

GENESYS

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User's Guide

Genesys Web Engagement 8.1.2

1/23/2022

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Genesys Web Engagement User's Guide

Welcome to the *Genesys Web Engagement 8.1.2 User's Guide*. This document provides procedures and instructions for common tasks you need to perform when setting up and configuring Genesys Web Engagement. Most of this information can be found in other GWE guides — it's compiled here as a quick reference for your convenience. See the summary of chapters below.

Tools Find information about how to use the Web Engagement Instrumentation Tool.	Business Information Learn how to manage business information. Managing Categories Managing Business Events
Rules	Reporting
Find information to help you manage	Find information to help you import and
rules templates and rules packages.	use GWE reporting templates.
Managing CEP Rules Templates	Reporting
Managing Rules	Standard Reporting Templates

Managing CEP Rule Templates

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.

Template Development - WebEngagement, CEDDule, Templates, 85pl	avaround /Actions - Eclinse SDK	
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		Quic
 Project Explorer S WebEngagement_CEPRule_Templates_85playground Actions Generate Actionable Event Generate Actionable Event predefined Conditions Check search string Check search string with category Check search string with category Check search string with category Counter Following event with category Following event with name Following event with name Following event with name Has Category Has Category without save Save category as event Timeout on category Enums 	 Actions [WebEngagement Actions Editor [N Actions Generate Actionable I Generate Actionable I 	CEPRule_Templates_85play
GRS Server Explorer X Service Information Environment	Property Properties	X S Console
		1

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.

Start

- 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_85 application name project.
 - Warning: Do **not** enable the option **Copy projects into workspace**.

#Import	
mport Projects Select a directory to search for existing Eclipse projects.	
Select root directory: C:\Program Files\GCTI\Genesys Web Select archive file: Projects:	Engagem Browse Browse
WebEngagement_CEPRule_Templates_85playground (C: WebEngagement_CEPRule_Templates_playground (C:\Pr	NProgram rogram Fil Deselect All Refresh
Copy projects into workspace Working sets Add project to working sets Working sets:	Select
Reck Next > F	Finish Cancel

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.

Start

- 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.

💀 Properties for WebEngageme	nt_CEPRule_Templates	_ D ×
Propercises for webengageme Image: Resource Builders Project References Refactoring History Run/Debug Settings Server Task Tags Image: Project References Validation	Template is reserved by you, settings cannot be changed ID: WebEngagement_CEPRule_Templates Publishing Data Type: web_engagement Tenant: Environment Description: Base version: 7	
?	ОК	Cancel

Set the **type** to web_engagement.

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



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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	B - ↓ Environment Git webEngagement_CEPRule_Templates	Description R O Errors (3 Rens) R & Warnings (32 Rens)		Pesa., *	Path
		x			1

8. Click Save.

End

Customizing the CEP Rule Templates (Optional)

Start

- 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:

anditions	÷ x	Condition Details	
		Name: Page following with category Language Expression: page following (prevEvent) with category (category) save as (event) Bute Language Manping:	
As Category who does save As Name As Name As Name without save As Name without save As Reamber last event As Reamber last event As Timeout on category		{event}: Event(eval({event}.getName().equals(PageEntered)) && eval({event}.hasCategory('{category}')), this after {prevEvent})	2

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

Senesys	GENE	SYS RUL	ES AUTH	ORING	G						We	ilcome, demo null
Environment		General	Ru	ules		Audit T	rail					
	ID	Name	Desci	ription		Phase		Calendar	Pending Deployment	Start Date	End Date	
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	Section	Expression	1	Parameters	6	event 'Se	arch' with	n parameter '{se	archString}' <i>(WebEnga</i>	gement_CEPRul	e_Templates_M	yProject)
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						page tran	sition eve	ent occurs that b	elongs to category (ca	tegory} (WebEng	gagement_CEPI	Rule_Templates_M
						page tran	sition eve	ent occurs that b	elongs to category (ca	tegory} save as	{event} (WebEn	gagement_CEPRu.

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.

Start

- 1. In **Project Explorer**, right click **WebEngagement_CEPRule_Templates**.
- 2. Select Publish. The Publish Template Wizard opens.

🏰 Template Development - WebEng	jagement_CEP <u>R</u> u	le_Templates_Genes	yslab/Co
File Edit Navigate Search Project	Run Configuration	n Server Window Helj	p
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			-
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Project Explorer 23		a default.workflow	
WebEngagement_CEPRule_Temp	New	1	🔸 lito
	Go Into		
G Enums	Copy	Chil+C	_
🕀 🖶 Fact Model	Paste	Ctrl+V	
E Functions	💢 Delete	Delete	string
Parameters	Move		ht wit
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E B WebEngagement_EngagementW	🚵 Import		with
	🛃 Export		
	Refresh	F5	hout :
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ቤ GRS Server Explorer 🛛 🔗	Reservations		
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🗄 🗄 🖷 🛉 Environment	Run As		+
	Debug As		•
	Profile As		
	Team Compare With		
	Restore from Lo	ocal History	
	Source		+
	Configure		•
	Properties	Alt+Enter	

The Publish Template Wizard.

