the Edit link beside the relevant objective list group in the Items pane of the Eligibility Rule Set, Objective List Group, or Objective Group page.

The following fields are available on the Modify Objective List Group page:

Field	Description	Mandatory
Name	Name of the objective list group.	Yes
Legislation ID	ID of the related legislation information.	No
Conjunction	Logical objective list conjunction in the objective list group. The following objective list group conjunction values are available: <i>All Objectives</i> : Returns all the successful objectives. <i>First Successful</i> : Returns only the first successful objective. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.	No
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	No
Highlight	Highlight indicator. This indicator specifies if this objective list group will be displayed in a different color if it fails.	No

Field	Description	Mandatory
List Rules Data Object	Name of the list RDO to be used for iteration.	Yes
Success	Result text to be displayed if the objective list group execution is successful.	No
Failure	Result text to be displayed if the objective list group execution fails.	No
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.	No

Table 5.7 Fields

The following buttons are available on the Modify Objective List Group page:

Button	Description
Save	Saves the modified objective list group details and returns the user to the Objective List Group page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set, Sub-rule Set, Objective List Group or Objective Group page.

Table 5.8 Buttons

The following submit validations are available on the Modify Objective List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.

Table 5.9 Submit Validations

5.5 Deleting an Objective List Group

To delete an objective list group, you must open the Delete Objective List Group page. To do this you must complete the following step:

- Press the Delete button on the Objective List Group page.

The following buttons are available on the Delete Objective List Group page:

Button	Description
Yes	Deletes the objective list group and returns the user to the Eligibility Rule Set, Sub-rule Set, Objective List Group or Objective Group page.
No	Dismisses the page and returns the user to the Objective List Group page.

Table 5.10 Buttons

5.6 Translating Objective List Groups

Objectives list groups are initially created using the default Cúram Rules language as defined in the property administration section of the application. However; translations can be created for objective list groups so that a single objective list group can potentially be executed in multiple languages without the need to develop an entirely new objective list group. This section describes how to translate objective list groups using the Rules Editor.

5.6.1 Creating an Objective List Group Translation

To create a translation for a Objective List Group you must complete the following step:

- Click on the Create Objective List Group Translation link on the View Objective List Group page.

The following fields are available on the Create Objective List Group Translation page:

Field	Description	Mandatory
Language	Language of this objective list group translation. Codetable <code>Locale</code> .	Yes
Objective List Group Name	Translation of the associated objective list group name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 5.11 Fields

The following buttons are available on the Create Objective List Group Translation page:

Button	Description
Save	Saves the new objective list group translation. Returns to the Objective List Group page.
Save & New	Saves the new objective list group translation. Clears all fields, and returns to the Create Objective List Group Translation page.
Cancel	Discards changes made on this page. Returns to the Objective List Group page.

Table 5.12 Buttons

The following submit validations are available on the Create Objective List Group Translation page:

Validation	Message
Only one translation allowed in a single language per objective list group. If on insert a translation record already exists for this objective list group ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this objective list group for language <Language>. An objective list group can only have one Translation per Language.

Table 5.13 Submit Validations

5.6.2 Viewing an Objective List Group Translation

To view a translation for an objective, complete the following step:

- Click on the expand link beside the relevant objective list group translation in the Translations list on the Objective List Group page.

The following fields are available on the View Objective List Group Translation page:

Field	Description
Language	Language of this objective list group translation. Codetable Locale.
Objective List Group Name	Translation of the associated objective list group name in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 5.14 Fields

The following buttons are available on the View Objective List Group Translation page:

Button	Description
Edit	Edit this objective list group translation. Opens the Modify Objective List Group Translation page.
Delete	Delete this objective list group translation. Opens the Delete Objective List Group Translation page.
Close	Closes this page. Returns to the Objective List Group page.

Table 5.15 Buttons

5.6.3 Modifying an Objective List Group Translation

To modify a translation for an objective list group you must complete either of the following steps:

- Click on the Edit link on the relevant item in the Translations list on the Objective List Group page.
- Press the Edit button on the Objective List Group Translation page.

The following fields are available on the Modify Objective List Group Translation page:

Field	Description	Mandatory
Language	Language of this objective list group translation. Codetable <code>Locale</code> .	Yes
Objective List Group Name	Translation of the associated objective list group name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 5.16 Fields

The following buttons are available on the Modify Objective List Group Translation page:

Button	Description
Save	Saves the new objective translation. Returns to the Objective List Group page.
Cancel	Discards changes made on this page. Returns to the Objective List Group page.

Table 5.17 Buttons

The following submit validations are on the Modify Objective List Group Translation page:

Validation	Message
Only one translation allowed in a single language per objective list group. If on modify a translation record already exists for this objective list group ID and language combination, an error should be thrown and the modify should not complete successfully.	A Translation already exists for this objective list group for language <Language>. An objective list group can only have one Translation per Language.

Table 5.18 Submit Validations

5.6.4 Deleting an Objective List Group Translation

To delete a translation for a rule you must complete the following step:

- Press the Delete button on the View Objective List Group page.

The following buttons are available on the Delete Objective List Group Translation page:

Button	Action
Yes	Deletes the objective list group translation and returns to the Objective List Group page.
No	Cancel the operation and returns to the Objective List Group page.

Table 5.19 Buttons

Chapter 6

Objectives

6.1 What is an Objective?

Objectives are anything that can be awarded as a result of the execution of an eligibility rule set. There can be multiple objectives for an eligibility rule set. Objectives are the “leaves” of the objective group tree.

An objective can only be added to the following rule set nodes:

- Objective group
- Objective list group

6.2 Viewing an Objective

To view an objective, you must open the View Objective List Group page or View Objective Group page. There are three ways to navigate to the View Objective page:

- Click on an objective list group node in the tree view and click on the View link for an objective in the Items list of a View Objective List Group page.
- Click on an objective group node in the tree view and click on the View link for an objective in the Items list of a View Objective Group page.
- Click on the objective in question in the Rules Tree.

The following fields are available in the View Objective page:

Name	Description
Rules Objective ID	Unique ID for this objective. It must be unique within the rule set and it must contain alphanumeric characters.
Name	Name of the objective.

Name	Description
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the <code>RuleID</code> codetable.
Priority	Priority of the objective. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.
Legislation ID	ID of any related legislation information.
Highlight	Highlight indicator. This indicator specifies if this objective should be displayed in a different color if it fails at runtime.
Deduction Allowed	Deduction allowed indicator. This indicator specifies if deductions are allowed against this objective: for example, when the claimant is involved in a regular deduction from a benefit in order to pay off an outstanding bill.
Type	Type of the objective. Codetable <code>rulescomponentfc-type</code> .
FC Type	Financial component type. Codetable <code>rulescomponent-fctype</code> .
Target	Objective target. This specifies to whom the payment will be made.
Target Identifier	ID of the target to which the objective result is applied. This can be any data item based on a <i>Long</i> .
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses which evaluate to a discrete value.
Success	Result text to be displayed if the objective execution is successful.
Failure	Result text to be displayed if the objective execution fails.
Items	List of items for this Objective. The list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each objective item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule group, objective, etc. The Name field contains the name of each objective item.
Translations	List of translations for the translatable elements of the objective. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The language field contains the language of each item in the list.

Name	Description
Comments	The Comments field should be used to provide a detailed description of the objective and its usage.

Table 6.1 Fields

The following links are available on the View Objective page:

Link	Description	Action
Add Objective Tag	Adds a new objective tag to this objective.	Opens the Create Objective Tag page.
Add Product Objective Tag	Adds a new product objective tag to this objective.	Opens the Create Product Objective Tag page.
Add Assessment Objective Tag	Adds a new product assessment tag to this objective.	Opens the Create Product Assessment Tag page.
Add Rule List Group	Adds a new rule list group to this objective.	Opens the Create Rule List Group page.
Add Rule Group	Adds a new rule group to this objective.	Opens the Create Rule Group page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this objective.	Opens the Create Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the View Objective page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the View Objective page and moves the selected item down in the execution order.
View (Translations)	View the objective translation.	Opens the View Objective Translation page.
Edit (Translations)	Modify the objective translation.	Opens the Modify Objective Translation page.

Table 6.2 Links and Actions

The following buttons are available on the View Objective page:

Button	Description
Edit	Opens the Modify Objective page.
Delete	Opens the Delete Objective page.

Table 6.3 Buttons

6.3 Creating an Objective

To add an objective, you must open the Create Objective page. To do this you must complete either of the following steps:

- Navigate to an Objective Group page and click on the Add Objective link.
- Navigate to an Objective List Group page and click on the Add Objective link.

The following fields are available on the Create Objective page:

Field	Description	Default	Mandatory
Name	Name of the objective.		Yes
Legislation ID	ID of any related legislation information.		No
Rules Objective ID	Unique ID for this objective (alphanumeric string). It must be unique within the rule set and it must contain alphanumeric characters.		Yes
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Deduction Allowed	Deduction allowed indicator. This indicator specifies if deductions are allowed against this objective (for example when the claimant is involved in a regular deduction from a benefit in order to pay off an outstanding bill.)	Off	No
Priority	Priority of the objective. Pri-	Default 0	No

Field	Description	Default	Mandatory
	riority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.		
FC Type	Financial component type. Codetable rulescomponentfctype		No
Highlight	Highlight indicator. This indicator specifies if this objective should be displayed in a different color if it fails.	Off	No
Target Identifier	ID of the target to which the objective result is applied. This can be any data item based on a <i>Long</i> .		No
Target	Objective target. It specifies to whom the payment should be made.		No
Type	Type of the objective. Codetable rulescomponentfctype .		No
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses which evaluate to a discrete value.		No
Success	Result text to be displayed if the objective execution is successful.		No
Failure	Result text to be displayed if the objective execution fails.		No
Comments	The Comments field should be used to provide a detailed description of the objective and its usage.		No

Table 6.4 Fields

The following buttons are available on the Create Objective page:

Button	Description
Save	Creates a new objective from the information entered on the page and returns the user to the View Objective page.
Cancel	Dismisses the page and returns the user to the View Objective page.

Table 6.5 Buttons

The following link is available on the Create Objective page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 6.6 Links & Actions

The following submit validations are available on the Create Objective page:

Validation	Message
Name.	'Name' must be entered.
Rules Objective ID must be entered.	'Rules Objective ID' must be entered.
Rules Objective ID must be alphanumeric.	'Rules Objective ID' must be alphanumeric.
Rules Objective ID must be unique.	'Rules Objective ID' must be unique.

Table 6.7 Submit Validations

6.3.1 Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Objective page.
- Modify Objective page.

To navigate to the Formula Helper page you must complete the following step:

- Click on the “Click here to open the formula helper” link on the Create Objective page or Modify Objective page. This will open the Select

Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 6.8 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 6.9 Columns

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 6.10 Buttons

The following links are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 6.11 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete

value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java® programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 6.12 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

6.4 Modifying an Objective

To modify an objective, you must open the Modify Objective page. To do this you must complete either of the following steps:

- Press the Edit button on the View Objective page to open the Modify Objective page.
- Click on the Edit link on the appropriate row of the Items list pane of either the View Objective Group page or the View Objective List Group page.

The following fields are available on the Modify Objective page:

Field	Description	Mandatory
Name	Name of the objective.	Yes
Legislation ID	ID of any related legislation information.	No
Deduction Allowed	Deduction allowed indicator. This indicator specifies if any deduction is allowed against this objective (for example when the claimant is involved in a regular deduction from a benefit in order to pay off an outstanding bill.)	No
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Priority	Priority of the objective. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	No
FC Type	Financial component type. Code table rulescomponentfctype .	No
Highlight	Highlight indicator. This indicator specifies if this objective should be displayed in a different color if it fails.	No
Target Identifier	ID of the target to which the objective result is applied.This can be any data item based on a <i>Long</i> .	No
Target	Objective target. It specifies to whom the payment should be made.	No
Type	Type of the objective. Codetable rule-scomponentfctype .	No
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses which evaluate to a discrete value..	No
Success	Result text to be displayed if the objective execution is successful.	No
Failure	Result text to be displayed if the objective execution fails.	No
Comments	The Comments field should be used to	No

Field	Description	Mandatory
	provide a detailed description of the objective and its usage.	

Table 6.13 Fields

The following buttons are available on the Modify Objective page:

Buttons	Description
Save	Saves the modified objective details and returns the user to the View Objective Group or View Objective List Group pages.
Cancel	Dismisses the page and returns the user to the View Objective Group or View Objective List Group pages.

Table 6.14 Buttons

The following submit validations are available on the Modify Objective page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 6.15 Submit Validations

6.5 Deleting an Objective

To delete an objective, you must open the Delete Objective page. To do this you must complete the following step:

- Press the Delete button on the View Objective page.

The following buttons are available on the Delete Objective page:

Button	Description
Yes	Deletes the objective and returns the user to the View Objective Group or View Objective List Group page.
No	Dismisses the page and returns the user to the View Objective Group or View Objective List Group page.

Table 6.16 Buttons

6.6 Translating Objectives

Objectives are initially created using the default Cúram Rules language as defined in the property administration section of the application. However; translations can be created for objectives so that a single objective can potentially be executed in multiple languages without the need to develop an entirely new objective. This section describes how to translate objectives using the Rules Editor.

6.6.1 Creating an Objective Translation

To create a translation for an objective, you must complete the following step:

- Click on the Create Translation link on the View Objective page.

The following fields are available on the Create Objective Translation page:

Field	Description	Mandatory
Objective Name	Translation of the associated objective name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if No different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if No different across languages. If blank, the failure text for the default language will be used.	No

Table 6.17 Fields

The following buttons are available on the Create Objective Translation page:

Button	Description
Save	Saves the new objective translation. Returns to the View Objective page.
Save & New	Saves the new objective translation. Clears all fields, and returns to the Create Objective Translation page.
Cancel	Discards changes made on this page. Returns to the View Objective page.

Table 6.18 Buttons

The following submit validations are available on the Create Objective

Translation page:

Validation	Message
Only one translation allowed in a single language per objective. If on insert a translation record already exists for this objective ID and language combination, an error is thrown and the insert will not complete successfully.	A Translation already exists for this objective for this language. An objective can only have one Translation per Language.

Table 6.19 Submit Validations

6.6.2 Viewing an Objective Translation

To view a translation for an objective, you must complete the following step:

- Select the View link beside the relevant element in the Translations list on the View Objective page.

The following fields are available on the View Objective Translation page:

Field	Description
Language	Language of this objective translation. Codetable <code>Locale</code> .
Objective Name	Translation of the associated objective text in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 6.20 Fields

The following buttons are available on the View Objective Translation page:

Button	Description
Edit	Edit this objective translation. Opens the Modify Objective Translation page.
Delete	Delete this objective translation. Opens the Delete Objective Translation page.
Cancel	Close this page. Returns to the View Objective page.

Table 6.21 Buttons

6.6.3 Modifying an Objective Translation

To modify a translation for an objective, you must complete either of the following steps:

- Click on the Edit link beside the relevant element in the Translations list on the View Objective page.
- Press the Edit button on the View Objective Translation page.

The following fields are available on the Modify Objective Translation page:

Field	Description	Mandatory
Objective Name	Translation of the associated objective name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 6.22 Fields

The following buttons are available on the Modify Objective Translation page:

Button	Description
Save	Saves the new objective translation. Returns to the View Objective page.
Cancel	Discards changes made on this page. Returns to the View Objective page.

Table 6.23 Buttons

The following submit validations are on the Modify Objective Translation page:

Validation	Message
Only one translation allowed in a single language per objective. If on modify a translation record already exists for this objective ID and language combination, an error should	A Translation already exists for this objective for language <Language>. An objective can only have one Translation per Language.

Validation	Message
	be thrown and the modify should not complete successfully.

Table 6.24 Submit Validations

6.6.4 Deleting an Objective Translation

To delete a objective translation, you must complete the following step:

- Press the Delete button on the View Objective Translation page.

The following buttons are available on the Delete Objective Translation page:

Button	Description
Yes	Delete this rule translation and returns the user to the View Objective page.
No	Cancel operation and returns the user to the View Objective page.

Table 6.25 Buttons

6.7 Objective Tags

An objective tag can be an amount of money or a formula that evaluates an amount of money for a specific objective. It can also be a rate (string) value. An objective tag is defined in terms of a specific period of time (from days to years). An objective may have several objective tags. For example, an unemployment benefit product may have two objective tags, one applying for “per day” (\$10) and one “per week” (\$73.48). Information about an objective tag is returned when executing the rules, but only if the objective to which the objective tag is added succeeds.

6.7.1 Viewing an Objective Tag

To view an objective tag, you must open the View Objective Tag page. There are two ways to navigate to this page:

- Click on an objective node in the tree view.
- Click on the View link for an Objective Tag in the Items list of a View Objective page.

The following fields are available on the View Objective page:

Name	Description
Name	Name of the objective tag.
Type	Underlying type. Codetable rulescomponent-fctype
Value	Value or formula that evaluates to a numerical value.
Frequency	Frequency applicable to this objective tag.
Comments	The Comments field should be used to provide a detailed description of the objective tag and its usage.

Table 6.26 Fields

The following buttons are available on the View Objective page:

Button	Description
Edit	Opens the Modify Objective Tag page.
Delete	Opens the Delete Objective Tag page.

Table 6.27 Buttons

6.7.2 Creating an Objective Tag

Objective tags can only be added to objectives. Multiple objective tags can be added to an objective. To add an objective tag, you must open the Create Objective Tag page. To do this you must complete the following step:

- Click the Add Objective link on the View Objective page.

