

Release Notes - Test Automation 9.9

New Features:

- External Test Plan Parameters GUI could be a panel (Test Plan Settings) [#3859](#)

Usability Improvements:

- Test plan gets in invalid state when Bench Settings are not saved [#4767](#)
- Package Create: Less greedy package dependency detection [#4959](#)
- Cleanup SortValue logic in package manager [#5334](#)
- Collapse parameter group does not refresh [#5485](#)
- Sweep parameter step to show the name of the parameter(s) being swept [#5508](#)
- Right click menu, naming consistency [#5509](#)
- Simplify Parameter Editor Dialog Title [#5511](#)
- Test Plan panel: Settings which can be enabled remain inactive until step is moved [#5627](#)

Bug Fixes:

- Strange behavior when adding sweep values [#5326](#)
- Windows have white bar across top in dark theme [#5377](#)
- Remove External Parameters editor in favor of a standard PropGrid showing Parameters [#5393](#)
- Unhandled GUI Error: Index was outside the bounds of the array [#5442](#)
- Parameterizing a list of values does not seem to work [#5450](#)
- External Parameters Panel: Paths are not updated when changed [#5481](#)
- Editing a parameter name re-introduce the parameter group [#5506](#)
- Help link in Edit Parameter box does not work [#5510](#)
- File associations: OpenTAP.TapPackage version 9.8.x is installed by TAP 8 instead of 9 [#5518](#)
- Column Header to support descriptions in property data grids [#5533](#)
- Text Log result listener: Open File from File Path does not work and gives error when using / but works when using [#5535](#)
- Update Assembly version from 9.5.0 to 9.9.0 Development [#5536](#)
- Test plan refreshes forever when adding an Instrument (or DUT) [#5546](#)
- External parameter is removed after editing a parameterized setting [#5547](#)
- Error while generating GUI for 'DCA Acquire and Compute 4 Lanes', property 'DCA': [#5560](#)
- Timing Analyzer misses OxyPlot.Wpf dependency [#5564](#)
- External parameter text input loses focus while step settings are visible [#5569](#)
- Pasting empty lines in Connections inserts invalid elements [#5573](#)
- Break Condition has wrong ControlProvider [#5579](#)
- Add New Steps panel goes out of view [#5580](#)
- New panel names cause layout serialization to generate errors [#5585](#)
- Test Plan Settings Panel - import /export menu is disabled when using it the first time [#5609](#)
- Parallel and dialogs: A 0 timeout dialog will not run until the other dialog is finished [#5634](#)
- Undo does not work as intended for copy pasted steps [#5635](#)
- Sweep values: After adding rows some changes are not saved [#5636](#)

Documentation:

- Update package installation dialog text from 'Solving Dependencies' to 'Resolving Dependencies' [#3760](#)
- Cleanup Internal Documentation Part 2 [#5493](#)
- Migration Guide: support for AbortException removed in OpenTAP [#5517](#)
- Help page for Test Plan Settings panel [#5582](#)
- Help: External Test Plan Parameters info should be removed or updated in conformity with Test Settings feature [#5610](#)

Release Notes - Test Automation 9.8

Updated to **OpenTAP 9.8**. See the OpenTAP Release Notes [here](#) .

New Features:

- Scoped Parameters [#5347](#)
- Version dependent file association and %TAP_PATH% option [#5391](#)

Usability Improvements:

- UI performance issue when using test plan reference [#5225](#)
- Using a Dialog with 0s timeout can break Repeat step iteration [#5325](#)

Bug Fixes:

- The Output Value does not update as expected the first time the test plan is executed [#4674](#)
- Tooltip text doesn't wrap correctly [#5354](#)
- Anomalous GUI behavior for Step Rename functionality with ALT key [#5365](#)
- Property value is not updated consistently in Step Settings [#5378](#)
- Duration value disappears when scrolling [#5381](#)
- Examples: "Available values example" cannot paste a new row, only to replace an existing row [#5400](#)
- Examples: "Available values example" Export - > Import does not work [#5401](#)
- Run Selected Step with disabled parent : Verdict Update does not occur [#5404](#)
- Result Viewer Filter not working properly [#5416](#)
- Sweep values: edited parameter's value doesn't save [#5432](#)
- Sweep loop: Sweep parameter columns are doubled when adding row [#5437](#)
- Scoped parameters: Renaming a parameter from the Edit Parameter dialog throws an unhandled GUI error [#5438](#)

Documentation:

- Document Scoped Parameters Functionality in CHM [#5384](#)
- Update F1 documentation regarding new Sweep Parameter steps [#5458](#)

Release Notes - TestAutomation 9.7

Updated to **OpenTAP 9.7**. See the OpenTAP Release Notes [here](#) .

New Features:

- Plugin support for authentication icon in GUI [#5296](#)
- Support access to current TestPlan from `IMenuItem` [#5300](#)

Usability Improvements:

- Improved SCPI Instrument Settings [#5178](#)
- Exception is suppressed by property set method [#5263](#)
- KS8400A Startup does not record all log messages [#5306](#)
- Run Explorer: TAP syntax appears in button tooltip [#5313](#)
- Help: GUI syntax should be replaced with Editor [#5314](#)

Bug Fixes:

- Welcome screen not closing when adding a step from CLI [#5244](#)
- Package Manager: After installing a plugin from internal repository the tree hierarchy is not displayed correctly [#5267](#)
- Update LicenseInjector to 9.3 [#5281](#)
- Caught unhandled GUI error: Object reference not set to an instance of an object - copy a strange row in connections [#5294](#)
- SDK Example Crashes Test Automation when `Available Values` are added [#5302](#)
- Issues Building Netstandard Plugins [#5317](#)
- Error clicking button in step settings when selecting multiple steps [#5318](#)
- Exception: Unable to cast object of type `RecoveryFile` to type `OpenTap.TestPlan` [#5319](#)

Release Notes - TestAutomation 9.6

Updated to OpenTAP 9.6. See the OpenTAP Release Notes [here](#) .

Usability Improvements:

- Help: Unclear example for Results Viewer/ Order Points & Order Series setting #4649
- Missing Step settings description from help #5245
- Improve Enabled<> view in test plan grid #5253

Bug Fixes:

- Bench/DUT : Paste option is not active after using cut on an added DUT #4987
- Test steps do not appear after upgrading from 9.4.2 to 9.5.1 #5230
- License Keys tab available for non-licensed plugins #5239
- "Show Plugin Package" reopens after closing #5252
- Time Guard: Stops the tests plan execution even with "Stop Test Plan on Timeout" - #5115
- "Show Package Plugin" when adding steps only works when the package manager is open - #5217
- Double Clicked TapPackage without version - #5220
- Editor Hangs When Instrument Fails to Load Due to missing DLL - #5242
- tap package list -version x.y.z does not work - #5243
- ComponentSettingsList is no longer using the Display attribute - #5255
- Copy/Paste rows with sub objects does not work - #5261
- Unhandled GUI exception: Pasting something invalid in Bench - Connections - #5282

Release Notes - Test Automation 9.5 (KS8400A)

Updated to **OpenTAP 9.5**. See the OpenTAP Release Notes [here](#) .

New Features:

- Add custom files as steps (Autogenerate steps) [#2523](#)
- Make “SQL and PostgreSQL” package for Ubuntu [#5121](#)

Usability Improvements:

- Multi-Select for Test Plan Reference [#3112](#)
- Engine Settings: “Abort Run If” should be renamed to “Stop Test Plan Run if” [#4996](#)
- Support for packaging/ unpackaging large files [#5058](#)
- Set new “Owner” property in all packages [#5189](#)
- Editor version should be the same as in the about box [#5209](#)

Bug Fixes:

- Connection: Copy/Paste action for connection generates the wrong name [#4736](#)
- Dialog: Closing the Dialog Message from the X button uses verdict from OK instead of Cancel [#4754](#)
- Start up Editor: Save untitled message displayed [#4889](#)
- Step verdicts are not cleared when starting a test run [#4998](#)
- License required icons are missing for available plugins (not installed plugins) [#5054](#)
- Unnecessary Package dependency Warning shown by Package Manager [#5096](#)
- It is possible to add elements to a selection List implemented as read only list. [5099](#)
- Property is not updated when its value is changed by another property. [#5100](#)
- PostgreSQL ResultListener can't create tables [#5116](#)
- Validation Error stays visible after correction, and move away [#5119](#)
- Package Manager 9.4.2 does not start with OpenTAP 9.3.0 [#5131](#)
- Searching for plugins in repositories is dependent on the exception caught when invalid repo [#5134](#)
- Sweep loop with field attributes example: Cannot set sweep values [#5136](#)
- PackageManager treeview does not handle groups in groups [#5156](#)
- Download with Dependencies pulling wrong dependencies [#5157](#)

Other:

- Better handling of large result sets in Result Viewer [#1930](#)
- Copy to Clipboard from Pareto Raw data Viewer doesn't copy the selected data [#2302](#)
- Toggle filter mode option in right click context menu user documentation [#4753](#)
- Help - Connection adding/removing to be updated [#5071](#)
- Update Test Automation Version in user doc. [#5205](#)

Release Notes - Test Automation 9.4 (KS8400A)

Updated to **OpenTAP 9.4**. See the OpenTAP Release Notes [here](#) .

