



OutSystems® Platform 9 – Change Log

This document lists the log of changes produced in the OutSystems® Platform 9. Unless otherwise stated in the details of the revision, each revision is cumulative and includes all the features and fixes introduced in the previous revisions.

For further information on any issues, please contact [Product Support](#).

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NOTICE: OutSystems does not give support to any undesirable behavior you may experience due to the use or manipulation of undocumented components of the OutSystems Platform, such as, internal JavaScript, RuntimePlatform library, database system meta-model, components in installation directories, etc.

Introduction

This document presented the log of the changes made in the OutSystems Platform 9. There are four sections, one for each Platform component.

Platform Server

Platform Server 9.0.1.60 (2016-04-15)

- Improved checklist to include optional step to backup database before updating schema (#1137098)
- Added information to checklist noting that "Log on as a Service" right is granted/needed to platform database users (#1164631)
- Fixed _preloader.html being vulnerable to an open redirect attack (#1149475)
- Fixed error synchronizing users to environment in 8.0 or lower (#1026583)
- Fixed compilation error when using Entity Identifiers in Aggregates' filters (#1045290)
- Fixed problem of ComboBox not opening when inside of a form on windows phone 8.1 (#1133369)
- Fixed Team Edit screen only showing a limit of 50 Users and Applications in Lifetime (#1157680)
- Fixed Charts not showing time inside tooltips (#1112955)
- Fixed not be able to assign NullDate to a variable (#1118745)
- Fixed GetRequestHeader return 'undefined' value instead of empty string (#1142931)
- Introduced new setting to allow comments with hints to be passed in queries to Oracle databases (#1146855)
- Fixed not being able to activate "LifeTime Manage Users and Roles" option in cloud infrastructures (#1152168)
- Fixed deadlock scenario during concurrent synchronizations of different environments (#1170089)
- Fixed authentication error in lifetime services when using token and username (#1172174)
- Fixed compiler service crash when a timeout occurs while doing an introspection (#1172199)
- Fixed record being created twice when using external entities and asynchronous logging (#1176560)
- Fixed username format on connection string when using windows authentication (#1177951)
- Fixed crash on PreviewInDevices while toggle between different resolutions (#1183402)
- Improved checklist information regarding MySQL database on Amazon RDS (#1151724)

Platform Server 9.0.1.55 (2016-02-26)

- Improved security of Service Center authentication (#1093831)
- Fixed RichWidgets' Auto Complete dropdown list not closing due to javascript error in JQueryUI (#1103553)
- Fixed OverflowException when retrieving decimals from the DB that have more than 28 digits (#1105735)
- Fixed WindowsAuthentication on Service Center applications, hence originating http 401 errors (#1118319)
- Fixed concurrency issue when there are two synchronizations of the same environment running (#996100)
- Fixed Error Invoking WebReference with choices between different types that are converted to the same type in OutSystems (#896497)
- Fixed login errors after a slowquery loading the an application (#1002203)
- Improved optimization of actions that handle very complex structures (#1004396)
- Fixed LDAP configurations being applied without pressing Save button (#1066935)

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- Updated default value of DEFAULT_DDL_LOCKTIMEOUT from 0 to 600 to avoid errors during installation (#1087885)
- ServiceCenter login page is no longer indexed by default by Google (#1093309)
- Fixed List of Application in Users not showing anything on Oracle when search input is empty (#1095783)
- Fixed ServiceCenter not showing some configurations for Database Connections and Database Catalogs when Windows Authentication is being used to connect to the database (#1098432)
- Fixed Preloader ignoring HTTPtoHTTPSproxyHeader parameter (#1101893)
- Primary key indexes on Oracle are now created as unique (#1106512)
- CI_AI configuration is no longer enforced on Oracle database connections when using the connection switching API (#1106513)
- Fixed incorrect rendering of Label widgets with fixed width when using a style (#1107268)
- OpenSource modules are no longer contributing to SU/AO count when publishing a Solution (#1111891)
- Fixed shared tooltips not working when using Charts (#1112784)
- Fixed EditableTable save operation validates all mandatory fields in the page (#1115600)
- Fixed expression value restoration when canceling a row edition in an EditableTable (#1117374)
- Fixed slowness when sending an email (#1117424)
- Fixed error handling ignoring HTTPtoHTTPSproxyHeader parameter when redirecting to a HTTP page (#1117522)
- Fixed 'From' field of an email being escaped (#1117819)
- Fixed OutSystems Application Pools not being set to .NET 4.0 when windows authentication is used (#1118290)
- Fixed problem when registering previously registered environment in lifetime (#1118910)
- Fixed image database not being cached (#1125824)
- Fixed strange validation messages strange behavior in IE8 (#1126149)
- Fixed timeout error while preparing staging in LifeTime (#1130304)

Platform Server 9.0.1.50 (2016-01-15)

- **What's New**
 - Improved Solution Deployments: Licensing errors abort deployments for the entire solution
- Improved Logging Related with Token Communication and Private Key changes (#1022330)
- Improved LDAP configuration in Users application (#1067924)
- Improved Security in Permanent Login Feature (#1025095)
- Fixed improper tenant data access with broken references (#1093351)
- Signatures of old Module Versions are now cleaned when no longer necessary (#913184)
- Fixed user with privileges not being able to check Solution publication logs (#945395)
- Fixed compilation error when using a list of identifiers inside structures (#1009391)
- Fixed compilation error when using a list of integers and a list of identifiers (#1025964)
- Fixed poor performance of Error log screen in MySQL (#1027271)
- Fixed compilation error when consuming an action with a static entity as output parameter (#1052638)
- Fixed environment token not being deleted after unregistering the environment, leading to being impossible to re-register it (#1055299)
- Fixed detach source code references and warnings (#1058295)

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- Fixed performance issue on SAP Remote calls that retrieve a great number of rows (#1098393)
- Fixed generation of time intervals for a Timer schedule with timezone different from GMT (#477649)
- Fixed Editable table saving row on enter press for Microsoft IME (#998469)
- Updated Login action to avoid blocking when updating the LastLogin (#1006905)
- Fixed issue generating multiple execution plans for a single query in SQL Server (#1024056)
- Fixed email validation in Service Center's User Edit screen (#1026325)
- Fixed Combo-Box being enabled in editable tables rows not being edited in Internet Explorer (#1049765)
- Fixed inconsistent limit for Decimals attribute between Service Studio and Platform Server (#1051952)
- IIS "HTTP Response Headers" missing "Expire Web content" cache setting (#1058326)
- Fixed ServiceCenter autocomplete not working in Chrome (#1060952)
- Fixed Internet Explorer's windows going to the background when saving the row of an EditableTable inside a popup editor (#1078109)
- Fixed tagging in LifeTime to take into consideration tags reserved by saved plans (#1084994)
- Fixed escaping mechanism used in OSJS that would cause runtime errors in some scenarios (#1094808)
- Fixed "User Provider Espace not found" error in Case Sensitive Oracle Databases (#1094813)
- Fixed RichWidget's Input Auto-Complete when using an IME keyboard in Firefox browser (#1096980)
- Fixed Database Configuration form for iDB2 being refreshed when trying to check Auto Commit option (#1101895)
- Fixed input inside a Form losing style after an Ajax Refresh (#995661)

Platform Server 9.0.1.40 (2015-11-13)

- Fixed compilation error when a directory from "share" folder is open in explorer (#283909)
- Fixed DBCleaner delete attributes that were deleted but recreated later. (#1026692)
- Fixed DatePicker inside Forms not working in Chrome in Windows with touch interface enabled (#893682)
- Improved Security in System eSpaces Web Screens (#1014894 #1014896)
- Improved Security of generated applications (#1014916)
- Fixed Asynchronous Logging error saving non-mandatory foreign keys with value 0 (#1026097)
- Fixed Performance Monitor button highlight when in Performance Monitor (#730999)
- Fixed compilation error when using implicit conversions in Web Screen input parameter (#992127)
- Fixed Ajax error when redirecting to external screen in exception handler (#1005426)
- Fixed missing Administrator role on AppPreview page in ECT_Provider (#1023105)
- Improved Generated Applications Error Logging (#1025056)
- Fixed Custom Logging errors not being logged in Error Logs (#1025057)
- Fixed REST API documentation formatting (#1025175)
- Improved reliability when sending emails to tolerate SMTP Server misbehaviors (#1025190)
- Fixed sessions lasting beyond session timeout when using EPA taskbox (#1025664)
- External authentication plugins are not longer called to authenticate PlatformServices (#1026353)
- Fixed Lifetime Deployment leaving outdated modules in target environment (#1026359)
- Fixed compilation error when publishing SAP configured eSpace with large passwords (#1026497)
- Fixed Charts not loading in screen with Client Side Tabs in IE9 (#1027220)

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- Fixed pending time displayed when hovering an email in Service Center (#276584)
- Fixed extension download version and user information in Integration Studio "Download Other Versions" dialog (#429597)
- Fixed minor issues in eSpace and Solution Edit screens in Service Center (#908661)
- Fixed App Feedback confirmation message translation (#998127)
- Fixed cursor backward traverse to not move out of the first element of the editable row (#1023413)
- Improved Performance Monitoring when an environment is unregistered and reregistered (#1023661)
- Improved LifeTime environment sync to detect hotfix changes (#1024023)
- Fixed missing permissions left by configuration tool when using windows authentication to access session database (#1027143)

Platform Server 9.0.1.35 (2015-10-02)

- **What's New**
 - Added UTF-8 support in a 'From' field of an email (#997410)
 - Added Icelandic translations to RichWidgets and Users (credits to Iris) (#994171)
 - New Exposed REST APIs capabilities:
 - Customize the url of each method (#1019733)
 - Use input parameters in the url path (#1019734)
 - Added Requests and Responses logging (#1019735)
 - Added extensibility callbacks - OnRequest and OnResponse (#1019736)
- Fixed incorrect Slow Query reported time (#1020265)
- Fixed error in preview of Aggregates with non-text "search parameters" (#825944)
- Fixed slow login when using LDAP (#847719)
- Fixed error rendering Editable Table with 150+ lines (#873613)
- Fixed errors on AppFeedback's InvalidateCache callback due to high amount of modules (#943846)
- Fixed error editing Database Catalog description in Service Center (#867581)
- Fixed Editable Table's row being saved when pressing Enter inside a multi-line input in the row (#938610)
- Fixed not being able to drag a Popup window (#993993)
- Fixed application not showing in App Feedback configuration nor option to load more applications (#996090)
- Fixed not be able to use Charts when the application is using JQuery 1.4.2 (#997401)
- Fixed rare timeouts in application servers due to deadlock (#997405)
- Fixed the last line of the Editable Table not being shown after an ajax request (#997414)
- Fixed App Feedback application not showing button to scroll enabled Applications (#999448)
- Fixed issue where Administrator user on a Cloud Environment didn't see link to publish Applications in ServiceCenter (#1002165)
- Fixed large filename length generated for structures when using Exposed REST APIs (#1013211)
- Fixed wrong LifeTime environment order in cloud (#1013718)
- Fixed Exposed REST APIs documentation to still include HTTPS as a accepted protocol even if the service does not require it (#1019741)
- Fixed debugger not working in Expose REST APIs when the request is not from the same machine that is debugging (#1005689)
- Fixed minor issue in precaching feature that might cause repeated fetch of resources (#1014152)