The following fields are available on the Create Objective Tag page:

Name	Description	Default	Mandatory
Name	Name of the objective tag.		Yes
Type	Underlying type. Codetable rulescomponentfctype.	Double	No
Value	Value or formula that evaluates to a numerical value.		Yes
Frequency	Frequency applicable to this objective tag.	Daily	Yes
Comments	The Comments field should be used to provide a detailed description of the objective tag and its usage.		No

Table 6.28 Fields

The following fields are available on the Create Objective Tag page:

Link	Description	Action
Click Here to Open the Formula Helper	Opens the Select Data Item page.	Opens the Select Data Item page.

Table 6.29 Links and Actions

The following buttons are available on the Create Objective Tag page:

Button	Description
Save	Creates a new objective tag from the information entered on the page and returns the user to the View Objective Page.
Cancel	Dismisses the page and returns the user to the View Objective Page.

Table 6.30 Buttons

The following submit validations are available on the Create Objective Tag page:

Validation	Message
Objective Tag Name must be entered.	'Objective Tag Name' must be entered.
Value must be entered.	'Value' must be entered.
The value entered is too long - the maximum allowed is '200'.	The value entered is too long - the maximum allowed is '200' characters
Value must be a valid expression. This can be a numerical value or a formula for calculating a value.	Invalid rules expression.

Table 6.31 Submit Validations

6.7.3 Adding a Data Item to an Objective Tag

To add a data item to an objective tag, you must complete the following steps:

- Navigate to the appropriate View Objective Tag page and click on the Edit button.
- Press the "Click here to open formula helper" button on the Modify Objective Tag page.
- Using the search page, copy the appropriate data item from the search results.

The following fields are available on the Select Data Item page:

Name	Description	Mandatory
Rules Data Object	Name of the Rules Data Object, drop down box.	No
Search Results	List of rules data objects objective. This list contains three fields, Attribute, Description and Domain. The Attribute field contains the Rules Data Object attribute, The description field contains a description of the Rules Data Object attribute, and the Domain field describes the application-specific datatype attribute.	No

Table 6.32 Fields

The following buttons are available on the Select Data Item page:

Button	Description
Search	Searches the Rules Data Objects and displays results in the Search Results pane.
Reset	Resets the search results
Cancel	Closes the pop up page and returns the user to the View Objective Tag page.

Table 6.33 Buttons

The following links are available on the Select Data Item page:

Buttons	Description
Copy	Copies the selected Rules Data Objective attribute, closes the pop up page and automatically pastes the attribute into the Value field on the Create Objective Tag page
Delete	Opens the Delete Product Objective Tag page.

Table 6.34 Links and Actions

Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Objective Tag page.
- Modify Objective Tag page.

To navigate to the Formula Helper page you must complete the following

step:

- Click the “Click here to open the formula helper” link on the Create Objective Tag page or Modify Objective Tag page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 6.35 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 6.36 Fields

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 6.37 Buttons

The following links and actions are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 6.38 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 6.39 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

6.7.4 Modifying an Objective Tag

To edit an objective tag you must open the Modify Objective Tag page. To do this you must complete either of the following steps:

- Navigate to the View Objective Tag page and press the Edit button.
- Click the Edit link on the appropriate row of the Items pane on the View Objective page.

The following fields are available on the Modify Objective Tag page:

Name	Description	Default	Mandatory
Name	Name of the objective tag.		Yes
Type	Underlying type. Codetable rule-componentfc-type	Double	No
Value	Value or formula that evaluates to a numerical value.		Yes
Frequency	Frequency applicable to this objective tag.	Daily	Yes
Comments	The Comments field should be used to provide a detailed description of the objective tag and its usage.		No

Table 6.40 Fields

The following buttons are available on the Modify Objective Tag page:

Button	Description
Save	Saves the modified objective tag details and returns the user to the View Objective Tag page.
Cancel	Dismisses the page and returns the user to the View Objective Tag page.

Table 6.41 Buttons

The following submit validations are available on the Modify Objective Tag page:

Validation	Message
Name must be entered.	'Name' must be entered.
Value must be entered.	'Value' must be entered.
Value must be a valid expression. This can be a numerical value or a formula for calculating a value.	Invalid rules expression.

Table 6.42 Submit Validations

6.7.5 Deleting an Objective Tag

To delete an objective tag you must open the Delete Objective Tag page. To do this you must complete the following step:

- Navigate to the View Objective Tag page and press the Delete button.

The following buttons are available on the Delete Objective Tag page:

Button	Description
Yes	Deletes the objective tag and returns the user to the View Objective Tag Details page.
No	Dismisses the page and returns the user to the the View Objective Tag Details page.

Table 6.43 Buttons

6.8 Product Objective Tags

A product objective tag represents a recommendation of another human services product as part of a rule set execution. Information about a product objective tag is returned when executing the rules if the objective to which the objective tag is added succeeds.

6.8.1 Viewing a Product Objective Tag

To view a product objective tag, you must open the View Product Objective Tag Details page.

To do this you must complete the following step:

- Click on the View link on the relevant product objective tag in the items list of the View Objective page.

The following fields are available on the View Objective Tag page:

Name	Description
Name	Name of the product objective tag.
Type	Type of the product objective. Codetable <code>rule-scomponentfctype</code>
Comments	The Comments field should be used to provide a detailed description of the product objective tag and its usage.

Table 6.44 Fields

The following buttons are available on the View Objective Tag page:

Buttons	Description
Edit	Opens the Modify Product Objective Tag page.

Buttons	Description
Delete	Opens the Delete Product Objective Tag page.

Table 6.45 Buttons

6.8.2 Adding a Product Objective Tag to an Objective

Product objective tags can only be added to objectives. Multiple product objective tags can be added to a single objective. To add a product objective tag to an objective you must open the Create Product Objective Tag page. To do this you must complete the following step:

- Click the Add Product Objective Tag link on the View Objective page.

The following fields are available on the Add Product Objective Tag page:

Name	Description	Mandatory
Name	Name of the product objective tag.	Yes
Type	Name of the product to be recommended. The list of available products is defined in the Codetable Productname .	No
Comments	The Comments field should be used to provide a detailed description of the product objective tag and its usage.	No

Table 6.46 Fields

The following buttons are available on the Add Product Objective Tag page:

Buttons	Description
Save	Creates a new product objective tag from the information entered on the page and returns the user to the View Objective page.
Cancel	Dismisses the page and returns the user to the View Objective page.

Table 6.47 Buttons

The following submit validations are available on the Add Product Objective Tag page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 6.48 Submit Validations

6.8.3 Modifying a Product Objective Tag

To edit a product objective tag you must open the Modify Product Objective Tag page. To navigate to this page you must complete either of the following steps:

- Click the Edit link on the appropriate row in the Items pane of the View Objective page to open the Modify Product Objective Tag page.
- Click the Edit link on the appropriate row in the Items pane of the View Product Objective Tag page to open the Modify Product Objective Tag page.

The following fields are available on the Modify Product Objective Tag page:

Name	Description	Mandatory
Name	Name of the product objective tag.	Yes
Value	Name of the product to be recommended. The list of available products is defined in the Codetable Productname .	No
Comments	The Comments field should be used to provide a detailed description of the product objective tag and its usage.	No

Table 6.49 Fields

The following buttons are available on the Modify Product Objective Tag page:

Button	Description
Save	Saves the modified product objective tag details and returns the user to the View Objective page.
Cancel	Dismisses the page and returns the user to the View Objective page.

Table 6.50 Buttons

The following submit validations are available on the Add Product Objective Tag page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 6.51 Submit Validations

6.8.4 Deleting a Product Objective Tag

To delete a product objective tag you must open the Delete Product Objective Tag page. To do this you must complete the following step:

- Press the Delete button on the View Product Objective Tag details page.

The following buttons are available on the Delete Product Objective Tag details page.

Buttons	Description
Yes	Deletes the product objective tag and returns the user to the View Objective page.
No	Dismisses the page and returns the user to the View Objective page.

Table 6.52 Buttons

6.9 Assessment Objective Tags

An assessment objective tag represents a recommendation for a human services assessment as a result of a rule set execution. Information about an assessment objective tag is returned when executing the rules if the objective to which the assessment objective tag is added succeeds.

6.9.1 Viewing an Assessment Objective Tag

To view an assessment objective tag, you must open the View Assessment Objective Tag Details page. To do this you must complete the following step:

- Click on the View link for an assessment objective tag in the Items list of a View Objective page.

The following fields are available on the View Assessment Objective Tag Details page:

Name	Description
Name	Name of the assessment objective tag.
Value	Name of the human services assessment to be recommended.
Comments	The Comments field should be used to provide a detailed description of the assessment objective tag and its usage.

Table 6.53 Fields

The following buttons are available on the View Assessment Objective Tag Details page:

Buttons	Description
Edit	Opens the Modify Assessment Objective Tag page.
Delete	Opens the Delete Assessment Objective Tag page.

Table 6.54 Buttons

6.9.2 Creating an Assessment Objective Tag

Assessment objective tags can only be added to objectives. Multiple assessment objective tags can be added to a single objective. In order to add an assessment objective tag, a user must open the Create Assessment Objective Tag page. To create an assessment objective tag you must complete the following step:

- Click the Add Assessment Objective Tag link on the View Objective page.

The following fields are available on the Create Assessment Objective Tag page:

Name	Description	Mandatory
Name	Name of the assessment objective tag.	Yes
Value	Name of the assessment to be recommended. The list of available assessments is defined in the Codetable <code>AssessmentName</code> .	Yes
Comments	The Comments field should be used to provide a detailed description of the assessment objective tag and its usage.	No

Table 6.55 Fields

The following buttons are available on the Create Assessment Objective Tag page:

Buttons	Description
Save	Creates a new assessment objective tag from the information entered on the page and returns the user to the View Objective page.
Cancel	Dismisses the page and returns the user to the View

Buttons	Description
	Objective page.

Table 6.56 Buttons

The following submit validations are available on the Create Assessment Objective Tag page:

Validation	Message
Name must be entered.	'Name' must be entered.
Value must be entered.	'Value' must be entered.

Table 6.57 Submit Validations

6.9.3 Modifying an Assessment Objective Tag

To edit an assessment objective tag you must open the Modify Assessment Objective Tag page. To do this you must complete either of the following steps:

- On the View Objective page, click the Edit link on the appropriate row in the items pane to open the Modify Assessment Objective Tag page.
- Press the Edit button in the View Assessment Objective Tag page to open the Modify Assessment Objective Tag page.

The following fields are available on the Modify Assessment Objective Tag page:

Name	Description	Mandatory
Name	Name of the assessment objective tag.	Yes
Value	Name of the assessment to be recommended. The list of available assessments is defined in the Codetable AssessmentName .	Yes
Comments	The Comments field should be used to provide a detailed description of the assessment objective tag and its usage.	No

Table 6.58 Fields

The following buttons are available on the Modify Assessment Objective Tag page:

Buttons	Description
Save	Saves the modified assessment objective tag details and returns the user to the View Objective page.
Cancel	Dismisses the page and returns the user to the View Objective page.

Table 6.59 Buttons

The following submit validations are available on the Create Assessment Objective Tag page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 6.60 Submit Validations

6.9.4 Deleting an Assessment Objective Tag

To delete an assessment objective tag you must open the Delete Assessment Objective page. To do this you must complete the following step:

- Press the Delete button on the View Assessment Objective Tag Details page to open the Delete Assessment Objective Tag page.

The following buttons are available on the Delete Assessment Objective Tag page:

Buttons	Description
Yes	Deletes the assessment objective tag and returns the user to the View Objective page.
No	Dismisses the page and returns the user to the the View Objective page.

Table 6.61 Buttons

Chapter 7

Rule Groups

7.1 What is a Rule Group?

A rule group is a logical collection of rules. A rule group comprises related rules that govern a specific application function. A rule group can be added to any of the following rule set nodes:

- Rule group
- Rule list group
- Objective
- Objective group
- Objective list group



Note

At the top level of an eligibility rule set there can be one and only one rule group or rule list group. This is called the Top Level Rule Group. This rule group is important, as it is executed before any rate components are evaluated and hence can serve an important purpose. For example, if this rule group fails, then execution is halted at this point. It can also be used to ensure that cases which cannot qualify for the product delivery are caught quickly, and no more processing then necessary is done.

7.2 Viewing a Rule Group

To view a rule group, you must open the View Rule Group page. To do this you must complete either of the following steps:

- Click on a Rule Group node in the tree view.

- Click on the expand link for a Rule Group in the Items list pane of the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

The following fields are available on the View Rule Group page:

Name	Description
Name	Name of the rule group.
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: <ol style="list-style-type: none"> 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeeds.
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Legislation ID	ID of any related legislation information.
Highlight	Highlight indicator. This indicator specifies if this rule group should be displayed in a different color if it fails.
Summary	Summary item indicator. This indicator specifies if the rule group should be displayed in the rules summary view.
Success	Result text to be displayed if the rule group execution is successful.
Failure	Result text to be displayed if the rule group execution fails.
Items	List of items for this rule group. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each rule group item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule, objective group, etc. The Name field contains the name of each rule group item.

Name	Description
Translations	List of translations for this rule group. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.

Table 7.1 Fields

The following links are available on the View Rule Group page:

Link	Description	Action
Add Rule	Adds a new rule to this rule group.	Opens the Create Rule page.
Add Sub Rule Set	Adds a new sub rule set to this rule group.	Opens the Add Sub-rule Set page.
Add Data Item Assignment	Adds a new data item assignment to this rule group.	Opens the Create Data Assignment page.
Add Rule Group	Adds a new rule group to this rule group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this rule group.	Opens the Create Rule List Group page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this rule group.	Opens the Create Rule Group Translation page page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the item up in the execution order.	Refreshes the Rule Group page and moves the selected item up in the execution order.
Down (Items)	Moves the item down in the execution order.	Refreshes the Rule Group page and moves the selected item down in the execution order.

Link	Description	Action
View (Translation)	View the rule group translation.	Opens the View Rule Group Translation page.
Edit (Translation)	Modify the rule group translation.	Opens the modify Rule Group Translation page.

Table 7.2 Links & Actions

The following buttons are available on the View Rule Group page:

Button	Description
Edit	Opens the Modify Rule Group page.
Delete	Opens the Delete Rule Group page.

Table 7.3 Buttons

7.3 Creating a Rule Group

To add a rule group to a rule set node, you must open the Create Rule Group page. To do this you must complete the following step:

- Click the Add Rule Group link on the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

There can be only one rule list group or rule group at the root level.

The following fields are available on the Create Rule Group Page:

Name	Description	Default	Mandatory
Name	Name of the rule group.		Yes
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeeds.	“AND”	Yes
Execution Mode	Mode of the rules execution. This mode specifies if all the	“Execute All”	Yes

Name	Description	Default	Mandatory
	<p>rules in the rule group should be executed. The following execution mode values are available:</p> <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed. 		
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Legislation ID	ID of any related legislation information.		No
Highlight	Highlight indicator. This indicator specifies if this rule group should be displayed in a different color if it fails.	Off	No
Summary	Summary item indicator. This indicator specifies if the rule group should be displayed in the rules summary view.	Off	No
Success	Result text to be displayed if the rule group execution is successful.		No
Failure	Result text to be displayed if the rule group execution fails.		No

Table 7.4 Fields

The following buttons are available on the Create Rule Group Page:

Button	Description
Save	Creates a new rule group from the information

Button	Description
	entered on the page and returns the user to the View Rule Group page.
Save & New	Creates a new rule group from the information entered on the page and resets the page allowing an additional rule group to be created. Returns the user to the Rule Group page.
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group, Objective List Group page.

Table 7.5 Buttons

The following buttons are available on the Create Rule Group Page:

Validation	Message
Name must be entered.	'Name' must be entered.
At top level it is only possible to have only one rule group or rule list group at the root level.	'It is only possible to have only one rule group or rule list group at the root level'.

Table 7.6 Submit Validations

7.4 Modifying a Rule Group

To edit a rule group, you must open the Modify Rule Group page. To do this you must complete either of the following steps:

- Press the Edit button on the Modify Rule Group page.
- Click on the Edit link on the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

The following fields are available on the Modify Rule Group page:

Name	Description	Mandatory
Name	Name of the rule group.	Yes
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: 1. <i>And</i> : all rules inside the rule group must succeed for the rule	Yes

Name	Description	Mandatory
	group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeed.	
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.	Yes
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Legislation ID	ID of any related legislation information.	No
Highlight	Highlight indicator. This indicator specifies if this rule group should be displayed in a different color if it fails.	No
Summary	Summary item indicator. This indicator specifies if the rule group should be displayed in the rules summary view.	No
Success	Result text to be displayed if the rule group execution is successful.	No
Failure	Result text to be displayed if the rule group execution fails.	No

Table 7.7 Fields

The following buttons are available on the Modify Rule Group page:

Button	Description
Save	Saves the modified rule group details and returns the user to the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Object-

Button	Description
Cancel	Dismisses the page and returns the user to the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group, Objective List Group page.

Table 7.8 Buttons

The following submit validations are available on the Modify Rule Group page:

Button	Description
Name must be entered.	'Name' must be entered.

Table 7.9 Submit Validations

7.5 Deleting a Rule Group

To delete a rule group, you must open the Delete Rule Group page. To do this you must complete the following step:

- Press the Delete button on the Rule Group page.