New Features:

- Add .NET Standard 2.0 project template to VS SDK #2563
- Change SDK and templates to no longer save compiled output in TAP directory #2856
- SDK Support for VS 2019 #4641
- SDK Template to be dependent on NuGet rather than TAP_PATH #4911
- Support for KAL (Keysight Advanced Licensing) #4918
- Groups for Dockable panels under view menu #4937

Usability Improvements:

- Results Viewer: Subtitle checked but it isn't displayed in the list as selected #4882
- Developer's System and Developer's System CE should contain same packages #5065

Bug Fixes:

- Test Plan Hash does not get updated between runs with open resources #4742
- Obfuscation not applied #4859
- Show plugin package feature not working for the new bundle structure in the Package Manager when collapsed #4988
- Unable to create instance of OpenTap.MemberData #5025
- External parameters have odd behavior with merged parameters #5027
- Editor process increases memory when loading a test plan reference inside a sweep loop value #5030

Release Notes - Test Automation 9.3 (KS8400A)

Updated to OpenTAP 9.3. See the OpenTAP Release Notes [here](#) .

New Features:

- Prompt to save changes when using X to close settings dialogs #3623
- Support right-click option to “Edit Referenced Test Plan” in a separate window #4120
- Support external parameter configuration on the Editor #4199
- Support groups for TAP Packages #4934
- UserInput dialog enhancement #4991

Usability Improvements:

- Improve performance of highlighting large number of steps #4256
- Run Explorer: Empty tags should not be allowed to be added #4880
- Memory issues in Editor with large test plans #4910
- Open file button displays strange behavior #4992

Bug Fixes:

- SweepLoop Copy/Paste not working #4831
- Packager manager GUI does not keep it's window size #4891
- Start screen is not automatically hidden #4917
- Keysight Fixed Licensing package does not include Keysight.Ccl.Licensing.Api assemblies #4931
- Caught unhandled GUI error: TestPlanGrid.dragStop(), Object reference not set to an instance of an object. #4942
- Exception: Item was not present in the dictionary - columnfiltercontext #4950
- Result Listener intermittently not closing #4951
- OpenTap.Gui has stopped working - StackOverflowException #4856
- GUI: Unhandled exception from Error ArdornerLayer #4969
- VS SDK projectfinalname error #4970
- Editor –open argument fault: stopped working #4974
- Exception: Test plans cannot be modified while running #4986
- Open file does not work from test plan reference #4995
- It is possible to copy multiple identical steps even though Ensure Unique Step Name option is checked #4997
- SweepLoop: Importing file with wrong header deletes the sweep values #5001

Other:

- Help: Confusing explanation regarding where resources are stored #4817
- Package Manager: Using the internal repository takes 2 minutes to refresh #4888
- Package Manager Help documentation: Bundle Tab is removed #4905
- KS8000A installer to include all licensing components #4919
- Remove submodule reference to OpenTAP repo #4933
- Strange WPF message box when installing a plugin 4953
- Package Manager: Package header text color in dark theme #4955
- Package Manager: Installing a plugin with a dependency will leave open a package dependency warning window #5007
- Package Manager: Error message contains “TAP” #5023

Release Notes - Keysight Test Automation version 9.2 (Including OpenTAP changes)

New Features:

- Change Test Plan Execution during break - #3167
- Icon support in TapPackage - #3560
- Provide OpenTAP (TAP Engine) as a nuget package - #3616
- Support thread dispatch situations in TapThread - #4777
- Support shortcuts and disabling/hiding of top menu items (IMenuItem plugins) - #4783
- Added bundle tree view in package manager (bundles/packages) - #4843
- Allow newline in package.xml Description element - #4847

Usability Improvements:

- Better Support For Side-by-Side development - #3122
- Multiple delete test steps now results in correct focus - #3328
- CTRL+Tab behavior in docking panel now disabled - #3732
- Improved the readability of the time range values in the Timing Analyzer main view - #3929
- Result Viewer to list Results in alphabetical order instead of ordered by number of unique values within each Result - #4151
- F1 help for Python SDK plugin to show up in Editor F1 help after installation - #4226
- Test plan scrolling when dragging steps to reorder. - #4640
- `tap package list --installed` to not require any internet access. - #4852

Bug Fixes:

- Help file has search error because it is different name in main tree's than page title page - #3833
- PostgreSQL result listener throw exception when make DMM test - #4643
- Exception: Error HRESULT E_FAIL has been returned from a call to a COM component. - #4697
- Keysight Test Automation Platform plugin needs LINUX OS but no information about that in PM - #4700
- AvailableValue behavior change in TAP 9.0 - #4702
- ResourcePlaceholders not working on test plan load - #4726
- Connection: NO warning for negative frequency value - #4737
- Enabled with DirectoryPathAttribute not supported - #4757
- Build truncating last field in dot separate name - #4781
- Package Manager suggests an update with change in patch version - #4782
- GUI can't start when installing OpenTAP and Editor only. - #4787
- OpenTap Linux INSTALL.sh unzipping wrong TapPackage - #4790
- Unchecking DateTime X-Axis option does not reload old X-Axis values - #4792
- Test Plans with nested sweep loops (range) do not open correctly - #4798
- Sweep Loop Values do not properly load Excel generated CSV files - #4799
- Short Lived Connections Resource Strategy give "crash" exceptions instead of helpful message, as is coming in Default Resource Manager - #4808
- TAP Crashes if there are {}'s in the stacktrace - #4813
- Sweep loop exception in OpenTAP 9 - #4819
- Dragging & Dropping child step into parent causes exception - #4821
- PathAttribute Example Creates GUI Error - #4829
- Package create overwrites package name if period exist in package name - #4830
- Test Plan serialize of null resource - #4838
- Cannot create new postgres database schema - #4845
- Run Isolated does not work from root directory on windows - #4851
- OpenTAP Linux does not detect license - #4853
- Strange UI elements not visible - #4873
- External parameter merge: When removing a merged parameter the next value change will apply to it - #4874
- BeforeOpen hook exception handling - #4875
- GUI error: Connections tab: Clicking in port direction column of a RF connection - #4886
- Package Create on linux throws Bus Error - #4892

- Can't uninstall plugin as files are in use, need a hint to the user about closing TAP - #4894
- External parameter merge: Merged value is not refreshed - #4895

Other:

- Added Example/Migration Guide Info for IControlProvider/IAnnotation - #4646
- Added "Ensure unique step name" setting to user documentation - #4748
- Replace "GUI" with "Editor" naming in user documentation - #4749
- Remove Set Verdict step from user documentation - #4750
- Keysight misspelling in user documentation - #4752
- OpenTap Engine Load Performance Improvements - #4780
- Improved documentation for IControlProvider in developer guide - #4794

Release Notes - Keysight Test Automation version 9.1 (Including OpenTAP changes)

New Features:

- Blink in task bar when test plan finished if the window does not have focus [#91](#)
- OpenTAP CLI should indicate version and branch information [#1143](#)
- FilePath Attribute Should Support Multiple File Types [#1428](#)
- Directory Support for Package.xml [#2539](#)
- Support Available values in PlatformInteraction buttons dialog [#3680](#)
- Allow full directories to be specified in package xml [#3820](#)
- Allow A setting to be configured as an External Parameter from the Test Step Source [#3930](#)
- TestStep.Enabled as External Parameter [#4175](#)
- Use External Parameter Name as ColumnDisplayName [#4218](#)
- Feature Request: package.xml include directory [#4288](#)
- Make it possible to copy version number from GUI [#4345](#)
- No UTF-8 BOM on CSV Result Listener output file [#4439](#)
- Support for `$(GitVersion)` in `PackageDependency` version attribute [#4634](#)
- Expose downloaded packages from DownloadAction [#4665](#)

Usability Improvements:

- FilePath Attribute Should Support Multiple File Types [#1428](#)
- Support Available values in PlatformInteraction buttons dialog [#3680](#)
- TAP Installer Fails if REST API is running [#3953](#)
- Use External Parameter Name as ColumnDisplayName [#4218](#)
- Toggle filter mode disabled when there are no test steps [#4470](#)
- Display Step Settings Panel for the last selected step [#4477](#)
- Remove white spaces from xml tags [#4488](#)
- Inconsistent inheritance of Browsable attribute [#4567](#)
- Difficult to see renaming of steps in TAP GUI [#4579](#)
- Rename module name "TAP" to "OpenTAP" [#4582](#)
- Warnings when building SDK examples project in release mode [#4583](#)
- Rename "TAP" to "OpenTAP" in Plugin Development description [#4584](#)
- Package Manager: When having an offline (or invalid) repository, the loading repository information displayed is incorrect [#4587](#)
- Sweep Loop Range - NO warning message when sweep parameters aren't selected [#4588](#)
- Package Manager should display different messages for: unsupported repos vs invalid repos [#4589](#)
- Rename .TapPackageCache xml files [#4590](#)
- Package Manager visualization of Required and Installed Versions [#4607](#)
- tap.exe run: The `-try-external` option does not work as it's described in help [#4620](#)
- tap.exe package download: Using the `-target` option will create an empty "Packages" folder [#4621](#)

Bug Fixes:

- Unhandled GUI error - when deleting steps [#3993](#)
- Autoscroll Step into View Not working When Steps are Collapsed [#4099](#)
- LicenseInjector does not support injecting into .netstandard assemblies [#4299](#)
- TAP 9.0 installer creates a "Keysight" folder during installation in the installer folder [#4443](#)
- Uninstall TAP: The UAC pop-up does not show Keysight as Verified publisher [#4446](#)
- tap.exe -search command: Package is required to load the test plan, but it is not installed. [#4452](#)
- Help shows wrong location in the TOC [#4530](#)
- Sweep loop parameters: New parameters are available in 9.0 and have no functionality or crash when used [#4557](#)
- Unable to find match for package dependency if architecture is not the same [#4606](#)
- Remove `--prerelease` argument from `tap package create` [#4624](#)
- tap.exe: pagemanager options do not work or need more info [#4626](#)
- Update bug when loading Reference TestPlan [#4627](#)
- Failing to install package on Linux from local file [#4635](#)

- Gui error: Exception: Collection is read-only. #4637
- Erroneous error on loading ported test plan #4647
- Caught unhandled GUI Error when enabling/disabling each "Report Sections" #4652
- TAP CLI eats piped commands #4658
- On License Servers with KS8400A and KS8000A TAP will check out both licenses to run a Test Plan through the GUI #4661
- Unhandled GUI Exception With External Parameters #4666
- Nullable Properties not showing up after 9.0 port #4668
- Installer sometimes installs the wrong version of packages #4678

Other:

- Include TapApiReference.chm in KS8000A #4464
- Consider adding Editor setting to disable blink behavior. #4473
- SuggestedValuesAttribute missing in DevGuide #4511
- Find better names for the installers #4522
- Result Viewer: **error** option is available in Series/ Result Name drop-down list #4532
- Change TAP 9.x to OpenTAP 9.x in the Migration Guide #4576
- Check if file is a .net assembly when running create package action #4578
- Change linux install and readme to point to OpenTap (instead of Keysight) #4593
- Add unit test that shows that two SQLite result listeners cannot write at the same time #4597
- Migration Guide: PlatformInteraction -> UserInput #4602
- Clean up packagemanager uninstall action #4608
- SDK log message of Fake install is confusing. #4611
- Architecture spelling #4628
- Improve CLI help with consistent naming #4629
- tap.exe help should be updated to include running external parameters using a CSV file #4657
- Add new Installation(Directory.GetCurrentDirectory()).GetOpenTapPackage().Version to migration guide #4669
- UserInputExample.cs Display attribute incorrect #4685
- Linux README still shows TAP 2018 #4688
- Move Keysight.Tap.Library.dll from OpenTAP to Licencing Components package #4693
- "Example code" package on gitlab.com #4696
- Ignore assembly warning if the assembly contains .vshost. #4707

Release Notes - Keysight Test Automation version 9.0 (Including OpenTAP changes)

New Features:

- Keysight Test Automation Threads #108
- Package Manager should allow uninstalling system-wide packages #3799
- External parameters should be supported with List of values setting #3949
- GUI enhancement: enable/disable unique naming for test steps #4086
- Result Viewer Data Table should also support "Subtitle" (in addition to Title) #4108
- User should be able to Hide/Show the Results Viewer right-hand settings panel #4109
- Support for CLI sub commands and cleanup #4194
- Basic support for running multiple test plans in the same process. #4237
- Support plugins to extend behavior of package install/uninstall/create/etc. #4242
- Open/port TAP8x test plans #4368
- No validation error for Input Properties set to None #4468

Usability Improvements:

- SuggestedValueAttribute - suggest available values instead of forcing them #319
- Save Menu items in Timing Analyzer are not intuitive #1021
- Rename SessionLogs.Load() to SessionLogs.Initialize() #3176
- Rename legacy title in RV from Result Type to Result Name #3319
- Don't provide build warning when semantic versioning isn't used #3633
- Disable obfuscation in package.xml template #3677
- Remove Set Verdict from Basic Steps #3729
- Support Automatic Versioning in Assembly Info #3742
- Run Program step - log header with a whitespace #3881
- PackageManager change -tap-dir command line argument to -target #3902
- Package Manager is unresponsive for several seconds on launch and after plugin installation #3918
- RV allow selection of >1 instance of same result type. #3932
- The Editor stops responding after loading 5000 steps test plan into a test plan reference step #4100
- Align log messages in summary #4002
- Run explorer export dialog improvements #4003
- SecureString Control too tall in Editor #4070
- User should be able to easily Drag&Drop individual windows within Result Viewer #4107
- Toggle All Test Steps should be disabled in right-click context menu if there are no test steps #4113
- RunExplorer export dialog styling #4116
- Copy command should be disabled if log panel is empty #4122
- Collapse option active when no collapsible Control available #4131
- "Open link" and "Copy link" commands should be disabled if log panel is empty #4138
- Better Support of non-SemVer Plugins #4159
- Correct typo in External Parameter GUI #4163
- Tooltip missing for "Adding a Parameter Column" button #4172
- Tap-dir option has wrong location description #4192
- TestPlanReference External Parameters are not available programmatically #4193
- Plugin searching spams log messages at Package Create #4302
- Documentation for tap editor arguments(open, search, add) #4315
- Package Manager should know when it connects to a server with wrong API version #4330
- Result Viewer - The drop down buttons for selecting filter Result are blocked #4336
- (Improvement) Changes to the Dialog Step settings for the "Default Positive" option #4342
- (Improvement) Sweep Loop (Range): Empty "Sweep parameters" dropdown should have "0 selected" #4370
- Filtering: Sweep Loop settings are not displayed correctly in filtering columns #4403
- Default size for metadata prompt dialog can be improved #4432
- Tap.exe package install command returns 404 on remote repository despite repository is working fine #4455

Bug Fixes:

- Subtitles from Selected Data are not displaying proper in the Results Viewer #1840
- Compare results "X" button redirects to settings dialog #3997
- Using reserved names in Profile name does not work as intended #4045
- Available Values Saved as a String in Test Plan Reference #4053
- Remove TestPlanRun.AbortRequested #4083
- 'No Input Selected' Validation Rule continues to fail (false activation) when a default value is picked up by the setting #4085
- Results: arrays are not properly stored in the database when used as step properties #4105
- "Unit" attribute does not currently work for double[] array type settings #4136
- Incorrect dependency on serializing DUT #4173
- Disable hidden properties shouldn't report into the aggregated step parameter errors #4201
- ResultViewer: Order Points not applied when loading from template #4204
- Package action fails if there is no version tag #4213
- Package Dependencies missing in TestPlan #4214
- tap.exe package install fails with error code 0 #4232
- Tap.exe can't install package if being executed from another directory #4233
- Pushing a large amount of results might cause an error #4246
- Postgresql cannot export large number of rows #4247
- PackageManager assumes wrong installed version of Test Automation #4250
- Caught unexpected error. Exception: 57014: canceling statement due to statement timeout - View Results #4259
- Exception: An operation is already in progress. - Run Explorer open log/open run in Test Automation application #4260
- Popups not shown when the Editor is maximized #4262
- Enabled<>.IsEnabled not updating UI #4275
- tap package test does not execute tests #4296
- Show Result Viewer option isn't available for enabling #4308
- The given key was not present in the dictionary tap timinganalyzer -dual #4314
- Moving test step property to new group breaks sweep loop #4317
- Installer warnings / errors #4324
- Unexpected error message when uninstalling package from fresh installation #4335
- Semantic version - prerelease comparison is backwards #4339
- Validation rules in test plan grid are not updated #4354
- PropGrid does not update when isEnabled changes #4359
- Package Manager - uninstall example plugins doesn't work #4364
- Test Automation fails to run isolated when trying to install package from outside the installation folder #4366
- The list of repositories does not save on exit #4367
- Package Repos in PM GUI disappear #4371
- From Dockable Panels: ResultListeners in context.ResultListeners are not opened with Connect Resource Button #4372
- Flickering drop-down menu on setting Input step properties #4393
- Enum drop down does not respect browsable attribute #4400
- Unhandled Editor error: Sequence contains no matching element #4404
- Demonstration plugin doesn't install in Package Manager #4413
- PackageManager: Uninstall + install OpenTAP GUI does not work (in a certain scenario) #4420
- Caught unexpected error- The path is not of a legal form #4434
- Create/upgrade Postgresql database not working #4435
- Package dependency warning despite having the correct dependency version #4438
- Sweep loop select all - Value cannot be null. Parameter name: source #4456
- Incorrect order of data extracted from PostgreSQL RL #4483
- Sweep loop: Unhandled Editor error: Having two sweep loops selected and clicking "Edit" button #4494
- Connection - Import Cable Loss values generate errors #4505
- GuiHelp.chm should be replaced with EditorHelp.chm #4513
- No timeout on VISA discovery #4560

Other:

- Typo in Sibeling class name #1266
- RepositoryManager (a class in package manager) should be cleaned up #2910
- Package folder to contain installed packages (combine it with package definition folder/xml) #2951
- Improve version scheme of alpha releases #3072
- Remove ShortNameAttribute #3100
- Clean up PlatformInteraction interface #3152
- Update RV documentation with respect to Result Type renamed to Result Name #3320

- Renamed 'Result Type' column in RV to 'Result Name' #3321
- Migrate Engine to netstandard2.0 #3689
- Thread.Abort is not supported on .NET Core. Find an alternative. #3771
- Make PackageManager independent of PackageManagerSettings #3905
- Connection.IsActive behavior/logic #3952
- Consolidate IResultImport and IResultImport2 #3969
- Context menu test plan panel missing documentation #3981
- Updated EULA #4018
- ILogListener has unsafe behavior #4028
- IResultStore.GetAverageDuration return value #4031
- Rename namespace Keysight.Tap to OpenTap in "TAP Base" parts #4043
- Rename Keysight.Tap.* to Keysight.OpenTap.* in commercial (not open source) parts #4044
- Remove all outgoing dependencies of OpenTAP #4050
- Move CommandLineArgumentAttribute from "Package" namespace to "Cli" namespace #4062
- Make installer/script for OpenTAP #4063
- Update Package Schema namespace #4067
- Remove configuration from package Schema #4068
- Update comment when creating a new settings class using SDK #4073
- Install folder for KS8000 and KS8400 #4074
- Update About box #4076
- Disable "suspenders" as it is causing confusion for customers #4077
- Streamline TapPackage create process. #4078
- "Keysight Test Automation on PathWave" instead of "Keysight Test Automation" #4087
- `tap list` to show all packages (not just installed) by default #4128
- Remove PackageManager.exe #4129
- Change TapVersion class to better support SemVer #4130
- Use BundleInstaller and LicenseInjector from main internal repo #4145
- Consider removing ValidatingObject.ThrowOnValidationError #4152
- Build fails with invalid file name #4176
- Turn Tap.Cli.exe into a ICliAction #4195
- Turn Keysight.OpenTap.Gui.exe into a ICliAction #4196
- Migrate Demonstration plugin to 9.0 and include in installer #4200
- Update Keysight Certificate #4205
- Add Initialize method to SessionLogs and mark the Load method as obsolete in the "TAP / Core" repository. #4206
- Update migration guide #4209
- Make unused methods internal in PluginInstaller.cs and Installer.cs #4211
- Remove `-service` options form CLI #4212
- Clear PDF plugin in PackageManager.Unittests of .dlls to avoid Black Duck complaining about that content #4236
- Delete TapVersion, GitBranch and GitBranchVersion macros #4249
- Remove Blowfish algorithm #4254
- Change package specification to be exact by default #4285
- Remove TransformArgument and convert plugins to use ICustomPackageData/ICustomPackageAction #4292
- Remove CheesyDesign #4295
- Rename OpenTap.PackageManager.dll to OpenTap.Package.dll #4297
- Migrate "Licensing Components" package to new folder structure #4298
- Move "UseVersion" feature in package.xml to new ICustomPackageAction plugin system #4307
- Clean up naming in SearchComparison and related classes #4318
- Remove IResultTagging2 interface #4321
- Release Notes 9.0 #4323
- Update SDK to depend on TAP9x #4327
- Remove "Break at Line" feature #4328
- Visual Studio Templates in SDK needs to be updated for TAP9x #4331
- Remove Tap.Plugins.BasicSteps.Gui project #4332
- Update OpenTAP 9.0 installer with product name = "Keysight Test Automation 9.0" #4334
- Update .chm file names to not contain TAP #4346
- Rename TAP to OpenTAP in developer guide #4376
- Set Verdict step should be removed from help #4379
- Remove "Platform" naming from ApiReference.chm #4388
- Testplan panel: Step settings appear in columns for other steps #4390
- Create separate TAP Packages for dotfuscator, obfuscator and sign #4396

- SDK projects need to use latest c# version #4406
- Namespace clean-up #4422
- Move WindowsSigner out of OpenTap #4424
- Incorrect path on TAP Package Manager documentation #4428
- Misc minor API cleanup #4429
- Support internal types as plugins #4430
- Default package repositories should be changed #4431
- Update .chm content to not contain TAP #4447
- Default Installer dir for KS8400 and KS8000 should be Keysight/Test Automation #4448
- Rename TapApiReference.chm to OpenTapApiReference.chm #4453
- Package Manager: On first run after a clean install, it will show "Demonstration" in the list, which is an incompatible package (RC1) #4457
- Package Manager tries to install Demonstration from a temp folder which requires administrator access #4458
- Rename TestPlanRunExplorerHelp.chm to RunExplorerHelp.chm #4460
- Move SDK.MSBuiold.dll to package folder #4462
- Renaming of .exe files in install folder #4463
- Rename SDK/Example assemblies #4465
- Rename "GUI" in Settings to "Editor" #4466
- Rename assembly Keysight.OpenTap.Gui.Controls.dll to Keysight.OpenTap.Wpf.dll #4479
- Removing NotifyingResultListener #4481
- C:folder change from TAP to Test Automation #4485
- Update Migration Guide to reflect recent changes in filenames #4499
- Connection- Connection can be edited when resources are connected #4507
- Rename Settings created with VS Template #4517
- Remove Limit check basic step #4523
- Fix the demonstration plugin to not contain TAP #4561

Release Note - TAP 2018 Update 7 Version 8.8

New Features:

- Improved filtering and bulk updates of Test Plans #3765
- Added possibility to *Select All* in Sweep Loop Parameters Settings #4054
- Added possibility to bulk enable/disable rows in Sweep Loop #4080
- Add possibility to populate Test Plan column selection with all possible step settings #4092
- When a filter is applied other filters are updated to highlight the values that are still available #4111

Usability Improvements:

- Window size is now maintained between edits in Sweep Loop #4081
- Fixed an issue where messages were printed twice in the Log Panel #3889
- “Dot” display is replaced with Dropdown for Sweep Loop Step Settings #4032
- Fixed a performance issue with SQLite database #4058
- Fixed a performance issue with ParallelStep #4115

Bug fixes:

- Added a fix which prevents multiple TAP instances to write to the same SQLite database #3979
- GUI now reflects resource name change correctly #4048
- Autoscroll step into view is now working when steps are collapsed #4099
- Results Viewer, with Data Table chart type now support custom title #4106
- It is now possible to update Timing Analyzer when using TAP x64 #4126
- TAP no longer crashes if ITapDockPanel/IMenuItems throw exceptions #4132

Release Note - TAP 2018 Update 6, Version 8.7

New Features:

- Enabling/Disabling all steps in a test plan is now possible through the right-click menu #3915

Usability Improvements:

- Test plans which end with the verdict error are no longer used for test run estimations #3539
- Added package cache directory #3795
- PageUp/PageDown in TestPlanGrid now works when steps are collapsed #3805
- Added warning on loading test plan with invalid resource configuration #3836
- Fixed font weight for lists and headings in Help #3875
- Improved the Delete profile dialog #3877 , #3920
- F10 command is disabled when there are no available test step #3878
- The minimum required license is checked out based on which executable is used #3946
- TestPlan doesn't load anymore if required packages are missing #3975
- Copy-pasting hundreds of steps no longer results in lag when refreshing steps list #3583
- Fixed slow scrolling for large test plans #3787
- Package manager's download indicator now shows two digits after the decimal #3911
- Added documentation for `ScpiQueryBlock<double>("")` to clarify its behavior #3944
- Fixed `Aborted by user` message shown multiple times in the log file #3964
- Removed 'tap.exe could not be removed' warning message when installing TAP Base from the CLI #3980

Bug fixes:

- Fixed unresponsive TAP GUI for long test runs #3358
- Package Manager Settings URL editor no longer steals +/- key events #3645
- Fixed race condition in Prompt User for Metadata #3686
- Fixed ResultsViewer template to support multiple CSV data #3777
- Fixed Add Test Step Search to not crash TAP with a large number of test steps plugins #3827
- Fixed issue with height when scrolling in the Test Plan Panel #3830
- Fixed Dialog step verdict with Abort If setting #3882
- Improved error logging for "PackageAction error : Error while updating version information" #3885
- Fixed plugin installation problem in TAP Installer #3899
- Implemented `-cachedir` to Tap.exe #3903
- Fixed a bug where TAP failed to detect a valid license #3896
- Package Dependencies no longer missing from TestPlan file #3912
- Copy Table in Results Viewer now also works if not all columns have data #3931
- Fixed a problem with tap install that was unable to install "TAP Base" #3938
- Fixed a problem with breakpoints not being cleared when using Jump to Step / Abort #3943
- PackageManager download action and install action now parse versions the same way #3957
- Fixed GUI error - 'Refresh' is not allowed during an AddNew or EditItem transaction #3970
- Fixed Package.Dependencies deserialization #3974
- Fixed Duplicate installed plugins throwing exceptions when loading test plans #3982
- TAP Base package now shows the Plugins tab in Package Manager #4029

Release Note - Test Automation Platform 2018, Version 8.6

New Features:

- PackageManager is now able to update itself (#2794)
- Supporting fine granularity resource locking similarly to RemoteTestBench/ITestPlanRunMonitor (#3304)
- Added visual indication to the test plan panel if a Step Setting rule has not been met (#3504)
- Supply Docker image for KS8000 (#3646)
- PackageManager now uses a cache for downloaded packages (#3740)
- Implemented IPackageTransform for package create task (#3814)
- Added support to allow the creation of custom GUI for importing and exporting test plans (#3816)

Usability Improvements:

- The Search drop-down button is displayed in the correct position even after resizing the Log Panel (#3223)
- Added a link to the SDK Examples to the TAP Welcome Screen (#3343)
- Sweep Loop step names are now aligned (#3368)
- Package Manager doesn't shows packages as installed after a failed package installation anymore (#3466)
- Scroll bars on tool tips in the Timing Analyzer are now disabled (#3537)
- Resized PathWave Test splash screen (#3625)
- Improved the way column sizes are calculated in the Log Panel (#3728)
- SCPI step now default to query action (#3744)
- Horizontal and vertical scroll bars now disappear when applying a filter in the log panel if the text fits the window (#3748)
- Improved message on error from package repository (#3802)
- Max allowed value for "Message Limit" setting is reduced to avoid memory issues (#3890)

Bug fixes:

- The Timing Analyzer's Log tabs now have a fixed location (#3186)
- Changed the behavior of defer regarding errors (#3720)
- Added regex validation for Run Program step and verdict regex (#3750)
- Modified GUI error regarding Test Plan Reference (#3752)
- Fixed a PackageManager issue about installing .TapPackages (#3769)
- HashSets of numbers can now be serialized (#3773)
- TestPlanReference can now be deleted by multi-select (#3779)
- Fixed bug in the GUI regarding drag and delete (#3794)
- List of enums can now be modified (#3812)
- Fixed ReferenceTestPlan step on obfuscated Linux builds (#3824)
- Recent test plan file list now updates properly (#3842)
- Fixed a problem with the serialization of instrument settings (#3845)
- Now supporting resource references being null all the way to ILockManager.BeforeOpen (#3851)
- PackageManager DownloadAction now only considers the plugin in the target folder (#3852)
- Fixed the horizontal scroll in the log panel (#3853)
- Fixed an issue with published results being sometimes skipped or repeated (#3854)
- PackageManagerSettings is now properly recreated when gathering packages and dependencies (#3865)
- Fixed unhandled GUI error regarding reordering steps (#3874)
- Results Viewer now shows correct number of distinct values (#3897)
- Fixed issue with verdict priority when a step is aborted (#3888)

Other:

- F1 Help now documents prompt for metadata (#3386)
- Optimized the colors of the GUI (#3437)
- Using TAP Engine in REST-API with KS8400 installed doesn't throw exceptions anymore (#3636)
- Fixed spacing in "Add Test Step Window" (#3662)
- Updated the Developer Guide regarding screen shots and smaller errors (#3696)
- Fixed inconsistency in the Results.Defer and Errors behaviors (#3722)

- PathWaveTestResultListener .TapPackage can now be installed from Package Repository using 8.5.449 PackageManager.exe command line (#3770)
- Removed references to 'graphical progress bar' from TAP documentation (#3784)
- Updated Linux deployment to target .NetCore 2.1 (#3838)
- Removed the word 'Help' from F1 TOC (#3856)
- Updated product number in About Box (#3858)

Release Note - Test Automation 2018, Version 8.5

New Features:

- Settings can be updated prior to test plan execution (#3348)
- Resources can be opened when a given test step needs them, not when a test plan starts (#3422)
- PackageDependency versions now update when creating a package (#3429)
- Filtering of the Log Panel allows to remove some of the generated TAP log messages (#3430)
- Setting ProcessStartInfo.CreateNoWindow in ActionStep of package.xml is possible (#3467)
- Enable/Disable of SCPI logging is supported (#3605)
- MultipleChoiceWindow supports enums with display attributes (#3621)
- Resource properties can have placeholder arguments, so they can map to any compatible resource at execution time (#3654)

Usability Improvements:

- Can detect missing plugin type when deserializing Test Plan or settings (#2884)
- Package Manager can now connect even if URL ends with a space (#3135)
- 'Save As' file type is not showing twice anymore (#3214)
- Resource connected button is now disabled when the test step is deleted and the resources are disconnected (#3336)
- Pressing Enter in the search area of the Package Manager does not installs/uninstalls package anymore (#3363)
- Improved documentation of the "Allow Metadata" engine setting's impact on the CLI (#3372)
- Using Shift to select multiple test steps no longer expands test steps that are collapsed (#3379)
- Using a slow package repository no longer stops packages from other repositories to be installed (#3388)
- PackageDependency versions is now updated when creating a package (#3429)
- Improved how help is found for test steps (#3453)
- Paste option is disabled in the step name's right click menu if the user has not copied anything yet (#3494)
- The behavior of the Repeat Repeat button was simplified (#3498)
- Selection and deletion in the log panel doesn't delete a row from test plan panel anymore (#3581)
- Scrollbar now follows selected step when scrolling up with arrow keys (#3611)
- The GUI no longer blocks when closing an open test plan (#3638)
- Fixed XML serialization precision issue with doubles (#3649)
- Fixed focus issue of the "?" icon in the results panel (#3692)

Bug fixes:

- Fixed broken links in documentation (#3492)
- Fixed NullReferenceException on Tap.CLI (#3519)
- Bundle context chm can now be displayed (#3552)
- Fixed incompatibility issue with Dependency Resolution with .NET 4.7.1 installed (#3589)
- Run Explorer: Export now save the run verdict in the filename (#3595)
- Fixed typo in Result Viewer help (#3604)
- Incorrect 'Version' string no longer causes a long error message during TAP load (plugin search) (#3606)
- PackageManager -f option no longer causes package to not be found (#3607)
- Sweeping an Input property no longer generates unhandled GUI exceptions (#3609)
- Fixed issue with test plan Reference step (#3613)
- External parameters button is now displayed correctly (#3617)
- Fixed Timing Analyzer crash issue that occurred while analyzing logs during test plan run (#3626)
- Fixed bogus PackageDependency on REST API (#3629)
- Fixed an issue with Timing Analyzer not starting #3631
- Updating Resource Setting is now triggering Setting Changed Event (#3635)
- Fixed issue with parallel test step run (#3637)
- "Resource "{0}" opened." now works with custom Instrument class implementation on Open and Close (#3663)
- Fixed issue with multiple EnabledIf attribute usage consistency with contradicting HidelfDisabled values (#3678)
- Fixed issue with installing packages from network drive (#3679)
- Fixed issue with updating/uninstalling a plugin that has a ControlProvider plugin (#3698)
- Fixed issue with SQL result listeners not removing result data when runs are deleted (#3705)
- Installing plugins using -tap-dir option now installs in the specified dir (#3706)
- PackageManager now respects OS Choice for Dependency Resolution (#3714)

