Remarks

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Release notes with changes since version 9.0.2.

Upgrade notes when upgrading from 9.0.x to Appway 9.1:
- The method UIdGenerator.getUUID() was removed in Appway 9.1 and must be replaced before
upgrading. See the Upgrade Guide for more details:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#14-
replace-the-uidgeneratorgetuuid-method
- If your Appway installation uses a Relational Database or Cassandra as a Cluster Storage
backend, ensure the 'startupfiles' table is created automatically or create it manually. See
the Upgrade Guide for more details: https://community.appway.com/screen/kb/article/system-
upgrade-8-1-to-9-x-1747176546847#22-update-cluster-storage
- With Appway 9.1, you can remove manually defined node names and UID prefixes and let Apppway
generate them instead. See the Upgrade Guide for more details:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#31-
automated-node-names-and-uid-prefixes
- Default values for many Style and Style Value Business Objects were modified with Appway
9.1. When upgrading, the new default values are automatically applied if you did not define a
custom value. See the Upgrade Guide for more details:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#3321-
new-default-values-with-auto-migration
- Unrecommended Primitive Types are no longer available for use in some locations in the
Studio. See the Upgrade Guide for more details:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#333-
handling-of-unrecommended-primitive-types

For upgrade information when upgrading to Appway 9.1 from Appway 8.1.x, see the 'System
Upgrade: 8.1 to 9.x' article:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847

For new Appway 9 installations, see the Installation Guide:
https://community.appway.com/screen/kb/article/system-installation-appway-9-1736030944029

For information on Known Issues in Appway 9, see:
https://community.appway.com/screen/kb/article/appway-9-known-issues-1756745073316

For documentation of new and existing features, see the Appway Knowledge Base at:
https://community.appway.com/screen/kb

For an overview of the documentation of new Appway 9 features, see:
https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#36-
adopting-new-features

For information on deprecated and removed features in Appway 9, see:
https://community.appway.com/screen/kb/article/feature-removal-and-deprecation-with-appway-9-0
-1710706195381

For information on the Appway product lifecycle, see:
https://community.appway.com/screen/kb/article/appway-releases-product-lifecycle-and-end-of-
support-1753664569425
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Appway Platform (Core)

Feature

Area	Importance	Description
Cluster	Low	Added an option to the menu available at System Configuration > Configuration Properties to remove the manually configured 'nm.uid.prefix' and 'nm.cluster.local.nodename' properties (these properties can be generated automatically by Appway). This feature is particularly useful for Appway instances that run in containers.
Cluster	Medium	The Startup File Sync functionality allows storing the system configuration and extensions in Cluster Storage. The feature is enabled by setting the system property 'nm.cluster.startup.file.sync.enabled' to true. This feature is particularly useful for Appway instances that run in containers.
Info Box	Low	A defined tooltip is now also displayed when the Info Box is disabled.

Java	Medium	Starting with version 9.0.0, Appway now officially supports selected OpenJDK 8 distributions. See OpenJDK Support for more information: https://community.appway.com/screen/kb/article/openjdk-support-1818762454932
Script Editor	Low	A dropdown menu displaying the content of a namespace or a Package is now available during autocompletion directly after the namespace/Package was selected.
Script Editor	Low	Autocomplete now includes a namespace if the first characters of its name are entered (for example: typing "use" displays the "User" namespace in the dropdown) and it includes all the functions within the namespace when the full namespace followed by a colon is entered (typing "user:" displays all the functions available within the "User" namespace in the dropdown).
Startup	Medium	Packages found in the <data-home>/packages/ directory are auto-deployed during startup.
System Configuration	Low	The properties 'nm.uid.prefix' and 'nm.cluster.local.nodename' are now automatically computed when left blank. This feature is particularly useful for Appway instances that run in containers. Important note when updating an existing Solution: An already configured 'nm.uid.prefix' has to be kept "as is" until after the first start of the Solution using Appway 9.1 or later. During this first start, the existing 'nm.uid.prefix' will be used to correctly store the last used UID values into Cluster Storage (the local conf/uid.properties will be removed afterwards).
System Configuration	Medium	You can now set Environment Variables to override configuration properties which were defined at System Configuration > Configuration Properties (for the platform) or in the extension configuration. This feature is particularly useful for Appway instances that run in containers.