The following buttons are available on the Delete Rule Group page:

Button	Description
Yes	Deletes the rule group and returns the user to the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.
No	Dismisses the page and returns the user to the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

Table 7.10 Buttons

7.6 Rule Group Translations

Rule Groups are initially created using the default Cúram Rules language defined in the property administration section of the application. However, Rule Groups can be translated so that a single rule group can potentially be executed in multiple languages without the need to develop an entirely new rule group. This section describes how to translate rule groups using the

Rules Editor.

7.6.1 Creating a Rule Group Translation

To create a translation for a rule group, you must complete the following step:

- Click the Create Translation link on the Rule Group page.

The following buttons are available on the Create Rule Group Translation page:

Field	Description	Mandatory
Language	Language of this rule group translation. Codetable <code>Locale</code> .	Yes
Rule Group Name	Translation of the associated rule group text in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 7.11 Fields

The following buttons are available on the Create Rule Group Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Rule Group page.
Cancel	Discards changes made on this page. Returns to the Rule Group page.

Table 7.12 Buttons

The following submit validations are available on the Create Rule Group page:

Button	Description
Only one translation allowed in a single language per rule group. If on insert a translation record already exists for this rule group ID and lan-	A Translation already exists for this rule group for language <Language>. A rule group can only have one Translation per Language.

Button	Description
	guage combination, an error should be thrown and the insert should not complete successfully.

Table 7.13 Submit Validations

7.6.2 Viewing a Rule Group Translation

To view a translation for a rule group, you must complete the following step:

- Click the View link beside the relevant rule group translation in the Translations list on the Rule Group page.

The following fields are available on the View Rule Group Translation page:

Field	Description
Language	Language of this rule group translation. Codetable Locale .
Rule Group Name	Translation of the associated rule group text in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 7.14 Fields

The following buttons are available on the View Rule Group Translation page:

Button	Description
Edit	Edit this rule group translation and opens the Modify Rule Group Translation page.
Delete	Deletes the rule group translation and opens the Delete Rule Group Translation page.
Close	Closes the page and returns the user to the Rule Group page.

Table 7.15 Buttons

7.6.3 Modifying a Rule Group Translation

To modify a translation for a rule group you must complete either of the following steps:

- Click on the Edit link on the relevant item in the Translations list on the Rule Group page.
- Press the Edit button on the View Rule Group Translation page.

The following fields are available on the Modify Rule Group Translation page:

Field	Description	Mandatory
Rule Group Name	Translation of the associated rule group text in the appropriate language.	Yes
Success	Translation of the associated Success Text, if No different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if No different across languages. If blank, the failure text for the default language will be used.	No

Table 7.16 Fields

The following buttons are available on the Modify Rule Group Translation page:

Button	Description
Save	Saves the new rule group translation and returns to the Rule Group page.
Cancel	Discards changes made on this page and returns to the Rule Group page.

Table 7.17 Buttons

The following submit validations are available on the Modify Rule Group Translation page:

Button	Description
Only one translation allowed in a single language per rule group. If on modify a translation record already exists for this rule group ID and language combination, an error should be thrown and the modify should not complete successfully.	A Translation already exists for this rule group for language <Language>. A rule group can only have one Translation per Language.

Table 7.18 Submit Validations

7.6.4 Deleting a Rule Group Translation

To delete a rule group translation, you must complete the following step:

- Press the Delete button on the View Rule Group Translation page.

The following buttons are available on the Delete Rule Group Translation page:

Button	Action
Yes	Delete this rule translation and returns the user to the Rule Group page.
No	Cancel this operation and returns the user to the Rule Group page.

Table 7.19 Buttons

Chapter 8

Rule List Group

8.1 What is a Rule List Group?

A rule list group is essentially a rule group, but it is used to execute its contained rules a number of times for a set of data contained in an associated list rules data object. Note, however, there are some nesting constraints for rule list groups:

- A rule list group can be nested in a sub-rule set, rule group, objective group and objective.
- A rule list group is allowed to be nested in list groups (objective list group and rule list group).

8.2 Viewing a Rule List Group

To view a rule list group, you must open the Rule List Group page. Accessing the Rule List Group page depends on the structure of the rule set. To view a rule list group that is part of a rule set you must complete the following step:

- Click on the expand link for a rule list group in the Items list of an eligibility rule set, rule group, rule list group, objective, objective group or objective list group.

The following fields are available on the View Rule List Group page:

Name	Description
Name	Name of the rule list group.
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule list group after the execution of a rule set has been

Name	Description
	completed. The values for the identifiers are defined in the RuleID codetable.
Legislation ID	ID of any related legislation information.
Rule Conjunction	<p>Logical rules conjunction in the rule list group. The following rule conjunction values are available:</p> <ol style="list-style-type: none"> 1. And: all rules inside the rule list group must succeed for the rule list group to succeed. 2. Or: at least one of the rules inside the rule list group must succeed for the rule list group to succeed.
Execution Mode	<p>Mode of the rules execution. This mode specifies if all the rules in the rule list group should be executed. The following execution mode values are available:</p> <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.
Highlight	Highlight indicator. This indicator specifies if this rule list group should be displayed in a different color if it fails.
Summary	Summary item indicator. This indicator specifies if the rule should be displayed in the rules summary view.
Loop Execution Mode	<p>The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the final result becomes known. <i>Succeed All</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i>: the loop will be executed until the result is known. The rule list group succeeds only if rules for all items in the List RDO succeed. <i>Succeed One Stop</i>: the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCodeMode.</p>
List Rule Data Object	A list rules data object is an RDO that contains a list

Name	Description
	of items. You can click the search icon to select the appropriate list RDOs for the rule list group.
Success	Result text to be displayed if the rule list group execution is successful.
Failure	Result text to be displayed if the rule list group execution fails.
Items	List of child items for this rule list group. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each item in the list, eg., view, edit, etc. The Name field contains the name of each item in the list. The Type field describes the type of item e.g., rule, rule group, etc.
Translations	List of translations for this rule list group. This list contains two fields: Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each of the item in the list.

Table 8.1 Fields

The following links are available on the View Rule List Group page:

Link	Description	Action
Add Rule	Adds a new rule to this rule list group.	Opens the Create Rule page
Add Data Item Assignment	Adds a new data item assignment to this rule list group.	Opens the Create Data Assignment page
Add Rule Group	Adds a new rule group to this rule list group.	Opens the Create Rule Group page
Add Rule List Group	Adds a new rule list group to this rule list group.	Opens the Create Rule List Group page
Add Sub Rule Set	Adds a new sub rule set to this rule group.	Opens the Add Sub-Rule Set page
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page
Create Translation	Create a new translation for this rule list group.	Opens the Create Rule List Group Translation page
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.

Link	Description	Action
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the item up in the execution order.	Refreshes the Rule List Group page and moves the selected item up in the execution order.
Down (Items)	Moves the item down in the execution order.	Refreshes the Rule List Group page and moves the selected item down in the execution order.
View (Translation)	View the rule list group translation.	Opens the View Rule List Group Translation page
Edit (Translation)	Modify the rule list group translation.	Opens the Modify Rule List Group Translation page

Table 8.2 Links & Actions

The following buttons are available on the View Rule List Group page:

Button	Description
Edit	Opens the Modify Rule List Group page.
Delete	Opens the Delete Rule List Group page.

Table 8.3 Buttons

8.3 Creating a Rule List Group

To add a rule list group to a rule set, you must open the Create Rule List Group page. To do this you must complete the following step:

- Click on the Add Rule List Group link in the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

There can be only one rule list group or rule group at the root level.

The following fields are available on the Create Rule List Group page:

Name	Description	Default	Mandatory
Name	Name of the rule list group		Yes

Name	Description	Default	Mandatory
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Legislation ID	ID of any related legislation information.		No
Rule Conjunction	Logical rules conjunction in the rule list group. The following rule conjunction values are available: 1. And: all rules inside the rule list group must succeed for the rule list group to succeed. 2. Or: at least one of the rules inside the rule list group must succeed for the rule list group to succeed.	“AND”	Yes
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule list group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.	“Execute All”	Yes
Highlight	Highlight indicator. This indicator specifies if this rule list group should be displayed in different color if it fails.		No
Summary	Summary item indicator. This indicator specifies if the rule list group should be dis-		No

Name	Description	Default	Mandatory
	played in the rules summary view.		
Loop Execution Mode	The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the final result becomes known. <i>Succeed All</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i> : the loop will be executed until the result is known. The rule list group succeeds only if rules for all items in the List RDO succeed. <i>Succeed One Stop</i> : the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCode-Mode .	“Succeed All”	No
List Rules Data Object	A list rules data object is an RDO that contains a list of items. You can click the search icon to select the appropriate list RDOs for the rule list group.		Yes
Success	Result text to be displayed if the rule list group execution is successful.		No
Failure	Result text to be displayed if the rule list group execution fails.		No

Table 8.4 Fields

The following buttons are available on the Create Rule List Group page:

Button	Description
Save	The Save action creates a rule list group from the information entered on the page and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.
Save & New	The Save & New action creates a new rule list group from the information entered on the page and resets the page allowing an additional record to be created on the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.
Cancel	The Cancel action dismisses the page and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 8.5 Buttons

The following submit validations are available on the Create Rule List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.
It is only possible to have one rule group or rule list group at the root level.	'It is only possible to have one rule group or rule list group at the root level.

Table 8.6 Buttons

8.4 Modifying a Rule List Group

To edit a rule list group, you must open the Modify Rule List Group page. To do this you must complete either of the following steps:

- Press the Edit button on the Modify Rule List Group page.
- Click on the Edit link beside the relevant Rule List Group in the Items pane of the Eligibility Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

The following fields are available on the Modify Rule List Group page:

Name	Description	Mandatory
Name	Name of the rule list group	Yes
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Legislation ID	ID of any related legislation information.	No
Rule Conjunction	Logical rules conjunction in the rule list group. The following rule conjunction values are available: 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeed.	Yes
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule list group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.	Yes
Highlight	Highlight indicator. This indicator specifies if this rule list group should be displayed in different color if it fails.	No
Summary	Summary item indicator. This indicator specifies if the rule list group should be displayed in the rules summary view.	No
Loop Execution Mode	The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the fi-	No

Name	Description	Mandatory
	nal result becomes known. <i>Succeed All</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i> : the loop will be executed until the result is known. The rule list group succeeds only if rules for all items in the List RDO succeed. <i>Succeed One Stop</i> : the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCodeMode.	
List Rules Data Object	A list rules data object is an RDO that contains a list of items. You can click the search icon to select the appropriate list RDOs for the rule list group.	Yes
Success	Result text to be displayed if the rule list group execution is successful.	No
Failure	Result text to be displayed if the rule list group execution fails.	No

Table 8.7 Fields

The following buttons are available on the Modify Rule List Group page:

Button	Description
Save	Saves the modified rule list group details and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.
Cancel	Dismisses the page and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 8.8 Buttons

The following submit validations are available on the Modify Rule List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.

Table 8.9 Submit Validations

8.5 Deleting a Rule List Group

To delete a rule list group, you must open the Delete Rule List Group page. To do this you must complete the following step:

- Press the Delete button on the Rule List Group page.

The following buttons are available on the Delete Rule List Group page:

Button	Description
Yes	Deletes the rule list group and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.
No	Dismisses the page and returns the user to the eligibility rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 8.10 Buttons

8.6 Translating Rule List Groups

Rule list groups are initially created using the default Cúram Rules language defined in the property administration section of the application. However, rule list groups can be translated so that a single rule list group can potentially be executed in multiple languages without the need to develop an entirely new rule list group. This section describes how to translate rule list groups using the Rules Editor.

8.6.1 Creating Rule List Group Translations

To create a translation for a rule list group, you must complete the following step:

- Click on the Create Translation link on the Rule List Group page.

The following fields are available on the Create Rule List Group Translation page:

Field	Description	Mandatory
Language	Language of this rule list group translation. Codetable <code>Locale</code> .	Yes
Rule List Group Name	Translation of the associated rule list group text in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 8.11 Fields

The following buttons are available on the Create Rule List Group Translation page:

Button	Description
Save	Saves the new rule list group translation. Returns to the Rule List Group page.
Cancel	Discards changes made on this page. Returns to the Rule List Group page.

Table 8.12 Buttons

The following submit validations are available on the Create Rule List Group Translation page:

Validation	Message
Only one translation allowed in a single language per rule list group. If on insert a translation record already exists for this rule list group ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this rule list group for language <Language>. A rule list group can only have one Translation per Language.

Table 8.13 Submit Validations

8.6.2 Viewing a Rule List Group Translation

To view a translation for a rule list group, you must complete the following step:

- Click on the View link beside the relevant rule list group translation in the Translations list on the Rule List Group page.

The following fields are available on the View Rule List Group Translation page:

Field	Description
Language	Language of this rule list group translation. Codetable <code>Locale</code> .
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 8.14 Fields

The following buttons are available on the View Rule List Group Translation page:

Button	Description
Edit	Edit this rule list group translation. Opens the Modify Rule List Group Translation page.
Delete	Delete this rule list group translation. Opens the Delete Rule List Group Translation page.
Close	Close this page. Returns to the Rule List Group page.

Table 8.15 Buttons

8.6.3 Modifying a Rule List Group Translation

To modify a translation for a rule, you must complete either of the following steps:

- Click on the Edit link beside the relevant rule list group translation in the Translations list on the Rule List Group page.
- Press the Edit button on the View Rule List Group Translation page.

The following fields are available on the Modify Rule List Group Translation page:

Field	Description	Mandatory
Rule List Group Name	Translation of the associated rule list group name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the success text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 8.16 Fields

The following buttons are available on the Modify Rule List Group Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Rule List Group page.
Cancel	Discards changes made on this page. Returns to the Rule List Group page.

Table 8.17 Buttons

The following submit validations are available on the Modify Rule List Group Translation page:

Validation	Message
Only one translation allowed in a single language per rule list group. If on modify a translation record already exists for this rule list group ID and language combination, an error should be thrown and the modify should not complete successfully.	A Translation already exists for this rule list group for language <Language>. A rule list group can only have one Translation per Language.

Table 8.18 Submit Validations

8.6.4 Deleting a Rule List Group Translation

To delete a translation for a rule list group translation you must complete the following step:

- Press the Delete button on the View Rule List Group Translation page.

The following buttons are available on the Delete Rule List Group Translation page:

Button	Action
Yes	Delete this rule translation and return to the Rule List Group page.
No	Cancel operation and return to the Rule List Group page.

Table 8.19 Buttons

Chapter 9

Rules

9.1 What is a Rule?

A rule is defined as a logical expression involving atomic conditions that can evaluate to true or false. Rules represent business logic and can be executed using the business rules engine.

A rule can be added to any of the following rule set nodes:

- Rule group
- Rule list group

9.2 Viewing a Rule

To view a rule, you must open the Rule List Group page or Rule Group page. To do this you must complete any of the following steps:

- Click on a Rule List Group node in the tree view and then click on the View link for a rule in the Items list pane of a Rule List Group page.
- Click on a Rule Group node in the tree view and then click on the View link for a rule in the Items list pane of a Rule Group page.
- Click on the relevant rule in the Rules Tree.

The following fields are available on the View Rule page:

Name	Description
Name	Name of the rule.
Legislation ID	ID of any related legislation information.
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule

Name	Description
	item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Summary	Summary item indicator. This indicator specifies if the rule group should be displayed in the rules summary view.
Highlight	Highlight indicator. This indicator specifies if this rule should be displayed in a different color if it fails.
Expression	Expression. Expressions can reference RDO data items. Expressions consist of one or more clauses which evaluate to a discrete value.
Success	Result text to be displayed if the rule execution is successful.
Failure	Result text to be displayed if the rule execution fails.
From Simulation	Rule set simulation indicator. This indicator specifies if the rule should be excluded from simulation.
From Reassessment	Reassessment indicator. This indicator specifies if the rule must be excluded from execution when the containing rule set is running in assessment mode.
Translations	List of translations for this rule. This list contains two fields, Action and Language. The action field contains the set of actions possible for each item in the list. The language field contains the language of each item in the list.

Table 9.1 Fields

The following links are available on the View Rule page:

Link	Description	Action
Validate Rule Set	Validates the rule set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this rule.	Opens the Create Rule Translation page.
View (Translation)	View the translation.	Opens the View Rule Translation page.
Edit (Translation)	Edit the translation.	Opens the Modify Rule Translation page.

Table 9.2 Links & Actions

The following buttons are available on the View Rule page:

Button	Description
Edit	Opens the Modify Rule page.
Delete	Opens the Delete Rule page.

Table 9.3 Buttons

9.3 Creating a Rule

To add a rule to a rule set node, you must open the Create Rule page. To do this you must complete the following step:

- Click on the Add Rule link in the View Rule Group or View Rule List Group page.

The following fields are available on the Create Rule page:

Name	Description	Default	Mandatory
Name	Name of the rule.		Yes
Legislation ID	ID of any related legislation information.		No
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Summary	Summary item indicator. This indicator specifies if the rule should be displayed in the rules summary view.	Off	No
Highlight	Highlight indicator. This indicator specifies if this rule should be displayed in different color if it fails.	Off	No
Expression	Expression. Expressions can reference RDO data items. Expressions consist of one or more clauses which evaluate to a discrete value.		No
Success	Result text to be displayed if the rule execution is success-		No

Name	Description	Default	Mandatory
	ful.		
Failure	Result text to be displayed if the rule execution fails.		No
From Simulation	Rule set simulation indicator. This indicator specifies if the rule should be excluded from simulation.	Off	No
From Reassessment	Reassessment indicator. This indicator specifies if the rule must be excluded from execution when the containing rule set is running in assessment mode.	Off	No

Table 9.4 Fields

The following link is available on the Create Rule page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 9.5 Links & Actions

The following buttons are available on the Create Rule page:

Button	Description
Save	Creates a new rule from the information entered on the page.
Save & New	Creates a new rule from the information entered on the page and resets the page allowing an additional rule to be created.
Cancel	Dismisses the page and returns the user to the previous page.

