$\begin{array}{c} \textbf{Remarks} \\ \textbf{Release notes with changes since version 5.2.3.8.} \end{array}$ 

# Feature

Area	Importance	Description
Console	Low	Process Engine: Process Threads: The table listing all process threads has a new column "Execution Time". If a process thread is currently executing a job (e.g. update a process instance), it shows the duration of this job execution (e.g. "3m 15s").
Extension	Low	ExtendedActivityReport 0.0.1-dev
Extension	Low	OfflineWorklistClient 2.5.12: The function "OfflineWorklistSystems" may use the in-memory cache for system status entries. If the extension configuration property "worklist.systemstatus.cache.timeout" is set to a positive integer, system states read from the database table "SystemStatus" are internally cached for the given amount of seconds. The default value of the configuration property is "5", in which case the system status is cached for 5 seconds. Within this amount of time, subsequent invocations of the functions "OfflineWorklistSystems" or "OfflineWorklistSystemStatus" do not access the database.
Extension	Low	RichTextExtension 1.3: New rich text editor component
Extension	Low	SOAPExtension 2.1.3: Added XSDToDataClass function for importing data classes from a XSD.

# Change

Area	Importance	Description
Extension	Low	StrongEncryptedValueStores 1.2: Value Store Persistence: New method "boolean exists(String id)" added to interface "ValueStorePersistence".
Extension	Low	VisioIntegrationExtension 1.2: Improved importer
Process Engine	Low	Background Process Threads: If a process thread has to execute a job (e.g. update a process instance), it now first checks if an other process thread is already executing the same job. This may be the case if a job takes a long time to execute. If this is the case, the process thread skips the job. If the other process thread is already working on the job for more than 60 seconds, a warning message is written to the log. Example: "Job execution is already in progress since 3m 15s: Update 1374584240207 (2013-07-23 15:51:00)"
Process Instance Service	Medium	Performance: If the service has to get a list of XML files in the directory "processdata/workflowinstances", it does not check anymore if a file is indeed a file or a directory. It only checks if the name ends with ".xml" and then assumes that it is a file. This has a big impact on the performance if the data home is located on a network drive. In the worst case where a user has created a directory with a name ending with ".xml", an error is written to the log as soon as the service tries to read the content of that XML file.
SDK	Low	Value Store Persistence: New method "boolean exists(String id)" added to interface "ValueStorePersistence".
SDK	Low	Value Store Service: New methods "boolean exists(String id)" and "List <string> getLoadedValueStoreIds()" added. The first method checks if the value store with the given id exists. The second method returns a list of ids of all value stores which are currently loaded into memory.</string>
User Service	Medium	Performance: If the service has to get a list of XML files in the directory "users", it does not check anymore if a file is indeed a file or a directory. It only checks if the name ends with ".xml" and then assumes that it is a file. This has a big impact on the performance if the data home is located on a network drive. In the worst case where a user has created a directory with a name ending with ".xml", an error is written to the log as soon as the service tries to read the content of that XML file.
Value Store Persistence	Medium	Performance: If the service has to get a list of files in the directory "processdata/valuestores", it does not check anymore if a file is indeed a file or a directory. It only checks if the name ends with ".xml" or ".enc" and then assumes that it is a file. This has a big impact on the performance if the data home is located on a network drive.

## Bugfix

Area	Importance	Description
Administration	Low	Script Language: Contexts: Fixed exception if execution context does not have a location.
Console	Medium	Process Data: Performance: Performance improvement when displaying process data

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		persistence commands.
Console	High	Process Instance Details: Performance improvements when opening the process instance details dialog.
Console	Medium	Value Stores: Performance: Performance improvement when saving all modified value stores ("Store All"). Appway no longer generates a list of all value stores on disk. Instead, it uses a list of all value stores loaded into memory. Value stores which have not been loaded into memory cannot have unsaved modifications anyway.
Extension	Low	DataStore 2.8.8.2: Error during conversion from NUMBER to VARCHAR, that should be possible and available as a feature.
Extension	Low	ProcessMigration 0.6.2: Workaround for bug in jQuery plugin "a-tools" which overrides custom "onkeyup" event handlers on text areas in IE. As a result, changes in "Execute Script" actions have not been detected and saved in the batch program editor.
Process Data	Medium	Performance: Performance improvement when searching for modified value stores. Appway no longer generates a list of all value stores on disk. Instead, it uses a list of all value stores loaded into memory. Value stores which have not been loaded into memory cannot have unsaved modifications anyway.
Runtime Database	Low	Let HSQLDB connection pool grow if exhausted.
Screen Editor	Low	Dragging a binding from the left variable tree view to the schema now uses the same UI feedback as when dragging a component. The user is presented with a lash, that will show where the next possible target is. Thus, the dragging does not have to be precise anymore. When dropping a binding, the corresponding target will blink, to tell the user, the binding has been applied successfully.
Screen Rendering	Medium	Scopes created for Include and Template screen components now use a reference count to guarantee that a scope is not unlinked from its parent scope as long as there is at least on HTTP request working with the scope. This solves the "Variable not defined" problem which could occur when multiple ajax update requests have been processed on the server in parallel for the same screen task.