GENESYS™

Genesys Rules System Deployment Guide

GRE Configuration Options

5/8/2025

GRE Configuration Options

Settings in GRE

Description	Valid values	Default value	Takes effect
deployed-rules-directory			
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 deployed-rules-directory is recommended. If a value is not assigned to the deployed-rules-directory, the rule packages are placed in the WEB-INF\config sub-directory within the genesys-rules-engine web application directory. At this location the deployed rule packages may be deleted when an updated .war file is deployed. If you choose to change the default value, ensure that the path exists and that the application server can write to the specified directory.		/GCTI/logs/GRS_Engine	After restart
max-number-rule-executions			
The maximum number of rules to be executed during a request. This is used to detect unwanted recursion when sequential-mode is false. If this maximum is reached an error is reported. May be set to -1 to denote no maximum.	Any positive integer or -1	10,000	Next rules execution
sequential-mode			
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	true/false	false	On rules deployment

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rules engine to operate in a simplified way.			
verify-deployer-address			
Indicates whether to verify the TCP address of the application deploying rules to be that of an associated Genesys Rules Authoring Tool.	true/false	true	Immediately
esp-worker-threads			
Specifies the maximum number of worker threads available when using the ESP interface to execute rules.	Any positive integer	5	Immediately
load-packages-on-start			
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			
With value true, the JsonHierarchicalStreamDriver class is used to serialize JSON responses. With value false, the JettisonMappedXmlDriver 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 JsonHierarchicalStreamDriver will maintain the data type.	true/false	false	Immediately
cache-operational-parameters (new in 8.5.0)			
Operational parameters are rule parameters whose value is obtained at rule execution time. They are configured in GAX as Parameter Groups, and stored in the Configuration Server database. Prior to 8.5, whenever an operational parameter was referenced during the execution of a rule, GRE would fetch the current value from Configuration Server. In high-volume	true/false	true	Immediately

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environments, this could put unnecessary stress on Configuration Server. In GRS 8.5, the value of the operational parameters can be cached inside GRE, to make fetching faster. Instead of fetching the value with each reference, GRE will set up a listener to Configuration server and maintain the value in a local cache. When the administrator changes the value of the parameter using GAX, GRE will receive an event and update its local cache. If cache-operational-parameters is set to `true` (default), this new caching mechanism will be enabled. If cache-operational-parameters is set to `false`, no caching will be used and each reference will fetch the current value from Configuration Server (as was done prior to 8.5).			
parameter-cache-timeout (new in 8.5.0)			
When `cache-operational-parameters` is set to `true`, `parameter-cache-timeout` defines how long (in hours) an operational "parameter group" will remain in the cache. After the timeout expires, the transaction will be removed from the cache until the next time the value is requested. This is used to clean up old subscriptions to parameter groups which are no longer being referenced. The default value for this will be 168 (168 hours = 1 week).	Integer	168	Immediately
clear-cache-on-disconnect (new in 8.5.0)			
When `cache-operational-parameter` is set to `true`, the `clear-cache-on-disconnect` parameter defines what the behavior should be if GRE loses connection with the Configuration Server. If `clear-cache-on-disconnect` is set to `false`, GRE will continue to use the cached value for any rule evaluations, until such time as the	true/false	false	Immediately

Description	Valid values	Default value	Takes effect
Configuration Server is restored. With this option, there is a risk that GRE could use "stale" values for rule evaluation during the time the connection to Configuration Server is down. If `clear-cache-on-disconnect` is set to `true`, the cache will be cleared and a null ("") value will be used in the rules. With this option, there is potential that rules will fail evaluation during the period that the Configuration Server connection is down.			
include-rule-evaluation-detail-in-response (new in 8.5.001)			
Returns disqualified rules (rules that did not fire), conditions that evaluated `false` and rule evaluation time back to the REST client invoking the rule evaluation request. Prior to 8.5.001, only the results of rules that fired were returned. Note: Currently, the `rulesDisqualified` and `executionTime` is not returned via ESP to iWD.	true/false	false	Immediately