Change

Area	Importance	Description
3rd Party Library	Low	A new Java library has been added: Veracode Annotations 1.2.1. This library contains Java annotation classes used by the Veracode static code analyzer.
3rd Party Library	Low	The Caffeine library was upgraded from version 2.6.2 to 2.7.0.
3rd Party Library	Low	The following Jackson libraries were upgraded: - Jackson Core from version 2.8.11 to 2.9.9 - Jackson Annotations from version 2.8.11 to 2.9.9 - Jackson Databind from version 2.8.11.1 to 2.9.9.1
3rd Party Library	Low	Upgraded the following libraries: - Apache Commons Pool 2 from version 2.6.0 to 2.6.2 - Apache Commons DBCP 2 from version 2.5.0 to 2.6.0
Data Logic Editor	Medium	Removed the Conditional Cast Control and replaced it with a simpler, more compact approach. Now, Data Class Controls offer the "active if" Data Class selector, allowing you to handle situations where other Data Classes inherit from the Data Class you are working with. Older Solutions using Conditional Cast will continue to work and can be modified, but it is not possible to add new Conditional Cast Controls.
Data Logic Editor	Low	Renamed the 'Complex' Control to 'Data Class' Control.
Data Logic Editor	Medium	The "Unfold" action available for Data Class Controls (previously called Complex Controls) has changed to make unfolding non-disruptive. With this change, unfolding means that the connection to the original Data Class instance represented by the Data Class Control is no longer lost, allowing you to "refold" a Data Class Control if needed. Existing Solutions which use the old unfold functionality will continue to work as before.
Data Logic Editor	Medium	The styling of the Controls in the Composition area of the Controls tab has been improved to provide a better user experience.
Date Picker	Medium	The behavior of the Date Picker Screen Component has been changed to enable improved keyboard navigation in Screens. When the focus moves to the Date Picker, the popup no longer opens directly, but opens only when a search string is entered, or the arrow keys are used.
Developer Dashboard	Low	The Appway Developer News widget has been removed from the Studio Developer Dashboard (available on the System Maintenance tab).
Error Filter	Low	Appway no longer logs stack traces for WorkspaceException, access control exceptions, ClientAbortException, and other HTTP I/O errors. This change prevents stack traces for uncaught exceptions in HTTP threads from being written to Appway log files, as these stack traces do not help finding the reason for the exception.

Packages	Low	At Configure Package > Permissions, the dropdown containing the list of users now also displays the first and last name of users when available.
Primitive Types	Medium	The handling of Unrecommended Primitive Types has changed: - Unrecommended Primitive Types can no longer be selected in the Business Object selectors for properties of Data Classes, and variables of Process, Screen, PDF Output, and Data Logic Business Objects. If necessary, you can whitelist needed Unrecommended Primitive Types using the 'nm.primitiveTypes.recommended.whitelist' configuration property. - Existing Solutions using Unrecommended Primitive Types will continue to work, but will return a validation warning. For more details, see https://community.appway.com/screen/kb/article/recommended-and-unrecommended-primitive-types-in-the-appway-platform-1822053324027
System Health	Low	The start of Health Sensors and the Sensor State Poller is delayed by 30s after system startup. This helps to prevent false readings right after system startup.
Web API Licensing	Low	The payload consumed for files uploaded through Web API is now counted as 1 KB in licensing reports and WebAPI statistics, regardless of the file size.
XML Validation	Low	For performance reasons, XML validation is now disabled by default when reading Business Objects from Cluster Storage.