Table 9.6 Buttons

The following submit validations are available on the Create Rule page:

Validation	Message
Name must be entered	'Name' must be entered.

Table 9.7 Submit Validations

9.3.1 Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Rule page.
- Modify Rule page.

To navigate to the Formula Helper page you must complete the following step:

- Click on the “Click here to open the formula helper” link on the Create Rule page or Modify Rule page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 9.8 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 9.9 Columns

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 9.10 Buttons

The following links are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 9.11 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 9.12 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

9.4 Modifying a Rule

To edit a rule, you must open the Modify Rule page. To do this you must complete the following steps:

- Press the Edit button on the Rule page to open the Modify Rule page.
- Click on the Edit link on a rule in the Items list of either a Rule Group page or Rule List Group page.

The following fields are available on the Modify Rule page:

Name	Description	Mandatory
Name	Name of the rule.	Yes
Legislation ID	ID of any related legislation information.	No
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Summary	Summary item indicator. This indicator specifies if the rule should be displayed in the rules summary view.	No
Highlight	Highlight indicator. This indicator specifies if this rule should be displayed in different color if it fails.	No
Expression	Expression. Expressions can reference RDO data items. Expressions consist of one or more clauses which evaluate to a discrete value.	No
Success	Result text to be displayed if the rule execution is successful.	No
Failure	Result text to be displayed if the rule execution fails.	No
From Simulation	Rule set simulation indicator. This indicator specifies if the rule should be excluded from simulation.	No
From Reassessment	Reassessment indicator. This indicator specifies if the rule must be excluded from execution when the containing rule set is running in assessment mode.	No

Table 9.13 Fields

The following links are available on the Modify Rule page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 9.14 Links & Actions

The following buttons are available on the Modify Rule page:

Buttons	Description
Save	Saves the modified rule details and returns the user to the Rule Group or Rule List Group pages.
Cancel	Dismisses the page and returns the user to the Rule Group or Rule List Group pages.

Table 9.15 Buttons

The following submit validations are available on the modify Rule page:

Validation	Message
Name must be entered	'Name' must be entered.

Table 9.16 Submit Validations

9.5 Deleting a Rule

To delete a rule, you must open the Delete Rule page. To do this you must complete the following step:

- Press the Delete button on the View Rule page.

Button	Description
Yes	Deletes the rule and returns the user to the Rule Group or Rule List Group page.
No	Dismisses the page and returns the user to the Rule Group or Rule List Group page.

Table 9.17 Buttons

9.6 Translating a Rule

Rules are initially created using the default Cúram Rules language as defined in the property administration section of the application. However; translations can be created for rules so that a single rule can potentially be executed in multiple languages without the need to develop an entirely new

rule This section describes how to translate rules using the Rules Editor.

9.6.1 Creating a Rule Translation

To create a translation for a rule, you must complete the following step:

- Click on the Create Translation link on the Rule page.

The following fields are available on the Create Rule Translation page:

Field	Description	Mandatory
Language	Language of this rule translation. Codetable <code>Locale</code> .	Yes
Rule Name	Translation of the associated rule name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 9.18 Fields

The following buttons are available on the Create Rule Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Rule page.
Cancel	Discards changes made on this page. Returns to the Rule page.

Table 9.19 Buttons

The following submit validations are available on the The Create Rule Translation page:

Validation	Message
Only one translation allowed in a single language per rule. If on insert a translation record already exists for this rule ID and language combination, an error should be thrown and the insert should not complete successfully.	A Translation already exists for this rule for language <Language>. A rule can only have one Translation per Language.

Table 9.20 Submit Validations

9.6.2 Viewing a Rule Translation

To view a translation for a rule, you must complete the following step:

- Select the View link beside the relevant translation in the Translation pane on the Rule Group page.

The following fields are available on the View Rule Translation page:

Field	Description
Language	Language of this rule translation. Codetable <code>Locale</code> .
Rule Name	Translation of the associated rule name in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 9.21 Fields

The following buttons are available on the View Rule Translation page:

Button	Description
Edit	Edit this rule translation. Opens the Modify Rule Translation page.
Delete	Delete this rule translation. Opens the Delete Rule Translation page.
Close	Close this page. Returns to the Rule page.

Table 9.22 Buttons

9.6.3 Modifying a Rule Translation

To modify a translation for a rule you must complete either of the following steps:

- Click the Edit link beside the relevant translation in the translations list pane on the Rule page.
- Press the Edit button on the View Rule Translation page.

The following fields are available on the Modify Rule Translation page:

Field	Description	Mandatory
Rule Name	Translation of the associated	Yes

Field	Description	Mandatory
	rule name in the appropriate language.	
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 9.23 Fields

The following buttons are available on the Modify Rule Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Rule page.
Cancel	Discards changes made on this page. Returns to the Rule page.

Table 9.24 Buttons

The following submit validations are on the Modify Rule Translation page:

Validation	Message
Only one translation allowed in a single language per rule. If on modify a translation record already exists for this rule ID and language combination, an error should be thrown and the modify should not complete successfully.	A Translation already exists for this rule for language <Language>. A rule can only have one Translation per Language.

Table 9.25 Submit Validations

9.6.4 Deleting a Rule Translation

To delete a translation for a rule, you must complete the following step:

- Press the Delete button on the View Rule Translation page.

The following buttons are available on the Delete Rule Translation page:

Button	Action
Yes	Delete this rule translation and return the user to the Rule page.
No	Cancel operation and return the user to the Rule page.

Table 9.26 Buttons

Chapter 10

Data Item Assignments

10.1 What are Data Item Assignments?

A data item assignment provides the user with the ability to assign a value to an attribute of an RDO. This value can then be used during the execution of the rules. It is similar to a variable assignment in a programming language.

10.2 Viewing a Data Item Assignment

To view data item assignment details, you must open the View Data Item Assignment Details page.

To view data item assignment details, you must follow one of the following steps:

- Click the View link on a data item assignment in the Items pane of the Rule Group page.
- Click the View link on a data item assignment in the Items pane of the Rule List Group page.

The following fields are available on the View Data Item Assignment page:

Name	Description
Data Item	Left hand side of the assignment operation. The value of the evaluated formula is assigned to this data item at runtime.
Description	The description of the assignment.
Formula	Formula used to perform the calculation and evaluation. Assigned to “Data Item” at runtime.
Load Target	Indicates whether the loader associated with the left

Name	Description
	hand side operand should be invoked prior to executing the assignment.

Table 10.1 Fields

The following links are available on the View Data Assignment page:

Link	Description	Action
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.

Table 10.2 Links and Actions

The following buttons are available on the View Data Assignment page:

Link	Description
Edit	Opens the Modify Data Item Assignment page.
Delete	Opens the Delete Data Item Assignment page.

Table 10.3 Buttons

10.3 Creating a Data Item Assignment

To add a data item assignment, you must open the Add Data Item Assignment page. To do this you must complete the following step:

- Click the Add Data Item Assignment link on the Rule List Group or the Rule Group page.

The following fields are available on the Add Data Assignment page:

Name	Description	Default	Mandatory
Data Item	Left hand side of the assignment operation. The value of the evaluated formula is assigned to this data item at runtime.		Yes
Formula	The formula is the right hand side of the assignment, it can be either a constant, a function or an expression using constants and/or other data object attributes.		Yes
Load Target	Indicates whether the loader associated with the left hand	True	No

Name	Description	Default	Mandatory
	side operand should be invoked prior to executing the assignment.		

Table 10.4 Fields

The following links are available on the Add Data Assignment page:

Link	Description
Click here to open the formula helper	Opens the Formula Helper page.

Table 10.5 Links and Actions

The following buttons are available on the Add Data Assignment page:

Button	Description
Save	Saves the Data Item Assignment Details entered on the page and returns the user to the Rule List Group or the Rule Group page.
Save & New	Saves the Data Item Assignment Details entered on the page and returns the user to the Create Data Item Assignment page.
Cancel	Dismisses the page and returns the Rule List Group or the Rule Group page.

Table 10.6 Buttons

The following submit validations are available on the Add Data Assignment page:

Validation	Message
Data Item must be entered.	'Data Item' must be entered.
Formula must be entered.	'Formula' must be entered.
The Expression must be valid.	Invalid rules expression.

Table 10.7 Submit Validations

10.3.1 Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Data Item Assignment page.
- Modify Data Item Assignment page.

To navigate to the Formula Helper page you must complete the following step:

- Click on the “Click here to open the formula helper” link on the Create Data Item Assignment page or Modify Data Item Assignment page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 10.8 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 10.9 Columns

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 10.10 Buttons

The following links are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the

Link	Description
	text area.

Table 10.11 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 10.12 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

10.4 Modifying a Data Item Assignment

To edit a data item assignment, you must open the Modify Data Item Assignment page. To do this you must complete one of the following steps:

- Click the Edit link on a data item assignment item on the Rule Group or

Rule List Group page.

- Click the Edit button on the View Data Item Assignment Details page.

The following fields are available on the Modify Data Item Assignment page:

Name	Description	Mandatory
Data Item	Left hand side of the assignment operation. The value of the evaluated formula is assigned to this data item at runtime.	Yes
Formula	The formula is the right hand side of the assignment, it can be either a constant, a function or an expression using constants and/or other data object attributes.	Yes
Load Target	Indicates whether the loader associated with the left hand side operand should be invoked prior to executing the assignment.	No

Table 10.13 Fields

The following links are available on the Modify Data Item Assignment page:

Link	Description
Click here to open the formula helper	Opens the Formula Helper page. Please see Section 7.6 for more information.

Table 10.14 Links and Actions

The following buttons are available on the Modify Data Item Assignment page:

Button	Description
Save	Updates the data item assignment using the information entered on the page and returns the user to the Rule List Group or the Rule Group page.
Cancel	Dismisses the page and returns the user to the Rule List Group or the Rule Group page.

Table 10.15 Buttons

The following submit validations are available on the Modify Data Item Assignment page:

Validation	Message
Data Item must be entered.	'Data Item' must be entered.

Validation	Message
Formula must be entered.	'Formula' must be entered.
The Expression must be valid.	Invalid rules expression.

Table 10.16 Submit Validations

10.5 Deleting a Data Item Assignment

To delete a data item assignment, you must open the Delete Data Item Assignment page. To do this you must complete the following step:

- Click the Delete button on the View Data Item Assignment Details page.

The following buttons are available on the Delete Data Item Assignment page.

Button	Description
Yes	Deletes the data item assignment and returns the user to the Rule List Group or the Rule Group page.
No	Dismisses the page and returns the user to the Rule List Group or the Rule Group page.

Table 10.17 Buttons

Chapter 11

Sub-Rule Sets

11.1 What are Sub-Rule Sets?

A Sub-rule set is a mechanism to allow larger rule sets to be broken into multiple smaller functional units. The parametrisation of sub-rule sets allows for true functionality decomposition. The user can pass the RDOs as input parameters to the subrule sets and get the values out as output RDOs from the sub-rule sets.

Sub-rule sets are otherwise similar to eligibility rule sets. Sub-rule sets are defined independently with a unique Rule Set ID and Name, and can be invoked multiple times both across and within eligibility rule sets and other sub-rule sets, thus enabling them to be reused.

The appearance and navigation of sub-rule sets is the same as that for eligibility rule sets, with the left hand panel showing the rules tree with nodes and the right-hand frame which shows the screen that corresponds to the selected tree node in the left-hand frame.



Note

Sub-rule sets can only contain a single grouping element at the top level i.e. the root node of a sub-rule set must be one (and only one) of the following four elements: rule group, rule list group, objective group or objective list group.

The following nodes can be found in the sub-rule set tree:

- Objective Group
- Objective List Group
- Objective
- Rule Group
- Rule List Group

- Rule
- Data Item Assignment
- Sub-Rule Set link

Note however, that not all these nodes may be present in any given sub-rule set.

The following table shows the default screen that is opened on the right hand frame when a user clicks on any of the above tree items:

Left Click	Default Page
Sub-Rule Set	Opens the Sub-Rule Set page.
Objective Group	Opens the Objective Group page.
Objective List Group	Opens the Objective List Group page.
Objective	Opens the Objective page.
Rule Group	Opens the Rule Group page.
Rule List Group	Opens the Rule List Group page.
Rule	Opens the Rule page.
Data Item Assignment	Opens the View Data Item Assignment Details page.
Sub-Rule Set Link	Opens the Sub-Rule Set page.

Table 11.1 Default Sub-Rule Set Tree Page

Certain items are not shown in the sub-rule set tree. These items are navigable by clicking the appropriate link on the right hand frame. These are:

- Expression
- Assessment Objective Tag
- Product Objective Tag
- Objective Tag

11.2 Viewing a Sub-Rule Set

To view a sub-rule set you must open the View Sub-Rule Set page. To do this you can complete any of the following steps:

- Click on a sub-rule set link node in an eligibility rule set or a sub-rule set and then click on the link in the right-hand pane.
- Navigate to the List Sub-Rule Sets page and click on the View link beside the relevant sub-rule set.
- Navigate to the Items list on the appropriate View page and then click

on the link in the right-hand pane.

The following fields are available on the View Sub-Rule Set page:

Name	Description
Rule Set ID	Unique ID of the sub rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.
Name	Name of the sub rule set.
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user to understand the legislation behind the sub rule set.
Legislation ID	ID of any related legislation information.
Highlight	Highlight indicator. This indicator specifies if the sub rule set node should be displayed in a different color if it fails at runtime.
Success	Result text to be displayed when the sub rule set execution is successful.
Failure	Result text to be displayed when the sub rule set execution fails.
Items	List of items for this sub-rule set. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each sub-rule set item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule, objective, etc. The Name field contains the name of each sub-rule set item.
Translations	List of translations for the translatable elements of the sub-rule set. This list contains two fields: Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.
Rules Data Objects	List of rules data objects for this sub-rule set. This list contains five fields: Action, RDO Name, Qualifier, Type and Final. The Action field contains the set of actions possible for each RDO in the list. The RDO Name field contains the name of each RDO in the list. The Type field describes the type of each RDO in the list, e.g., singleton. The qualifier field may have 4 possible values: Input, Output, Local and Blank. The final field denotes whether the RDO is final or not.
Comments	The Comments field should be used to provide a detailed description of the sub-rule set and its usage.

Table 11.2 Fields

The following links are available on the View Sub-Rule Set page:

Link	Description	Action
Add Rules Data Object	Add Rules Data Object, opens the Rules Data Object page where a user may add or view Rules Data Objects	Opens the Add Rules Data Objects page.
Clone Sub-Rule Set	Clones the sub-rule set.	Opens the Clone Sub-Rule Set page.
Validate Sub-Rule Set	Validates the sub-rule set.	Opens the Validate Sub-Rule Set page.
Add Objective Group	Adds a new objective group to this sub-rule set.	Opens the Create Objective Group page.
Add Objective List Group	Adds a new objective list group to this sub-rule set.	Opens the Create Objective List Group page.
Add Rule Group	Adds a new rule group to this sub-rule set.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this sub-rule set.	Opens the Create Rule List Group page.
Publish Changes	Publishes any changes which may have been made to the rule set since the last publish. The cached version of this rule set will be removed from the cache and the updated version will be picked up by the Rules Engine the next time the rule set is executed.	Opens the Publish Rule Set Changes page.
Create Translation	Creates a new translation for this sub-rule set.	Opens the page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Sub-Rule Set page and moves the selected item up in the execution order. Also re-

Link	Description	Action
		refreshes the tree view (note that it is possible for a single sub-rule set to be included more than once from a single rule set or from another sub-rule set).
Down (Items)	Moves the Item down in the execution order.	Refreshes the Sub-Rule Set page and moves the selected item down in the execution order. Also refreshes the tree view (note that it is possible for a single sub-rule set to be included more than once from a single rule Set or from another sub-rule set).
View (Translations)	View the sub-rule set translation.	Opens the View Sub-Rule Set translation page.
Edit (Translations)	Modify the sub-rule set translation.	Opens the Modify Sub-Rule Set Translation page.
View (Rules Data Objects)	View rules data object.	Opens the View Rules Data Object page.
Remove (Rules Data Objects)	Removes the rules data object from the sub rule set.	Opens the Delete Rules Data Object page.

Table 11.3 Links & Actions

The following buttons are available on the View Sub-Rule Set page:

Button	Description
Edit	Opens the Modify Sub-Rule Set page.
Delete	Opens the Delete Sub-Rule Set page.

Table 11.4 Buttons

The following submit validations are available on the View Sub-Rule Set

page:

Validation	Message
Cannot add more than one rule group to a sub-rule set.	It is only possible to have only one rule group or rule list group at the root level.
Cannot add more than one rule list group to a sub-rule set.	It is only possible to have only one rule group or rule list group at the root level.
Cannot add more than one objective group to a sub-rule set.	It is only possible to have only one objective group or objective list group at the root level.
Cannot add more than one objective list group to a sub-rule set.	It is only possible to have only one objective group or objective list group at the root level.
The top-level node of a Sub-Rule Set must be a Rule Group, a Rule List Group, an Objective Group or an Objective List Group.	The top-level node of a Sub-Rule Set must be a Rule Group, a Rule List Group, an Objective Group or an Objective List Group.

Table 11.5 Submit Validations



Note

The above submit validations are for the addition of rule groups, rule list group, objective groups or objective list groups from the View Sub-Rule Set page.

