



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

Genesys Rules System Deployment Guide

GRS Configuration Options

4/24/2025

GRS Configuration Options

Contents

- **1 GRS Configuration Options**
 - 1.1 log
 - 1.2 Settings in GRAT
 - 1.3 Settings in GRE

log

Description	Valid values	Default value	Takes effect
<p>all</p> <p>Specifies the outputs to which an application sends all log events. The log output types must be separated by a comma when more than one output is configured. For example: all = stdout, logfile</p>	<ul style="list-style-type: none"> • stdout—Log events are sent to the Standard output (stdout). • stderr—Log events are sent to the Standard error output (stderr). • network—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. Setting the all log level option to the network output enables an application to send log events of the Standard, Interaction, and Trace levels to Message Server. Debug-level log events are neither sent to Message Server nor stored in the Log Database. • memory—Log events are sent to the memory output on the local disk. This is the safest output in terms of the application performance. • [filename]—Log events are stored in a file with the specified name. If a path is not specified, 	<p>stdout</p>	<p>After restart</p>

Description	Valid values	Default value	Takes effect
	the file is created in the application's working directory.		
expire			
Determines how many log files will be kept on disk. If set, expire specifies the maximum number of log files kept on disk.	Any number	(blank)	After restart
segment			
Determines whether a log output written to file is split in multiple segments. If it is, segment specifies the maximum size of each segment file.	Any number that represents the log size in megabyte	(blank)	After restart
standard			
Specifies the outputs to which an application sends the log events of the Standard level. The log output types must be separated by a comma when more than one output is configured. For example: standard = stderr, network	<ul style="list-style-type: none"> • stdout—Log events are sent to the Standard output (stdout). • stderr—Log events are sent to the Standard error output (stderr). • network— Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. • memory—Log events are sent to the memory output on the local disk. This is the safest output in terms of the application performance. 	stdout	After restart

Description	Valid values	Default value	Takes effect
	<ul style="list-style-type: none"> [filename]—Log events are stored in a file with the specified name. If a path is not specified, the file is created in the application's working directory. 		
trace (not in application template by default)			
<p>Specifies the outputs to which an application sends the log events of the Trace level and higher (that is, log events of the Standard, Interaction, and Trace levels). The log outputs must be separated by a comma when more than one output is configured. For example: trace = stderr, network</p>	<ul style="list-style-type: none"> stdout—Log events are sent to the Standard output (stdout). stderr—Log events are sent to the Standard error output (stderr). network—Log events are sent to Message Server, which can reside anywhere on the network. Message Server stores the log events in the Log Database. memory—Log events are sent to the memory output on the local disk. This is the safest output in terms of the application performance. [filename]—Log events are stored in a file with the specified name. If a path is not specified, the file is created in the application's working directory. 	stdout	After restart
verbose			
<p>Determines whether a log output is created. If it is, specifies the minimum level of log events generated. The log events levels, starting with</p>	<ul style="list-style-type: none"> all—All log events (that is, log events of the Standard, 	standard	After restart

Description	Valid values	Default value	Takes effect
<p>the highest priority level, are Standard, Interaction, Trace, and Debug.</p>	<p>Trace, Interaction, and Debug levels) are generated.</p> <ul style="list-style-type: none"> • debug—The same as all. • t race—Log events of the Trace level and higher (that is, log events of the Standard, Interaction, and Trace levels) are generated, but log events of the Debug level are not generated. • interaction—Log events of the Interaction level and higher (that is, log events of the Standard and Interaction levels) are generated, but log events of the Trace and Debug levels are not generated. • standard Log events of the Standard level are generated, but log events of the Interaction, Trace, and Debug levels are not generated. • none—No output is produced. 		

Settings in GRAT

Description	Valid values	Default value	Takes effect
group-by-level (group rules by business level)			
<p>There are three levels of rules: global, department, and process.</p>	true/false	true	Immediately

<p>With value <code>true</code>, rules are grouped by business level:</p> <ul style="list-style-type: none"> • All global rules belong to agenda group <code>level0</code>. • Department rules belong to agenda group <code>level1</code>. • Process rules belong to agenda group <code>level2</code>. <p>When a rule package is executed, <code>level0</code> rules are executed first. Updates from this first pass then influence the department (<code>level1</code>) rules which are executed in the second pass. Updates from this second pass then influence any process rules (<code>level2</code>), which are executed in a third pass.</p> <p>Note: The GRE option <code>sequential-mode</code> must be <code>false</code> when <code>group-by-level</code> is set to <code>true</code>.</p> <p>When <code>group-by-level</code> is set to <code>false</code>, all rules are executed in a single pass. Changes made by a rule do not influence which other rules are executed (unless a Drools “update” or “insert” command is used).</p> <p><i>CEP functionality</i></p> <ul style="list-style-type: none"> • Genesys Web Engagement's CEP functionality strips out the rule attribute that indicates which level a rule is associated with. So, the setting of the <code>group-by-level</code> has no influence on rule execution. 			
max-connections			
<p>Specifies the maximum number of different users that may be connected to the server. Multiple connections from the same user ID are only counted once.</p>	<p>Any positive integer</p>	<p>99</p>	<p>After GRAT restart</p>

session-timeout			
Specifies the amount of time (in minutes) a client session can have no communication with the Rules Authoring Server before timing out. If no value is specified, the timeout (if any) defined by the application server applies. If the value is less than or equal to 0, the session will not time out.	Any positive integer	30	Immediately
session-timeout-alert-interval			
The amount of time (in minutes), prior to an expected timeout, for a user to be warned of a pending timeout. If no value is specified, or if the value is less than or equal to 0, the default warning period of 1 minute will be used. For example, if you set the value of this option to 3, the user will be warned 3 minutes prior to an expected timeout. This warning dialog box will prompt the user to extend the session. If the session is not extended, the user will be logged out and the login dialog box will be displayed. Any unsaved changes that the user made during their session will be lost.	Any positive integer	1	Immediately
strict-mode			
This option controls whether or not the rules authoring tool enables <i>strict</i> mode in the DROOLS rule compiler. Strict mode will cause the compiler to catch common mistakes when the rule author attempts to validate or save a rule.	true/false	true	Immediately
verify-deployer-address			
Indicates whether to verify the TCP address of the application deploying rules to be that of an associated Genesys Rules Engine.	true/false	true	Immediately
display-n-template-versions (new in 8.1.3)			