Bugfix

Area	Importance	Description
Data Logic	Medium	Fixed a known issue which caused the Data Engine to fail for some manually created (valid) binding expressions of Data Class Controls (previously called Complex Controls). This affected expressions with a more complex structure than binding expressions which are automatically generated by the Data Logic editor for Data Class Controls.
Data Logic Editor	Low	Fixed an issue that caused duplicated entries to be displayed in the right-hand side library of the Data Logic Editor when using Internet Explorer.
Data Logic Editor	Low	Fixed an issue that prevented opening the Data Logic Editor when a Data Class from a missing Package was referenced.
Data Logic Editor	Low	Fixed an issue that prevented users from dragging Controls in the Control Tab when using Firefox.
Data Logic Package	Low	Fixed all issues leading to validation warnings in the DataLogic Package
Interactive Script Editor	Low	Fixed an issue where multiple spaces within a String were not preserved in the debugger (in the Variables & Watches sections) and the output of the Interactive Script Editor.
Move Business Objects	Low	Fixed an issue that prevented the rendering of Package logos in the "Review Dependencies" step of the Move Business Object wizard, which allows moving Business Objects from one Package to another.
Process Editor	Low	Fixed an issue that degraded the performance of the Process Editor when editing a Process containing a Swimlane, in an installation containing a large number of users, roles, and groups.
Script Language	Medium	Fixed an issue that prevented an Indexed Collection 'addAll' method from accepting a list of Strings.
Script Language Editor	Low	Validation in the Script Editor now reports the correct lines when sparse code (with empty lines) and dense code (multiple statements per line) is validated.
Style Values	Low	Style Values in the Branding Package are now also used in style sheets.

Appway Extensions

Feature

Area	Importance	Description
Extension	Medium	Component Extension 9.1.0: Style and Style Value Business Objects --- - Feature: The following Screen Components are now styleable in the Appway model using dedicated Style Business Objects: 'Notification List', 'Notification Popup', and 'Notification

		Alert'. Moreover, the Notification List Style Business Object makes reference to the new 'Notification Element (Virtual)' Style Business Object. - Change: Updated the default values in the following Style and Style Value Business Objects: Button_Text-primary; Button_Text-navigationToParent; Button_IconDescriptive-secondary; Button_IconQualifier-secondary; Heading2; Color - CallToAction; Color - CallToAction-effect; Color - PageBg; Color - Theme; Color - SecondaryContent; Color - Shadow-focus; Color - SelectedBg; Color - Selected; Color - HighlightsBg; Color - AuxiliaryBg; Unit - TextSizeXXXL; Unit - TextSizeXXL. Auto-migration is in place, meaning that the new default value replaces the previous default value both in new and upgraded installations. However, if you applied a custom value, this is persisted in your upgraded installation. See the Upgrade Guide for more information: https://community.appway.com/screen/kb/article/system-upgrade-8-1-to-9-x-1747176546847#332-new-default-values-in-style-and-style-value-business-objects. Multiple Selection Field and Checkbox List --- - Feature: New Converters have been created for the 'Multiple Selection Field' and the 'Checkbox List' Screen Components. The new Converters add/remove elements inside a Collection without replacing the whole collection. - Feature: The 'Multiple Selection Field' Screen Component now displays an arrow icon, consistent with the 'Dropdown List' Screen Component. - Change: The behavior of the 'Multiple Selection Field' Screen Component has been improved to allow better keyboard navigation in Screens. When the focus moves to the Multiple Selection Field, the popup no longer opens directly, but opens only when a search string is entered, or the arrow keys are used. Form Screen Component --- - Bugfix: Fixed an issue in the 'Form' Screen Component (Interaction Channel) where the Date Picker displayed today's date even if a different date was previously selected.
Extension	Medium	Functions Extension 5.1.1: - Feature: Added the Process:GetReadOnlyInstance() function, which returns the Process Instance with the provided ID. - Feature: Added the User:ListLocalIds() function, which returns a list of local user IDs on the current node. - Feature: Added the Screen:GenerateAppwayTestIds() function, which generates Appway Test IDs for all Workspace Components in the target Package. - Change: Moved the following functions from Appway core to the Functions extension: EVALUATERULE, EVALUATERULESET, LIST, ProcessElementId, ProcessStartURL, READTEXTRESOURCE, RECORDS, RESOURCEURL, SCREENURL, StartProcess, StartSubProcess, WRITETEXTRESOURCE - Bugfix: The Migration:MigrateFunctions function now migrates USER('userId') to User:Get('userId') correctly, optional function arguments are now also copied.
Extension	Low	StatisticsCollector Extension 5.0.0: - Feature: Memory Holders statistics are now collected. - Change: The automatically computed UID prefix is to be used if the nm.uid.prefix property is not set.
Extension	Medium	WebServices Extension 2.9.2: - Feature: The RestClient httpMultipartPost method now allows sending multiple files with the same part name in a single multipart request. The new implementation allows using an Indexed Collection of HttpFileUpload objects inside the Named Collection parameters. This improves the previous behavior that relied on a Named Collection, implying that each part of the message had a unique key.