11.2.1 Publishing Changes to a Sub-Rule Set

Publishing changes to a sub-rule set removes the cached version of the sub-rule set so that the updated version will be picked up by the Rules Engine the next time the sub-rule set is executed.

To publish changes to a sub-rule set you must complete the following step:

- Click the Publish Changes link on the View Sub-Rule Set page.

The following buttons are available on the Publish Rule Set Changes page:

Button	Description
Yes	Publishes the changes and returns the user to the View Sub-Rule Set page.
No	Does not publish the changes, dismisses the page and returns the user to the View Sub-Rule Set page.

Table 11.6 Buttons

11.2.2 Rules Data Objects

To use a data item anywhere in a sub-rule set you must assign a rules data object containing this data item to the sub-rule set. To navigate to the Rules Data Objects for a sub-rule set you must complete the following step:

- Click on the Sub-Rule Set link on the Rules Editor home page. The Rules Data Objects associated with the sub-rule set are displayed in the Rules Data Objects pane.

The following links are available on the Rules Data Object List page:

Link	Description	Action
View	View the Rules Data Object. Opens the View Rules Data Object page where a user can view details and attributes associated with the Rule Data Object	Opens the View Rules Data Object page.
Remove	Removes the Rules Data Object from the Rule Set.	Opens the Remove Rules Data Object page.

Table 11.7 Links & Actions

11.2.3 Viewing a Rules Data Object

To navigate to the View Rules Data Object page you must complete the following steps:

- Open the List Sub-Rule Sets page.
- Click on the View link in the Rules Data Objects pane of the View Sub-Rule Set page.

The following buttons are available on the View Rules Data Object page:

Button	Description
Close	Closes the page and returns the user to the View Sub-Rule Set page.

Table 11.8 Buttons

The following fields are available on the View Rules Data Object page:

Name	Description
Name	RDO Name
Type	RDO Type

Name	Description
Final	Denotes whether the RDO is final. Values cannot be assigned to the final RDO data items more than once in the rule set execution.
Qualifier	Four possible values: Input, Output, Local and blank.
Name (Attributes)	RDO Attribute Name.
Type (Attributes)	RDO Attribute Type, either "Singleton" or "List".

Table 11.9 Fields

11.2.4 Adding a Rules Data Object to a Sub-Rule Set

To navigate to the Add Rules Data Object page a user must take the following steps:

- Navigate to the View Sub-Rule Set page.
- Click on the Add Rules Data Object link.

The following fields are available on the Add Rules Data Object page:

Field	Description	Default	Mandatory
Rules Data Object	Rules Data Object Name		Yes
Final	Denotes whether the RDO is final. Final RDOs cannot be assigned to more than once in the scope in which they are declared as final.	Unchecked.	Yes
Qualifier	Four possible values: Input, Output, Local and blank.	Blank	Yes

Table 11.10 Fields

The following buttons are available on the Add Rules Data Object page:

Button	Description
Save	Adds the selected RDO to the Sub Rule Set and returns the user to the View Sub-Rule Set page.
Cancel	Dismisses the page and returns the user to the View Sub-Rule Set page.

Table 11.11 Buttons

The following links are available on the Add Rules Data Object page:

Link	Description	Action
Search Rule Data Object	Opens the Rules Data Object Search page. A pop up page appears where a user can search for Rules Data Objects, select a rules data object and paste the rules data object into the Add Rules Data Object page.	Opens the Rules Data Object Search page.
Clear	Clears out any current rule data object.	Resets the rules data object field.

Table 11.12 Links & Actions

The following submit validations are available on the Add Rules Data Object page:

Validation	Message
It is not possible to add RDOs with a blank qualifier to a sub-rule set already containing RDOs with a non-blank qualifier.	This sub-rule set already contains RDOs whose qualifier is non-blank; it is not possible to mix RDOs with a blank qualifier and those with a non-blank qualifier within a single Sub Rule Set. Either set the qualifier for this RDO to non-blank, or cancel from this page and remove the RDO(s) with non-blank qualifiers from this sub-rule set.
It is not possible to add RDOs with a non-blank qualifier to a sub-rule set already containing RDOs with a blank qualifier	This sub-rule set already contains RDOs whose qualifier is blank; it is not possible to mix RDOs with a blank qualifier and those with a non-blank qualifier within a single sub-rule set. Either set the qualifier for this RDO to blank, or cancel from this page and remove the RDO(s) with a blank qualifier from this sub-rule set.

Table 11.13 Submit Validations

11.2.5 Removing a Rules Data Object from a Sub-Rule Set

To remove a rules data object from a sub-rule set, click the Remove link in the Rules Data Object pane on the Sub-Rule Set page.

The following buttons are available on the Remove Rules Data Object page:

Button	Action
Yes	Removes this rule data object and returns the user to the View Sub-Rule Set page.
No	Cancel the operation and returns the user to the View Sub-Rule Set page.

Table 11.14 Buttons

11.2.6 Cloning a Sub-Rule Set

Cloning a sub-rule set allows you to copy the existing rule set and requires you to enter a new RulesetID and name. To clone a sub-rule set, you must open the Clone Rule Set page. To do this you must complete the following step:

- Click on the Clone Rule Set link on the Sub-Rule Set page.

The following fields are available on the Clone Rule Set page:

Field	Description	Mandatory
Rule Set ID	Unique ID of the cloned sub-rule set (alphanumeric string). Developers will use this value to identify the newly cloned rule set and to invoke it for execution.	Yes
Name	Name of the cloned sub rule set.	Yes

Table 11.15 Fields

The following buttons are available on the Clone Rule Set page:

Button	Description
Save	Saves the cloned sub rule set and returns the user to the View Sub-Rule Set page for the newly cloned sub rule set.
Cancel	Dismisses the page and returns the user to the View Sub-Rule Set page .

Table 11.16 Buttons

The following submit validations are available on the Clone Rule Set page:

Validation	Message
Rule Set ID must be entered.	'Rule Set ID' must be entered.

Validation	Message
Rule Set ID must be alphanumeric with no spaces.	'Rule Set ID' must be alphanumeric with no spaces.
Rule Set ID must be unique.	'Rule Set ID' must be unique.
Name must be entered.	'Name' must be entered.

Table 11.17 Submit Validations

11.3 Creating a Sub-Rule Set

To create a sub-rule set, you must open the Create Sub-Rule Set page. To open this page you must complete the following steps:

- Open the List Sub-Rules Sets page by clicking on the Rules Editor link in the System menu.
- Click on the New button.

The following fields are available on the Create Sub-Rule Set page:

Field	Description	Default	Mandatory
Rule Set ID	Unique ID of the sub rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.		Yes
Name	Name of the sub rule set.		Yes
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user understand the legislation behind the sub rule set.		No
Legislation ID	ID of any related legislation information.		No
Highlight	Highlight indicator. This indicator specifies if the sub rule set node should be displayed in a different color if it fails at runtime.	Off	No
Success	Result text to be displayed if the sub rule set execution is successful.		No
Failure	Result text to be displayed if		No

Field	Description	Default	Mandatory
	the sub rule set execution fails.		
Comments	The Comments field should be used to provide a detailed description of the sub-rule set and its usage.		No

Table 11.18 Fields

The following buttons are available on the Create Sub-Rule Set page:

Button	Description
Save	Creates a new sub rule set from the information entered on the page and returns the user to the List Sub-Rule Sets page.
Cancel	Dismisses the page and returns the user to the List Sub-Rule Sets page.

Table 11.19 Buttons

The following submit validations are available on the Create Sub-Rule Set page:

Validation	Message
Rule Set ID must be entered.	'Rule Set ID' must be entered.
Rule Set ID must be alphanumeric with no spaces.	'Rule Set ID' must be alphanumeric with no spaces.
Rule Set ID must be unique.	'Rule Set ID' must be unique.
Name must be entered.	'Name' must be entered.

Table 11.20 Submit Validations

11.4 Modifying a Sub-Rule Set

To edit the details of a sub-rule set, you must open the Modify Sub-Rule Set page. To open the Modify Sub-Rule Set page you must complete the following step:

- Click the Edit button on the View Sub-Rule Set page.

The following fields are available on the Modify Sub-Rule Set page:

Field	Description	Default	Mandatory
Rule Set ID	Unique ID of the sub-rule set (alphanumeric string). Ap-	Previously entered Rule	Yes

Field	Description	Default	Mandatory
	Application developers use this value to identify the rule set and to invoke it for execution. It is not editable.	Set ID	
Name	Name of the sub-rule set.		Yes
Legislation Base	Legislation base of any related legislation information. This information can be used to help a user to understand the legislation behind the sub rule set.		No
Legislation ID	ID of any related legislation information.		No
Highlight	Highlight indicator. This indicator specifies if this sub-rule set should be displayed in a different color if it fails at runtime.		No
Success	Result text to be displayed when the sub-rule set execution is successful.		No
Failure	Optional help text to be displayed at runtime for this rule.		No
Comments	The Comments field should be used to provide a detailed description of the sub-rule set and its usage.		No

Table 11.21 Fields

The following fields are available on the Modify Sub-Rule Set page:

Button	Description
Save	Saves the modified sub rule set and returns the user to the Sub-Rule Set page.
Cancel	Dismisses the page and returns the user to the Sub-Rule Set page.

Table 11.22 Buttons

The following submit validations are available on the Modify Sub-Rule Set page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 11.23 Submit Validations

11.5 Deleting a Sub-Rule Set

To delete a sub-rule set, you must open the Delete Sub-Rule Set page. To do this you must complete the following step:

- Click on the Remove link for an item on the List Sub-Rule Sets page.
- Press the Delete button on the View Sub-Rule Set page.

The following buttons are available on the Delete Sub-Rule Set page:

Button	Description
Yes	Deletes the sub rule set and returns the user to the List Sub-Rule Sets page.
No	Dismisses the page and returns the user to the List Sub-Rule Sets page.

Table 11.24 Buttons

11.6 Translating a Sub-Rule Set

Sub-rule sets are initially created using the default Cúram Rules language defined in the property administration section of the application. However, sub-rule set elements can be translated so that a single sub-rule set can potentially be executed in multiple languages without the need to develop an entirely new sub-rule set. This section describes how to translate sub-rule sets using the Rules Editor.

11.6.1 Creating a Sub-Rule Set Translation

To create a translation for a sub-rule set, you must complete the following step:

- Click on the Create Translation link on the Sub-rule Set page.

The following fields are available on the Create Sub-Rule Set Translation page:

Field	Description	Mandatory
Language	Language of this sub rule set translation. Codetable LOC-	Yes

Field	Description	Mandatory
	a.l.e.	
Sub Rule Set Name	Translation of the associated sub rule set name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text. If blank, the failure text for the default language will be used.	No

Table 11.25 Fields

The following buttons are available on the Create Sub-Rule Set Translation page:

Button	Description
Save	Saves the new rule translation. Returns to the Sub-Rule Set page.
Save & New	Saves the new rule translation. Clears all fields, and returns to the Create Sub-Rule Set Translation page.
Cancel	Discards changes made on this page. Returns to the Sub-Rule Set page.

Table 11.26 Buttons

The following submit validations are available on the Create Sub-Rule Set Translation page:

Validation	Message
Only one translation allowed in a single language per sub rule set. If on insert a translation record already exists for this sub rule set ID and language and Language combination, an error should be thrown and the insert should not complete successfully.	A translation already exists for this sub rule set for language <Language>. A sub rule set can only have one translation per language.

Table 11.27 Submit Validations

11.6.2 Viewing a Sub-Rule Set Translation

To view a translation for a sub-rule set, you must complete the following step:

- Click on the View link beside the relevant element in the Translations list on the Sub-Rule Set page.

The following fields are available on the View Sub-Rule Set Translation page:

Field	Description
Language	Language of this sub rule set translation. Codetable Local.
Sub Rule Set Name	Translation of the associated sub rule set name in the appropriate language.
Success	Translation of the associated Success Text in the appropriate language.
Failure	Translation of the associated Failure Text in the appropriate language.

Table 11.28 Fields

The following buttons are available on the View Sub-Rule Set Translation page:

Button	Description
Edit	Edit this sub rule set translation. Opens the Modify Sub-Rule Set Translation page.
Delete	Delete this rule translation. Opens the Delete Sub-Rule Set Translation page.
Close	Close this page. Returns to the Sub-Rule Set page.

Table 11.29 Buttons

11.6.3 Modifying a Sub-Rule Set Translation

To modify a translation for a sub-rule set, you must complete either of the following the following steps:

- Click on the Edit link on the relevant item in the Translations list on the Sub-Rule Set page.
- Press the Edit button on the Sub-Rule Set Translation page.

The following fields are available on the Modify Sub-Rule Set Translation page:

Field	Description	Mandatory
Language	Language of this sub rule set transla-	Yes

Field	Description	Mandatory
	tion. Codetable Locale .	
Sub Rule Set Name	Translation of the associated sub rule name in the appropriate language.	Yes
Success	Translation of the associated Success Text, if different across languages. If blank, the failure text for the default language will be used.	No
Failure	Translation of the associated Failure Text, if different across languages. If blank, the failure text for the default language will be used.	No

Table 11.30 Fields

The following buttons are available on the Modify Sub-Rule Set Translation page:

Button	Description
Save	Saves the new sub-rule set translation. Returns to the Sub-Rule Set page.
Cancel	Discards changes made on this page. Returns to the Sub-Rule Set page.

Table 11.31 Buttons

The following submit validations are available on this page:

Validation	Message
Only one translation allowed in a single language per sub-rule set. If on modify a translation record already exists for this sub-rule set ID and language combination, an error is thrown and the modify should not complete successfully.	A translation already exists for this sub rule set for language <Language>. A sub-rule set can only have one translation per language.

Table 11.32 Submit Validations

11.6.4 Deleting a Sub-Rule Set Translation

To delete a translation for a rule, you must complete the following step:

- Press the Delete button on the View Sub-Rule Set Translation page.

The following buttons are available on the Delete Sub-Rule Set Translation page:

Button	Action
Yes	Delete this rule translation and return to the Sub-Rule Set page.
No	Cancel operation and return to the Sub-Rule Set page.

Table 11.33 Buttons

11.7 Publishing Changes to a Sub-Rule Set

When changes to the sub-rule set are published, the cached version of the sub-rule set will be removed from the cache and the updated version will be picked up by the Rules Engine the next time the sub-rule set is executed.

To publish changes to a sub-rule set you must complete the following step:

- Click the Publish Changes link on the Sub-Rule Set page to open the Publish Rule Set Changes page.

The following buttons are available on the Publish Rule Set Changes page:

Button	Description
Yes	Publishes the changes to the rule set and returns the user to the Sub-Rule Set page.
No	Dismisses the page and returns the user to the Sub-Rule Set page.

Table 11.34 Buttons

11.8 Validating a Sub-Rule Set

To perform validation of all the rules in the sub-rule set, you must open the Sub-Rule Set page. To do this, you must complete the following steps:

- Open the Sub-Rule Set page.
- Click on the View link on the appropriate row to open the Sub-Rule Set page.
- Click on the Validate Rule Set link to validate the sub-rule set.

Field	Description
Name	Hyperlink name of data item assignments, objective tag formulas, rules' expressions, RDO names for rule list groups and objective list groups. Links to selected item.

Field	Description
Problem	Text description of the problem

Table 11.35 Fields

11.9 Sub-Rule Set Links

A sub-rule set link is a “pointer” to the sub-rule set for an eligibility rule set or another sub-rule set. A sub-rule set can be executed only as a part of another eligibility rule set or sub-rule set.

To view details of a sub-rule set link, you must open the sub-rule set link page. All sub-rule set links are displayed on the eligibility rule set items panel. Clicking the view button on the items panel brings you to the sub-rule set link page.

A sub-rule set link can be added to any of the following rule set nodes:

- Rule Group
- Rule List Group
- Objective Group
- Objective List Group

11.10 Viewing a Sub Rule-Set Link

All sub-rule set links are displayed on the eligibility rule set Items panel. To view details of a sub-rule set link, you must open the View Sub-Rule Set Link page. To do this you must complete the following step:

- Click on the View link on the Items list beside the relevant sub-rule set link to go to the Sub-Rule Set Link page.

The following fields are available on the View Sub-Rule Set Link page:

Name	Description
Name	Name of the sub rule set.

Table 11.36 Fields

The following links are available on the View Sub-Rule Set Link page:

Link	Description	Action
Sub-Rule Set Name	Opens Sub-Rule Set page.	Opens the Sub-Rule Set page.

Table 11.37 Links & Actions

The following buttons are available on the View Sub-Rule Set Link page:

Button	Description
Remove	Opens the the Remove Sub-Rule Link page.
Close	Dismisses the page and returns the user to the Rule Group or Rule List Group page.

Table 11.38 Buttons

11.11 Deleting a Sub-Rule Set Link

It is not possible to modify a sub-rule set link. A sub-rule set link has to be removed and added again if changes need to be made to it. To remove a sub-rule set link, you must complete the following steps:

- Open the Eligibility Rule Sets page.
- Navigate to the appropriate View Sub-Rule Set Link page.
- Press the Remove button to open the Remove Sub-Rule Set Link Page.

The following buttons are available on the Remove Sub-Rule Set Link page:

Button	Description
Yes	Remove the sub-rule link and returns the user to the Rule Group or Rule List Group page.
No	Dismisses the page and returns the user to the Sub-Rule Link page.