3. Select WebEngagement_CEP_Rule_Templates.

🕌 Publish Template Wiza	rd						
² roject Selection							
Select project to publish to t	he rule repository						
	1						
Project	Target	Туре					
🗟 BlueSkyRules	🛉 Environment	CONVERSATION_MGR					
\delta OESSampleTemplate	🛉 Environment	IWD					
ST PFS_Rules	🛉 Environment	CONVERSATION_MGR					
and TestRules	🛉 Environment	IWD					
WebMERules	🛉 Environment	web_engagement					
Edit properties							
?		<u>F</u> inish Cancel					

Select WebEngagement_CEP_Rule_Templates.

4. Click Finish.

End

Managing Categories

Overview

You can use the GWE Plug-in for Genesys Administrator Extension to define, in a few clicks, Web Engagement categories that contain business information related to URL or web page titles. These categories are used in the CEP rule templates, which provide rules that define when to submit actionable events to Web Engagement — this is what starts the engagement process.

For example, lets look at Solutions on the Genesys website. In this scenario, you can define a Solution category associated with the http://www.genesys.com/solutions page and several or all solution sub-pages, such as http://www.genesys.com/solutions/cloud or http://www.genesys.com/solutions/cloud or http://www.genesys.com/solutions/enterprise-workload-management.

- To associate the category with all the pages containing the "solutions" string in the URL, you can create the "solutions" tag. This tag defines the "solutions" string as a plain text expression to search in the events triggered by the visitor browsers.
- To set up a specific list of sub-pages for the Solutions category, you can create a tag for each sub-page:
 - The "cloud" tag, which defines the "cloud" string as the plain text expression to search in the events triggered by the visitor browsers.
 - The "enterprise-workload" tag, which defines the "enterprise-workload-management" string as the plain text expression to search in the events triggered by the visitor browsers.

Now your rules can use this category to match solution-related pages. You can add and remove categories for Web Engagement through the Category interface in the Genesys Administrator Extension plug-in. You create these categories during the Application Development process if you use the Simple Engagement Model when you Create Business Information.

Each category is compliant with the category definition and includes tags to define business information related to your website. To access the Categories interface, open Genesys Administrator Extension and navigate to Proactive Engagement > Categories.

Genesys Administ	trator Extension		Welcome demo	Log Out	He
🕇 Home 🔔 Ac	counts 🖌 Configuration	operations	Proactive Er	ngagement	
Categories	- Environment		ak.		
Categories - Environmen	nt <	>			
T Quick	Filter 🔲 🕇 O				
Name 🔺 genesys-About	Description genesys-About	A			
genesys-Contact	genesys-Contact				
genesys-Login	genesys-LogIn				
genesys-Platform	genesys-Platform				
genesys-SearchCategory	genesys-SearchCategory				
genesys-Services	genesys-Services				
genesys-Solutions	genesys-Solutions				
pfs-ContactUs	pfs-ContactUs				
pfs-home-logged-in	pfs-home-logged-in				
pfs-LoanApplication	pfs-LoanApplication				
pfs-login	pfs-login				
PlayGround-Ads-First	PlayGround-Ads-First				
PlayGround-Ads-Second	PlayGround-Ads-Second				
PlayGround-Counter	PlayGround-Counter				
PlayGround-PageA	PlayGround-PageA				
PlayGround-PageB	PlayGround-PageB				
PlayGround-Search	PlayGround-Search				
PlayGround-Seg-First	PlayGround-Seg-First				

PlavGround-Sea-First PlavGround-Sea-First A list of Categories

Features

The Categories interface includes the following features:

Feature	Usage
Create categories.	See Creating a Category for instructions.
Create matching tags.	See Creating Category Matching Tags for instructions.
	Select the tag in the Category Matching Tag section and click X.
	Category Matching Tags *
	test category (en-US)
	 Show category in Interaction Workspace
Delete matching tags.	Language-specific Display Names 0
	aaaa (en-US)
	sssss (ru-RU)
	Save Cancel
	Select the category in the list and click Delete. The Delete Confirmation dialog opens. Click OK.
Delete categories.	Cts This item will be permanently deleted.
	ngagements Delete Confirmation.

Important

You can also find the categories in Configuration Manager, but you should not edit or delete them through that interface because it can cause synchronization issues with

the Categories interface in GAX.

Creating a Category

Prerequisites

- Your environment includes Genesys Administrator Extension. See Genesys environment prerequisites for compliant versions.
- You installed the Web Engagement Plug-in for Genesys Administrator.

Start

- 1. In Genesys Administrator Extension, navigate to Proactive Engagement > Categories. The Categories interface opens.
- 2. Click Switch Tenant, select the tenant where you deployed Genesys Web Engagement, and click OK.