Other:

- F1 help material for the Demonstration-Plugin converted to Markdown (#3338)
- Now possible to set Macros in TAP CLI (#3373)
- Updated the Developer Guide on Defer Task (#3459)
- TAP log panel: Can now select multiple log rows using Ctrl or Shift (#3530)
- Added ability to tag a package as “system wide” (#3550)
- Now using C# 7.2 (#3568)
- Improved MacroString documentation (#3653)
- GuiSettings filewatcher no longer causes .NET Core to crash due to missing dependency (#3667)
- Fixed error in the EnabledIf documentation (#3683)
- Added system Wide Package Installation (#3695)
- Updated the Developer Guide with new screenshots (#3696)
- Log Hash is used for attachment storage (#3708)
- Updated F1 help screen captures (KS8400 Applications) to reflect latest GUI (PWT). (#3709)
- Temporarily disabled ResouceManager hooks for 8.5 release (#3741)

Release Note - Test Automation 2018, Version 8.4

New Features:

- Updated to latest Wsl and supporting Caranu skin(#2405)
- Linear Sweep Loop supports multiple input parameters (#2720)
- ScpiInstrument supports fine grained VISA locking (#3165)
- Set Results Settings from the CLI (#3166)
- Created App Icons for the TAP Menu (#3292)
- PathWave Test Hub (KS8700A version 0.1) - TAP edition (#3325)
- Package.xml allows to specify "Tool" for payload files that should be listed in the Tools menu (#3342)
- TPM can install a package despite any dependency issues using `--force` (#3365)
- Created separate installer for PathWave Test 0.1 (#3390)
- Version information is now displayed in **About** box (#3511)

Usability Improvements:

- All GUI panels show a help link (#2954)
- Using a slow package repo no longer stops packages from other repos to be shown (#3023)
- Tags created from Visual Studio now work for versioning (#3211)
- Fixed missing context menu for links from log lines in the Timing Analyzer (#3219)
- Refresh button is now active if unable to connect to repository (#3242)
- Refresh button is disabled if no URL is specified (#3244)
- Editing lists within lists no longer shrinks columns when closing the list edit window (#3283)
- Tap Developer's System Plugins tab disappears if there are no plugins available (#3367)
- Name Label **Instruments** settings is not visible if no instrument is selected (#3378)
- Selected tabs in TabControls are no longer difficult to identify (#3391)
- Added FLO personality XML as part of Licensing (#3394)
- Floating panels now have a help icon after using "Restore default layout" (#3395)
- When maximizing the TAP GUI the last row of log panel is not cut off anymore (#3404)
- Steps panel now has min width and height (#3406)
- After installing a new package the package list no longer changes selection to another plugin (#3425)
- TA now showing debug messages (#3432)
- Improved tooltips for incorrect VISA address (#3433)
- Optimized time estimates in progress bar for compact view (#3435)
- The Sweep loop edit values window now has min width and height (#3447)
- Package Manager no longer tries to unzip a file 10 out of 5 time (#3460)
- Packaging a package no longer includes references to itself (#3461)
- Adjusted TAP minimum window height (#3472)
- Package manager now shows required version and the exact installed version (#3488)

Bug fixes:

- Exported CSV file is no longer broken when exporting too much data (#3252)
- Restore default layout now working (#3253)
- Package Manager GUI no longer locks files if the plugin contains control providers (#3286)
- Fixed bug where package Manager could not uninstall TAP GUI (#3362)
- Fixed issues with Pareto in Comparison Mode (#3380)
- Fixed show plugin package (#3385)
- Fixed TA not showing debug messages (#3432)
- Fixed crash during execution if a step is defined in a dynamic assembly (#3434)
- Fixed strange layout issue when updating from 8.3 to 8.4 (#3442)
- Fixed Package Manager issue where different reference versions resulted in stack overflow (#3463)
- License manager is now installed with KS8400A (#3477)
- Color scheme now updates when changed across applications (#3478)
- Using Duration property in TestStep no longer results in an error on Run (#3485)
- Copy/Paste in List Dialog no longer results in exception (#3505)
- Timing analyzer: Copy to clipboard from pareto chart no longer crashes the app (#3520)

- SCPI step action doesn't produce unhandled GUI error anymore (#3525)
- Test plan panel: Dropdowns are no longer cut off when set to be shown in columns (#3531)
- PackageManager packaging no longer goes into infinite loop (#3554)
- Fixed installation problem with REST-API rc plugin (#3567)
- PWT doesn't stop responding anymore when lower right corner is dragged and TAP GUI is loaded (#3579)

Other:

- Dialog step now has a default title (#3229)
- Uninstalling Tap Developer's System from CMD no longer behaves differently from Package Manager (#3360)
- Fixed wrong link in Engine Setting>Log Path (#3375)
- Updated SDK to include example of deferred tasks (#3393)
- Implemented test on Centos 7 as that will be the platform IO Libs and Licensing will support short term (#3431)
- Fixed sweep loop range issue where multiple input parameters were not logged (#3450)
- Fixed WSL Checkbox Animations (#3464)
- Run explorer: Up/Down arrows now change selection of test runs (#3515)
- Arrays are now expanding correctly (#3518)
- Reduced size of burger menu in testplangrid (#3547)
- Documented new bundle installer in markdown (#3559)

Release Note - Test Automation Platform 2018, Version 8.3

New Features:

- #2608 Support that TestSteps can run actions after Run() completes
- #2868 Add ScpiRead to ScpiInstrument class
- #3049 Test Plan Run Explorer to search by date
- #3140 Bundles view in Package Manager GUI
- #3178 Possibility to jump to any step at the current hierarchy level when you hit a break point
- #3228 Allow exporting to databases in Run Explorer
- #3278 Support directional Ports (input or output)
- #3318 Resource settings now include the original name
- #3322 Add support for generic resource lists
- #2520 `List<Port>` is now recognized by the Connections Settings

Usability Improvements:

- #2922 Remove columns when steps with ColumnDisplayName attributes are removed
- #3092 Improve test step rule validation
- #3110 Some test plan column headings don't disappear when choosing not to display them
- #3170 Show warning message in CLI when external parameters are not found
- #3207 Test Plan Run Explorer: Search suggestions are at the right end of the search bar
- #3221 Test Plan Run Explorer : search suggestions can be incorrect
- #3233 TimeGuard step can have a 0 s timeout
- #3312 When External Parameters are set to invalid values, there is no feedback to the user
- #3316 TAP GUI freezes due to Package Dependency Warning

Bug fixes:

- #3234 Package Manager shows same package multiple times
- #3254 Add support for retrieving normal VISA aliases
- #3261 'Verdict Of' shows the Repeat step's own setting
- #3265 Custom ComponentSettingsList not exporting/importing
- #3266 Component Settings not saving
- #3267 Package Manager is locked on install even though TAP is closed
- #3284 Copy-paste a row in PropGridList copies by reference and not by value
- #3289 Test Plan Reference Step Name is reset when loading a Test Plan that has an external parameter
- #3294 Unhandled GUI error - add a step during test plan run
- #3310 "Count" parameter from Repeat test step ignored if used as External parameter
- #3315 Exception on editing a SecureString Property in External Parameter window
- #3332 External Parameters with List of Objects

Other:

- #3090 Move Keysight.Tap.Gui.Controls.dll to separate package.
- #3189 Scroll the currently running test step into view.
- #3192 Migration Guide: Missing info on changes in IDynamicStep
- #3193 Add information about git tag version to developer guide
- #3277 Package does not build if following instructions from Migration Guide
- #3290 Move to .md based F1 help
- #3308 TAP User interface help updates

Release Note - Test Automation Platform 2018, Version 8.2

New Features:

- #2154 Support multiple group levels in test step settings
- #2798 Support collections of SwitchMatrixRow, SwitchMatrixColumn and SwitchPosition
- #2962 Sweep values import/export: include enabled status
- #2979 Add option to connect to a network license server if license check fails
- #3030 PackageManager CLI to install a specific package version
- #3089 Searchable description in step dialog
- #3124 Search result highlighted in log panel