Table 11.39 Buttons

Chapter 12

Work Allocation Rule Sets

12.1 What is a Work Allocation Rule Set?

Work Allocation Rule Sets are functionally similar to Eligibility Rule Sets except that they define rules to determine how tasks are allocated. The application provides the option to specify a task definition that allocates tasks according to the allocation strategy type specified as a work allocation rule set. The specified rule set is evaluated at runtime and the result of the evaluation is a set of allocation targets.



Differences between work allocation rule sets and eligibility rule sets

The result of a work allocation rule set execution is not displayed to the user. This means that success text and failure text do not have to be specified for the rules items added to work allocation rule sets.

Work allocation rule sets are used by the application to link application components.

The following nodes can be found in the work allocation rule set tree:

- Work Allocation Rule Set
- Objective Group
- Objective List Group
- Objective
- Rule Group
- Rule List Group
- Rule
- Data Item Assignment

Note however, that not all these nodes may be present in any given work allocation rule set.

The following table shows the default screen that is opened on the right hand frame when a user clicks on any of the above tree items:

Tree Node	Default Page
Work Allocation Rule Set	Opens the Work Allocation Rule Set page.
Objective Group	Opens the Objective Group page.
Objective List Group	Opens the Objective List Group page.
Objective	Opens the Objective page.
Rule Group	Opens the Rule Group page.
Rule List Group	Opens the Rule List Group page.
Rule	Opens the Rule page.
Data Item Assignment	Opens the View Data Item Assignment Details page.

Table 12.1 Default Work Allocation Rule Set Tree Page

Certain items are not shown in the work allocation rule set tree. These items are navigable by clicking the appropriate link on the right hand frame. The following node is not shown in the work allocation rule set tree:

- Expression

12.2 Viewing a Work Allocation Rule Set

To view a work allocation rule set, you must open the Work Allocation Rule Sets page. To open the Work Allocation Rule Sets page:

- Click on the Work Allocation Rule Sets link on the Navigation menu.
- Click the expand link beside the Work Allocation Rule Set you wish to view.

The following fields are available on the Work Allocation Rule Sets page:

Name	Description
Rule Set ID	Unique ID of the work allocation rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.
Name	Name of the work allocation rule set.
Items	List of items for this work allocation rule set. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible

Name	Description
	for each rule set item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule group, objective group, etc. The Name field contains the name of each rule set item.
Translations	List of translations for the translatable elements of the work allocation rule set. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.
Rules Data Objects	List of rules data objects for this work allocation rule set. This list contains three fields: Action, RDO Name and Type. The Action field contains the set of actions possible for each RDO in the list. The RDO Name field contains the name of each RDO in the list. The Type field describes the type of RDO. The Final field denotes whether the RDO is final. Values cannot be assigned to final RDO data items more than once in the rule set execution.
Comments	The Comments field should be used to provide a detailed description of the work allocation rule set and its usage.

Table 12.2 Fields and Descriptions

The following actions are provided on the Work Allocation Rule Set page:

Link	Description	Action
Add Rules Data Object	Add Rules Data Object opens the Rules Data Objects page where a user can search for and select or view a Rules Data Object.	Opens the View Rules Data Objects page
Clone Rule Set	Clones the work allocation rule set. The existing rule set will be copied and the user is required to enter a new Rule-setID and name.	Opens the Clone Rule Set page.
Validate Rule Set	Validates the rule set.	Opens the Validate Rule Set page.
Add Objective Group	Adds a new objective group to this work allocation rule set.	Opens the Create Objective Group page. It is only possible to have one objective group or objective list group at the top level.

Link	Description	Action
Add Objective List Group	Adds a new objective list group to this work allocation rule set.	Opens the Create Objective List Group page. It is only possible to have one objective list group or objective group at the top level.
Add Rule Group	Adds a new rule group to this work allocation rule set.	Opens the Create Rule Group page. It is only possible to have one rule group or rule list group at the top level.
Add Rule List Group	Adds a new rule list group to this work allocation rule set.	Opens the Create Rule List Group page. It is only possible to have one rule list group or rule group at the top level.
Publish Changes	Publishes any changes which may have been made to the rule set since the last publish. The cached version of this rule set will be removed from the cache and the updated version will be picked up by the Rules Engine the next time the rule set is executed.	Opens the Publish Rule Set Changes page.
Create Translation	Creates a new translation for this rule set.	Opens the Create Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Work Allocation Rule Set page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the Work Allocation Rule Set page and moves the selected item down in the execution order.
View (Translations)	View the work allocation rule set translation.	Opens the View Work Allocation Rule Set Translation page.
Edit (Translations)	Modify the work allocation rule set translation.	Opens the Modify Work Allocation Rule Set Translation page.
View (Rules)	View rules data object.	Opens the View Rules Data

Link	Description	Action
Data Objects)		Object page.
Remove (Rules Data Objects)	Removes the rules data object from the work allocation rule set.	Opens the Delete Rules Data Object page.

Table 12.3 Links and Actions

The following buttons are available on the View Work Allocation Rule Set Page:

Button	Description
Edit	Opens the Modify Work Allocation Rule Set page.

Table 12.4 Buttons

12.3 Creating a Work Allocation Rule Set

To open the Create Work Allocation Rule Set page, you must complete the following steps:

- Click the Work Allocation Rule Sets link on the Navigation menu.
- Press the New button to open the Create Work Allocation Rule Set page.

The following fields are available on the Create Work Allocation Rule Set page:

Field	Description	Default	Mandatory
Rule Set ID	Unique ID of the work allocation rule set (alphanumeric string). Application developers use this value to identify the rule set and to invoke it for execution.		Yes
Name	Name of the work allocation rule set.		Yes
Comments	The Comments field should be used to provide a detailed description of the work allocation rule set and its usage.		No

Table 12.5 Fields



Important

The Rule Set ID and Name fields are mandatory. You should ensure

that the Work Allocation Rule Set ID and Name are unique.

The following buttons are available on the Create Work Allocation Rule Set page:

Button	Description
Save	Creates a new work allocation rule set from the information entered on the page and returns the user to the Work Allocation Rule Set page.
Cancel	Dismisses the page and returns the user to the Work Allocation Rule Set page.

Table 12.6 Buttons

The following submit validations are available on the Create Work Allocation Rule Set page:

Validation	Message
Rule Set ID must be entered.	'Rule Set ID' must be entered.
Rule Set ID must be alphanumeric with no spaces.	'Rule Set ID' must be alphanumeric with no spaces.
Rule Set ID must be unique.	'Rule Set ID' must be unique.
Name must be entered.	'Name' must be entered.

Table 12.7 Submit Validations

12.4 Modifying a Work Allocation Rule Set

To open the Modify Work Allocation Rule Set page you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Press the Edit button to open the Modify Work Allocation Rule Set page.

The following fields are available on the Modify Work Allocation Rule Set page:

Field	Description	Default	Mandatory
Name	Name of the work allocation rule set.		Yes
Comments	General remarks to be entered by the user.		No

Table 12.8 Fields and Descriptions

The following buttons are available on the Modify Work Allocation Rule Set page:

Button	Description
Save	Saves the modified work allocation rule set details and returns the user to the Work Allocation Rule Set page.
Cancel	Dismisses the page and returns the user the Work Allocation Rule Set page.

Table 12.9 Buttons

12.5 Deleting a Work Allocation Rule Set

To open the Delete Work Allocation Rule Set page, you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Press the Delete button.

The following buttons are available on the Delete Work Allocation Rule Set page:

Button	Description
Yes	Deletes the work allocation rule set and returns the user to the Work Allocation Rule Sets page.
No	Dismisses the page and returns the user to the the Work Allocation Rule Sets page.

Table 12.10 Buttons

12.6 Rule Groups

A rule group is a logical collection of rules. A rule group comprises related rules that govern a specific application function. A rule group can be added to any of the following rule set nodes:

- Rule group
- Rule list group
- Objective
- Objective group
- Objective list group

12.6.1 Viewing a Rule Group

To view a rule group, you must open the View Rule Group page. To do this you must complete either of the following steps:

- Click on a Rule Group node in the tree view.
- Click on the View link for a Rule Group in the Items list pane of the Work Allocation Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

The following fields are displayed on the Rule Group page:

Name	Description
Name	Name of the rule group.
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: <ol style="list-style-type: none"> 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeeds.
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Items	List of items for this rule group. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each rule group item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., rule, objective group, etc. The Name field contains the name of each rule group item.
Translations	List of translations for this rule group. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each item in the list.

Table 12.11 Fields

The following links are available on the View Rule Group page:

Link	Description	Action
Add Rule	Adds a new rule to this rule group.	Opens the Create Rule page.
Add Sub Rule Set	Adds a new sub rule set to this rule group.	Opens the Add Sub-rule Set page.
Add Data Item Assignment	Adds a new data item assignment to this rule group.	Opens the Create Data Assignment page.
Add Rule Group	Adds a new rule group to this rule group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this rule group.	Opens the Create Rule List Group page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this rule group.	Opens the Create Rule Group Translation page page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the item up in the execution order.	Refreshes the Rule Group page and moves the selected item up in the execution order.
Down (Items)	Moves the item down in the execution order.	Refreshes the Rule Group page and moves the selected item down in the execution order.
View (Translation)	View the rule group translation.	Opens the View Rule Group Translation page.
Edit (Translation)	Modify the rule group translation.	Opens the modify Rule Group Translation page.

Table 12.12 Links & Actions

12.6.2 Creating a Rule Group

To add a rule group to a work allocation rule group, you must open the Add Rule Group page. To do this you must complete the following steps:

- Open the Work Allocation Rule Sets page.
- Navigate to the appropriate rule set node, where you want to add a rule group.
- Click the Add Rule Group link.

There can be only one rule list group or rule group at the root level.

The following fields are available on the Create Rule Group page:

Name	Description	Default	Mandatory
Name	Name of the rule group.		Yes
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeeds.	“AND”	Yes
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.	“Execute All”	Yes
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for		No

Name	Description	Default	Mandatory
	the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		

Table 12.13 Fields

The following buttons are available on the Create Rule Group page:

Button	Description
Save	Creates a new rule group from the information entered on the page.
Save & New	Creates a new rule group from the information entered on the page and resets the page allowing an additional rule group to be created.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.14 Buttons

12.6.3 Modifying a Rule Group

To edit the details of rule group, you must open the Modify Rule Group page. To do this you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Navigate to the appropriate Rule Group page.
- Press the Edit button to open the Modify Rule Group page. The following fields are available on the Modify Rule Group page:

Name	Description	Mandatory
Name	Name of the rule group.	Yes
Rule Conjunction	Logical rules conjunction in the rule group. The following rule conjunction values are available: <ol style="list-style-type: none"> 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeed. 	Yes

Name	Description	Mandatory
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed.	Yes
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No

Table 12.15 Fields

The following buttons are available on the Modify Rule Group page:

Button	Description
Save	Saves the modified rule group details.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.16 Buttons

12.6.4 Deleting a Rule Group

To delete a rule group, you must open the Delete Rule Group page. To open the Delete Rule Group page, you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Navigate to the appropriate Rule Group page.
- Press the Delete button on the Rule Group page to open Delete Rule Group page.

The following buttons are available on the Delete Rule Group page:

Button	Description
Yes	Deletes the rule group.

Button	Description
No	Dismisses the page and returns the user to the previous page.

Table 12.17 Buttons

12.7 Rule List Groups

A rule list group is essentially a rule group, but it is specifically used to execute the same rules a number of times. It does this for a set of similar data contained in the list rules data object of the rule list group. Rule list groups are defined based on the related list rules data object. For more information on list rules data object, see *Cúram Rules Codification Guide*. There are some nesting constraints for rule list groups: a rule list group is allowed to nest in a sub-rule set, rule group, objective group and objective. It is not allowed to nest in list groups (objective list group and rule list group).

12.7.1 Viewing a Rule List Group

To view rule a list group details, you must open the Rule List Group page. Accessing the Rule List Group page depends on the structure of the rule set. To view rule list group details, you must know the location of the rule list group within the rule set. All rule list group locations are displayed on the rule set tree.

The following fields are displayed on the Rule List Group page:

Name	Description
Name	Name of the rule list group.
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule list group after the execution of a rule set has been completed. The values for the identifiers are defined in the RuleID codetable.
Rule Conjunction	Logical rules conjunction in the rule list group. The following rule conjunction values are available: <ol style="list-style-type: none"> 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeeds.
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available: <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known.

Name	Description
	2. <i>Execute All</i> : all the rules inside the rule group are executed.
Loop Execution Mode	The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the final result becomes known. <i>Succeed All</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i> : the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i> : the loop will be executed until the result is known. The rule list group succeeds only if rules for all items in the List RDO succeed. <i>Succeed One Stop</i> : the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCodeMode.
List Rule Data Object	A list rules data object is an RDO that contains a list of items. You can click the search icon to select the appropriate list RDOs for the rule list group.
Items	List of child items for this rule list group. This list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each item in the list, eg., view, edit, etc. The Name field contains the name of each item in the list. The Type field describes the type of item e.g., rule, rule group, etc.
Translations	List of translations for this rule list group. This list contains two fields: Action and Language. The Action field contains the set of actions possible for each item in the list. The Language field contains the language of each of the item in the list.

Table 12.18 Fields

The following links are available on the View Rule List Group page:

Link	Description	Action
Add Rule	Adds a new rule to this rule list group.	Opens the Create Rule page.
Add Data Item Assignment	Adds a new data item assignment to this rule list group.	Opens the Create Data Assignment

Link	Description	Action
		page.
Add Rule Group	Adds a new rule group to this rule list group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this rule list group.	Opens the Create Rule List Group page.
Add Sub Rule Set	Adds a new sub rule set to this rule group.	Opens the Add Sub-Rule Set page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this rule list group.	Opens the Create Rule List Group Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the selected item.
Up (Items)	Moves the item up in the execution order.	Refreshes the Rule List Group page and moves the selected item up in the execution order.
Down (Items)	Moves the item down in the execution order.	Refreshes the Rule List Group page and moves the selected item down in the execution order.
View (Translation)	View the rule list group translation.	Opens the View Rule List Group Translation page.
Edit (Translation)	Modify the rule list group translation.	Opens the Modify Rule List Group Translation page.

Table 12.19 Links & Actions

The following buttons are available on the View Rule List Group page:

Button	Description
Edit	Opens the Modify Rule List Group page.
Delete	Opens the Delete Rule List Group page.

Table 12.20 Buttons

12.7.2 Creating a Rule List Group

To add a rule list group to a work allocation rule set, you must open the Create Rule List Group page. To do this you must complete the following step:

- Click on the Add Rule List Group link in the Work Allocation Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

There can be only one rule list group or rule group at the root level.

The following fields are available on the Create Rule List Group page:

Name	Description	Default	Mandatory
Name	Name of the rule list group		Yes
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Rule Conjunction	Logical rules conjunction in the rule list group. The following rule conjunction values are available: 1. And: all rules inside the rule list group must succeed for the rule list group to succeed. 2. Or: at least one of the rules inside the rule list group must succeed for the rule list group to succeed.	“AND”	Yes
Execution Mode	Mode of the rules execution. This mode specifies if all the rules in the rule list group should be executed. The following execution mode values are available: 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group be-	“Execute All”	Yes

Name	Description	Default	Mandatory
	<p>comes known.</p> <p>2. <i>Execute All</i> : all the rules inside the rule group are executed.</p>		
<p>Loop Execution Mode</p>	<p>The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the final result becomes known. <i>Succeed All</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i>: the loop will be executed until the result is known. The rule list group succeeds only if rules for all items in the List RDO succeed. <i>Succeed One Stop</i> : the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCode-Mode.</p>	<p>“Succeed All”</p>	<p>No</p>
<p>List Rules Data Object</p>	<p>A list rules data object is an RDO that contains a list of items. You can click the search icon to select the appropriate list RDOs for the rule list group.</p>		<p>Yes</p>

Table 12.21 Fields

The following buttons are available on the Create Rule List Group page:

Button	Description
Save	The Save action creates a rule list group from the information entered on the page and returns the user to the work allocation rule set, rule set, rule group, rule list group, objective, objective group or objective list group page.
Save & New	The Save & New action creates a new rule list group from the information entered on the page and resets the page allowing an additional record to be created on the work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.
Cancel	The Cancel action dismisses the page and returns the user to work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 12.22 Buttons

The following submit validations are available on the Create Rule List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.
It is only possible to have one rule group or rule list group at the root level.	'It is only possible to have one rule group or rule list group at the root level.

Table 12.23 Buttons

12.7.3 Modifying a Rule List Group

To modify a rule list group, you must open the Modify Rule List Group page. To do this you must complete either of the following steps:

- Press the Edit button on the Modify Rule List Group page.
- Click on the Edit link beside the relevant Rule List Group in the Items pane of the Work Allocation Rule Set, Rule Group, Rule List Group, Objective, Objective Group or Objective List Group page.