Categorie	s - Environme	ent < >	
(Quick Filte	r 🔟 🛨 💠 🏛	
Name	Descri	ption	
inino i genea	y 3 LAG		
Plain	Pla	Switch tenant	X
· .	sing		
•	dou		
	OIN	Environment	
		Environment	

Click the Switch tenant.

- 3. Click + to add a new Category. The New panel opens.
- 4. Enter a Category Name. For instance, pfs-login.

- 5. Optionally, you can enter a Category Description.
- 6. Enable Show category in Interaction Workspace to display this category in Interaction Workspace if an agent opens interactions that are related to it.
- 7. Click Save. The Products category is added to the list.

End

Creating Category Matching Tags

Each category should have at least one Category Matching Tag, which contains an expression to search in the URLs and titles submitted with the events of the browser. For instance, a tag to identify the http://www.genesyslab.com/products/genesys-inbound-voice/overview.aspx page could be the plain expression 'genesys-inbound-voice' or the regular expression 'Inbound Voice'.

Prerequisites

• You completed Creating a Category.

Start

- 1. In Genesys Administrator Extension, navigate to Proactive Engagement > Categories and select a catetory. The <category name> panel opens.
- 2. In the Category Matching Tags section, click +. The New panel opens.
- 3. Fill in the form to create a tag. Consult the table below for more information about the form fields.

Field	Description
Name	The display name for your tag. For example, Inbound Voice.
	The type of expression to search. There are three options:
	 Regular Expression — A regular expression search.
	 Plain Text — A substring search. This is the default.
Туре	• Google Like Expression — Selecting this option opens a new window where you can enter an expression using Google search operators. When you click Generate to REGEX, it converts the expression to a regular expression and populates the Expression field.
Expression	The expression to search. This can be plain text or a regular expression.
Case-sensitive	Selecting this field makes the regular expression case-sensitive. It is not selected by default.

Field	Description
Language	Select the language for the tag. This allows you to make the search expression specific to the localization of the browser.

- 4. Click Save. The tag is added to the list of Category Matching Tags.
- 5. If needed, you can also define display names for the category that are language specific. In the Language-specific DisplayNames section click +. The New panel opens.
- 6. Enter a Name.
- 7. Select a Language.
- 8. Click Save. The language-specific display name is added to the list on the <category name> panel.
- 9. Click Save on the <category name> panel.

End

Regular Expressions in Tags

You can create tags that use regular expressions to search for matches by selecting "Regular Expression" from the Type list. A regular expression is a sequence of elements, either a word or expression inside quotes. Each search element can be preceded by a '-' to exclude that element. A wildcard symbol '*' can be used inside or outside of the quotes. If you prefer, you can select "Google Like Expression" for the Type, which converts anything you enter in the "Expression" field to a regular expression. If your expression is incorrect, your expression is not converted.

Search Request Patterns (Google Like Expression)

The following table describes the patterns in search requests.

Search Options	Description
Search for all exact words in any order. search query	The result must include all the words. These words can be substrings attached to other words—for example, [Web-search query1].
Search for an exact word or phrase. "search query"	Use quotes to search for an exact word or set of words in a specific order without normal improvements such as spelling corrections and synonyms. This option is handy when searching for song lyrics or a line from literature—for example, ["imagine all the people"].
Exclude a word. -query	Add a dash (-) before a word to exclude all results that include that word. This is especially useful for synonyms like Jaguar the car brand and jaguar the animal. For example, [jaguar speed -car].
Include "fill in the blank". query *query	Use an asterisk (*) within a query as a placeholder for any terms. Use with quotation marks to find variations of that exact phrase or to remember words in the middle of a phrase. For example, ["a * saved is a * earned"].

Managing Business Events

Overview

When you create an application, a set of Domain Specific Language (DSL) files that are used by your application is also created. These files are defined in the **apps\Your application name_composer-project\WebEngagement_EngagementWidgets\dsl**\ directory. You can use the DSL to define Business events (read about the structure of these events here) that are specific to your solution needs.

Default domain-model.xml

The **domain-model.xml** is the main default DSL file for your application:

```
<?xml version="1.0" encoding="utf-8" ?>
oroperties>
    <events>
        <!-- Add your code here
        <event id="" name="">
        </event>
        - ->
        <!-- This is template for your search event -->
        < | _ _
        <event id="SearchEvent" name="Search">
            <trigger name="SearchTrigger" element="" action="click" url="" count="1" />
            <val name="searchString"
                                          value="" />
        </event>
        - ->
        <event id="TimeoutEvent10" name="Timeout-10" condition=""</pre>
postcondition="document.hasFocus() === true">
            <trigger name="TimeoutTrigger" element="" action="timer:10000" type="timeout"
url="" count="1"/>
        </event>
        <event id="TimeoutEvent30" name="Timeout-30" condition=""</pre>
postcondition="document.hasFocus() === true">
            <trigger name="TimeoutTrigger" element="" action="timer:30000" type="timeout"</pre>
url="" count="1" />
        </event>
    </events>
```

```
</properties>
```

By using the **<event>** element, you can create as many business events as you need. These events can be tied to the HTML components of your page and can have the same name, as long as they have different identifiers (these identifiers must be unique across the DSL file, to make a distinction between the events sent by the browser). It can be useful to associate several HTML components with the same event if these HTML components have the same function. For instance, you can define several events associated with a search feature and give all these events the same name: "Search".

