Remarks

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Release notes with changes since version 11.1.3.

See the following resources for further information:

Appway 2022.1 Technical Requirements:
https://community.appway.com/screen/kb/article/system-installation-technical-requirements-
1482807410782

Upgrading from Appway 11.x to 2022.1.x:
https://community.appway.com/screen/kb/article/system-upgrade-11-x-to-2022-1-x-2289547016459

New Appway 2022.1 installations:
- System Installation 2022.1: https://community.appway.com/screen/kb/article/system-
installation-appway-2022-1-2298029250985
- System Installation Using Containers 2022.1:
https://community.appway.com/screen/kb/article/system-installation-using-containers-appway-
2022-1-2298180001361

Deprecated and removed features in Appway 2022.1:
https://community.appway.com/screen/kb/article/feature-removal-and-deprecation-with-appway-
2022-1-2297722129732

Appway 2022.1 Known Issues: https://community.appway.com/screen/kb/article/appway-2022-1-known
-issues-2298240537905

Appway Product Lifecycle: https://community.appway.com/screen/kb/article/appway-releases-
product-lifecycle-and-end-of-support-1753664569425

Appway Platform 2022 renaming: https://community.appway.com/screen/support/news/2022-appway-
platform-releases-renaming-announcement-2282031383370
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Appway Platform (Core)

Feature

Area	Importance	Description
Business Object Editors	Low	The 'Translations Tool' modal window (available for Data Logic, Process and Data Class Editors) can now be moved and resized. See documentation: https://community.appway.com/screen/kb/article/1482805527070
Business Object Replacement	Low	Improved the UI of the 'Replaceable' and 'Replacements' modules ('Solution Design' > [Package] > 'Properties') to support easier selection of Business Objects and better usage of space. See documentation: https://community.appway.com/screen/kb/article/1496136140789
Business Object Visibility	Medium	A context menu option in the Business Object Library now allows adding or removing one or multiple Business Objects to the list of Business Objects Visible from another Package. Moreover, the UI of the 'Visible' module ('Solution Design' > [Package] > 'Properties') has been improved to support easier selection of Business Objects and better usage of space. See documentation: https://community.appway.com/screen/kb/article/1496136140789
Data Class Editor	Medium	The Data Class Editor now features the Translations Tool (accessible from the 'Edit Labels' button on the header), which allows editing the Labels used in the current Business Object. See documentation: https://community.appway.com/screen/kb/article/1482805527070
Data Logic	Medium	Added a new Health Sensor called 'Data Logic Update Function Execution Time', which checks the average execution time of Update Functions defined in Data Logic Business Objects. If the average execution time of an Update Function is above the defined thresholds 0.5s and 2s, the sensor reports a warning and an error, respectively. This has the purpose of notifying the developer that the long execution time of the Update Function could impact the user experience in the Workspace negatively. See documentation: https://community.appway.com/screen/kb/article/1739928404187

		https://community.appway.com/screen/kb/article/1482807177758
Data Logic	High	Catalog Value Data Rules now allow configuring lazy loading for Catalog values. See documentation: https://community.appway.com/screen/kb/article/1739928404187#521-catalog-lazy-loading https://community.appway.com/screen/kb/article/2298753448573
Global Search	Medium	Appway Studio now allows limiting the search of a Business Object to a specific Package. Moreover, Custom Lists search has been improved by providing additional filtering options. See documentation: https://community.appway.com/screen/kb/article/1497400061606#23-search
Script Language	Medium	When a multi line comment precedes a script function in a Script Function Business Object or a Data Class method, lines starting with @param, @return, or @example are given special handling by the Interactive Script Editor (ISE) and are displayed on the left-side panel. See documentation: https://community.appway.com/screen/kb/article/1482806956335
Studio	Medium	Several occurrences of data tables in Appway Studio (e.g. in the 'System Maintenance' and 'Solution Maintenance' modules) can now be exported through the 'Download' button.
Style Value Business Object	Low	The 'Info' Color Style Value Business Object has been added to the Base Package.

