

# **GENESYS**

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# Developer's Guide

Publishing the CEP Rule Templates

# Publishing the CEP Rule Templates

After you create business information by following either the Simple Engagement Model or the Advanced Engagement Model, you can begin working with the CEP Rule Templates. Even if you do not plan to customize the CEP rule templates, you still need to import, configure, and publish them in the rules repository so that they are available when you begin creating your rules.

Complete the following steps to publish the templates:

- 1. Read the overview information about the rule templates.
- 2. Importing the CEP Rule Templates in GRDT.
- 3. Configuring the CEP Rule Templates.
- 4. If necessary, you can Customize the CEP Rule Templates.
- 5. Publishing the CEP Rule Templates in the Rules Repository.

### Overview

The Complex Event Processing (CEP) Rule Templates define the actions and conditions you can use when you create your business rules in Genesys Rules Authoring Tool.

You use Genesys Rules System (GRS) to develop, author, and evaluate these business rules. A business rule is a piece of logic defined by a business analyst. These rules are evaluated in a Rules Engine based upon requests received from client applications such as Genesys Web Engagement. GRS implements the CEP (Complex Event Processing) template for GWE. This template type enables rule developers to build templates that rule authors then use to create rules and packages. These rules use customized event types and rule conditions and actions. Each rule condition and action includes the plain-language label that the business rules author will see, as well as the rule language mapping that defines how the underlying data will be retrieved or updated.

The rule templates are created with your Web Engagement application — in release 8.1.2, there are two CEP Rule Template projects:

- \apps\application name\\_composer-project\WebEngagement\_CEPRule\_Templates\_85 includes templates that feature reworked conditions for 8.1.2.
- \apps\application name\\_composer-project\WebEngagement\_CEPRule\_Templates includes templates that are compatible with Web Engagement 8.1.1.

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CEP rule template in Composer

In order to use these templates to define rules, you must first publish them — see Publishing the CEP

Rule Templates for details about when the templates should be published in the Web Engagement application development workflow.

Before you publish the templates, you can edit them to suit your business needs using the the Genesys Rules Development Tool. For more information about rule templates, refer to the Genesys Rules System documentation.

#### Important

Note that if you customize your rule templates, you must republish them.

#### Actions

The list of actions available in the template is listed in **WebEngagement\_CEPRule\_Templates** > **Actions**. You can edit, add, or remove these actions. In the Genesys Rules Authoring Tool (GRAT), when you create a rule based on the template, you can add an action by clicking **Add action**; GRAT displays all the actions defined in the template. You'll see how actions are implemented once you start creating rules. The default actions are:

- Generate Actionable Event
- Generate Actionable Event Predefined

#### Enums

The enumerations available in the template are listed in **WebEngagement\_CEPRule\_Templates** > **Enums**. You can edit, add, or remove these enumerations. When you create a rule based on the template, you can specify a **Phase** by clicking **Add Linear Rule**; GRAT displays all the enumerates available in the template. In the default template, no specific enumeration is available.

#### Conditions

The conditions are listed in **WebEngagement\_CEPRule\_Templates > Conditions**.



List of conditions in the CEP rule template.

You can edit, add, or remove these conditions. Each condition associates a name with an expression. When you create a rule based on the template, you can add one or more condition to this rule by clicking **Add condition**; GRAT displays all the condition expressions available in the template. For complex templates, you need several conditions to implement a rule.

Condition Name	Expression	Condition details
Check search string	event searches {searchString}	Returns true if the event Search occurs and if the {searchString} label is found, this event's result is saved in the {event} label.
Following event with category	AND event following {prevEvent} with category {category} save as {event}	If the event follows {prevEvent} and contains the {category} label, this event's result is saved in the {event} label.
Following event with name	AND event following {prevEvent} with name {eventName} save as {event}	If the {eventName} follows {prevEvent} in parameter, this event's result is saved in the {event} label.
Has Category	page transition event occurs that belongs to category {category} save as {event}	If the event is a page transition for the given category, this event's result is saved in the {event} label.
Has Category without save	page transition event occurs that belongs to category {category}	Returns true if the event is a transition to the given category's page.
Has Name	event with name {eventName} save as {event}	If the {eventName} occurs, this event's result is saved in the {event} label.
Has Name without save	AND event with name {eventName}	Returns true if {eventName} occurs.
Remember last event	Precondition: save last event	Saves the last event.
Save category as event	category is {category} save as {event}	If the event contains the given category, this event's result is saved in the {event} label.
Timeout on category	Timeout event occurs with category {category}	Returns true if the Timeout event occurs for the given category.