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- Fixed issue where user with permissions would not be able to list extensions in Service Studio (#1020568)
- Fixed issue where an input with auto-complete would have onchange trigger more than once (#1022465)
- Fixed SEO Site rules not being applied in Oracle installations(#1020695)
- Improved the time required to change the virtual directory in IIS when deploying modules (#994130)
- Properly escape single quotes inside extended properties in Label widget (#1019618)

Platform Server 9.0.1.25 (2015-08-24)

- Added support to Edge Browser (#991318)
- Changed App Feedback back office to load CSS from feedbacks sent under an https connections to servers without valid certificates (#418673)
- Improved Resource Prefetching feature configuration tab (#981216)
- Fixed LifeTime not being able to register environment via HTTPS only (#695499)
- Fixed issue in Sync_References that might cause a timeout while executing (#959103)
- Fixed issue where LifeTime would retrieved a deleted version of producer module when syncing references (#978859)
- Fixed error opening a zip file produced in MAC-OS with the Zip Extension (#472665)
- Fixed compilation error when using a variable as the value for the "tabindex" extended property (#582043)
- Fixed compilation error using static entities with Text Id starting with apostrophe (#913186)
- Fixed Lifetime SDK action Deployment_List not returning values for DeploymentStatusId attribute (#918439)
- Fixed a compilation problem when consuming an action that uses a nameclashed entity or structure (#951390)
- Fixed deployment planning errors due to duplicate modules in LifeTime (#955459)
- Fixed issue where user without manage infrastructure couldn't call some lifetime team WS methods (#962315)
- Increased SEO site rules limit from 10000 to 50000 (#967109)
- Fixed synchronization error when trying to synchronize module versions that were not published (#973762)
- Fixed issue in LifeTime where users with some special characters in the name could not be added to teams (#976381)
- Fixed wrong CSS binary being uploaded in Resource Prefetching custom configuration (#976419)

Platform Server 9.0.1.19 (2015-07-30)

- **What's New**
 - Discovery, consumption and monitoring of SAP BAPIs
- Fixed Consumed REST APIs Structures Attributes Software Unit count (#988167)
- Fixed introspection with DB2 to correctly list all available schemas (#950073)

Platform Server 9.0.1.15 (2015-07-10)

- **What's New**
 - Application's resources preloader and pre-caching JavaScript API (#952306)
- Fixed LifeTime staging leaving outdated modules for selected applications (#942272)
- Fixed AppFeedback not displaying resources properly due to relative URLs (#928079)

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- Fixed 1CP concurrency problem (#653483)
- Fixed incorrect definitions of update and upgrade procedures in the installation checklist (#915879)
- Fixed issue publishing solutions with REST APIs when there were no changes in the modules (#926366)
- Fixed problem with User's applications list where applications that weren't UserProvided by User would appear (#494363)
- Fixed AppFeedback callbacks not being deleted when personals are shifted from cluster (#909657)
- Fixed last row of Editable Table is always visible in Internet Explorer 8 (#939709)
- Fixed SEO page rule problem when renaming an eSpace (#484846)
- Fixed some situations where publication was not working in Service Center when accessing via HTTPS (#634271)
- Fixed AppFeedback not working when using Site Rules to set Root Application (#882878)
- Fixed compilation error when using type List Entity Identifier (#884723)
- Fixed AppFeedback javascript being rendered multiple times (certain Platform callbacks were being rendered multiple times) (#886594)
- Fixed Bar Chart colors not matching with their legend (#886993)
- Fixed Charts not being displayed inside client side tabs on IE after an ajax refresh (#892030)
- Fixed RichWidget's Calendar 'Today' button not working when current day is a special date (#903944)
- Fixed unicode characters not showing in aggregate preview (only noticeable with newer version of Development Environment) (#906536)
- Fixed eSpaces not being shown in Factory Configuration when environment is managed by lifetime (#917202)
- Fixed white margin at the bottom in Login pages developed with Silk caused by AppFeedback block (#918008)
- Fixed AppFeedback not properly handling external Feedback (#923419)
- Fixed SEO site rules problem when renaming an eSpace (#924303)
- Fixed problem when trying to download an image to embed in an email and there is no ContentLength (#924318)
- Fixed Expose REST documentation to correctly display Integer types as "Integer" instead of "Long" (#926379)
- Fixed error in Service Center Monitoring screen when having more than 1000 espaces (#931421)
- Fixed External Site url not being updated in runtime after changing it (#932962)
- Fixed AppFeedback block not showing prompt text on Internet Explorer (#934549)
- Fixed issue preventing SOAP Web Services with Enumerates from being imported correctly (#935823)
- Fixed the 'Show All' link for the eSpaces search result not being visible when there were more eSpaces to be displayed (#894204)
- Fixed a problem when publishing an empty solution where the Deploy Button would always reappear at the end of the process (#896981)
- Fixed eSpace link in Service Center Process Monitoring screen (#932534)
- Fixed problem with publication of an eSpace with reference to system entities requires that was requiring full control (#884393)
- Increased the limit of a connection string to 800 characters in custom database connections (#950163)
- Improved debugger communication error messages (#774299)
- Improved cache of referenced resources using suffix based on producer's version instead of consumer's version (#952307)
- Improved performance when retrieving eSpace list in Service Studio when connected to a MySQL server (#919750)
- Improved MySQL configuration instructions (#940329)

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- Improved MySQL maxRecords implementation to be more efficient when collecting a subset of records from large tables (#946883)
- Added Integration Log link in the Application Screen in Service Center (#934481)
- Added pagination to detail of Service Center Analytics report screen (#264614)
- Removed deprecated link in eSpace edit page (#875377)

Platform Server 9.0.1.9 (2015-05-29)

- **What's New**
 - Support for full unicode on MySQL, for existing platforms the databases need to be recreated or migrated to the new charset (#821321)
- Fixed dynamic order by to work with calculated attributes (#854718)
- Added a warning/error when trying to deploy application without modules (#885720)
- Fixed deployment abort not working in LifeTime (#886971)
- Fixed Submit Feedback selection log in LifeTime (#886972)
- Fixed problem republishing deleted modules with LifeTime (#886975)
- Fixed broken links in LifeTime (#886978)
- Deleting an application from an environment now cleans application info in LifeTime (#886980)
- Fixed staging a deleted application with just a deleted module (#886984)
- Fixed problem while exporting LifeTime SDK sample data (#886985)
- Removed "different" sign from extensions in LifeTime (#886987)
- Fixed problem when tagging and deploying applications from Forge with LifeTime (#888004)
- Multiple equal options appearing on staging options dropdown (#910925)
- Fixed broken links to LifeTime in ServiceCenter (#914304)
- Increased LifeTimeAudit default maximum log days from 12 to 365 days (#914354)
- In ServiceCenter, a user with Change & Deploy permission is not allowed to delete an Application (#914358)
- Added Icelandic translations to RichWidgets (credits to Íris) (#871759)
- Updated RichWidgets and ServiceStudio icons (#893236)
- Fixed incorrect aggregate count when using group by function (#747370)
- Fixed Input_AutoCompete widget overriding Placeholder/Prompt text (#858392)
- Fixed issue when Popup Info Balloon would be rendered outside visible page (#573796)
- Fixed error Invoking WebReference with choices with object types (#730936)
- Fixed compilation error when publishing caused by nameclash on the generated code (#796999)
- Fixed error in Create/Upgrade Database step in Configuration Tool when upgrading (#825592)
- Fixed invalid Excel date pattern generated by the RecordListToExcel widget (#834401)
- Fixed EditRecord validation problem where invisible inputs using ajax refresh would count for the validation of the whole EditRecord (#841640)
- Modified the default value of DDL_LOCKTIMEOUT (#843004)
- Fixed wrong font for Japanese characters in new eSpaces when accessed from Windows (#858002)
- Increased Test List Addresses from 250 to 2000 characters (#865081)
- Improved logs to troubleshoot license errors while uploading a license (#868315)
- Fixed input calendar widget not being properly updated in flat-style mode (#868691)

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- Fixed wrong CSS in Input Calendar widget (#872139)
- Increased ISAPIFilter Maximum URL size to process to 2048 (#886576)
- Fixed rare crash of IIS due to HTTPRequestHandler misbehaviour (#887660)
- Removed unnecessary audits in general logs from HTTPRequestHandler (#887975)
- Fixed problem where Flows or Resources named "Plugins" are not correctly copied to the application (#897649)
- Fixed Lifetime "Setup Done" not working after setting up the infrastructure (#901585)
- Fixed error after setting the LDAPAuthProvider as active and testing (#905470)
- Fixed REST documentation typo (#910936)
- Fixed SAP and DB2 links in the installation checklist (#913227)
- Removed margin top from footer in London_Layout (#848759)
- Fixed RichWidgets Input Calendar not displaying month and year menu (#856032)
- Added possibility in AppFeedback to search by feedback ID for one application (#914774)
- Allow granting Reference permission to all eSpaces and Extensions in Service Center (#851433)
- Fixed built-in function GetCurrentLocale to retrieve the correct value (#878390)
- Fixed aggregate sorting in referenced DB2 table(#919348)
- Added default <system.diagnostics> to services config files (#872117)
- Added new method to services' RMI (#872122)