Change

Area	Importance	Description
3rd Party Library	Low	The following third-party libraries were upgraded in Appway 2022.1.1: - Caffeine from version 2.8.5 to 3.0.5 - Jackson Core, Jackson Annotations, and Jackson Module JAXB Annotations from version 2.12.3 to 2.12.6 - Jackson Databind from version 2.12.3 to 2.12.6.1 - Apache Commons Compress from version 1.5 to 1.21 Changes in third-party libraries are also listed in our System Upgrade documentation: https://community.appway.com/screen/kb/article/2289547016459
Data Engine	Medium	Two issues have been fixed in Data Logic Collection Controls, which imply a change of behavior. In case your Solution exploits the previous behavior (described below) at runtime, please contact Appway Support: - Collection Controls could contain (at runtime) a Collection whose type was not compatible with the binding of the Control itself (not the same type nor a child type). This behavior was incorrect. Currently, such Controls are shown in error state in the Workspace. - It was possible to add Elements whose type was not compatible with the binding of the Control itself (not the same type nor a child type). This behavior was incorrect. Currently, adding such Elements to a Collection is not allowed. See documentation: https://community.appway.com/screen/kb/article/2289547016459
Deprecation	Medium	The 'Discussion' feature in Appway Studio ('Solution Design' > 'Discussion' tab) is deprecated. See documentation: https://community.appway.com/screen/kb/article/2297722129732
Deprecation	Medium	The following Script Function have been deprecated and replaced by new Script Functions. Automatic migration is available through Appway's migration tool: - 'MergePDFFiles' is replaced by 'Pdf:Merge' - 'PDFNumberOfPages' is replaced by 'Pdf:CountPages' See documentation and migration tool information: https://community.appway.com/screen/kb/article/2297722129732
Hazelcast	Medium	Hazelcast has been upgraded to version 5.0.2. For security reasons, member auto-discovery (which was introduced with Hazelcast version 5) is disabled automatically in `hazelcast.xml`. See documentation:

		https://community.appway.com/screen/kb/article/2289547016459#251-edit-jvm-options https://community.appway.com/screen/kb/article/2298029250985#28-edit-jvm-options
Label Business Objects	Medium	When creating a Label from the Business Object library, the Properties panel is no longer displayed. Instead, you can edit Label metadata from the 'Create New Label' dialog. Consider that, in this case, translations are saved as Overriding Translations, and they do not modify the Label Business Object itself. See documentation: https://community.appway.com/screen/kb/article/1482805527070#211-creating-labels-from-the-label-business-object-editor
Process Data	Low	For security reasons, Appway now generates fully random IDs for Process Instances and Process Tokens. Existing Process Instances and Tokens will keep their old IDs. However, new Process Instances and Tokens will receive IDs with a fixed length of 32 hex characters ('0'-'9' and 'a'-'f') where the first character is always a letter ('a'-'f'). This results in an entropy of slightly less than 128 bits and makes it virtually impossible to guess the ID of a Process Instance or Process Token, or to run a successful enumeration or forced browsing attack on endpoints using such IDs. See See System Upgrade for additional info: https://community.appway.com/screen/kb/article/2289547016459
Process Editor	Low	Label Business Objects are no longer shown in the 'Dependencies' section in the Process Editor. You can see which Labels are used in the Process from the Translations Tool, by clicking on the 'Edit Labels' button on the header. See documentation: https://community.appway.com/screen/kb/article/1482806118517
Removal	Medium	The Conditional Cast Control (Data Logic), deprecated in Appway 10, is now removed. See documentation: https://community.appway.com/screen/kb/article/2297722129732
Removal	Medium	The JDBCDrivers Extension, deprecated in Appway 10, is now removed. The recommended way of including database drivers in an Appway installation is to add the drivers to the lib directory of the Application Server. Moreover, the drivers provided by the JDBCDrivers Extension were outdated. See documentation: https://community.appway.com/screen/kb/article/2297722129732
Shutdown	Medium	Appway shutdown time has been improved considerably. This applies when JVM is stopped after Appway stops.
Startup	Medium	Persistent map initialization now uses multiple threads. The number of threads can be configured using the configuration property 'nm.cluster.persistence.startup.threads.count'. Default is 4 threads. In addition, the following configuration property was removed 'nm.cluster.persistence.init.parallel'.
Startup	Medium	Startup is aborted and the whole cluster is shut down if any cluster data cannot be loaded (e.g., missing Business Objects). To ignore startup errors during data loading for specific maps, you can use the following configuration property: 'nm.cluster.persistence.startup.ignore.errors.maps'. You can configure multiple maps separated by commas (e.g., businessObjectsMap, clusterFilesMap). Note that this property should only be used for emergency cases and should be removed as soon as the underlying data loading problem is fixed.