The following fields are available on the Modify Rule List Group page:

Name	Description	Mandatory
Name	Name of the rule list group	Yes

Name	Description	Mandatory
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Rule Conjunction	<p>Logical rules conjunction in the rule group. The following rule conjunction values are available:</p> <ol style="list-style-type: none"> 1. <i>And</i> : all rules inside the rule group must succeed for the rule group to succeed. 2. <i>Or</i> : at least one of the rules inside the rule group must succeed for the rule group to succeed. 	Yes
Execution Mode	<p>Mode of the rules execution. This mode specifies if all the rules in the rule group should be executed. The following execution mode values are available:</p> <ol style="list-style-type: none"> 1. <i>Stop on Result</i> : the rules execution stops when the result for the rule group becomes known. 2. <i>Execute All</i> : all the rules inside the rule group are executed. 	Yes
Loop Execution Mode	<p>The loop execution mode for a rule list group specifies the conditions under which a rule list group execution is considered to be successful. It also specifies if the rule list group execution should be stopped if the final result becomes known. <i>Succeed All</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds only if rules for all items in the list RDO succeed. <i>Succeed One</i>: the loop will be executed for all items in the list RDO. The rule list group succeeds if rules for at least one item in the list RDO succeed. <i>Succeed All Stop</i>: the loop will be executed until the result is known. The rule list group succeeds only if</p>	No

Name	Description	Mandatory
	rules for all items in the List RDO succeed. <i>Succeed One Stop</i> : the loop will be executed until the result is known. The rule list group succeeds if rules for at least one item in the list RDO succeed. Codetable LoopExecutionCodeMode.	
List Rules Data Object	A list rules data object is an RDO that contains a list of items. You can click the search icon to select the appropriate list RDOs for the rule list group.	Yes

Table 12.24 Fields

The following buttons are available on the Modify Rule List Group page:

Button	Description
Save	Saves the modified rule list group details and returns the user to the work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.
Cancel	Dismisses the page and returns the user to the work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 12.25 Buttons

The following submit validations are available on the Modify Rule List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.

Table 12.26 Submit Validations

12.7.4 Deleting a Rule List Group

To delete a rule list group, you must open the Delete Rule List Group page. To do this you must complete the following step:

- Press the Delete button on the Rule List Group page.

The following buttons are available on the Delete Rule List Group page:

Button	Description
Yes	Deletes the rule list group and returns the user to the work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.
No	Dismisses the page and returns the user to the work allocation rule set, rule group, rule list group, objective, objective group or objective list group page.

Table 12.27 Buttons

12.8 Rules

A rule is defined as a logical expression involving atomic conditions that can evaluate to true or false. Rules represent business logic and can be executed using the business rules engine.

A rule can be added to any of the following rule set nodes:

- Rule group
- Rule list group

12.8.1 Viewing a Rule

To view a rule, you must open the Rule List Group page or Rule Group page. To do this you must complete any of the following steps:

- Click on a Rule List Group node in the tree view and then click on the View link for a rule in the Items list pane of a Rule List Group page.
- Click on a Rule Group node in the tree view and then click on the View link for a rule in the Items list pane of a Rule Group page.
- Click on the relevant rule in the Rules Tree.

The following fields are displayed on the Rule page:

Name	Description
Name	Name of the rule.
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Expression	Expression. Expressions can reference RDO data

Name	Description
	items. Expressions consist of one or more clauses which evaluate to a discrete value.
Translations	List of translations for this rule. This list contains two fields, Action and Language. The action field contains the set of actions possible for each item in the list. The language field contains the language of each item in the list.

Table 12.28 Fields

The following links are available on the View Rule page:

Link	Description	Action
Validate Rule Set	Validates the rule set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this rule.	Opens the Create Rule Translation page.
View (Translation)	View the translation.	Opens the View Rule Translation page.
Edit (Translation)	Edit the translation.	Opens the Modify Rule Translation page.

Table 12.29 Links & Actions

The following buttons are available on the View Rule page:

Button	Description
Edit	Opens the Modify Rule page.
Delete	Opens the Delete Rule page.

Table 12.30 Buttons

12.8.2 Creating a Rule

To add a rule to a rule set node, you must open the Create Rule page. To do this you must complete the following step:

- Click on the Add Rule link in the View Rule Group or View Rule List Group page.

The following fields are available on the Create Rule page:

Name	Description	Default	Mandatory
Name	Name of the rule.		Yes
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Expression	Expression. Expressions can reference RDO data items. Expressions consist of one or more clauses which evaluate to a discrete value.		No

Table 12.31 Fields

The following link is available on the Create Rule page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 12.32 Links & Actions

The following buttons are available on the Create Rule page:

Button	Description
Save	Creates a new rule from the information entered on the page.
Save & New	Creates a new rule from the information entered on the page and resets the page allowing an additional rule to be created.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.33 Buttons

The following submit validations are available on the Create Rule page:

Validation	Message
Name must be entered	'Name' must be entered.

Table 12.34 Submit Validations

12.8.3 Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Rule page.
- Modify Rule page.

To navigate to the Formula Helper page you must complete the following step:

- Click on the “Click here to open the formula helper” link on the Create Rule page or Modify Rule page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 12.35 Fields and Descriptions

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 12.36 Columns

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 12.37 Buttons

The following links are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 12.38 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 12.39 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

12.8.4 Modifying a Rule

To edit a rule, you must open the Modify Rule page. To do this you must complete the following steps:

- Press the Edit button on the Rule page to open the Modify Rule page.
- Click on the Edit link on a rule in the Items list of either a Rule Group page or Rule List Group page.

The following fields are available on the Modify Rule page:

Name	Description	Mandatory
Name	Name of the rule.	Yes
Rule ID	Rule item identifier. This identifier can be used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.	No
Expression	Expression. Expressions can reference RDO data items. Expressions consist of one or more clauses which evaluate to a discrete value.	No

Table 12.40 Fields

The following links are available on the Modify Rule page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 12.41 Links & Actions

The following buttons are available on the Modify Rule page:

Buttons	Description
Save	Saves the modified rule details and returns the user to the Rule Group or Rule List Group pages.
Cancel	Dismisses the page and returns the user to the Rule Group or Rule List Group pages.

Table 12.42 Buttons

The following submit validations are available on the modify Rule page:

Validation	Message
Name must be	'Name' must be entered.

Validation	Message
entered	

Table 12.43 Submit Validations

12.8.5 Deleting a Rule

To delete a rule, you must open the Delete Rule page. To open the Delete Rule page, you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Navigate to the appropriate Rule page.
- Press the Delete button on the Rule page to open Delete Rule page.

The following buttons are available on the Delete Rule page:

Button	Description
Yes	Deletes the rule and returns the user to the Rule Group or Rule List Group page.
No	Dismisses the page and returns the user to the Rule Group or Rule List Group page.

Table 12.44 Buttons

12.9 Data Item Assignments

A data item assignment provides the user with the ability to assign a value to an attribute of an RDO. This value can then be used during the execution of the rules. It is similar to a variable assignment in a programming language.

12.9.1 Viewing a Data Item Assignment

To view data item assignment details, you must open the View Data Item Assignment Details page. Accessing the View Data Item Assignment Details page depends on the structure of the rule set. To view data item assignment details, you must know the location of the rule set node containing the data item assignment.

To view data item assignment details, you must follow one of the following steps:

- Click the View link on a data item assignment in the Items pane of the Rule Group page.
- Click the View link on a data item assignment in the Items pane of the

Rule List Group page.

The following fields are displayed on the View Data Item Assignment Details page:

Name	Description
Data Item	Left hand side of the assignment operation. The value of the evaluated formula is assigned to this data item at runtime.
Description	The description of the assignment.
Formula	Formula used to perform the calculation and evaluation. Assigned to “Data Item” at runtime.
Load Target	Indicates whether the loader associated with the left hand side operand should be invoked prior to executing the assignment.

Table 12.45 Fields

The following links are available on the View Data Item Assignment Details page:

Link	Description	Action
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.

Table 12.46 Links and Actions

The following buttons are available on the View Data Assignment page:

Link	Description
Edit	Opens the Modify Data Item Assignment page.
Delete	Opens the Delete Data Item Assignment page.

Table 12.47 Buttons

12.9.2 Creating a Data Item Assignment

To add a data item assignment, you must open the Add Data Item Assignment page. To do this you must complete the following step:

- Click the Add Data Item Assignment link on the Rule List Group or the Rule Group page.

The following fields are available on the Add Data Assignment page:

Name	Description	Default	Mandatory
Data Item	Left hand side of the assign-		Yes

Name	Description	Default	Mandatory
	ment operation. The value of the evaluated formula is assigned to this data item at runtime.		
Formula	The formula is the right hand side of the assignment, it can be either a constant, a function or an expression using constants and/or other data object attributes.		Yes
Load Target	Indicates whether the loader associated with the left hand side operand should be invoked prior to executing the assignment.	True	No

Table 12.48 Fields

The following links are available on the Add Data Assignment page:

Link	Description
Click here to open the formula helper	Opens the Formula Helper page.

Table 12.49 Links and Actions

The following buttons are available on the Add Data Assignment page:

Button	Description
Save	Saves the Data Item Assignment Details entered on the page and returns the user to the Rule List Group or the Rule Group page.
Save & New	Saves the Data Item Assignment Details entered on the page and returns the user to the Create Data Item Assignment page.
Cancel	Dismisses the page and returns the Rule List Group or the Rule Group page.

Table 12.50 Buttons

The following submit validations are available on the Add Data Assignment page:

Validation	Message
Data Item must be entered.	'Data Item' must be entered.

Validation	Message
Formula must be entered.	'Formula' must be entered.
The Expression must be valid.	Invalid rules expression.

Table 12.51 Submit Validations

Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Data Item Assignment page.
- Modify Data Item Assignment page.

To navigate to the Formula Helper page you must complete the following step:

- Click the “Click here to open the formula helper” link on the Create Data Item Assignment page or Modify Data Item Assignment page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 12.52 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 12.53 Fields

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results sec-

Button	Description
	tion on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 12.54 Buttons

The following links and actions are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 12.55 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators (`==`, `<=`, `>=`, `>`, `<`, `!=`) and arithmetic operators (`+`, `-`, `/`, `*`). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 12.56 Fields

**Note**

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

12.9.3 Modifying a Data Item Assignment

To edit a data item assignment, you must open the Modify Data Item Assignment page. To do this you must complete one of the following steps:

- Click the Edit link on a data item assignment item on the Rule Group or Rule List Group page.
- Click the Edit button on the View Data Item Assignment Details page.

The following fields are available on the Modify Data Item Assignment page:

Name	Description	Mandatory
Data Item	Left hand side of the assignment operation. The value of the evaluated formula is assigned to this data item at runtime.	Yes
Formula	The formula is the right hand side of the assignment, it can be either a constant, a function or an expression using constants and/or other data object attributes.	Yes
Load Target	Indicates whether the loader associated with the left hand side operand should be invoked prior to executing the assignment.	No

Table 12.57 Fields

The following links are available on the Modify Data Item Assignment page:

Link	Description
Click here to open the formula helper	Opens the Formula Helper page. Please see Section 7.6 for more information.

Table 12.58 Links and Actions

The following buttons are available on the Modify Data Item Assignment page:

Button	Description
Save	Updates the data item assignment using the information entered on the page and returns the user to the Rule List

Button	Description
	Group or the Rule Group page.
Cancel	Dismisses the page and returns the user to the Rule List Group or the Rule Group page.

Table 12.59 Buttons

The following submit validations are available on the Modify Data Item Assignment page:

Validation	Message
Data Item must be entered.	'Data Item' must be entered.
Formula must be entered.	'Formula' must be entered.
The Expression must be valid.	Invalid rules expression.

Table 12.60 Submit Validations

12.9.4 Deleting a Data Item Assignment

To delete a data item assignment, you must open the Delete Data Item Assignment page. To do this you must complete the following step:

- Click the Delete button on the View Data Item Assignment Details page.

The following buttons are available on the Delete Data Item Assignment page.

Button	Description
Yes	Deletes the data item assignment and returns the user to the Rule List Group or the Rule Group page.
No	Dismisses the page and returns the user to the Rule List Group or the Rule Group page.

Table 12.61 Buttons

12.10 Objective Groups

The functionality of an objective list group is similar to an objective group. However, it is used to evaluate a group of objectives a number of times for a set of data contained in a List RDO assigned to the objective list group. An objective list group succeeds whenever an objective group for at least one of data records in the List RDO succeeds.

An objective list group can be added to any of the following rule set nodes:

- Work Allocation rule set
- Sub-rule set
- Objective group
- Objective list group

12.10.1 Viewing an Objective Group

To view an objective group, you must open the Objective Group page. Accessing the Objective Group page depends on the structure of the rule set. To view objective group details, you must know the location of the objective group within the rule set. Locations of all the objective groups are displayed on the rule set tree.

The following fields are displayed on the Objective Group page:

Name	Description
Name	Name of the objective list group
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Conjunction	Logical objectives conjunction in the objective group. The following objective conjunction values are available: <ol style="list-style-type: none"> 1. <i>All Objectives</i> : Returns all the successful objectives. 2. <i>First Successful</i> : Returns only the first successful objective. 3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. 4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.
List Rules Data Object	Name of the list RDO to be used for iteration.

Name	Description
Items	List of items for this objective list group. The list contains three fields: Action, Name and Type. The Action field contains the set of actions possible for each objective list group item in the list e.g. view, edit, etc. The Type field describes the type of item, e.g., objective. The Name field contains the name of each objective list group item.
Translations	List of translations for this objective list group. This list contains two fields, Action and Language. The Action field contains the set of actions possible for each item in the list. The language field contains the language of each item in the list.
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.

Table 12.62 Fields

The following links are available on the View Objective List Group page:

Link	Description	Action
Add Objective	Adds a new objective to this objective list group.	Opens the Create Objective page.
Add Objective Group	Adds a new objective group to this objective list group.	Opens the Create Objective Group page.
Add Objective List Group	Adds a new objective list group to this objective list group.	Opens the Create Objective List Group page.
Add Rule Group	Adds a new rule group to this objective list group.	Opens the Create Rule Group page.
Add Rule List Group	Adds a new rule list group to this objective list group.	Opens the Create Rule List Group page.
Add Sub Rule Set	Adds a new sub-rule set to this objective list group.	Opens the Add Sub-rule Set page.
Validate Rule Set	Validates the Rule Set.	Opens the Validate Rule Set page.
Create Translation	Create a new translation for this objective list group.	Opens the Create Translation page.
View (Items)	View the selected item.	Opens the appropriate View page for the selected item.
Edit (Items)	Modify the selected item.	Opens the appropriate Modify page for the

Link	Description	Action
		selected item.
Up (Items)	Moves the Item up in the execution order.	Refreshes the Objective List Group page and moves the selected item up in the execution order.
Down (Items)	Moves the Item down in the execution order.	Refreshes the Objective List Group page and moves the selected item down in the execution order.
View (Translations)	View the objective list group translation.	Opens the View Objective List Group Translation page.
Edit (Translations)	Modify the objective list group translation.	Opens the Modify Objective List Group Translation page.

Table 12.63 Links & Actions

The following buttons are available on the View Objective List Group page:

Button	Description
Edit	Opens the Modify Objective List Group page.
Delete	Opens the Delete Objective List Group page.

Table 12.64 Buttons

12.10.2 Creating an Objective Group

To add an objective group to a rule set node, you must open the Create Objective Group page. To do this you must complete the following steps:

- Click on the rule set node you want as the parent of the new objective group.
- Click on the Add Objective Group link on the Work Allocation Rule Set, Objective List Group or Objective Group page.

There can be only one objective list group or objective group at the root level.

The following fields are available the Create Objective Group page:

Field	Description
Name	Name of the objective group.

Field	Description
Conjunction	<p>Logical objectives conjunction in the objective group. The following objective conjunction values are available:</p> <ol style="list-style-type: none"> 1. <i>All Objectives</i> : Returns all the successful objectives. 2. <i>First Successful</i> : Returns only the first successful objective. 3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. 4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.
Rule ID	<p>Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the <code>RULEID</code> codetable.</p>
Priority	<p>Priority of the objective group. The priority is specified as an integer. The larger the number, the higher the priority. This priority can be used by the Rules Engine to return only the objectives with the highest priority.</p>
Comments	<p>The Comments field should be used to provide a detailed description of the objective group and its usage.</p>

Table 12.65 Fields and Descriptions

The following buttons are available on the Create Objective Group page:

Button	Description
Save	Creates a new objective group from the information entered on the page.
Save & New	Creates a new objective group from the information entered on the page and resets the page allowing an additional objective group to be created.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.66 Buttons

12.10.3 Modifying an Objective Group

To edit an objective group, you must open the Modify Objective Group page. To do this you must complete either of the following steps:

- Press the Edit button on the Objective Group page.
- Click on the Edit link on the Items pane beside the relevant objective group on the Work Allocation Rule Set, Objective Group or Objective List group page.

The following fields are available on the Modify Objective Group page:

Field	Description	Mandatory
Name	Name of the objective group.	Yes
Rule ID	Rule item identifier. This identifier is used to retrieve the execution status for the specified rule item after the execution of a rule set has been completed. The values for the identifiers are defined in the RuleID codetable.	No
Conjunction	Logical objectives conjunction in the objective group. The following objective conjunction values are available: <ol style="list-style-type: none"> 1. <i>All Objectives</i> : Returns all the successful objectives. 2. <i>First Successful</i> : Returns only the first successful objective. 3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. 4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value. 	No
Priority	Priority of the objective group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	No
Comments	The Comments field should be used to provide a detailed description of the objective group and its usage.	No

Table 12.67 Fields

The following fields are available on the Modify Objective Group page:

Button	Description
Save	Saves the modified objective group details and returns the user to the Objective Group page.
Cancel	Dismisses the page and returns the user to the Objective Group page.

Table 12.68 Buttons

The following submit validations are available on the Modify Objective Group page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 12.69 Submit Validations

12.10.4 Deleting an Objective Group

To delete an objective group, you must open the Delete Objective Group page. To do this you must complete the following step:

- Press the Delete button on the Objective Group page.

The following buttons are available on the Delete Objective Group page:

Button	Description
Yes	Deletes the objective group.
No	Dismisses the page and returns the user to the previous page.