For each event, you can define triggers which describe the condition to match in order to submit the

event:

- Triggers can implement timeouts.
- Triggers can be associated with DOM events.
- You can define several triggers for the same event (see <trigger> for further details).

Each trigger should have an element attribute that specifies the document's DOM element to attach the trigger to, and the action attribute, which species the DOM event to track.

You can specify standard DOM events for the action:

- Browser Events
- Document Loading
- Keyboard Events
- Mouse Events
- Form Events

In addition to the standard DOM events, the DSL supports the following two values: timer and enterpress.

The following example generates a "Search" event if the visitor does a site search. The "searchString" value is the string entered in the "INPUT.search-submit" form.

If the DSL uses the optional condition attribute, the event's triggers are installed on the page if the condition evaluates to true. The following example creates a Business event with a time that can be triggered only if the text inside the <h1> tag is "Compare":

If the DSL uses an optional postcondition attribute, this can manage how an event is generated by checking a condition after the actions are completed. The following example creates a Business event timeout by timer if a page is in focus. In this case, the event does not generate if the page is opened in the background:

A DSL trigger can use the type attribute. This can have a value of either timeout or nomove, which specifies how the timer action works. If the type is timeout, then the timer interval begins after the page is loaded. If the type is nomove, then the timer resets each time the user moves the mouse.

You can also apply the optional url attribute. This attribute defines the URL of the specific page that raises the Business event. The Business event is not submitted if the current document's URL does not match the URL parameter.

Finally, you can apply the optional count attribute. This attribute specifies how many times the trigger needs to be matched before the event is generated and sent to the Frontend Server.

For more information about the DSL elements, see the Business Events DSL.

Creating Business Events by Customizing the DSL File

You can edit the apps\Your application name\frontend\src\main\webapp\resources\dsl\ domain-model.xml and add a list of events, with specific conditions, related to your web pages' content.

Important

Genesys recommends that you use the InTools application to help you modify your DSL.

The default **domain-model.xml** file includes a few events to help you get started with your DSL customizations: SearchEvent, TimeoutEvent10, and TimeoutEvent30. The following sections show you how you can customize these events to work on your website.

Using the SearchEvent Template

By default, the **domain-model.xml** file contains commented code that you can implement to trigger a business event when a visitor tries to search for something on your website. Complete the following steps to customize the SearchEvent for your website.

Start

1. Remove the comment characters that wrap around the event: <!- and - ->. The event should look like the following:

```
<event id="SearchEvent" name="Search">
        <trigger name="SearchTrigger" element="" action="click" url="" count="1" />
        <val name="searchString" value="" />
        </event>
```

 Set the element attribute to the jQuery selector that triggers a search. For example, we have an input (id="search") with a submit button (id="search-submit").

```
<event id="SearchEvent" name="Search">
        <trigger name="SearchTrigger" element="#search-submit" action="click" url=""
        count="1" />
            <val name="searchString" value="" />
        </event>
```

3. Set the **value** attribute to the script to retrieve the search string. For example, our input id of "search".

```
<event id="SearchEvent" name="Search">
        <trigger name="SearchTrigger" element="#search-submit" action="click" url=""
        count="1" />
            <val name="searchString" value="$(#search).val()" />
        </event>
```

Now the search event is triggered when a visitor clicks the **search-submit** button.

End

Using the Timeout Events

By default, the **domain-model.xml** file contains two timeout events: timeout-10 and timeout-30.

You can customize these events or disable one or both to suit your business needs. By default, these events are triggered with a 10-second and 30-second delay after the tracking script is initialized on the page. The only difference between the events is the **action** attribute, which defines the timeout in milliseconds.

Both events have the **postcondition** attribute set to "document.hasFocus() === true", which checks whether the focus is on the current page. The timeout event is only triggered if the **postcondition** returns true.

Creating Business Events by Using the Monitoring Agent API

You can also use the Monitoring JS API, which allows you to submit events and data from the HTML source code.

In this case, you can use the _gt.push() method which allows you to decide when events should be submitted and which data they generate, directly from your web pages. See Monitoring JS API Reference for further details.

You should also consider using the API when you have more complex logic that can't be handled by DSL alone. For an example, see How To — Enable a trigger after another trigger.

Managing Routing Strategies

When you create your application, Genesys Web Engagement also creates default chat routing and engagement logic strategies in the **\apps\application_name_composer-project** folder. Orchestration Server (ORS) uses these strategies to decide whether and when to make a proactive offer and which channels to offer (chat or web callback). You can modify these strategies by importing them into Composer.