Usability Improvements:

- #2517 Add option to GUI settings to expand hierarchy when opening test plan
- #2561 Selected steps are cleared in test plan panel when scrolling with scrollbar
- #2690 Bench settings connections validations
- #2844 GetConnectionsTo() to match switch based devices on device basis
- #2845 Display the name of a connection if a Connection property is used in Step settings
- #3005 Plugin Package Manager does not show version number for unpackaged plugins
- #3025 Edit step settings simultaneously for two steps
- #3065 Sometimes the old pop-up (without buttons) is shown when updating a plugin that is already in use
- #3103 Not able to close the install plugin warning dialog
- #3104 Change height and width for warning dialog when installing/uninstalling a plugin
- #3119 Session log format to change according to column size
- #3120 EnabledIf can cause unhandled GUI error if used incorrectly
- #3127 Package Manager list shows pre-release packages
- #3137 Show debug message for update-check issues
- #3147 Change minimum width and height for external parameters window
- #3157 Package Manager to not require write permissions on network share
- #3158 Package Manager package datagrid jumps when clicking the version column
- #3173 Package Manager cancel button reloads plugins
- #3177 Change the dependency grid column widths of the Package Manager
- #3200 Package Manager Type column shrunk
- #3251 If a ControlProvider throws a LicenseException it is propagated to the GUI as an unhandled exception

Bug fixes:

- #2674 Unable to cast object of type 'MS.Internal.NamedObject' to type 'Keysight.Tap.Gui.TestStepRowItem
- #2757 Results viewer not responding / refresh not working as intended
- #2872 TAP GUI crashes if a test plan is started shortly after the GUI is loaded
- #3019 "Auto scroll" enables automatically after a test plan run or when entering a settings screen
- #3075 Float values are casted and displayed as doubles
- #3083 In debug mode, plugin code breaks and VS throws an exception
- #3086 When Locale with comma is used as decimal separator Shared properties of numbers do not work
- #3087 List<int> has issues with 0 values
- #3094 Error on loading a dynamically generated instrument plugin
- #3118 Do not provide error messages when the package repo can't be reached for updates
- #3125 Range values of the sweep loop change on loading a test plan
- #3130 New steps can be added while TestPlan is locked
- #3134 The test plan reference step is serialized as version 0.0.0
- #3142 Exception when installing TAP
- #3163 Package Manager fails to install dependencies
- #3195 CSV RL: Missing Column Names
- #3209 Progress bar stops when restoring default layout
- #3218 Could not launch server within allotted time crash
- #3235 Bench Settings DUTs - update data is not saved
- #3249 Run Program Step - NO generated Results

#3250 RunExplorer search value suggestions doesn't distinguish between step and plan parameters

Other:

#584 Improved Log Panel (rendering)

#1440 Timing Analyzer works with sub milliseconds

#2880 Use the GUI controls.xml instead of application data for the TAP GUI(s)

#3064 Merge functionality of "Incompatible Packages" dialog into "Broken Packages" dialog

#3071 Set error code when download fails in Package Manger CLI

#3073 The DevGuide is missing info on Custom Dockable Panels

#3093 Improve Package Manager version matching/API

#3101 AssemblyResolver should look for newer versions of already loaded DLLs

#3105 Change the text color of debug messages to black from light gray in TAP GUI

#3145 Package Manager list does not show all components

#3156 Package Manager connects slowly when using network share containing .TapPackageS files

Release Note - Test Automation Platform 2018, Version 8.1

New Features:

- #16 Support docking/undocking of windows/panels in TAP GUI
- #1998 Support TapPlan.Name in MacroPath
- #2482 Extend CSV Result Listener
- #2686 Make support for Obfuscator in package manager, alternative to dotfuscator (Win only)
- #2692 TAP Bundle Installer
- #2698 Dockable TAP panels
- #2717 SQLiteDatabase does not work with inheritance
- #2727 Support for Custom GUI Panels
- #2766 Rotation of SessionLog?
- #2781 Support dockable TAP panels as Plugins.
- #2782 Dockable TAP: Add New Step
- #2808 PackageManager.exe list command improvements
- #2810 Support Semantic versioning in package XML
- #2816 Support OS attribute in package.xml
- #2836 Support Architecture attribute in package.xml
- #2837 Support in TPM to handle OS and Architecture
- #2877 Support borrowed FlexLM licenses in EESoF license provider
- #2912 Update FlexLM DLL to latest version from FLO (same API for win/linux)

Usability Improvements:

- #2322 Installer - 'Select installed version' wrong
- #2342 Test plan reference load other files than test plans
- #2683 When installing TAP and .NET 4.6.2 the PC need (at least in some cases) to restart
- #2702 Import settings profile contains a "default" filename entry which cannot be opened
- #2733 "Caught unhandled GUI error." is displayed when copying a step that contains an invalid character in a string input field
- #2735 Different delaySecs values after copy/paste a delay step to a text editor
- #2739 Timeguard timeout doesn't close the child's dialog pop-up
- #2769 TAP keeps old history of test plans
- #2807 Error when running PM CLI while PM GUI is open.
- #2811 package.xml for licensed plugins can be edited to use an existing licenses or no license at all
- #2818 EnabledIf + Rule Invalid Problem
- #2832 Read only booleans looks as if they can be edited in the testplan grid
- #2840 Improve warning message when loading old testplan files
- #2904 After TAP GUI uninstall running other components crashes
- #2909 Nested repeat steps can cause OutOfMemory exception
- #2915 Setting in the Package Manager GUI to show incompatible packages
- #2924 Make GUIcontrols and WSL a dependency of the TA,RV,GUI packages
- #2937 Polish text in new GUI/RV/TA/etc packages
- #2940 Wrong warning message when uninstalling plugin from CLI
- #2941 "Show results viewer" setting can be grayed out if no Results Viewer available
- #2943 Package Manager and CLI to not show 'file name information' as licensing string
- #2944 Sources_Open New.. from Run Explorer without SQLite and PostgreSQL plugin installed
- #2949 Uninstalling CSV plugin from Package manager does not work in the GUI Results
- #2952 Comparing logs link from Timing Analyzer help does not work
- #2981 Remove empty directories when uninstalling
- #2982 Mention in the installer that you are about to install TAP 2018
- #2984 PackageManager creates package with "..." in name
- #2985 Wrong configuration set in "Licensing Component" plugin and "Demonstration"
- #3002 Manually entered PackageDependencies should be preserved along side autogenerated ones when creating a package
- #3020 Textbox active for Filter disabled if CTRL+I is pressed
- #3022 Selecting other versions of tap base moves it down the package list
- #3063 Broken Packages dialog improvements

Bug fixes:

- #2589 Wrong values converted in seconds for Time Delay
- #2718 TAP CLI has issues in executing legacy test plans
- #2724 Tap.PackageManager doesn't run completely on Linux
- #2725 Add new step - unhandled GUI error
- #2779 PackageManager cannot uninstall the Python Plugin
- #2792 Values shown incorrectly in GUI due to Unit Attribute PreScaling
- #2818 EnabledIf + Rule Invalid Problem
- #2824 If a TestStep has two of the same Property serialization will fail
- #2831 Applying RV Template Changes Data Set
- #2833 Caught unhandled GUI error when opening About page
- #2834 Wrong Version number inserted by PackageManager, ends up in test plan
- #2858 KS8400A not appearing as option in auto activation
- #2860 Multi select editing with decimal values does not update values
- #2892 Wrong integration version name
- #2895 SharedProperties leaks event handlers
- #2897 Custom Component Setting Causing Stack Overflow
- #2905 Help Page not working from every page using "?"
- #2906 Steps panel doesn't update after plugin install
- #2907 PackageManager cannot update version info if dependencies aren't in the working directory
- #2918 TAP to run on FIPS enabled Widows PC
- #2921 TAPVersion.CompareTo is inverted
- #2938 Package repo does not connect correctly to 'redirect' links
- #2939 Timing Analyzer / Results viewer cannot be uninstalled from PackageManager
- #2949 Uninstalling CSV plugin from Package manager does not work in the GUI Results
- #2957 "Restore a Default Layout" option no longer works
- #2958 Repat Test Pan: Plan Failed to Start condition is not checked
- #2959 Resource Manager needs to closed during ScpiInstrument.Close()
- #2961 Sweep values import/export does not handle enum correctly
- #2963 Package Manager: does not update file version
- #2970 Un-initialized char variables in teststep fail when serialized.
- #2973 Changes to package versions are not possible when TAP in opened
- #2976 Flex license crashes TAP if it cannot connect to the license server
- #2983 SDK uses UseVersion="true" in package.xml
- #2986 "Linear sweep loop" external parameter "Stop" is not show as external after updating from 7.4 to 8.1
- #2998 Add new steps during test plan run?
- #3009 Exclamation mark not shown if new version is available in Package Manager
- #3010 Sometimes Demonstration plugin files are not deleted when uninstalling the plugin
- #3017 ResultListeners, DUT's, and Instruments (Resources) Cannot be Added
- #3021 If an installed package is available in multiple repos, it show more than once
- #3027 Incorrect dependency popup when uninstalling a package
- #3028 "Show plugin package.."feature not working as intended
- #3029 PackageManger CLI list wrong version
- #3055 Scroll in "Broken Plugin Package" windoes does not work
- #3058 Nothing happens when the user tries to open an app that he doesn't have license for

