$\begin{array}{c} \textbf{Remarks} \\ \textbf{Release notes with changes since version 5.3.} \end{array}$

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").
Data Table	Low	The table will now keep the state for the filters, sorters and the widths of the columns per user for the duration of a process instance.
Extension	Low	RichTextExtension 1.3: New rich text editor component
Screen Editor	Low	Data Table Component: Implemented a datetime filter for columns.
Script Editor	Low	Script code validation produces warnings if deprecated Java API methods are used.
Script Language	High	Deadlock: The classes used to represent indexed collections (DataArray), named collections (DataMap) and data objects (DataObject) now make use of the new concurrent collections "DataEntityList" and "DataEntityMap". The fully synchronized collections used before could lead to deadlocks when multiple threads where accessing them in parallel.

Change

Change Area	Importance	Description
Data Table	Low	The property for the sorter rank is now only shown, if the column is actually presorted: (ascending or descending)
Extension	Low	AuditTrail 0.0.1-dev
Extension	Low	BAMExtension 1.7.1: - Added configuration property "bam.testDataEnabled" to enable/disable the test data module Extended column size for process and token ids Final commit with the cleaned up export for the dashboards Fixed issue with scenarios with spaces Fixed pretty print duration function Fixed header display for additional screens Fixed token insert for SLA=0.
Extension	Low	ChartingExtension 2.0.47: - Corrected a few validation errors (specially when choosing script or catalog source confusing messages appeared, also opacity validation and the message 'work in progress removed') Correcting validation errors (script/expression) on pie charts and line charts related with FLOT.
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	PortalWorkList 2.2.8-dev: - Improved BAM SLA columns to fetch token SLA recursively from token hierarchy Fix: Added ParentComponentPath variable Adding subScope -dev Screen Component API: Screen components should usually override method "validateComponentProperties" instead of "validate" or "validateComponent" Fix: Removed header data from loop.
Extension	Low	SOAPExtension 2.1.3: - Produce an empty tag for elements which "do not have properties" or "all property values are null" XML: Added support for extended simple type Added configuration property "normalize" which triggers normalization of soap-body XML structure. If normalize is disabled (default) an namespace alias for the xml schema instance namespace will be added to the payload root element, otherwise the schema alias will be created when and where the namespace is used.

		 - Added XSDToDataClass function for importing data classes from a XSD. - Display formatted SOAP Messages. - Fixed log output.
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	Breakpoints: Fix in UI
Administration	Low	Global Validation: MM.onPopupMenu is no longer called when the Global Validation screen is opened in its own window, because in that situation, there's no popup menu.
Administration	Low	Script Language: Contexts: Fixed exception if execution context does not have a location.
Console	Low	Process Data: Performance: Performance improvement when displaying process data persistence commands.
Console	Medium	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.
Data Table	Low	Hitting the enter key on a column filter could cause the server to get stuck in an endless loop.
Data Table	Low	lds of Data Table components were not always unique. If a Data Table was part of an include and that include got rendered twice within the same screen, the two Data Tables shared the same id. The result was, that only one of the tables got rendered correctly.
Data Table	Low	If a column was rendered inside a logic component, actions on that column were not executed.
Data Table	Low	It is now made sure, that the data table component will not override a variable definition with the same name as the row object variable, when a validation is executed.

Data Table	Low	It is now possible to use AjaxUpdateAreas inside interlines.
Data Table	Low	Opening/Closing an interline, will now re-layout the table, if a scrollbar appears or disappears because of this action.
Data Table	Low	Switching data source types did not clear the row object variable definition.
Data Table	Low	The processing of the component is now synchronized to avoid race conditions. If the user submitted the page twice (no patience), failure due to race conditions were very likely.
Data Table	Low	The screen editor now refreshes the properties if the user changes the interline screen in order to show/hide the variable assignments tab.
Data Table	Low	The screen editor now shows an info message, that interlines cannot be rendered in preview mode instead of letting a javascript error appear, when a user opens an interline.
Data Table	Low	The table now displays the value of a possibly predefined filter.
Dependencies	Low	The pattern used to identify static dependencies from process swim lanes on user groups was using an incorrect prefix "ROLE:" instead of "GROUP:".
Extension	Low	ComponentExtension 2.0.80: Ajax Update Area: events that triggered when Ajax Update Area update started and ended no longer worked properly
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.
Process Editor	High	Opening the process editor no longer automatically starts a hidden preview process instance.
Runtime Database	Low	Close connection after retrieving the type statistics.
Runtime Database	Low	Let HSQLDB connection pool grow if exhausted, instead of waiting for connection to be returned.
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 Editor	Low	Validation: Do not generate false validation warning "Custom Component implementation is a Control:" for all custom control implementations (e.g. Date Picker).
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.
Script Language	Low	Function "DATACOMPARE": validation check constant string for date pattern.
Studio	Low	Business Object Editors: Sort dependencies on business objects of the same type by display name. Make sure that the comparison method does not violate the general contract.
Studio	Medium	Duplicating a data class did not correctly adjust the data class id on functions in the data class copy. As a result, the data class editor has thrown an exception when a data class has been opened which extends the new data class. Calling a function inherited from such a cloned data class has failed as well.
Workspace	Low	Ajax Update Area: Events that triggered when Ajax Update Area update started and ended no longer worked properly.