The following shows the Chat Routing workflow, where interactions are routed to agents with "Customer Service" or "Customer Care" skills:



A chat Routing worknow example.

When you alter the strategies, you must save your changes, generate the code, redeploy, and restart your Genesys Web Engagement application to apply those changes.

You can customize the routing strategies to help meet your specific business needs:

- Customizing the Engagement Strategy
- Customizing the Chat Routing Strategy

Managing Rules

Overview

Rules are mandatory for managing actionable events generated from the System and Business event flows submitted by the Browser Tier. To add rules, you must create a package and then a set of rules. For details about rules, refer to the Genesys Rules System documentation.

Multi-Package Domain Oriented Rules

As of version 8.1.2, Genesys Web Engagement supports multi-package domain oriented rules. You can map your rules package to a particular domain by reversing the domain zone in the name of the rules package. For example, the blog.genesys.com domain would have a rules package called com.genesy.blog.

You can have multiple rules packages on the same server at the same time. New rules packages (with a different package name) that are deployed do not rewrite the current rules, but are instead added to the current rules set. When the existing rules package is deployed, it rewrites selected package rules in the current rules set.

This domain mapping is applied hierarchically - the "root" domain is processed by the "root" package and the sub-domain is process by the sub-package and all parent packaged (including "root").

For example, your website contains the following sub-domains:

- genesys.com
- blog.genesys.com
- communication.genesys.com
- personal.communication.genesys.com

And you have the following rules packages:

- com.genesys
- com.genesys.blog
- com.genesys.communication
- com.genesys.communication.personal

The rules packages are processed as follows:

Domain	com.genesys	com.genesys.blog	com.genesys.com	m conicadiéne sys.com	munication
genesys.com	+	-	-	-	

Domain	com.genesys	com.genesys.blog	com.genesys.com	m conication esys.comm
blog.genesys.com	+	+	-	-
communication.gene	es y s.com	-	+	-
personal.communica	iti o n.genesys.com	-	+	+

Important

This feature is turned off by default. You can turn on domain separation rule execution on the specified Frontend server by setting the cep.domainSeparation option to true.

Creating a Rules Package

Complete the steps below to create the rules package associated with your Web Engagement application. This procedure is an example of how to create a rules package. For further information about creating rules, refer to the Genesys Rules System Deployment Guide.

Prerequisites

- Your environment includes Genesys Rules Authoring Tool. See Genesys environment prerequisites for compliant versions.
- Roles are configured to enable your user to create rules.

Start

- 1. Open the Genesys Rules Authoring Tool and navigate to Environment > Solution > New Rule Package.
- 2. In the General tab:
 - Enter a Package Name. For example, myproject.rules.products.
 - Enter a Business Name. For example, Products.
 - Select web_engagement for Package Type. WebEngagement_CEPRule_Templates appears in the Template table.
 - Optionally, you can enter a Description.
- 3. Select WebEngagement_CEPRule_Templates in the Template table.

Environment Aly City New Rule Package Demo Solution	Package Name Business Name	genesys.rules Product	product	Import Rule Package	
Coly City New Rule Package Demo Solution	Business Name	Product			
		1		Export Rule Package	
	Package Type	web_engager	nent 💌		
	Description				
	Template	Selected	Name	Version	Dat
			WebEngagement_CEPRule_Templates	4	Sep

GWENewPackageGRA.PNG

4. Click Save.

End

Creating Rules in the Rules Package

Prerequisites

• Creating a Rules Package

Start

- 1. In Genesys Rules Authoring Tool, select the rules package you created in the previous procedure.
- 2. Select the Rules tab.
- 3. Click New Linear Rule. This creates a new rule in the Rules table.
- 4. Select the created rule:

- Enter a Name. For example, Products.
- Enter a Phase. The list of rule phases can be modified by changing the values of the Phases enumeration in the CEP Rules Template. The default value is *.
- 5. Click Add Condition:
 - Scroll down to select a condition. For example, page transition event occurs that belongs to category, which launches the actionable event any time that a user enters or leaves a page on your website.

vironment	•	Gene	eral	Rules		Aux	dit Trail		
Environment	ID		Name	Description	Phase		Calendar	Pending Deployment	Start Date
Baly City New Rule Package Product Business Calendars Business (*)		Rule-10	products		*		(None selected	0	
		New De	cision Table	🔓 New Linear Rule	📑 imp	oort Rule	•		
	proc	lucts				Add C	ondition 🔻 🖌	Add Action 👻 Gro	up ▼ qu
						AND ca	tegory is {cate	egory) save as (eve	nt} (WebEng
	Section	Expre	ssion	Parameters		AND ev	ent following	{prevEvent} with ca	tegory (cate
	When					AND ev	ent following	(prevEvent) with no	ime (eventNa
	Then					AND ev	ent with name	{searchstring} (we c {eventName} (We	ozngagemen bEngagemen
						Precon	dition: save la	st event (WebEnga	gement_CEP
						event v	with name (ev	entName} save as {	event) (Web
						page tr	ansition even	t occurs that belon	gs to catego
						page tr	ansition even	t occurs that belon	gs to catego

Select your rule's condition.