Platform Server 9.0.1.4 (2015-04-27) – P9 Amsterdam

- **What's New**
 - Visual Exposing of REST APIs (#896524)
 - Added Support for Oracle 12c Database Engine (#850277)
 - Added support to Microsoft SQL Server 2014 (#807516)
 - Added Support for Microsoft Azure (#895415)
 - Improved IT governance support for app staging and external authentication mechanisms
 - Role-based Access Control in LifeTime (#843869)
 - Staging granularity and improvements (#843870)
 - Auditing of LifeTime operations (#843871)
 - Support for external authentication mechanisms (#895416)
 - New Application Feedback (former ECT) UI for users providing feedback (#808326)
 - New revamped Application Feedback backoffice (former Embedded Change Technology, ECT) & new way to configure rules (#808324)
 - Application Feedback (former ECT) now works on mobile devices (#808327)
 - Added Application Feedback (former ECT) integration with OutSystems Now - submit feedback with voice (#808329)
 - Support for Windows 8.1 and Windows Phone 8.1 in OutSystems Now (#896528)
 - Support inline base64 images in Email (#382261)
 - Support for data URI scheme on external images (#439002)
- Fixed error publishing to personal area for the first time, when module contained a custom widget (#706763)
- Fixed MySQL problem with query readers being closed after commit (#758628)
- Improved security of Feedback Message first usages (#827087)
- Fixed Service Center publish button not being visible for users with appropriate security level (#846855)

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- Fixed problem with AJAX request problem when using JQuery 1.4 (#860632)
- Fixed App Feedback problem on Internet Explorer 8 (IE8) (#862520)
- Fixed App Feedback problem when retrieving feedback from other environments (#862860)
- Fixed problem with DBCleaner_API not deleting Process Entities (#870539)
- Fixed incorrect sort attribute being generated when upgrading simple queries to aggregates (#873585)
- Fixed problem when creating a details screen for a read only entity (#880990)
- Fixed Deleting Old eSpace Versions causing broken references to Service Center public elements (#882843)

- **Known Issues** (to be fixed until the end of May)
 - In LifeTime, it is not possible to abort a deployment plan (#886971) – workaround: enable 2-stage deployment in the target environment before starting the deployment. If needed, you can abort the deployment via ServiceCenter by locating the deployment in the “Recent items” list, clicking it and aborting it from there.

Platform Server 9.0.0.36 (2015-03-13)

- Fixed missing slider in LifeTime role edit screen (#859162)

Platform Server 9.0.0.35 (unreleased)

[DISCLAIMER] Application running over MySQL will require republish to continue to work (#842692)

- **What's New**
 - Added Support for Oracle 12c Database Engine (#850277)
 - Improved the number of css requests when loading pages (#819599)
- Fix for inconsistent column number in views error after deleting a column using the DB cleaner API (#836686)
- Updated Japanese translations of LifeTime (#819838)
- Updated System Components translations (#819840)
- Fixed compilation error when using new data types (#811106)
- Relaxed restriction that only admin user can upload licenses in cloud infrastructures (#670673)
- Fixed compilation error triggered by using non-Text attributes in aggregates dynamic order by (#795521)
- Fixed editable table operations when header is hidden (#808728)
- Added DB2 requirements to checklist (#813291)
- Fixed missing administrator links to edit user permissions on lifetime when using the OutSystemsPaaS (#823623)
- Fixed RichWidgets Auto-complete widget reusing old values in some scenarios (#836304)
- Fixed impact analysis error when publishing new eSpace version with removed entities (#623575)
- Fixed issue using dbnulls in aggregates (#761844)
- Fixed concurrency issues where platform logins did not run in parallel (#798465)
- Fixed error "Missing OML Fragment" displayed in aggregates preview (#803222)
- Fixed compilation of basic type lists in some scenarios (#809375)
- Fixed editable table not being properly updated after an Ajax Refresh (#811110)
- Changed Editable Table header element tag from <td> to <th> (#811910)
- Fixed Label widget not applying style property correctly (#817879)
- Fixed Last publisher of extensions in Solution publish always being Admin (#828628)
- Fixed App Feedback integration problems (#838811)

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- Fixed Compilation error with Referenced WebReference Structure with attributes of type Static Entity Id (#838825)
- Fixed differential compilation problem after publishing a solution (#841937)
- Fixed Service Center Analytics descriptions (#760312)
- Japanese Translations Order Change Request - "Edit Name" to "Name Edit" (#821353)
- Improved debugger support for records and lists of basic types (#714034)

Platform Server 9.0.0.23 (2015-01-23)

- **What's New**
 - New Application Feedback (former ECT) UI for users providing feedback (#808326)
 - New revamped Application Feedback backoffice (former Embedded Change Technology, ECT) & new way to configure rules (#808324)
 - Application Feedback (former ECT) now works on mobile devices (#808327)
 - Added Application Feedback (former ECT) integration with OutSystems Now - submit feedback with voice (#808329)
 - Improved Web References to import Enumerates values as Static Entity Identifiers instead of Text. (#721181) - Only when imported with Development Environment 9.0.0.23+ (#721181)
 - Added support to Microsoft SQL Server 2014 (#807516)
 - Added DBCleanup_API module to System Components to allow deleting old columns/tables, and old module versions (#754942)
- Improved 1CP time by starting the check for wsdl changes step earlier (#751958)
- Improved 1CP time by optimizing database meta model introspection (#724644)
- Improved 1CP error message displayed when a developer tries to change the type of an attribute that already has values that are not convertible to the new type (#750199)
- 1CP now drops foreign keys of the deleted entities (#752035)
- Fixed multiple errors related with Unicode characters (#750213)
- Minor change to ServiceCenterEspace_Version entity (#702057)
- Improved performance of very large AJAX requests (#763385)
- Fixed Service Center security problem that allowed executing some operations with higher privileges (#493954,#807573)
- Fixed compilation error when exist Labels with non-text Value (#760311)
- Fixed error when refreshing or importing tables using Integration Studio with change and deploy permission level (#775845)
- Fixed browser side validation of input elements of type number when using decimal variables (#791483)
- Fixed overlapping links in Service Center's eSpace Edit screen (#806213)
- Fixed wrong active submenu in Consumed Web Reference Detail/Error page is Service Center (#798088)
- Fixed database catalog feature being shown in Service Center in a MySQL installation (#800967)
- Fixed compilation error when using static entities on referenced actions (#809847)
- Fixed BPT error when processing an activity exception (#813319)

Platform Server 9.0.0.19 (2014-12-19)

- Fixed LifeTime broken style in Users And Roles page (#604969)
- Improved LifeTime's synchronization mechanism (#670432)
- Fixed ECT feedback window not being repositioned on click using IE11 (#689265)
- Fixed non-visible used variables not being correctly added to viewstate (#775972)
- Fixed issue where Service Center could be replaced by other eSpace of the same name (#621946)

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- Fixed client-side validations of Number type input fields (#634208)
- Fixed order of expanded CSS properties in style attribute in emails (#668445)
- Fixed application comparison pop-up screen that showed incorrect module details and order (#687384)
- Fixed WebReference Choice with all option of the same type imported as a non Choice element (#729484)
- Fixed "New" button when using Scaffolding and mobile theme LondonSmartphone on Android stock browsers (pre 4.3) (#754483)
- Fixed EncodeSql built in function to correctly work with the current database. (#757519)
- Fixed database custom triggers being wrongly dropped (#758681)
- Fixed issue where the optimizer was marking query results as not used which caused runtime anomalies in the optimized code (#776461)
- Fixed Platform services recovery mode (were not being set to automatically restart) (#779476)
- Fixed error log screens when filtering by an application without eSpaces (#489667)
- Fixed espace compilation error with a complex flow (cycle inside a cycle with ifs and switches pointing to another cycle.) (#555072)
- Fixed broken link on Process Monitoring screen in Service Center (#604137)
- Fixed espace compilation error with webReference with choices where all choices are the same type (#663397)
- Fixed simple query testing with dynamic ordering by parameter without providing a parameter value (#693136)
- Fixed issue when checking the report for the publish of a big solution that could crash the browser (#696174)
- Fixed Ajax redirect stopped by onbeforeunload leaving Internet Explorer hanging (#703387)
- Fixed MDC Schema creation script to be RDS compatible (#716385)
- Fixed mobile input calendar showing 01-01-1970 (#718594)
- Added configuration to set HTTP-ONLY / Secure flags in session cookies (#719039)
- Fixed Runtime error invoking webReference with Choices with Enumerates (#720250)
- Fixed client-side validation date 1970-01-01 being considered invalid (#727118)
- Fixed incorrect execution of OnChange screen action when traversing a Combo Box using the TAB key (#736338)
- Fixed issue in eSpace upload where it was possible for the eSpace to have duplicate versions (#739637)
- Added Instructions to disable SSL 3.0 to prevent POODLE vulnerability (#740779)
- Fixed problem in GetFormValue that returned null when trying to obtain a non-existent field (#741200)
- Fixed platform help not opening in a browser (#741214)
- Fixed the list of timers, in Service Center, that was limited to 100 (#741236)
- Fixed Users integrated authentication when using internal network (#750813)
- Fixed configuration tool exception when installing on IIS server without web site (first install) (#760278)
- Fixed error when testing Advanced Queries dependent on widgets (#760298, 760298)
- Fixed error importing records to a static entity with entity reference attributes (#760372)
- Fixed Platform upgrade problem related to new system table privileges (#772074)
- Fixed problem where OutSystems services were not able connect to the database after reconfiguring an environment running on Oracle to run on SQL Server (#780083)
- Fixed TestQuery problem when results have non valid characters (#783497)
- Fixed ECT_Provider Feedback window not showing the number 1 icon (#495516)
- Fixed ResponsiveTables when using HiddenInSmartphone style in cells (#690158)
- Fixed Database Connection's permissions problem (#744712)
- Fixed problem where user was not able to delete an application created by him (#746987)
- Fixed manage infrastructure role permissions to be able to access logs (#746988)
- Fixed Database Connection permission problem where was not able to assign to a role (#746989)

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- Fixed Configuration Tool problem saving configurations (#766765)
- Fixed wrong Platform version information after platform upgrade (#766768)
- Fixed LifeTime problem in MySQL installations (#767688)
- Fixed CheckSessionDB isn't being executed in a RunAs context (#770763)
- Fixed problem run Configuration Tool silently in Windows Authentication mode (#774361)
- Fixed Platform Service database connectivity recovery after network problems (#781554)

Platform Server 9.0.0.11 (2014-11-24)

- Fixed issue with new installations on SQL Server causing Unicode support disabled (#777126)

Platform Server 9.0.0.6 (2014-10-24)

[DISCLAIMER] Production ready version for the .NET Oracle stack.
Any customers running on .NET/Oracle on earlier revisions of Platform 9 should update to 9.0.0.6+ to avoid known issues.