Extension	Medium	WorkspaceCollaboration Extension 4.0.1: - Feature: Added styleable versions of the Discussion and Chat components with default Style Business Objects. - Feature: Labels related to Workspace Collaboration components have now been translated to German. Also, three new labels were added: ext.workspacecollaboration.chat.title, ext.workspacecollaboration.discussion.discussionwidget.done, and aw.NotificationList.now. - Change: For new installations, the default WorkspaceCollaboration_JoinChat Screen now uses a styled Chat Screen Component instead of legacy styles. If you are upgrading, no migration is performed, but you can adopt the styled Chat component manually if required. - Bugfix: The 'Show More' button of the Discussion List is now enabled until the user reaches the end of the list. - Bugfix: The attribution annotation now also works properly when the User ID contains dots.

Change

Area	Importance	Description
Extension	Low	WebServices Extension 2.9.1: - Change: When importing a WSDL, a warning message is now issued if the numeric constraints imposed on the Appway Data Types are violated. - Bugfix: Changed CSS resource paths so that they do not contain any relative path elements. - Bugfix: Fixed an issue that prevented the import of some WSDL containing Java objects that cannot be deserialized due to a JDK security mechanism.
Extension	Low	AzureHazelcastDiscovery Extension 1.0.1: - Change: Upgraded the hazelcast-azure library from version 1.2.2-SNAPSHOT to version 1.2.2.
Extension	Low	Deployment Extension 12.0.1: - Change: When importing or exporting a Package, Business Data Storage and Data History configurations are now also included.
Extension	Low	ProcessMigration Extension 5.0.0: - Change: Deprecated calls to UIdGenerator.getUUID() have been replaced.
Extension	Low	ProcessUsageTracker Extension 2.5.0: - Change: The automatically computed UID prefix is to be used if the nm.uid.prefix property is not set. - Change: Column headers have been added in the 'Process Usage' section of the Licensing Report.

Bugfix

Area	Importance	Description
Extension	Low	BusinessDataStorage Extension 1.2.1: - Bugfix: All occurrences of the ‘Cascade Update’ label in the BDSSaveDataClassInstance and BDSSaveDataClassInstances Script Functions have been replaced with ‘Cascade Save’.
Extension	Medium	Mail Extension 3.1.3: - Bugfix: Fixed an issue where the Integration Link IMAP Mail Server Listener always used the INBOX folder instead of the Email Configuration folder name when the Mailbox Folder property was left empty. Now, if the Email Configuration does not have INBOX configured, the behavior changes and the configured folder is used.
Extension	Medium	WebServices Extension 2.9.3:

		- Bugfix: Fixed an issue that caused Sealed Packages to be displayed in the Target Package selector of the ‘Import WSDL’ window.