• Select a category in Parameters</t>. For example, Products. The Parameters list displays the categories that you previously created.

Sectio	Expression	Parameters	
When			
	page transition event oc	{category}	
Then		Products {category}	{category}

Set the condition's parameters.

- 6. Click Add Action and select an action in the list. For example, generate actionable event.
- 7. Click Save....

You can create as many rules as you need in your rules package.

End

Deploying the Rules Package

Prerequisites

• You started the Web Engagement servers.

Start

1. In Genesys Rules Authoring Tool, navigate to **Solution** > *your rules package* > **Deploy Rules**.

Environment	-Package Snapsho	ots		
iew Kule Package ie	Selected	Snapshot Name LATEST	Comment Represents latest contents of this rule package apshot Export Snapshot log Now Schedule Deployment	Date e Jun 5, 2014 3:57 AM napshot Refresh Show Package Source

- 2. Select the checkbox next to your rules package in the Package Snapshots section.
- 3. Click **Deploy Now**. The **Deploy** window opens.
- 4. Select your Genesys Web Engagement Server for the **Location**.

Environment Package Snapshots Selected Snapshot Name Comment Date Selected Snapshot Name Comment Date Selected Snapshot Name Comment Date Selected Snapshot Export Snapshot Delete Snapshot Refresh Deploy Rules (5) Search Deploy Now Schedule Deployment Show Package Source									
	Environment	Package Snapshots Selected Snapshot Name LATEST Create Snapshot	Comment Represents latest contents of this rule packa pshot Export Snapshot Delete S yy Novy Schedule Deployment	Date ge Jun 5, 2014 3:57 AM Snapshot Refresh					

5. Click **Deploy**. The rules package is deployed to the Web Engagement system.

End

Using InTools

Overview

InTools (Instrumentation Tools) is a Chrome/Chromium extension you can use to create, validate, and test DSL.

Installation

You can install and use InTools with the Chromium Browser or the Chrome Browser. Genesys recommends that you use the Chrome Browser because it has the largest selection of Developers Tools.

Chromium (Windows, Mac, Linux) and Chrome (Mac, Linux)

The installation process is the same for Chromium (Windows, Mac, Linux) and Chrome (Mac, Linux).

Important

Chrome in Windows has some restrictions about installing extensions that are not from the Chrome Store. If Chrome blocks you from installing InTools in Windows, you must install the unpacked extension in developer mode. See Chrome (Windows) for installation instructions.

Start

- 1. Run the Chrome browser.
- 2. Navigate to the **chrome://extensions** page.
- 3. Open a window in your OS and navigate to the GWE_installation\tools\intools\extension\ directory.
- 4. Drag and drop the **intools.crx** file to the browser.



5. In the **Confirm New Extension** dialog, click **Add**.



The InTools extension is added to the extension list and enabled:



End

Chrome (Windows)

1. Run the Chrome browser.

- 2. Navigate to the **chrome://extensions** page.
- 3. Enable Developer Mode.

	chrome://extensions	
	Extensions	Dev
4.	Open a window in your OS and navigate to the GWE_installation\tools\intools\extension \ directory.	
5. 6.	Unpack intools.crx by using a zip archiver. Click Load unpacked extension and choose the directory with InTools that you unpacked in the previous step.	
	chrome://extensions	
	Extensions	🖌 De
	Load unpacked extension Pack extension	date exte
	The InTools extension is added to the extension list and enabled:	
	chrome://extensions	
	Extensions	🕑 Dev
	Load unpacked extension Pack extension	late exten
	Web Engagement - InTools 1.0 InTools - Instrumentation tools for editing and testing Web Engagement DSL <u>Permissions</u> ID: gaibgnbcgocjmipfphkjggacjabgbcch	🖌 Ena
	Loaded from: D:\projects\Genesys\WE\build\resources\tools\intools\extensions\test\intools	

Allow in incognito Allow access to file URLs Reload (Ctrl+R)

Inspect views: context/background/background.html

GWE DSL Editor

The DSL Editor allows you to create, edit, and test Genesys Web Engagement DSL.