- Fixed compilation issue when Aggregates have some type conversions(#730611)
- Fixed editing combo box widget(#747426)
- Fixed problem when integrating with MySQL databases older than 5.1 (#747427)
- Fixed several problem upgrading modules (#728395)

Platform Server J2EE

Platform J2EE Server 9.0.1.60 (2016-04-15)

- Fixed error synchronizing users to environment in 8.0 or lower (#1026583)
- Fixed compilation error when using Entity Identifiers in Aggregates' filters (#1045290)
- Fixed problem of combobox not opening when inside of a form on windows phone 8.1 (#1133369)
- Fixed Team Edit screen only showing a limit of 50 Users and Applications in Lifetime (#1157680)
- Fixed Charts not showing time inside tooltips (#1112955)
- Introduced new setting to allow comments with hints to be passed in queries to Oracle databases (#1146855)
- Fixed not being able to activate "LifeTime Manage Users and Roles" option in cloud infrastructures (#1152168)
- Fixed deadlock scenario during concurrent synchronizations of different environments (#1170089)
- Fixed REST property Timeout in Seconds not taking into account time waiting for data to be received (#1170106)
- Fixed authentication error in lifetime services when using token and username (#1172174)

Platform J2EE Server 9.0.1.55 (2016-02-26)

- Improved security of Service Center authentication (#1093831)
- Fixed RichWidgets' Auto Complete dropdown list not closing due to javascript error in JQueryUI (#1103553)
- Fixed WindowsAuthentication on Service Center applications, hence originating http 401 errors (#1118319)
- Fixed concurrency issue when there are two synchronizations of the same environment running (#996100)
- Fixed advanced configuration of SQL Server external databases (default port is no longer enforced) (#1101225)
- Fixed timers not executing, or executing twice, when server changes between daylight saving time (#1115701)
- Fixed login errors after a slowquery loading the an application (#1002203)
- Improved optimization of actions that handle very complex structures (#1004396)
- Fixed LDAP configurations being applied without pressing Save button (#1066935)
- Updated default value of DEFAULT_DDL_LOCKTIMEOUT from 0 to 600 to avoid errors during installation (#1087885)
- ServiceCenter login page is no longer indexed by default by Google (#1093309)
- Fixed List of Application in Users not showing anything on Oracle when search input is empty (#1095783)
- Fixed ServiceCenter not showing some configurations for Database Connections and Database Catalogs when Windows Authentication is being used to connect to the database (#1098432)
- Fixed Preloader ignoring HTTPtoHTTPSproxyHeader parameter (#1101893)
- Primary key indexes on Oracle are now created as unique (#1106512)
- Fixed incorrect rendering of Label widgets with fixed width when using a style (#1107268)
- OpenSource modules are no longer contributing to SU/AO count when publishing a Solution (#1111891)
- Fixed shared tooltips not working when using Charts (#1112784)
- Fixed EditableTable save operation validates all mandatory fields in the page (#1115600)
- Fixed expression value restoration when canceling a row edition in an EditableTable (#1117374)
- Fixed slowness when sending an email (#1117424)

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- Fixed error handling ignoring HTTPtoHTTPSproxyHeader parameter when redirecting to a HTTP page (#1117522)
- Fixed Permanent Login failing when accessing a different eSpace where the login was performed (#1117818)
- Fixed 'From' field of an email being escaped (#1117819)
- Fixed problem when registering previously registered environment in lifetime (#1118910)
- Fixed strange validation messages strange behavior in IE8 (#1126149)
- Fixed timeout error while preparing staging in LifeTime (#1130304)
- Fixed slow eSpace undeploys in JBoss in large factories (#1123314)

Platform J2EE Server 9.0.1.50 (2016-01-15)

- **What's New**
 - Improved Solution Deployments: Licensing errors abort deployments for the entire solution
- Improve Logging Related with Token Communication and Private Key changes (#1022330)
- Improved LDAP configuration in Users application (#1067924)
- Improved Security in Permanent Login Feature (#1025095)
- Fixed improper tenant data access with broken references (#1093351)
- Signatures of old Module Versions are now cleaned when no longer necessary (#913184)
- Fixed user with privileges not being able to check Solution publication logs (#945395)
- Fixed widget visibility issues when placed inside a second level Table Records widget (#990763)
- Fixed compilation error when using a list of identifiers inside structures (#1009391)
- Fixed poor performance of Error log screen in MySQL (#1027271)
- Fixed login with LDAP when LDIF configuration is incomplete (#1048295)
- Fixed compilation error when consuming an action with a static entity as output parameter (#1052638)
- Fixed environment token not being deleted after unregistering the environment, leading to being impossible to re-register it (#1055299)
- Fixed detach source code references and warnings (#1058295)
- Fixed database connections not being properly released when undeploying an application (#1066428)
- Fixed performance issue on SAP Remote calls that retrieve a great number of rows (#1098393)
- Fixed generation of time intervals for a Timer schedule with timezone different from GMT (#477649)
- Fixed Editable table saving row on enter press for Microsoft IME (#998469)
- Updated Login action to avoid blocking when updating the LastLogin (#1006905)
- Fixed email validation in Service Center's User Edit screen (#1026325)
- Fixed Combo-Box being enabled in editable tables rows not being edited in Internet Explorer (#1049765)
- Fixed inconsistent limit for Decimals attribute between Service Studio and Platform Server (#1051952)
- Fixed ServiceCenter autocomplete not working in Chrome (#1060952)
- Fixed Internet Explorer's windows going to the background when saving the row of an EditableTable inside a popup editor (#1078109)
- Fixed tagging in LifeTime to take into consideration tags reserved by saved plans (#1084994)
- Fixed escaping mechanism used in OSJS that would cause runtime errors in some scenarios (#1094808)
- Fixed "User Provider Espace not found" error in Case Sensitive Oracle Databases (#1094813)
- Fixed RichWidget's Input Auto-Complete when using an IME keyboard in Firefox browser (#1096980)
- Fixed Database Configuration form for iDB2 being refreshed when trying to check Auto Commit option (#1101895)
- Fixed input inside a Form losing style after an Ajax Refresh (#995661)

Platform J2EE Server 9.0.1.40 (2015-11-13)

- Fixed DatePicker inside Forms not working in Chrome in Windows with touch interface enabled (#893682)
- Improved Security in System eSpaces Web Screens (#1014894 #1014896)
- Fixed Asynchronous Logging error saving non-mandatory foreign keys with value 0 (#1026097)
- Fixed Performance Monitor button highlight when in Performance Monitor (#730999)
- Fixed compilation error when using implicit conversions in Web Screen input parameter (#992127)
- Fixed missing Administrator role on AppPreview page in ECT_Provider (#1023105)
- Activated JBoss Garbage Collector and Access Logs by default (#1023625)
- Increased JBoss boot timeout to avoid timeouts in large factories (#1023626)
- Improved Generated Applications Error Logging (#1025056)
- Fixed Custom Logging errors not being logged in Error Logs (#1025057)
- Fixed REST API documentation formatting (#1025175)
- Improved reliability when sending emails to tolerate SMTP Server misbehaviors (#1025190)
- Fixed sessions lasting beyond session timeout when using EPA taskbox (#1025664)
- External authentication plugins are not longer called to authenticate PlatformServices (#1026353)
- Fixed Lifetime Deployment leaving outdated modules in target environment (#1026359)
- Fixed compilation error when publishing SAP configured eSpace with large passwords (#1026497)
- Fixed Charts not loading in screen with Client Side Tabs in IE9 (#1027220)
- Fixed pending time displayed when hovering an email in Service Center (#276584)
- Fixed extension download version and user information in Integration Studio "Download Other Versions" dialog (#429597)
- Fixed minor issues in eSpace and Solution Edit screens in Service Center (#908661)
- Fixed App Feedback confirmation message translation (#998127)
- Fixed cursor backward traverse to not move out of the first element of the editable row (#1023413)
- Improved Performance Monitoring when an environment is unregistered and reregistered (#1023661)
- Improved LifeTime environment sync to detect hotfix changes (#1024023)
- Fixed Empty dates on the Web Service response being read as current date (#1031414)
- Fixed issue in Lifetime where an equivalent module version was selected to publish instead of the correct one (#1026006)

Platform J2EE Server 9.0.1.35 (2015-10-02)

- **What's New**
 - Added Icelandic translations to RichWidgets and Users (credits to Iris) (#994171)
 - New Exposed REST APIs capabilities:
 - Customize the url of each method (#1019733)
 - Use input parameters in the url path (#1019734)
 - Added Requests and Responses logging (#1019735)
 - Added extensibility callbacks - OnRequest and OnResponse (#1019736)
- Fixed error in preview of Aggregates with non-text "search parameters" (#825944)
- Fixed error rendering Editable Table with 150+ lines (#873613)
- Fixed errors on AppFeedback's InvalidateCache callback due to high amount of modules (#943846)
- Fixed error editing Database Catalog description in Service Center (#867581)

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- Fixed Editable Table's row being saved when pressing Enter inside a multi-line input in the row (#938610)
- Fixed Editable Table not being properly updated after an Ajax Refresh (#981668)
- Fixed default SAP Connection Pooling settings that waited too long for available connections when pool limit was reached (#989841)
- Fixed not being able to drag a Popup window (#993993)
- Fixed application not showing in App Feedback configuration nor option to load more applications (#996090)
- Fixed not be able to use Charts when the application is using JQuery 1.4.2 (#997401)
- Fixed rare timeouts in application servers due to deadlock (#997405)
- Fixed App Feedback application not showing button to scroll enabled Applications (#999448)
- Fixed issue where Administrator user on a Cloud Environment didn't see link to publish Applications in ServiceCenter (#1002165)
- Fixed wrong LifeTime environment order in cloud (#1013718)
- Fixed MySQL configuration file location in installation checklist (#1015826)
- Fixed compilation of REST API and SAP to use symbolic links instead of always copy the libraries used (#1019739)
- Fixed Exposed REST APIs documentation to still include HTTPS as a accepted protocol even if the service does not require it (#1019741)
- Fixed debugger not working in Expose REST APIs when the request is not from the same machine that is debugging (#1005689)
- Fixed minor issue in precaching feature that might cause repeated fetch of resources (#1014152)
- Fixed issue where user with permissions would not be able to list extensions in Service Studio (#1020568)
- Fixed issue where an input with auto-complete would have onchange trigger more than once (#1022465)
- Fixed SEO Site rules not being applied in Oracle installations(#1020695)
- Fixed problem using connection switching API with DB2 integrations(#1021775)
- Properly escape single quotes inside extended properties in Label widget (#1019618)

Platform J2EE Server 9.0.1.25 (2015-08-24)