#### **Condition Details**

## Importing the CEP Rule Templates in GRDT

Complete this procedure to import the CEP rule templates in the Genesys Rules Development Tool. Even if you do not plan to customize the templates, your rule template must be published in the Rules System Repository before you try to create rules. **Prerequisites** 

• The Genesys Rules Development Tool is installed, configured, and opened in Composer.

- 1. Navigate to **Window > Open Perspective > Other > Template Development** to switch to the Template Development perspective of the Genesys Rules Development Tool.
- 2. Select File > Import....
- 3. In the **Import** dialog window, navigate to **General > Existing Projects into Workspace**. Click **Next**.
- 4. Select **Select Root Directory:**, then click **Browse**.
- 5. Import your project. In release 8.1.2, Genesys Web Engagement includes two sets of rules templates: \\_composer-project\WebEngagement\_CEPRule\_Templates is compatible with 8.1.1, while \\_composer-project\WebEngagement\_CEPRule\_Templates\_85 is compatible with 8.1.2 and features reworked conditions. Select the rules template project to import:
  - Browse to the \apps\application name\\_composer-project folder in the Genesys Web Engagement installation directory and select a project.
  - Click **OK**. WebEngagement\_CEPRule\_Templates\_85application name is added to the Projects list.
  - Select the WebEngagement\_CEPRule\_Templates\_85application name project.
  - Warning: Do **not** enable the option **Copy projects into workspace**.

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Import the default templates by clicking **Finish**.

 Click Finish to import the project. WebEngagement\_CEP\_Rule\_Templates\_85application name is added to the Project Explorer.



#### End

## Configuring the CEP Rule Templates

#### Prerequisites

• The **Web Engagement Categories** business attribute is defined in Genesys Administrator.

- 1. In the GRDT **Project Explorer**, right-click on the **WebEngagement\_CEPRule\_Templates** project. Click **Properties**.
- 2. In the **Properties** dialog window, navigate to **Template Properties**. In **Publishing Data**, set **Type** to web\_engagement.

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Set the **type** to web\_engagement.

- 3. Navigate to **Template Properties > Imports**. The **Imports** panel opens.
- 4. Select the **Enable global imports** option.

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Enabling global imports.

Note: The com.genesyslab.wme.cep.api.Event and com.genesyslab.wme.cep.drools.EventDispatcher packages must be present.

- 5. Click **OK**.
- 6. In the **Project Explorer**, navigate to **WebEngagement\_CEPRule\_Templates > Parameters >** category.
- 7. In the **Parameters Editor** panel, set **Attribute Name** to Web Engagement Categories.

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#### 8. Click Save.

#### End

# Customizing the CEP Rule Templates (Optional)

- 1. Open the CEP rule template project with GRDT and navigate to the Conditions item.
- 2. Expand Conditions to open the Conditions editor.
- 3. In the Conditions tab, click +. The **Add Condition** window opens.



Add a condition

- 4. Enter a name and click **OK**. The condition is added and selected in the condition list; the condition detail panel opens.
- 5. Insert the Language Expressions and Rule Language Mapping:

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6. Click Save Now when the rule template is published, the rule will be available in GRAT:

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#### End

# Publishing the CEP Rule Templates in the Rules Repository

#### Prerequisites

- Your user has the correct permissions to manage rules in GRAT, as detailed in the Genesys Rules System Deployment Guide.
- You configured GRDT to enable a connection to Configuration Server and Rules Repository Server.

- 1. In **Project Explorer**, right click **WebEngagement\_CEPRule\_Templates**.
- 2. Select Publish. The Publish Template Wizard opens.

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The Publish Template Wizard.

3. Select WebEngagement\_CEP\_Rule\_Templates.

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Select WebEngagement\_CEP\_Rule\_Templates.

4. Click Finish.

#### End

#### **Next Steps**

- You can continue customizing your application:
  - Customizing the SCXML Strategies
  - Customizing the Browser Tier Widgets
- You can build and deploy your application.