The DSL Editor

Advanced Editor

The Advanced Editor is a text editor for Genesys Web Engagement DSL that provides the following features:

Feature	Usage
Syntax highlighting. The editor highlights reserved words to improve readability.	Automatic.
ode complete. The editor provides a code omplete menu so you can see options to auto- omplete your code.	<pre>Use ctrl+space to open the window. <event <br="" id="TimeoutEvent30" name="Timeout-30">0 document.referrer.indexOf('genesys-care') 0 document.referrer.indexOf('jobs-careers') 0 document.referrer.indexOf('customer-care') 0)"></event></pre>
	<pre>< trigger name="" element=" act trigger name="" element=" name="Timeout-10" N window.location.href.indexOf('genesys-care The code complete menu.</pre>
XML syntax validation.	Automatic. 34 35 36 37 40 Syntax validation



Feature	Usage
	<pre>1 <?xml version="1.0" encoding="utf-8" ?> 2 3 <properties debug="false"> 4 5 <events> 6 <foo></foo> 7 8 </events></properties></pre> Q Elements Network Sources Timeline Profiles Resources Audits Console GPED
	1 xml version="1.0" end:</td 2
	<pre>In::42: parser error : Specification manda</pre>
Load the current DSL from a page. You can navigate to an already instrumented page and load DSL from it.	Click October Click
Pretty formatting.	Click
Test DSL. You can publish DSL changes to the current page	Click Test. The page is restarted and configured with the new DSL.
Unpublish DSL. You can removed the DSL you published.	Click Unpublish
Save as. You can save your DSL changes to the file system.	Click Save as

Simple Editor

The Simple Editor is a wrap for the Advanced Editor that provides easy to use forms.

Q Elements Network Sources Tir	neline Profiles Resources Audits Console GPE DSL Editor
 Timeout-30 TimeoutTrigger TimeoutTrigger Ianguage 	Trigger Name TimeoutTrigger Action timer 45000 Count 1 URL Page url Element \$(' jQuery selector ') Q
- a a anoda	

The Simple Editor

The editor includes the following features:

Feature	Usage
Navigation tree. The navigation tree allows you to quickly see events, triggers, and values.	Automatic.
jQuery selector highlighting. As in advanced mode, the tool can generate values for underscored attributes ("element" and "value").	Click the magnifying glass

Feature	Usage
	Element \$(' jQuery selector ')
Create or remove elements in the DSL tree.	Click In trigger U val
Test DSL. You can publish DSL changes to the current page	Click Test. The page is restarted and configured with the new DSL.
Unpublish DSL. You can removed the DSL you published.	Click Click
Save as. You can save your DSL changes to the file system.	Click Save as

Event Console

The Event Console monitors the generated events (both system and business). The event body includes all the event data in JSON format. The same format is posted to the Frontend Server.

· · · · · · · · · · · · · · · · · · ·	
Event Console 🚸 🖡 💉	Î
[SYSTEM] PageExited -	
[SYSTEM] PageEntered -	
[BUSINESS] Timeout-30 -	
[BUSINESS] Timeout-10 -	
1 "eventType", "PUSTNESS"	
"eventlype : DUSINESS ,	
"eventiname : Timeout-10 ,	
"pageTD": "0767A0713ADB4E46A831DAB7475E0C50"	
"timestamp": 1402666015008	
"category": ""	
"url": "http://www.genesys.com/customer-eyperi	
ence"	
"globalVisitID": "02f0c56c-2182-4e4a-be93-b917	
7868acf2".	
<pre>visitID": "f37cb23b-f8b7-4f6a-9927-7342dad912</pre>	
f3".	
"data": {	
"language": "en-US"	
}	
}	

The Event Console

The Event Console includes the following features:

Feature	Usage
Generated events monitoring.	Automatic
	Click the event name to hide/show the event information. [BUSINESS] Timeout-10 -
Toggle the full information for an event.	<pre>{ "eventType": "BUSINESS",</pre>
	The full event information is displayed. [BUSINESS] Timeout-30 - [BUSINESS] Timeout-10 - The full event information is hidden.

Feature	Usage
Hide all system events.	Click 🔹 .
Auto scroll to the last generated event.	Toggle 🚺 to enable.
Toggle all events.	Click .

Reporting

Genesys Web Engagement includes standard templates you can use for real-time interaction reporting. These templates report on the two kinds of interactions that GWE produces:

- **Pre-engagement phase interactions** are a specialized type of Open Media interaction called webengagement.
- Engagement phase interactions are chat or web callback interactions, depending on the selected channel.

To learn more about how to import the standard reporting templates into CCPulse+, see Standard Reporting Templates. Note that you can also create customized reports from the statistical data produced by Genesys Web Engagement.

Pre-engagement Phase Reports

Web Engagement includes the following reports based on pre-engagement phase interactions:

- Qualified webengagement interactions The number of rules that are triggered on your website.
- Engaged webengagement interactions The number of qualified interactions that meet the engagement strategy requirements.
- Accepted webengagement interactions The number of engaged interactions that were accepted when a site visitor clicked the "accept" button on the engagement invite.

Warning

Accepted interactions do not always start a chat or voice engagement interaction. For example, a site visitor may be redirected to a registration form after accepting an engagement invite. If the visitor closes this form, the engagement interaction will not start.

• Canceled webengagement interactions — The number interactions that are rejected when a site visitor clicked the "reject" button on the engagement invite.