- Added support to Edge Browser (#991318)
- Improved Resource Prefetching feature configuration tab (#981216)
- Changed App Feedback back office to load CSS from feedbacks sent under an https connections to servers without valid certificates (#418673)
- Fixed LifeTime not being able to register environment via HTTPS only (#695499)
- Fixed issue in Sync_References that might cause a timeout while executing (#959103)
- Fixed issue where LifeTime would retrieved a deleted version of producer module when syncing references (#978859)
- Fixed Log Service DB connections leak when DB table space is full (#872102)
- Fixed compilation error using static entities with Text Id starting with apostrophe (#913186)
- Fixed Lifetime SDK action Deployment_List not returning values for DeploymentStatusId attribute (#918439)
- Added instruction in checklist to solve Slow First Connection to Oracle DB (#928036)
- Fixed External Site url not being updated in runtime after changing it (#932962)
- Fixed a compilation problem when consuming an action that uses a nameclashed entity or structure (#951390)
- Fixed deployment planning errors due to duplicate modules in LifeTime (#955459)
- Fixed issue where user without manage infrastructure couldn't call some lifetime team WS methods (#962315)
- Fixed synchronization error in LifeTime due to wrong web-service definition (#968657)
- Fixed Resource Prefetching not running when the request has no cookies (#970826)

- Fixed synchronization error when trying to synchronize module versions that were not published (#973762)
- Fixed issue in LifeTime where users with some special characters in the name could not be added to teams (#976381)
- Fixed wrong CSS binary being uploaded in Resource Prefetching custom configuration (#976419)

Platform J2EE Server 9.0.1.19 (2015-07-30)

- **What's new in 9.0.1.15**
 - Discovery, consumption and monitoring of SAP BAPIs
- Fixed Consumed REST APIs Structures Attributes Software Unit count (#988167)
- Fixed introspection with DB2 to correctly list all available schemas (#950073)
- Fixed usage of Expose REST APIs in Weblogic 12c that caused Entry Points to stop working (#950750)
- Fixed concurrency problem that could cause Exposed REST APIs exception messages to appear incorrectly in error log (#969552)
- Fixed solution compilation error on modules with REST APIs that were not modified (#970018)

Platform J2EE Server 9.0.1.15 (2015-07-10)

- **What's new in 9.0.1.15**
 - Application's resources preloader and pre-caching JavaScript API (#952306)
- Fixed LifeTime staging leaving outdated modules for selected applications (#942272)
- Fixed AppFeedback not displaying resources properly due to relative URLs (#928079)
- Fixed 1CP concurrency problem (#653483)
- Fixed incorrect definitions of update and upgrade procedures in the installation checklist (#915879)
- Fixed issue publishing solutions with REST APIs when there were no changes in the modules (#926366)
- Fixed problem with User's applications list where applications that weren't UserProvided by User would appear (#494363)
- Fixed problem where was possible to create output parameters in screen actions (#833058)
- Fixed not being able to use the same element as input and output in a web reference (#848471)
- Fixed AppFeedback callbacks not being deleted when personals are shifted from cluster (#909657)
- Fixed connection pool in DB2 integration to honor the correct settings (#939700)
- Fixed last row of Editable Table is always visible in Internet Explorer 8 (#939709)
- Fixed concurrency issue in OnBeforeRequestAdvanced and OnBeforeResponseAdvanced of Consumed REST APIs in Java (#942288)
- Fixed some situations where publication was not working in Service Center when accessing via HTTPS (#634271)
- Fixed not being able to use a static entity identifier as default value of an input parameter of a web block (#644113)
- Fixed problem where a text entity identifier used as a search parameter was not working properly (#733386)
- Fixed AppFeedback not working when using Site Rules to set Root Application (#882878)
- Fixed compilation error when using type List Entity Identifier (#884723)
- Fixed AppFeedback javascript being rendered multiple times (certain Platform callbacks were being rendered multiple times) (#886594)
- Fixed Bar Chart colors not matching with their legend (#886993)
- Fixed Charts not being displayed inside client side tabs on IE after an ajax refresh (#892030)
- Fixed RichWidget's Calendar 'Today' button not working when current day is a special date (#903944)

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- Fixed unicode characters not showing in aggregate preview (only noticeable with newer version of Development Environment) (#906536)
- Fixed eSpaces not being shown in Factory Configuration when environment is managed by lifetime (#917202)
- Fixed white margin at the bottom in Login pages developed with Silk caused by AppFeedback block (#918008)
- Fixed AppFeedback not properly handling external Feedback (#923419)
- Fixed problem when trying to download an image to embed in an email and there is no ContentLength (#924318)
- Fixed Expose REST documentation to correctly display Integer types as "Integer" instead of "Long" (#926379)
- Fixed error in Service Center Monitoring screen when having more than 1000 espases (#931421)
- Fixed AppFeedback block not showing prompt text on Internet Explorer (#934549)
- Fixed error processing web request with backslashes in URL query-string (#934558)
- Fixed issue preventing SOAP Web Services with Enumerates from being imported correctly (#935823)
- Fixed compilation error of Exposed REST APIs during in the personal area (#939733)
- Fixed List Type Session variable being lost (#946874)
- Fixed the 'Show All' link for the eSpaces search result not being visible when there were more eSpaces to be displayed (#894204)
- Fixed a problem when publishing an empty solution were the Deploy Button would always reappear at the end of the process (#896981)
- Fixed eSpace link in Service Center Process Monitoring screen (#932534)
- Fixed problem with publication of an espace with reference to system entities requires that was requiring full control (#884393)
- Increased the limit of a connection string to 800 characters in custom database connections (#950163)
- Improved MySQL maxRecords implementation to be more efficient when collecting a subset of records from large tables (#946883)
- Improved MySQL configuration instructions (#940329)
- Improved performance when retrieving eSpace list in Service Studio when connected to a MySQL server (#919750)
- Improved debugger communication error messages (#774299)
- Improved cache of referenced resources using suffix based on producer's version instead of consumer's version (#952307)
- Added Integration Log link in the Application Screen in Service Center (#934481)
- Added pagination to detail of Service Center Analytics report screen (#264614)
- Removed deprecated link in eSpace edit page (#875377)

Platform J2EE Server 9.0.1.9 (2015-05-29)

- **What's New**
 - Support for full unicode on MySQL, for existing platforms the databases need to be recreated or migrated to the new charset (#821321)
- Fixed dynamic order by to work with calculated attributes (#854718)
- Added a warning/error when trying to deploy application without modules (#885720)
- Fixed deployment abort not working in LifeTime (#886971)
- Fixed Submit Feedback selection log in LifeTime (#886972)
- Fixed problem republishing deleted modules with LifeTime (#886975)
- Fixed broken links in LifeTime (#886978)
- Deleting an application from an environment now cleans application info in LifeTime (#886980)
- Fixed staging a deleted application with just a deleted module (#886984)

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- Fixed problem while exporting LifeTime SDK sample data (#886985)
- Removed "different" sign from extensions in LifeTime (#886987)
- Fixed problem when tagging and deploying applications from Forge with LifeTime (#888004)
- Multiple equal options appearing on staging options dropdown (#910925)
- Fixed broken links to LifeTime in ServiceCenter (#914304)
- Increased LifeTimeAudit default maximum log days from 12 to 365 days (#914354)
- In ServiceCenter, a user with Change & Deploy permission is not allowed to delete an Application (#914358)
- Added Icelandic translations to RichWidgets (credits to Íris) (#871759)
- Updated RichWidgets and ServiceStudio icons (#893236)
- Fixed incorrect aggregate count when using group by function (#747370)
- Fixed Input_AutoCompete widget overriding Placeholder/Prompt text (#858392)
- Fixed issue when Popup Info Balloon would be rendered outside visible page (#573796)
- Fixed problem upgrading from previous versions (#825592)
- Fixed invalid Excel date pattern generated by the RecordListToExcel widget (#834401)
- Modified the default value of DDL_LOCKTIMEOUT (#843004)
- Fixed wrong default font for Japanese characters shown in Windows Operating System (#858002)
- Increased Test List Addresses from 250 to 2000 characters (#865081)
- Improved logs to troubleshoot license errors while uploading a license (#868315)
- Fixed input calendar widget not being properly updated in flat-style mode (#868691)
- Fixed OutSystems services always marked as stopped after upgrading to Java JDK 1.6.0.91 (#872106)
- Removed unnecessary RedHat Channel RHEL Server Supplementary from the JBoss 6 EAP installation checklist (#872135)
- Fixed wrong CSS in Input Calendar widget (#872139)
- Fixed problem where Flows or Resources named "Plugins" are not correctly copied to the application (#897649)
- Fixed Lifetime "Setup Done" not working after setting up the infrastructure (#901585)
- Fixed error after setting the LDAPAuthProvider as active and testing (#905470)
- Fixed REST documentation typo (#910936)
- Removed margin top from footer in London_Layout (#848759)
- Fixed RichWidgets Input Calendar not displaying month and year menu (#856032)
- Added possibility in AppFeedback to search by feedback ID for one application (#914774)
- Allow to grant Reference permission to all eSpaces and Extensions in Service Center (#851433)
- Fixed aggregate sorting in referenced DB2 table (#919348)

Platform J2EE Server 9.0.1.6 (2015-05-15)

- Fixed cleanup mechanism of expired sessions not running for Java/Oracle installations (#918005)

Platform J2EE Server 9.0.1.4 (2015-04-27) – P9 Amsterdam

- **What's New**
 - Visual Exposing of REST APIs (#896524)
 - Added Support for Oracle 12c Database Engine (#850277)
 - Added support to Microsoft SQL Server 2014 (#807516)
 - Added Support for Microsoft Azure (#895415)

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- Improved IT governance support for app staging and external authentication mechanisms
 - Role-based Access Control in LifeTime (#843869)
 - Staging granularity and improvements (#843870)
 - Auditing of LifeTime operations (#843871)
 - Support for external authentication mechanisms (#895416)
- New Application Feedback (former ECT) UI for users providing feedback (#808326)
- New revamped Application Feedback backoffice (former Embedded Change Technology, ECT) & new way to configure rules (#808324)
- Application Feedback (former ECT) now works on mobile devices (#808327)
- Added Application Feedback (former ECT) integration with OutSystems Now - submit feedback with voice (#808329)
- Support for Windows 8.1 and Windows Phone 8.1 in OutSystems Now (#896528)
- Support inline base64 images in Email (#382261)
- Support for data URI scheme on external images (#439002)
- Fixed error publishing to personal area for the first time, when module contained a custom widget (#706763)
- Fixed MySQL problem with query readers being closed after commit (#758628)
- Improved security of Feedback Message first usages (#827087)
- Fixed Service Center publish button not being visible for users with appropriate security level (#846855)
- Fixed problem with AJAX request problem when using JQuery 1.4 (#860632)
- Fixed App Feedback problem on Internet Explorer 8 (IE8) (#862520)
- Fixed App Feedback problem when retrieving feedback from other environments (#862860)
- Fixed problem with DBCleaner_API not deleting Process Entities (#870539)
- Fixed incorrect sort attribute being generated when upgrading simple queries to aggregates (#873585)
- Fixed problem when creating a details screen for a read only entity (#880990)
- Fixed Deleting Old eSpace Versions causing broken references to Service Center public elements (#882843)
- **Known Issues**
 - In LifeTime, it is not possible to abort a deployment plan (#886971) – workaround: enable 2-stage deployment in the target environment before starting the deployment. If needed, you can abort the deployment via ServiceCenter by locating the deployment in the “Recent items” list, clicking it and aborting it from there.