Table 12.70 Buttons

12.11 Objective List Groups

The functionality of an objective list group is similar to an objective group. However, it is used to evaluate a group of objectives a number of times for a set of data contained in a List RDO assigned to the objective list group. An objective list group succeeds whenever an objective group for at least one of data records in the List RDO succeeds.

An objective list group can be added to any of the following rule set nodes:

- Work allocation rule set
- Sub-rule set
- Objective group

- Objective list group

12.11.1 Viewing an Objective List Group

To view an objective list group, you must open the Objective List Group page. Accessing the Objective List Group page depends on the structure of the rule set. To view objective list group details, you must know the location of the objective list group within the rule set. Locations of all the objective list groups are displayed on the rule set tree.

The following fields are displayed on the Objective List Group page:

Field	Description
Name	Name of the objective list group
Conjunction	Logical objectives conjunction in the objective list group. The following objective conjunction values are available: <ol style="list-style-type: none"> 1. <i>All Objectives</i> : Returns all the successful objectives. 2. <i>First Successful</i> : Returns only the first successful objective. 3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. 4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the <code>RULEID</code> codetable.
Priority	Priority of the objective list group. The priority is specified as an integer. The larger the number, the higher the priority. This priority can be used by the Rules Engine to return only the objectives with the highest priority.
List Rules Data Object	Name of the list RDO to be used for iteration.
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.

Table 12.71 Fields and Descriptions

The following actions are available on the Objective List Group page:

Action	Description
Add Objective	Adds a new objective to this objective list group.
Add Objective Group	Adds a new objective group to this objective list group.
Add Objective List Group	Adds a new objective list group to this objective list group.
Add Rule Group	Adds a new rule group to this objective list group.
Validate Rule Set	Validates the rule set.
Edit	Edits the objective list group details.
Delete	Deletes the objective list group.

Table 12.72 Actions and Descriptions

12.11.2 Creating an Objective List Group

To add an objective list group to a rule set node, you must open the Create Objective List Group page. To do this you must complete the following steps:

- Click on the Objective List Group node in a rule set in the tree view.
- Click on the Add Objective List Group link on the Work Allocation Rule Set, Objective List Group, or Objective Group page.

There can be only one objective list group or objective group at the root level.

The following fields are available on the Create Objective List Group page:

Field	Description	Default	Mandatory
Name	Name of the objective list group.		Yes
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.		No
Conjunction	Logical objectives conjunction in the objective list group. The following object-	“All Objectives”	No

Field	Description	Default	Mandatory
	<p>ive conjunction values are available:</p> <ol style="list-style-type: none"> 1. <i>All Objectives</i> : Returns all the successful objectives. 2. <i>First Successful</i> : Returns only the first successful objective. 3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority. 4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value. 		
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	0	No
List Rules Data Object	Name of the list RDO to be used for iteration.		Yes
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.		No

Table 12.73 Fields

The following buttons are available on the Create Objective List Group page:

Buttons	Description
Save	Creates a new objective list group from the information entered on the page and returns the user to the Objective List Group page.
Save & New	Creates a new objective list group from the informa-

Buttons	Description
	tion entered on the page and resets the page allowing an additional objective list group to be created.
Cancel	Dismisses the page and returns the user to the Work Allocation Rule Set page.

Table 12.74 Buttons

The following submit validations are available on the Create Objective List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.
It is only possible to have one objective group or objective list group at the root level.	It is only possible to have one objective group or objective list group at the root level.

Table 12.75 Submit Validations

12.11.3 Modifying an Objective List Group

To edit an objective list group, you must open the Modify Objective List Group page. To do this complete either of the following steps:

- Press the Edit button on the View Objective List Group page.
- Click on the Edit link beside the relevant objective list group in the Items pane of the Work Allocation Rule Set, Objective List Group, or Objective Group page.

The following fields are available on the Modify Objective List Group page:

Field	Description	Mandatory
Name	Name of the objective list group.	Yes
Conjunction	Logical objectives conjunction in the objective list group. The following objective conjunction values are available: 1. <i>All Objectives</i> : Returns all	No

Field	Description	Mandatory
	<p>the successful objectives.</p> <p>2. <i>First Successful</i> : Returns only the first successful objective.</p> <p>3. <i>Highest Priority Objective</i> : Returns only the successful objective with highest priority.</p> <p>4. <i>Highest Value Objective</i> : Returns only the successful objective with highest value.</p>	
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the <code>RULEID</code> codetable.	No
Priority	Priority of the objective list group. Priority is an integer value used by the Objective Groups and Objective List Groups to identify which successful objectives should be returned when the mode for the group specifies that the objective with highest priority should be returned. A higher priority value (integer value) represents the higher priority.	No
List Rules Data Object	Name of the list RDO to be used for iteration.	Yes
Comments	The Comments field should be used to provide a detailed description of the objective list group and its usage.	No

Table 12.76 Fields

The following buttons are available on the Modify Objective List Group page:

Button	Description
Save	Saves the modified objective list group details and returns the user to the Objective List Group page.
Cancel	Dismisses the page and returns the user to the Work Allocation Rule Set, Sub-rule Set, Objective List Group or Objective Group page.

Table 12.77 Buttons

The following submit validations are available on the Modify Objective List Group page:

Validation	Message
Name must be entered.	'Name' must be entered.
List Rules Data Object must be entered.	'List Rules Data Object' must be entered.

Table 12.78 Submit Validations

12.11.4 Deleting an Objective List Group

To delete an objective list group, you must open the Delete Objective List Group page. To do this you must complete the following step:

- Press the Delete button on the Objective List Group page.

The following buttons are available on the Delete Objective List Group page:

Button	Description
Yes	Deletes the objective list group and returns the user to the Work Allocation Rule Set, Sub-rule Set, Objective List Group or Objective Group page.
No	Dismisses the page and returns the user to the Objective List Group page.

Table 12.79 Buttons

12.12 Objectives

An objective in a Work Allocation Rule Set is a special kind of objective. Its task allocation target item and its value result from the Rules Engine execution on the rule set. The possible target items in the objective are: Job, Organization Unit, Position, User, and Work Queue. The objectives are included in the objective group or objective list group. This section provides

instructions on how to view objectives, how to add objectives, how to modify objectives, and how to delete objectives. These instructions are specific to the work allocation rule set.

12.12.1 Viewing an Objective

To view an objective, you must open the Objective page. Accessing the Objective page depends on the structure of the work allocation rule set. To view objective details, you must know the location of the objective within the work allocation rule set. Locations of all the objectives are displayed on the work allocation rule set tree.

The following fields are available on the Objective page:

Field	Description
Name	Name of the objective
Priority	Priority of the objective. The priority is specified as an integer. The larger the number, the higher the priority. This priority can be used by the Rules Engine to return only the objectives with the highest priority.
Rules Objective ID	Unique ID for this objective. It must be unique within the rule set and it can contain alphanumeric characters. The objective ID is returned by the Rules Engine and is used by the Application to check if some particular objective has been achieved.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses which evaluate to a discrete value.
Type	Task allocation target type.
Value	Value for the allocation target.

Table 12.80 Fields and Descriptions

The following actions are available on the Objective page:

Action	Description
Add Rule Group	Adds a new rule group to this objective.
Add Rule List Group	Adds a new rule list group to this objective.

Action	Description
Validate Rule Set	Validates the rule set.
Edit	Edits the objective details.
Delete	Deletes the objective.

Table 12.81 Actions and Descriptions

:

12.12.2 Creating an Objective

To add an objective to a work allocation rule set, you must open the Create Objective page. To open the Create Objective page, you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Navigate to the appropriate rule set node, where you want to add an objective.
- Click the Add Objective link.

The following fields are displayed on the Create Objective page:

Field	Description
Rules Objective ID	Unique ID for this objective. It must be unique within the rule set and it can contain alphanumeric characters. The objective ID is returned by the Rules Engine and is used by the Application to check if some particular objective has been achieved.
Name	Name of the objective.
Target Item	The work allocation target. It specifies the type and the value. Possible types include Job, Organization Unit, Position, User, and Work Queue. You also need to click the search icon to assign the appropriate value to the target item.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses

Field	Description
	which evaluate to a discrete value.
Priority	Priority of the objective. The priority is specified as an integer. The larger the number, the higher the priority. This priority can be used by the Rules Engine to return only the objectives with the highest priority.
Comments	The Comments field should be used to provide a detailed description of the objective and its usage.

Table 12.82 Fields and Descriptions

The following link is available on the Create Objective page:

Link	Description
Click here to open the formula helper	Opens up the Formula Helper page.

Table 12.83 Links & Actions

The following buttons are provided on the Create Objective page:

Button	Description
Save	Creates a new objective from the information entered on the page.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.84 Buttons

12.12.3 Formula Helper

The Formula Helper is used to assist users in the following pages:

- Create Objective page.
- Modify Objective page.

To navigate to the Formula Helper page you must complete the following step:

- Click on the “Click here to open the formula helper” link on the Create Objective page or Modify Objective page. This will open the Select Data Item page as a pop up window.

The following field is available in the Search Criteria section of the Select Data Item page:

Field	Description
Rules Data Object	A drop-down containing all the RDOs which have already been added to the current rule set.

Table 12.85 Fields

The following columns are available in the Search Results section of the Select Data Item page:

Field	Description
Attribute	A qualified name.
Description	A description or question associated with the data item.
Type	Type domain of the data item.

Table 12.86 Columns

The following buttons are available in the Select Data Item page:

Button	Description
Search	Finds all the data items on the selected rules data object and display them in the Search Results section on the Select Data Item page.
Reset	Clears the Search Results section on the Formula Helper page.

Table 12.87 Buttons

The following links are available in the Select Data Item page:

Link	Description
Copy	Copy the current qualified data item name to the clipboard. This is done so that a user can switch back to the page containing the Expression to be entered, and paste the data item name back into the text area.

Table 12.88 Links and Actions

Defining Expressions

Expressions consist of one or more clauses which evaluate to a discrete value. Boolean expressions use case sensitive "and", "or" and "xor" conjunctions, while other expressions use comparison operators ($=$, $<=$, $>=$, $>$, $<$, $!=$) and arithmetic operators (+, -, /, *). Expressions can contain an arbitrary number of clauses and can use opening and closing brackets to control precedence. Expressions can also contain constant values.

The bracketing of terms can have a significant impact on the result of a calculation. The behavior is as normal for mathematical operations, but the effects of brackets can be combined with operator precedence and may add complexity to an expression. Any operation that should be carried out in advance of another operation should be bracketed, e.g., $5 * (3/4) = 3.75$.

The precedence of operators is as defined for the Java programming language. The operators in the following table are listed in order of precedence:

Operator Precedence	Associatively	Type
()	left to right	parentheses
# /	left to right	multiplicative
+ -	left to right	additive
< <= > > =	left to right	relational
== !=	left to right	equities

Table 12.89 Fields



Note

It is worth noting that the Rules Editor will validate the expression to ensure the expression syntax is valid e.g. the number of open brackets matches the number of close brackets.

12.12.4 Modifying an Objective

To edit an objective you must open the Modify Objective page. To open the Modify Objective page, you must complete the following steps:

- Open the work allocation rule set page.
- Click the Work Allocation Rule Sets Link on the Navigation Menu.
- Click the View link on the appropriate row from the list of work allocation rule sets displayed to open the Work Allocation Rule Sets page.
- Navigate to the appropriate Objective page.
- Press the Edit button to open Modify Objective page.

The following fields are displayed on the Modify Objective page:

Field	Description
Rules Objective ID	Unique ID for this objective. This field cannot be modified once it has been created. It must be unique within the rule set and it can contain alphanumeric characters. The objective ID is

Field	Description
	returned by the Rules Engine and is used by the Application to check if a particular objective has been achieved.
Name	Name of the objective
Priority	Priority of the objective. The priority is specified as an integer. The larger the number, the higher the priority. This priority can be used by the Rules Engine to return only the objectives with the highest priority.
Rule ID	Rule element identifier. This identifier can be used to retrieve the execution status for the specified rule element after the execution of a rule set has been completed. The values for the identifiers can be defined in the RuleID codetable.
Related reference	Related reference can reference RDO and List RDO data items. Related reference can be an expression that consists of one or more clauses which evaluate to a discrete value.
Comments	The Comments field should be used to provide a detailed description of the objective and its usage.

Table 12.90 Fields and Descriptions

The following buttons are provided on the Modify Objective page:

Button	Description
Save	Saves the modified objective details.
Cancel	Dismisses the page and returns the user to the previous page.

Table 12.91 Buttons

12.12.5 Deleting an Objective

To delete an objective you must open the Delete Objective page. To open the Delete Objective page, you must complete the following steps:

- Open the Work Allocation Rule Set page.
- Navigate to the appropriate Objective page.
- Press the Delete button to open the Delete Objective page.

The following buttons are provided on the Delete Objective page:

Action	Description
Yes	Deletes the objective.
No	Dismisses the page and returns the user to the previous page.

Table 12.92 Buttons

Chapter 13

Simulations

13.1 The Rules Simulation Environment

The Cúram Rules Simulation Environment is a part of the Application which allows a rule set to be executed before it is incorporated into the application. It is possible to simulate execution of eligibility rule sets only. A sub-rule set can only be tested as a part of eligibility rule set.

13.2 Accessing the Cúram Rules Simulation Environment

The Cúram Rules Simulation Environment is managed as a part of system administration. To access the Cúram Rules Simulation Environment you must complete the following steps:

- Open the Administration Home Page.
- Click on the System link on the Navigation menu.
- Click on the Rules Editor link on the Navigation menu to open the Eligibility Rule Sets page.
- Click on the Simulations link on the appropriate row to open the Simulations page for the eligibility rule set you want to execute in the Cúram Rules Simulation Environment.

13.2.1 Creating a New Simulation

To create a new simulation you must complete the following steps:

- Open the Simulations page.
- Press the New button to open the Create Simulation page.

The following buttons are available on the Create Simulation page:

Button	Description
Save	The Save button will save the simulation data, and returns the user to the Simulations page.
Cancel	The Cancel button will close the Create Simulation page without saving the data and returns the user to the Simulations page.

Table 13.1 Buttons

The following fields are available on the Create Simulation page:

Field	Description
Name	Name of the simulation.
Simulation Data	Simulation Data panel contains a list rules data objects and the data items associated with the rule set. You must specify the values for the data items which are required for the execution of the rule set. Each data item is associated with a domain type. Each domain type resolves to one of the basic domain types. Special formatting is required for some of these types, see table below.

Table 13.2 Fields

The following are the formatting requirements when specifying values for data items:

Name	Description
SVR_BOOLEAN	One of the following values: "true" or "false". The value is case insensitive.
SVR_FREQUENCY	Frequency pattern is represented as a nine digit string. In most cases it would be sufficient to specify it as "000000000".
SVR_DATE	Date is represented using an ISO 8601 format (yyyymmdd), for example "20040325".
SVR_DATETIME	Date time is represented using an ISO 8601 format (yyyymmddThhmmss), for example "20040325T154001".

Table 13.3 Formatting requirements when specifying values for data items

The following submit validations are available on the Create Simulation page:

Validation	Message
Name must be entered.	'Name' must be entered.

Table 13.4 Submit Validations

13.2.2 Modifying an Existing Simulation

To edit an existing simulation you must complete the following steps:

- Open the Simulations page.
- Click on the Edit link on the appropriate row to open the Modify Simulation page.

The following buttons are available on the Modify Simulation page:

Button	Description
Save	The Save button will save the simulation data. and returns the user to the Simulations page.
Cancel	The Cancel button will close the Create Simulation page without saving the data and returns the user to the Simulations page.

Table 13.5 Buttons

The following fields are available on the Modify Simulation page:

Field	Description
Name	Name of the simulation.
Simulation Data	Simulation Data panel contains a list rules data objects and the data items associated with the rule set. You must specify the values for the data items which are required for the execution of the rule set. Each data item is associated with a domain type. Each domain type resolves to one of the basic domain types. Special formatting is required for some of these types and is described in the Table 4.3

Table 13.6 Fields

The following submit validations are available on the Modify Simulation page:

Validation	Description
Name must be entered.	'Name' must be entered.

Table 13.7 Submit Validations

13.2.3 Deleting a Simulation

To delete an existing simulation you must complete the following steps:

- Open the Simulations page.
- Click on the Delete link on the appropriate row to open the Delete Simulation page.

The following buttons are available on the Delete Simulation page:

Button	Description
Yes	Deletes the Simulation and returns the user to the Simulations page.
No	Dismisses the page and returns the user to the Simulations page.

Table 13.8 Buttons

13.2.4 Cloning a Simulation

In some cases you will want to execute simulation with some of the data slightly changed. To do so you can use the clone feature which will create an exact copy of an existing simulation. After the simulation is cloned you can update the values of the data items by modifying the new simulation.

To clone an existing simulation you must complete the following steps:

- Open the Simulations page.
- Click on the Clone link on the appropriate row to open the Clone Simulation page.

The following buttons are available on the Clone Simulation page:

Button	Description
Save	The Save button will save the cloned simulation data. and returns the user to the Simulations page.
Cancel	The Cancel button will close the page without cloning the data and returns the user to the Simulations page.

Table 13.9 Buttons

13.2.5 Running an Existing Simulation

A simulation is an abstract concept. It consists of information about an eligibility rule set to be executed, the data to be used by that rule set and the result of the execution. To run an existing simulation you must complete the following steps:

- Open the Simulations page.
- Click the Run link on the appropriate row to execute the simulation and to open the Simulation Result page.

The simulation result page contains a decision tree indicating which rules were executed successfully and which failed.

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