Warning

If an engagement invite is closed because it reaches the timeout limit, Web Engagement does not consider this a cancelled webengagement interaction. This is done to exclude cases where the site visitor never sees the engagement invitation — for example, when the visitor has multiple tabs open and the engagement invitation is not on the current tab.

• Failed webengagement interactions — The number of failed interactions. This includes both engaged and qualified interactions that failed because of any number of reasons, such as:

- The interaction does not meet the engagement strategy requirements. For example, there may be no agents available to handle the interaction.
- The interaction was triggered by a rule in test mode only.
- The interaction timed out.

Important

You cannot filter Open Media interactions in Stat Server, which restricts some types of reports. For example, you cannot report the percentage of successful engagement attempts out of the total count of qualified Open Media webengagement interactions.

Engagement Phase Reports

You can create engagement phase reports based on the number of processed interactions and the information contained within those interactions. The following are some engagement phase reports that can be collected from Web Engagement:

- The number of chat or web callback interactions that are triggered by Web Engagement and processed by an agent or group of agents.
- The percentage of chat or web callback interactions that are triggered by Web Engagement and processed by an agent.
- The number of chat or web callback interactions that are triggered by a specific Web Engagement rule and processed by an agent or group of agents.
- The percentage of chat or web callback interactions that are triggered by a specific Web Engagement rule and processed by an agent.

Standard Reporting Templates

Genesys Web Engagement provides the following standard reporting templates that can be imported into CCPulse+:

Pre-engagement Phase Templates

Web Engagement includes standard reporting templates for each Web Engagement statistics queue.

Reporting Template	Interaction Queue
WebEng_Accepted.xtpl	Webengagement_Accepted
WebEng_Engaged.xtpl	Webengagement_Engaged
WebEng_Failed.xtpl	Webengagement_Failed
WebEng_Qualified.xtpl	Webengagement_Qualified
WebEng_Rejected.xtpl	Webengagement_Rejected
WebEng_Timeout.xtpl	Webengagement_Timeout

Engagement Phase Templates

Web Engagement includes the following types of standard reporting templates for the engagement phase:

- Report templates on chat and web callback interactions triggered by the Web Engagement process and processed by an agent.
- Report templates for rule based reporting based on the data attached to chat and web callback interactions triggered by the Web Engagement process and processed by an agent.

Importing Genesys Web Engagement Sample Reporting Templates in CCPulse+

Note: For information about using CCPulse+, click Help in the CCPulse+ user interface or see the Reporting 8.0 CCPulse+ Administrator's Guide. The Web Engagement templates for CCPulse+ have an extension of .xtpl, which is an XML format. The documentation for CCPulse+ does not distinguish files by extension and refers to .xtpl files as XML files.

Prerequisites

- You have installed CCPulse+ version 8.0.000.36 (or later).
- You are a CCPulse+ administrator.

Start

- 1. Open CCPulse+ and navigate to Tools > Import/Export. The Import/Export Utility opens.
- 2. Select Templates for the Object Type.
- 3. Choose the import source.
 - For Storage 1 Type, select CCPulse+ XML Data Files.
 - For Path To Storage 1, click ... and select the path to the reporting XML template(s) you wish to import. The Genesys Web Engagement Sample Reporting Templates are located in the web_engagement_reporting_template directory on your installation CD.
 - Click Open. The reporting templates are displayed in the Storage 1 Contents box below. For example, if you select the Web Engagement Media Based folder for Path To Storage 1, the reporting templates WebEng_Chat_By_Agent.xtpl and WebEng_Voice_By_Agent.xtpl are displayed Storage 1 Contents.

Import/Export Utility 🛛 🗙		
Use the '' buttons to select source and destination storag selected template, threshold, or action from one storage to	ges. Then, use the >> or << buttons to copy the the other.	
Object Type: Templates		
Storage 1 Type: CCPulse+ XML Data Files Path To Storage 1: C:\G288_8110004_ENU\web_engagemen	Storage 2 Type: CCPulse+ 7.x Storage Path To Storage 2: C:\Program Files (x86)\GCT1\CCPulse+\St	
Storage 1 Contents: WebEng_Chat_By_Agent WebEng_Voice_By_Agent	Storage 2 Contents: S10_Agent_Sales Sales Sim_AllmediaVQ Sim_KP_Agent Sim_Voice Sim_VQ Evaluation SimVQ Evaluation SimAll Media SimChat Handling SimChat Handling SimVoice Handling SimVoice Handling SimVoice Handling SMS Queue Template Stats on Agents Survey Results Task Monitoring Template Tier Tier TierPFS	
Refresh	Refresh	

- 4. Choose the import destination.
 - Select CCPulse+ 7.x Storage for the Storage 2 Type.
 - Select a template in Storage 1 Contents and click the >> button. The template is copied to the Storage 2 Contents box. Repeat for each template you wish to copy from Storage 1 Contents.

- 5. Repeat steps 3 and 4 for each template you would like to import into CCPulse+.
- 6. Click Close. The Import/Export Utility closes.

End