Platform J2EE Server 9.0.0.36 (2015-03-13)

- Fixed missing slider in LifeTime role edit screen (#859162)

Platform J2EE Server 9.0.0.35 (unreleased)

[DISCLAIMER] Application running over MySQL will require republish to continue to work (#842692)

- **What's New**
 - Added Support for Oracle 12c Database Engine (#850277)
 - Improved the number of css requests when loading pages (#819599)
- Fix for inconsistent column number in views error after deleting a column using the DB cleaner API (#836686)
- Fixed compilation error when using new data types (#811106)
- Updated Japanese translations of LifeTime (#819838)
- Relaxed restriction that only admin user can upload licenses in cloud infrastructures (#670673)

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- Fixed compilation error triggered by using non-Text attributes in aggregate dynamic order by (#795521)
- Fixed editable table operations when header is hidden (#808728)
- Fixed missing administrator links to edit user permissions on lifetime when using the OutSystemsPaaS (#823623)
- Fixed RichWidgets Auto-complete widget reusing old values in some scenarios (#836304)
- Fixed impact analysis error when publishing new eSpace version with removed entities (#623575)
- Added WebLogic 12 Jaxb WSDL Enumerate patch to check list (#666032)
- Fixed issue using dbnulls in aggregates (#761844)
- Fixed concurrency issues where platform logins did not run in parallel (#798465)
- Fixed error publishing WebReference containing SimpleTypes with the same name in different schemas (#799757)
- Fixed error "Missing OML Fragment" displayed in aggregate preview (#803222)
- Fixed compilation of basic type lists in some scenarios (#809375)
- Changed Editable Table header element tag from <td> to <th> (#811910)
- Added WebLogic 12 Memory Leak patch to check list (#817872)
- Fixed Label widget not applying style property correctly (#817879)
- Updated Oracle UCP library with fix for stuck threads (#818880)
- Fixed Last publisher of extensions in Solution publish always being Admin (#828628)
- Fixed App Feedback integration problems (#838811)
- Fixed differential compilation problem after publishing a solution (#841937)
- Fixed Service Center Analytics descriptions (#760312)
- Japanese Translations Order Change Request - "Edit Name" to "Name Edit" (#821353)
- Improved debugger support for records and lists of basic types (#714034)

Platform J2EE Server 9.0.0.23 (2015-01-23)

- **What's New**
 - New Application Feedback (former ECT) UI for users providing feedback (#808326)
 - New revamped Application Feedback backoffice (former Embedded Change Technology, ECT) & new way to configure rules (#808324)
 - Application Feedback (former ECT) now works on mobile devices (#808327)
 - Added Application Feedback (former ECT) integration with OutSystems Now - submit feedback with voice (#808329)
 - Improved Web References to import Enumerates values as Static Entity Identifiers instead of Text. (#721181) - Only when imported with Development Environment 9.0.0.23+ (#721181)
 - Added support to CentOS 6 (#807517)
 - Added DBCleanup_API module to System Components to allow deleting old columns/tables, and old module versions (#754942)
- Improved 1CP time by optimizing database meta model introspection (#724644)
- Improved 1CP error message displayed when a developer tries to change the type of an attribute that already has values that are not convertible to the new type (#750199)
- Improved 1CP time by starting the check for wsdl changes step earlier (#751958)
- 1CP now drops foreign keys of the deleted entities (#752035)
- Minor change to ServiceCenterEspace_Version entity (#702057)
- Fixed compilation error when exist Labels with non-text Value (#760311)
- Fixed error when refreshing or importing tables using Integration Studio with change and deploy permission level (#775845)

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- Fixed browser side validation of input elements of type number when using decimal variables (#791483)
- Fixed wrong active submenu in Consumed Web Reference Detail/Error page is Service Center (#798088)
- Fixed overlapping links in Service Center's eSpace Edit screen (#806213)
- Fixed Service Center security problem that allowed executing some operations with higher privileges (#493954, #807573)
- Fixed database catalog feature being shown in Service Center in a MySQL installation (#800967)
- Add WebLogic 11 Memory Leak patch to Check list (#808315)
- Fixed compilation error when using static entities on referenced actions (#809847)
- Fixed LifeTime users/roles bootstrap in MySQL database (#802167)
- Fixed BPT error when processing an activity exception (#813319)

Platform J2EE Server 9.0.0.19 (2014-12-19)

- Fixed LifeTime broken style in Users And Roles page (#604969)
- Improved LifeTime's synchronization mechanism (#670432)
- Fixed ECT feedback window not being repositioned on click using IE11 (#689265)
- Fixed non-visible used variables not being correctly added to viewstate (#775972)
- Fixed issue where Service Center could be replaced by other eSpace of the same name (#621946)
- Fixed client-side validations of Number type input fields (#634208)
- Fixed order of expanded CSS properties in style attribute in emails (#668445)
- Fixed application comparison pop-up screen that showed incorrect module details and order (#687384)
- Fixed "New" button when using Scaffolding and mobile theme LondonSmartphone on Android stock browsers (pre 4.3) (#754483)
- Fixed EncodeSql built in function to correctly work with the current database. (#757519)
- Fixed database custom triggers being wrongly dropped (#758681)
- Fixed issue where the optimizer was marking query results as not used which caused runtime anomalies in the optimized code (#776461)
- Fixed error log screens when filtering by an application without eSpaces (#489667)
- Fixed espace compilation error with a complex flow (cycle inside a cycle with ifs and switches pointing to another cycle) (#555072)
- Fixed broken link on Process Monitoring screen in Service Center (#604137)
- Fixed compilation error when compiling web reference containing an element with nillable Integer type (#627531)
- Fixed simple query testing with dynamic ordering by parameter without providing a parameter value (#693136)
- Fixed issue when checking the report for the publish of a big solution that could crash the browser (#696174)
- Fixed Ajax redirect stopped by onbeforeunload leaving Internet Explorer hanging (#703387)
- Fixed espace compilation error with WebReference with nillable list (#710861)
- Fixed mobile input calendar showing 01-01-1970 (#718594)
- Added configuration to set HTTP-ONLY / Secure flags in session cookies (#719039)
- Fixed client-side validation date 1970-01-01 being considered invalid (#727118)
- Fixed downloaded file names that contain Unicode characters not being properly decoded (#736058)
- Fixed incorrect execution of OnChange screen action when traversing a Combo Box using the TAB key (#736338)
- Fixed issue in eSpace upload where it was possible for the eSpace to have duplicate versions (#739637)
- Added Instructions to disable SSL 3.0 to prevent POODLE vulnerability (#740779)
- Fixed problem in GetFormValue that returned null when trying to obtain a non-existent field (#741200)

OutSystems Platform 9 – Change Log

- Fixed platform help not opening in a browser (#741214)
- Fixed the list of timers, in Service Center, that was limited to 100 (#741236)
- Fixed error publishing WebReference with a ComplexType with sequence element and attribute with the same name (#742506)
- Fixed Users integrated authentication when using internal network (#750813)
- Fixed debugger abort request operation committing database transaction (#758646)
- Fixed error when testing Advanced Queries dependent on widgets (#760298, #749682)
- Fixed error importing records to a static entity with entity reference attributes (#760372)
- Fixed eSpace compiling error related to RecordList conversions (#775917)
- Fixed problem where OutSystems services were not able connect to the database after reconfiguring an environment running on Oracle to run on SQL Server (#780083)
- Added support to JBoss EAP 6.3 (#736029)
- Fixed TestQuery problem when results have non valid characters (#783497)
- Fixed ECT_Provider Feedback window not showing the number 1 icon (#495516)
- Fixed ResponsiveTables when using HiddenInSmartphone style in cells (#690158)
- Fixed Database Connection's permissions problem (#744712)
- Fixed problem where user was not able to delete an application created by him (#746987)
- Fixed manage infrastructure role permissions to be able to access logs (#746988)
- Fixed Database Connection permission problem where was not able to assign to a role (#746989)
- Fixed Configuration Tool problem saving configurations (#766765)
- Fixed wrong Platform version information after platform upgrade (#766768)
- Fixed LifeTime problem in MySQL installations (#767688)
- Fixed Platform Service database connectivity recovery after network problems (#781554)

Platform J2EE Server 9.0.0.6 (2014-10-24)

- Fixed compilation issue when Aggregates have some type conversions(#730611)
- Fixed editing combo box widget(#747426)
- Fixed problem when integrating with MySQL databases older than 5.1 (#747427)
- Fixed several problem upgrading modules (#728395)

Development Environment

Service Studio

Service Studio 9.0.1.60 (2016-04-15)

- 'New Attribute' command is bound to Ctrl+N, 'Save As...' to Ctrl+Shift+S and 'Open From...' to Ctrl+Shift+O (#1174788)
- Fixed crash when performing an Undo in some scenarios (#978819)
- Fixed crash when generating List screen for Read Only Entity (#982370)
- Fixed rare crash when pasting actions that contain aggregates (#1123321)
- Fixed crash when creating a new web block from the web block selection screen (#1170073)
- Fixed Consume Rest API Method error message overlapping the text area (#1170097)
- 'Import from Database' (for Static Records) no longer crashes when fetching boolean values in Oracle and MySQL (#1174786)
- Fixed multiple separators being shown in some context menu scenarios. (#1174787)
- Fixed order of structure's attributes created for element choice of Web Service (#1180672)

Service Studio 9.0.1.55 (2016-02-26)