Specifies the maximum number of versions to display for any published template.	Minimum value 1	3	Immediately
deploy-response-timeout (new in 8.1.3 - not in application template by default)			
Specifies the timeout (in seconds) applied to the deployment of a rule package.	Any positive integer	300	Immediately
require-checkin-comment (new in 8.1.3)			
Specifies whether users must add a check-in comment when committing changes to rules. These comments show up when viewing package history. If the value is set to false (default), users can save changes to rules without specifying a comment.	true/false	false	Immediately
force-snapshot-on-deployment (new in 8.1.3)			
Specifies whether users can deploy only a package snapshot. If the value is true, users can only deploy a package snapshot. If false (default), users can deploy either the LATEST package or a snapshot.	true/false	false	Immediately
encoding (not in application template by default)			
Activates Unicode support for the conversion of data between the local character set that is used by Configuration Manager and the UTF-8 encoding that is used by the Rules Authoring Server. By default, code page conversion is disabled. To activate this functionality, set this option to the name of a converter that can translate the local character set to UTF format. The converter that is suitable for a particular deployment can be found by using the ICU Converter Explorer. There is no			After GRAT restart

<p>default value for this option. For valid values, see the ICU Home > Converter Explorer pages (http://demo.icu-project.org/icu-bin/convexp).</p>			
<p>clear-repository-cache (new in 8.1.4)</p>			
<p>The GRAT server builds and maintains a cache of the rules repository database (for example, index files, and so on), and stores this on the file system under WEB-INF/classes/repository. The cache improves performance when accessing frequently used rules, calendars, and so on. However, this cache must stay synchronized with the rules repository database.</p> <p>Normally, if GRAT is restarted, it re-uses the existing cache, which is synchronized with the rules repository database. In this case, the clear-repository-option should be set to false (default).</p> <p>However, if you are configuring a second GRAT for warm standby (see High Availability Support), this option should be set to true for both the primary and the standby instances of GRAT. Since either GRAT could be brought online in the event of a failure, this option forces GRAT always to rebuild the cache and re-synchronize it with the rules repository database. Setting this option to true can delay the startup of GRAT, since the cache must be rebuilt, but it ensures that it is properly synchronized with the rules repository database.</p>	<p>true/false</p>	<p>false</p>	<p>After GRAT (re-)start</p>

Settings in GRE

Description	Valid values	Default value	Takes effect
<p>deployed-rules-directory (added to application template in 8.1.3)</p>			

<p>Specifies the directory in which to keep the working copy of deployed rule packages. When a package is deployed, a copy of the deployed package is placed here. When the rules engine is restarted, all packages defined in this directory are loaded and made available for execution. Specifying a <code>deployed-rules-directory</code> is recommended. If a value is not assigned to the <code>deployed-rules-directory</code>, the rule packages are placed in the <code>WEB-INF\config</code> sub-directory within the <code>genesys-rules-engine</code> web application directory. At this location the deployed rule packages may be deleted when an updated <code>.war</code> file is deployed.</p> <p>If you choose to change the default value, ensure that the path exists and that the application server can write to the specified directory.</p>		<p><code>/GCTI/logs/GRS_Engine</code> (8.1.3 onwards)</p>	<p>After restart</p>
<p>max-number-rule-executions</p>			
<p>The maximum number of rules to be executed during a request. This is used to detect unwanted recursion when <code>sequential-mode</code> is false. If this maximum is reached an error is reported. May be set to <code>-1</code> to denote no maximum.</p>	<p>Any positive integer or <code>-1</code></p>	<p>10,000</p>	<p>Next rules execution</p>
<p>sequential-mode</p>			
<p>Indicates whether to run the rules engine in sequential mode. In sequential mode, after the initial data set, no more data can be inserted or modified. This allows for the rules engine to operate in a simplified way.</p>	<p>true/false</p>	<p>false</p>	<p>On rules deployment</p>
<p>verify-deployer-address</p>			
<p>Indicates whether to verify the TCP address of the application deploying rules to be that of an associated Genesys Rules Authoring Tool.</p>	<p>true/false</p>	<p>true</p>	<p>Immediately</p>
<p>esp-worker-threads (new in 8.1.2)</p>			
<p>Specifies the maximum number of worker threads</p>	<p>Any positive integer</p>	<p>5</p>	<p>Immediately</p>

available when using the ESP interface to execute rules.			
load-packages-on-start (new in 8.1.4)			
Indicates whether to load deployed rule packages at application start up. If packages are not loaded at startup (value=false), then a package is loaded on its first execution request.	true/false	true	Immediately
json-hierarchical-driver (new in 8.1.4)			
With value true, the <code>JsonHierarchicalStreamDriver</code> class is used to serialize JSON responses. With value false, the <code>JettisonMappedXmlDriver</code> class is used. The Jettison driver is unaware of the original data type and will try to detect numerical values and omit the quotes, whereas the <code>JsonHierarchicalStreamDriver</code> will maintain the data type.	true/false	false	Immediately