Bugfix

Area	Importance	Description
Compare Package Version	Low	Fixed an issue where the 'Type' column of the 'Compare Package Versions' submodule ('Solution Design' > 'Maintenance') was empty even if filters were added.
Data Engine	Medium	Two issues have been fixed in Data Logic Collection Controls: - Collection Controls could contain (at runtime) a Collection whose type was not compatible with the binding of the Control itself (not the same type nor a child type). This behavior was incorrect. Currently, such Controls are shown in error state in the Workspace. - It was possible to add Elements whose type was not compatible with the binding of the Control itself (not the same type nor a child type). This behavior was incorrect. Currently, adding such Elements to a Collection is not allowed. These bugfixes imply a change of behavior. In case your Solution exploits the old behavior

		at runtime, please contact Appway Support. See documentation: https://community.appway.com/screen/kb/article/2289547016459#313-data-engine-change-of-behavior-in-collection-controls
Export Packages	Low	In the 'Export Packages' wizard, fixed an issue that was causing a Package version to appear as non-modified even if it was modified. This affected only modifications of Package Properties (Description, Entry Points, and so on)
Process Editor	Medium	Business Rules: fixed issue that prevented the assignment of the result of the evaluation of a Rule invoked using an Evaluate Rule Task in the Process Editor. This happened when the binding specified in the 'Actions Binding' field of the Task was not a simple variable expression such as $actions or $values.
Screens	High	All errors raised during Screens scope initialization (namely, script errors in variable assignments or type mismatches for assigned variables) will break the Screen or suspend the token. Specifically: For Screen Includes, the standard red error box will be shown in the place of the included Screen. For Screen Tasks, the token will be suspended before landing to the Screen. This new behavior fixes an issue, occurring in previous Appway versions, where exceptions were ignored (errors were only logged) in case of failure during Screen scope initialization, and Screens were rendered the best way possible. This resulted in no visible feedback, thus making the final user unaware that the an issue occurred during scope initialization. See System Upgrade for recommended actions and additional info: https://community.appway.com/screen/kb/article/2289547016459
Script Language	Low	Fixed an issue where the validation of Scripts using the METHODCALL Script Function failed due to a Class Cast exception.
Security	Low	If a user account has been disabled or has expired, Appway now shows an error page with a '403 - Forbidden' message, and adds some possible reasons for this error. This replaces the previous error page with a '500 - Internal Server' message, which could be interpreted as an application bug.

Appway Extensions

Feature

Area	Importance	Description
Extension	Medium	AppTask Extension 3.0.0: The AppTask Extension is used in Appway's Application Business Components. See separate Release Notes linked in: https://community.appway.com/screen/support/news/official-release-appway-2022-1-2301952324198
Extension	Medium	AppTaskAPI Extension 3.0.0: The AppTaskAPI Extension is used in Appway's Application Business Components. See separate Release Notes linked in: https://community.appway.com/screen/support/news/official-release-appway-2022-1-2301952324198
Extension	Medium	Functions Extension 8.0.1: Feature - JWT - Added three new JWT Script Functions: - Auth:GetJwtClaim - Auth:GetJwtClaimNames - Auth:HasJwtClaim Feature - JWT - Added three new Script Functions to retrieve OIDC tokens: - Auth:GetAccessToken - Auth:GetIdToken - Auth:GetRefreshToken Feature - Script Language - The following PDF-related Script Functions have been introduced:

		- 'Pdf:RemovePages' allows removing pages from a PDF file. - 'Pdf:Split' allows splitting a PDF file into multiple PDF files. - 'Pdf:RotatePages' allows rotating the pages of a PDF file. - 'Pdf:Merge' allows merging multiple PDF files. This function has the same behavior as 'MergePDFFiles', now deprecated. - 'Pdf:CountPages' allows getting the number of pages of a PDF file. This function has the same behavior as 'PDFNumberOfPages', now deprecated. - Bugfix .getId() method calls - Introduced a fix where .getId() method calls are no longer migrated on primitive types if an underlying Java class contains a .getId() method, and on Data Classes that have a .getId() method implemented. Therefore, only .getId() method calls on the DataEntity class are now migrated. See Function Reference documentation for more information: https://community.appway.com/screen/kb/article/1641896132117

Change

Area	Importance	Description
Extension	Medium	OfflineWorklistClient Extension 7.0.0: The size of the 'workflowInstanceId' and 'workflowTokenId' columns of Database tables defined by the OfflineWorklistClient extension has been extended from 20 to 32 characters. For existing installations, this requires a manual step to update the table definitions in the Database. See System Upgrade for details: https://community.appway.com/screen/kb/article/2289547016459

Bugfix

Area	Importance	Description
Extension	Medium	Component Extension 2022.1.1: Fixed an issue that caused the 'Data Table' Screen Component width to grow indefinitely, in the Workspace, in response to any event triggering a component resize.