- Fixed AOs being wrongly calculated when performing some operations with Static Entities (#890716)
- Fixed crash when using placeholders inside a WebBlock with loop (#595694)
- Fixed crash when pasting an action from a different eSpace. (#959589)
- Fixed crash when trying to copy the eSpace node (#1041642)
- Fixed crash when creating a preparation in some scenarios (#1083736)
- Fixed Invalid login when using a password with more than 20 characters (#1094410)
- Improved saving time for an eSpace with a large number of WebBlocks (#1095803)
- Fixed incorrect rendering of Label widgets with fixed width when using a style (#1107268)
- Fixed "Incompatible Types" warning for indirect entity identifiers with more that 2 levels (#1124409)
- Using 'New User Exception' after creating a Raise Error flow node correctly defaults to the newly created exception (#1132862)
- Using 'New Action' after creating an Execute Action flow node correctly defaults to the newly created action (#1132864)
- Fixed crash when trying to paste a reference that belongs to eSpace (#1127929)

Service Studio 9.0.1.50 (2016-01-15)

- Fixed crash when canceling the clone of a system's eSpace (#518209)
- Fixed crash when selecting a screen/block with differences in custom widgets in the merge window (#732676)
- Fixed crash when opening the suggestions combobox of an input of a List action (#813121)
- Fixed crash when editing expressions in the Expression Editor (#857593)
- Fixed crash when dropping an entity attribute over a widget which inside a list records (#860588)
- Fixed crash after double clicking on an aggregate filter or dynamic sort. (#999334)
- Fixed compilation error caused by a missing validation in a switch condition (#1041474)
- Fixed crash and oml corruption when copy/paste a placeholder from a custom widget (#1035982)
- Fixed crash caused by a process input bigger than 28 characters (#1058340)
- Fixed AOs being wrongly calculated in some scenarios, it now counts less than before (#1073901)

- Fixed inconsistent limit for Decimals attribute between Service Studio and Platform Server (#1051952)
- Fixed compilation error when renaming an entity attribute that is being used in a group by (#1078907)

Service Studio 9.0.1.40 (2015-11-13)

- Text widget can be edited from the widget tree (#1026106)
- Fixed crash when switching to an eSpace with the Entity Diagram opened (#526476)
- Fixed crash in various scenarios due to TrueChange misbehavior (#693095)
- Fixed compilation error due a missing validation in Service Studio when an Entity was deleted and was being used (#761398)
- Fixed crash when consuming action that exposes entity identifier through anonymous types (#794914)
- Fixed crash when creating a list screen or performing a search (#928919)
- Fixed crash when losing focus from root of the widget tree (#1018368)
- Fixed crash when consuming complex data types (#515638)
- Fixed crash when finding usages in all eSpaces (#518186)
- Fixed crash in "Go to definition" operation when using the keyboard shortcut (#552865)
- Fixed crash when deleting an unnamed input (#691814)
- Fixed crash when adding extension entity to an aggregate (#770047)
- Added missing validation when placing a decimal expression in "Decimals" property (#967072)
- Fixed compilation error when publishing incomplete referenced type (#1022105)
- Fixed Simple Queries with input parameter with IF expression incorrectly upgraded to Aggregate (#1023374)
- Fixed hang when opening a text box with a large text inside of it (#1023802)
- Fixed compilation error caused by missing validation on references name clash (#687679)
- Fixed crash when deleting an attribute of a structure while is being used in a Combo Box (#733654)
- Fixed crash when renaming a record attribute when its type is invalid (#843413)
- Fixed crash when double clicking on an error message related with an aggregate (#1024851)
- Added missing validation when referencing web block input parameters with incomplete type definitions (#1025349)
- Removed suggestion limitation on Static Entity records (#1026081)

Service Studio 9.0.1.35 (2015-10-02)

- **What's New**
 - New Exposed REST APIs capabilities:
 - Customize the URL of each method (#1019733)
 - Use input parameters in the URL path (#1019734)
 - Added Requests and Responses logging (#1019735)
 - Added extensibility callbacks - OnRequest and OnResponse (#1019736)
- Fixed rare crash in Service Studio when clicking on Edit menu (#518826)
- Fixed crash when dragging an entity to a WebFlow to create a List screen (#526830)
- Fixed crash when opening an Aggregate in a merge when it is only present on one of the versions (#548195)
- Fixed crash when trying to paste a WebBlock from another module (#769785)
- Fixed crash when trying to change the translation behavior of a resource in Windows 8 (#787478)
- Fixed merge result when changing column placement in a table record (#992497)
- Fixed upgrade of Simple Queries with 'like' conditions to Aggregates (#1001808)

- Fixed visual glitch when selecting a template different from London (#1013811)
- Fixed RichWidgets' Icon picker to include all icons(#1019831)
- Fixed Rest and Sap Services passwords being visible when the property tooltip is open(#1020555)
- Fixed hang when using an output of an Action as Source Record List of a Combo Box(#985185)
- Improved Comment color for better visibility (#1013727)
- Added warning to DE installer when minimum CPU cores requirement is to fulfilled (#1006932)

Service Studio 9.0.1.25 (2015-08-24)

- Fixed wrong help pages for the Type Editor and List Records (#939672)
- Fixed hang when opening the suggestions due to high number of possible values (#970009)
- Fixed crash on Expression Editor when using autocomplete (#506656)
- Fixed crash when trying to download and open an eSpace from the environment (#519786)
- Fixed crash when trying to delete/move an action that was being used on an Aggregate's OrderBy (#521505)
- Fixed crash when double clicking on an Aggregate filter (#572983)
- Fixed crash when changing the Destination of a Link Widget with the editor and the property had an 'Unused argument' (#578940)
- Fixed crash when creating an aggregate filter using a referenced static entity (#825101)
- Fixed crash when trying to rename a variable of a public object to a name that matched another entity's name (#719049)
- Fixed crash when selecting multiple widgets (some inside and others outside widgets placeholders) (#541195)
- Fixed crash when opening an element from an already opened eSpace (#912828)
- Fixed crash when selecting "Find Usages in all eSpaces" (#518640)
- Fixed crash when copy and pasting Assign nodes (#966554)
- Fixed crash when changing the type in the Type Editor (#970251)
- Fixed crash when trying to edit an expression that used the 'Current' property of a list after the deletion of one of its attributes (#924299)
- Fixed crash when changing Style property (#970807)
- Fixed crash while trying to submit feedback (#520501)
- Fixed crash due to empty Text Widget appearing after deleting another widget (#535250)
- Fixed rare crash when Merging or Adding and Removing references (#843666)
- Fixed rare crash when pressing the 1CP button (#518623)
- Fixed rare crash when double clicking Variable property of an assign with a TrueChange error (#893201)
- Fixed rare crash when trying to open the value of an attribute when the value was the attribute itself (#961834)
- Fixed compilation error when copying webscreens/actions that reference a multi-tenant entity to another module (#552061)
- Fixed error 302 in Preview mode when clicking a link to the current page (#745803)

Service Studio 9.0.1.21 (2015-08-06)

- **What's New**
 - Discovery, consumption and monitoring of SAP BAPIs
- Fixed crash when changing the type in the Type Editor (#970251)
- Fixed Consumed REST APIs Structures Attributes Software Unit count (#988167)
- Fixed compilation error after renaming a REST API (#938608)

Service Studio 9.0.1.16 (2015-07-17)

- Fixed issue incorrect auto-complete behavior while editing the style property of an widget (#968620)
- Fixed crash in screen editor when positioning the caret in non-visible elements (display:none) (#611273)
- Fixed crash in screen editor when hovering above non-visible elements (display:none) (#626566)
- Fixed 1CP concurrency problem (#653483)
- Fixed crash in Application Page when the Application has BackOffice and does not have FrontOffice (#707928)
- Fixed "Object not found" irrecoverable crash when performing delete operations (#758350)
- Fixed compilation error caused by missing validation in the Combo Box widget when the source record list data type (#853681)
- Fixed crash when deleting Entities or Structures that have ListAppend actions still using them (#711579)
- Fixed Crash when editing ComboBox SourceRecordList property (#734626)
- Fixed problem where was possible to create output parameters in screen actions (#833058)
- Fixed wrong error message being shown related to Show Tenant Identifier of referenced multi-tenant entities (#928382)
- Fixed Service Studio crash when having invalid login, instead of an showing an error message (#930343)
- Fixed compilation error when using the Source Record of a Form widget as the Source Record of the Form itself (#932924)
- Fixed Service Studio crash when having invalid login, instead of an showing an error message (#564574)
- Fixed web editor crash when refreshing complex UI patterns (#611535)
- Fixed web editor crash when refreshing complex UI patterns (#621526)
- Fixed crash when trying to access a dropdown from an unloaded property (#759806)
- Fixed submit feedback server-side crash - avoid sending strange unicode chars to server (#781826)
- Fixed web editor crash when trying to calculate CSS property values (#828116)
- Fixed Source Entity property in the Combo Box Widget from incorrectly set after a Source List was deleted (#830135)
- Fixed crash when trying to undo from an open dropdown (#903947)
- Fixed unicode characters not showing in aggregate preview (only noticeable with newer version of Development Environment) (#906536)
- Fixed ApplicationModelAPI extension throwing a missing dependency error (#913252)
- Fixed incorrect version error when copy and pasting object in the same eSpace (#918009)
- Fixed copy/paste of elements involving list types across eSpaces (#925523)
- Fixed crash when trying to change a source from an aggregate (#925527)
- Fixed debugger not working with a reverse proxy with path rewrite (#946875)
- Fixed ComboBox property Source Identifier Attribute not being cleaned when value (None) is chosen (#950758)
- Improved debugger communication error messages (#774299)
- Added 'NullBinary' BuiltIn function highlight in Expression Editor (#892063)
- Added possibility to collapse advanced properties in the Entity Editor (#933013)
- Added general.txt to submit feedback (#932926)
- Added preferences menu option to set debugger request length (#896930)
- Added Open Documentation command for Exposed REST APIs right click menu (#942285)
- Added new scaffolding capabilities to Flow Editor. We can now scaffold the details without a list, or create a list after the details. (#932997)
- Added new HTML Entity Diagram (#933011)

- Added possibility to Expose REST APIs to have Records and Lists of Records as Inputs and Outputs (#942283)

Service Studio 9.0.1.9 (2015-05-29)

- Updated RichWidgets and ServiceStudio icons (#893236)
- Fixed crash while saving settings (#284754)
- Fixed error when clearing selection very quickly (#538709)
- Fixed crash when changing aggregates' test values (#555709)
- Fixed errors related to TrueChange messages (#638566)
- Fixed crash related with Table Records' hidden header (#758499)
- Fixed crash when opening a webscreen with control characters (#518249)
- Fixed crash when searching for text elements in the Entity Editor dialog (#634275)
- Fixed crash when merging mismatching nodes (#819907)
- Fixed disabling a Form when dragging an attribute from read only referenced table the second time (#835103)
- Fixed crash when dragging an entity identifier input parameter on to an empty aggregate (#836615)
- Fixed crash when previewing web blocks with default values in date input parameters (#836685)
- Fixed annoying bug of Service Studio losing focus after Login or refreshing references (#887007)
- Fixed Aggregates Editor when working with Turkish locales (#892031)
- Improved scaffolding screen names (#898685)
- Fixed impossibility of drag/drop entity attributes into Aggregate editor (#905437)
- Fixed reference static entities merge that caused the incompatible references warning to be displayed incorrectly (#913228)
- Fixed Properties pane width not resizing properly and hiding the drop down arrows (#884418)
- Improved stack trace mechanism to display more information (#877798)

Service Studio 9.0.1.5 (2015-05-07)

- Fixed OML corruption when saving an eSpace module in version 9.0.0.38 or higher and using it in Service Studio versions prior to 9.0.0.38 (#901238)
- Fixed not being able to open actions in Service Studio or the right-click not working after random amount of work (#890804, #890805)
- Fixed not being possible to drag an entity attribute into an aggregate (#905437)

Service Studio 9.0.1.4 (2015-04-27) – P9 Amsterdam

- **What's New**
 - Visual Exposing of REST APIs (#896524)
 - Starter Templates - create application templates that teams can use as their initial application blueprint:
 - Allow the creation of Application Templates (#895442)
 - Templates can be fetched from the Forge (#895443)
 - Templates are displayed when creating a new Application (#895447)
 - Improved Aggregates editor usability (#828213)
 - Improved Aggregates editor performance (#828212)
 - Added the possibility to see the last executed SQL in the Aggregate properties (#802970)
 - Full support for Unicode in development environment (#819598)

- Fixed incorrect sort attribute being generated when upgrading simple queries to aggregates (#873585)
- Fixed problem when creating a details screen for a read only entity (#880990)
- Fixed Service Studio losing focus after Login or after refreshing references (#887007)
- **Known issues** (to be fixed until the end of April)
 - OML corruption might occur when saving an eSpace module in version 9.0.0.38 or higher, using a Service Studio version prior to 9.0.0.38 (#901238) – workaround: ask OutSystems to clean the OML
 - After a random amount of work, sometimes it is not possible to open actions in Service Studio or the right-click stops working (#890804, #890805) – workaround: close Service Studio and reopen it
 - It is not possible to drag an entity's attribute into an aggregate – workaround: drag the whole entity and hide the irrelevant attributes

Service Studio 9.0.0.38 (2015-03-31)

- **What's New**
 - Improved Aggregates editor usability (#828213)
 - Improved Aggregates editor performance (#828212)
 - Enhanced data type definition (#819595)
 - Improved type mapping for structures and list of structures (#803052)
 - Added the possibility to see the last executed SQL in the Aggregate properties (#802970)
 - Added support for Unicode characters (#819598)
 - Added help search to omni-search (#842651)
 - Find operations are now integrated with Omni-Search (#842672)
 - Added draggable dots near draggable objects (#842677)
 - Allow quick creation of entity attributes (CTRL + N with entity selected) (#842656)
 - Less used widgets will now be collapsed (#842653)
 - Forge password is now cached by Service Studio (#842655)
 - Changed pointer to hand when over draggable items (#842671)
 - In Aggregates editor, "Add Source" action now creates joins automatically (#828214)
 - Help (F1) now opens the default browser (#842657)
- Fixed problem starting Service Studio (#868347, #824926)
- Fixed Service Studio crash when refreshing reference of hidden web block input parameters (#844178)
- Fixed Service Studio crash when merging entities and WebScreens (#839568)
- Use Placeholder's Description to improve visibility of placeholders (#842687)
- First Tutorial Improvements. Removed "Contacts" Application name enforcement. (#842685)
- Added help button to scaffolding error message (#842678)
- Increased visibility of scaffolding error messages (#842675)
- Fixed dialog's resizing problems in secondary screens (#842674)
- Removed the localhost suggestion when connecting to a Server (#842658)
- Improved Scaffolding Patterns security for new applications (#840802)
- Show variables in use when the debugger is stopped in an aggregate (#840764)
- Improved upgrade of Simple Queries to Aggregates (#828211)
- Fixed "1 - eSpace has expressions with pending rebind" error when Merging or Adding and Removing references (#211350)
- Fixed an issue on advanced query select statement where mismatched brackets/blocks caused a crash (#512678)

OutSystems Platform 9 – Change Log

- Fixed Service Studio crash when double clicking a TrueChange message that targets a WebScreen widget while in preview mode (#604827)
- Fixed Service Studio crash when trying to change login by opening an eSpace of a different server (#634712)
- Fixed Service Studio crash when generating the preview of web blocks with static entities as input parameters (#648438)
- Fixed compilation error triggered by using non-Text attributes in aggregate dynamic order by (#795521)
- Improved debugger support for records and lists of basic types (#714034, #804896)
- Changed a warning message regarding menu web blocks (#531969)
- Fixed crash when refreshing type conversion over deleted elements (#695778)
- Fixed problem where the delete and find operations on referenced elements crashed Service Studio (#750690)
- Fixed GetDatabaseProvider documentation - missing MySQL (#754642)
- Fixed compilation error due to TrueChange not detecting some type incompatibilities (#775927)
- Added the possibility to change tenants when previewing Aggregates that use multi-tenant entities (#811823)
- Changed Editable Table header element tag from <td> to <th> (#811910)
- Fixed crash when selecting an Input Widget on a Label (#821073)
- Added logs to troubleshoot Service Studio connection with lifetime issues (#823347)
- Fixed error when opening web-screens with web-blocks with parameters of static entity integer type (#833270)
- Fixed issue refreshing input parameter with Record Joins (#833326)
- Fixed issue refreshing input parameters with referenced local types (cyclic reference) (#833327)
- Fixed shutdown when F1 is pressed and authentication proxy is being used (#837593)
- Fixed problem when an invalid type conversion was not being detected (#840777)
- Fixed description for sort attribute in aggregate's properties (#832143)

Service Studio 9.0.0.23 (2015-01-23)

- **What's New**
 - Improved Web References to import Enumerates values as Static Entity Identifiers instead of Text (#721181)
 - Only when imported with Development Environment 9.0.0.23+
- Fixed multiple development environment installer problems (#738410, #738411, #801869)
- Fixed problem upgrading simple queries with conditions with date type manipulation (#787365)
- Fixed error when upgrading simple queries that use the implicit conversion from entity identifier to decimal/currency (#796945)
- Fixed error using test query in advanced queries with empty expand inline test values (#799893)
- Fixed error using test query in advanced queries with empty strings in expand inline test values (#799896)

Service Studio 9.0.0.19 (2014-12-19)

- Allow Service Studio to address more memory in 64b Operating Systems with at least 4 GB of RAM (#775919)
- Fixed crash opening a screen when in preview mode (#605260)
- Fixed crash in Service Studio when using the back button while in preview mode (#647175)
- Fixed issue where Service Center could be replaced by other eSpace of the same name (#621946)
- Fixed Service Studio crash when loading a Web Screen than contains a TextReference Widget with null valueing (#733360)
- Fixed some syntax highlighting & SQL grammar bugs (#761857)

OutSystems Platform 9 – Change Log

- Fixed crash when deleting a role and some other component uses that Role (#538629)
- Fixed error when removing container that involves the placeholder inside the link (#606128)
- Fixed Service Studio Crash when testing a query with a very large number as max records. (#646052)
- Fixed crash when copying a theme (#649914)
- Fixed test-query using expand inline advanced query parameters containing entities/structures not present in query definition (#715075)
- Fixed platform help not opening in a browser (#741214)
- Fixed using @ to refer to SQL declared variables in test query parameter values throws the unknown (outsystems) parameter error (#750143)
- Fixed crash when trying to undo while in web screen preview mode (#757127)
- Fixed problem opening an eSpace after refreshing references (#769079)
- Fixed crash opening and saving espaces with custom properties (#780077)
- Fixed eSpace upgrade (from version 7.0) (#781574)
- Fixed TestQuery problem when results have non valid characters (#783497)
- Fixed problem with delete scaffolding action not working in Details screens (#750811)
- Service Studio UI Improvements (#782833, #782839, #782845, #782846, #782876, #783425, #783426)
- Added additional logs to troubleshoot problems with expression parsing (#234319)
- Fixed error open an eSpace after refreshing references (#786447)

Service Studio 9.0.0.7 (2014-11-17)

- **What's New**
 - Reduced memory consumption of Service Studio
- Fixed syntax highlighting not working when referencing multiple extension entities associated to the same database provider. (#771134)
- Fixed crash in Service Studio SQL Editor when opening parenthesis inside a query. (#771137)
- Fixed crash during implicit parameter refresh when its expression type is being deleted. (#706732)

Service Studio 9.0.0.6 (2014-10-24)

- Fixed save bug that lead to missing objects (interaction between background save thread / test query and lazy load) (#520811)
- Fixed crash when adding text to a container inside a link (#525035)
- Fixed crash when double clicking a referenced placeholder (#645779)
- Fixed a problem when adding a line with white space only on web editor (#711733)
- Fixed null dereference in Aggregate Editor refresh (#689895)
- Fixed crash when copy pasting variables with UnknownList type (#691869)
- Fixed Null dereference validating Aggregate expressions (#718754)
- Fixed a crash when deleting unused arguments after a Find Usages (#533822)
- Fixed crash opening oml (#629894)
- Fixed crash with cyclic references when undoing/redoing with reference objects (#660606)
- Fixed a problem copying a theme from one module to another (#705218)
- Fixed a problem when renaming entities (#713985)

Integration Studio

Integration Studio 9.0.1.55 (2015-02-26)

- Fixed option to import SAP action not appearing when there are already other SAP action in the extension (#1115230)

Integration Studio 9.0.1.35 (2015-10-02)

- Fixed problems when working with big Extensions in Integration Studio (#982947)
- Added option to set Java location in Integration Studio (#1002213)
- Added Visual Studio 2015 in Integration Studio auto detection (#1019740)

Integration Studio 9.0.0.19 (2014-12-19)

- Fixed Integration Studio entity and structure identifiers order in drop down menus (#667117)
- Fixed platform help not opening in a browser (#741214)