Other fixed issues:

- #1672 Support for 'crazy' chars in property strings - today the XML serializer will not accept it.
- #2239 Performance Issue: TAP becomes unresponsive when running a plan with multiple child steps
- #2339 Fix for zombie process issue caused by licensing
- #2351 TestPlanGridcan cause the GUI to lock up if enough data is being pushed into it and has aliasing problems.
- #2572 Clarification of Result Listener Plugin Development documentation
- #2594 Remove things that has been obsoleted in 7.x
- #2679 F1 help, update typical dir to TAP8
- #2687 "TAP Base" installer (KS8000)
- #2688 Create TAP packages for GUI, TA, RV&RE, SQLite, Postgres and Csv
- #2693 New Documentation Structure

#2695 Update F1 help to contain information about custom connection names
#2696 Document the new Sweep Loop (Range) step (replacing Linear Sweep Loop).
#2697 Update F1 help to contain info about repeat step allowing you to specify a condition from all steps (not just children).
#2706 Move package information to document folder and update to reflect TAP 8.0
#2707 Move injector information to documentation (MD) and update to reflect only TAP 8.0 and onwards
#2719 Remove Documents/SDK/SetupRemoteBench.docx
#2721 Update Demonstration plugin on public server
#2736 PluginSearcher should only load one assembly with the same name, and only the newest version
#2737 PackageManager Create should scan all references and automatically include direct references not found/compatible with dependencies found in other packages
#2740 PackageManager does not give file name in response when a file is not found
#2741 'Searcher' misspelt as 'Searher' in SessionLog
#2745 Investigate using Gitlab Docs for documentation
#2770 Connection Manager: Switch usage examples
#2780 PackageManagerGui 'leaks' handles
#2793 Cleanup special case for "TAP Base Installation" in package manager GUI
#2799 Upgrade TAP to use the released version of .NET Core 2.0
#2803 DUTs / Instruments in SDK/Examples should be in same group.
#2806 PackageManager GUI to show license status correctly
#2809 Move update check to use PackageManager
#2820 Migrate Developer Guide to MD
#2821 Migrate migration guides from wiki to md files
#2822 Migrate release notes to md files
#2823 Move CliTraceListener to Tap.Shared
#2825 new TAP architecture diagram
#2826 TAP Plugin Obj. Hierarchy diagram
#2828 Inconsistent capitalization in error message
#2841 No warning when loading plans containing legacy steps
#2842 SDK examples of using connecting manager to control a switch
#2851 Update documentation in F1 help to reflect the newly supported Tags.
#2853 new TAP Result Listeners diagram
#2855 Document "Dockable TAP panels" feature in F1 help
#2864 Update version in F1 help
#2876 Upgrade nuget packages to newest compatible version
#2878 Update F1 help to reflect the rotation of SessionLogFiles when >100mb
#2881 Update Installer GUI.xml with a current version.
#2885 Update external plugin package server to the latest version
#2894 Update xml packages for the TAP applications
#2908 Package Manager should handle installing the right package given a number of packages with the same name and version.
#2913 Make sure package requests match OS/CPU when downloading from repository
#2923 Update F1 help with the dockable TAP feature
#2926 Add "GUI Panels" plugin example code to SDK examples
#2931 Update version in API documentation
#2933 Review the Custom Result Listener section
#2946 Add BenchVue to the list of approved consumers of TAP.Engine.dll
#2947 Floating panels should have bold titles like when docked
#2948 Review the internal documentation on Packaging
#2950 Roll version number to 8.1 and update welcome screen to "TAP 2018"
#2953 Builds to be stamped as alpha/beta prereleases depending on git branch
#2955 Remove the feature "email session log", log right click or (CTRL+E)
#2960 Update to HPP 4.6 M5
#2965 Update user help: "Email session log" feature removed
#2966 Document the "SetAssemblyInfo" feature (part of pacakge.xml) in the dev guide
#2967 F1 Help Final Cleanup
#2972 Excel plugin keeps on failing to load.
#2977 Dev guide: Update section on Plugin Packaging and Versioning
#2980 Migration Guide: missing info that Tap.Licensing.LicenseManager is removed.
#2989 F1 help misleadingon and
#2990 Rename "TapVersion" to "GitBranchVersion"
#2994 Update package.xml in SDK/Examples

- #2996 TapVersion.CompareTo should compare prereleases correctly
- #2999 Add migration guide to DevGuide as appendix
- #3003 Update "Test Plan Control Flow" section in the Developer guide. Text and figure.
- #3004 All images in the developer guide should be centered on the page.
- #3007 Add info regarding "show incompatible packages" setting from package manager to F1 Help
- #3014 Add info in F1 Help regarding how the search is made in Package Manager
- #3033 All overloads of RunChildStep should automatically set verdict
- #3054 Unexpected error during run of tests
- #3062 Typo in Searcher Log Entry

Release Note - Test Automation Platform 2018 RC, Version 8.0

New Features

- #1329 Capability to provide custom names for connections
- #1421 Test Plan Reference step: User should be able to specify path to the referenced test plan relative to the currently executing test plan
- #1441 Allow multiple side-by-side versions of TAP
- #1668 Allow Repeat (WhileLoop) to be dependent on TestStep outside of Loop
- #1675 Allow insertion of test plan into existing test plan, right click
- #1692 Add Results Viewer, Timing Analyzer, etc. to start menu
- #1889 Support AvailableValues and EnabledIf in Test PlanReference step.
- #2057 Have TAP support that Plugins can be placed in different folders
- #2183 Exponential Sweep Loop
- #2188 Retrieving settings related to a switch
- #2353 TAP plan reference exposed as external parameter
- #2369 Extend PlatformInteraction with an argument to make WaitForInput behave as a modal input request
- #2374 Package.xml Execute a Packaged Executable on Install
- #2435 SDK Templates to support Visual Studio 2017
- #2519 New improved macro system
- #2527 ResourceOpenBehavior.Ignore is being ignored on steps
- #2530 Package Repository Server, Show package dependencies in detailed view
- #2559 Abort Test Plan Run on Result Listener Error/Failure
- #2575 Support changing result verdict from a different step 6
- #2614 Add TestPlan Name to our list of Supported Macro Variables
- #2619 Package Manager to support a bundle of packages ".Packages" (Both the CLI and GUI version)
- #2554 TAP.Engine running on .NET Core compliant with .NET standard 2.0
- #2586 Move to .NET 4.6.2

Usability Improvements

- #1329 Capability to provide custom names for connections
- #1790 Package rename (.TapPlugin -> .TapPackage)
- #1889 Support AvailableValues and EnabledIf in Test PlanReference step.
- #2199 Dialog step Title and Message Settings validation
- #2323 Align "configuration" in Package Manager dropdown using SharedSizeGroup
- #2426 Make it obvious that a TapPlan has "External Parameters" and make them easier to access
- #2444 URLs in plugin description can be hard to read when dark theme is selected
- #2542 Update tooltip/description of default result listeners to not include the word log - it is confusing.
- #2548 ResultsViewer Manual Refresh and AutoRefresh Not Working
- #2574 Wrong step name for "Set temperature" step
- #2579 Add new step search improvement
- #2582 Abnormal behaviour when all sweep values are deleted
- #2602 We should clear the Plugin details when the selected plugin is no longer visible due to search
- #2605 Some hyperlinks on Tools Menu window from Keysight TAP Graphical User Interface Help do not display any information
- #2607 Packager Manager Icon and shortcut in start menu
- #2614 Add TestPlan Name to our list of Supported Macro Variables
- #2645 Horizontal autoscroll when test steps contain long display names
- #2511 Demonstration Plugin Package missing type column when not installed
- #2694 Auto sizing of coloumn in Connection grid is problematic when entering edit mode

Bug fixes:

- #2481 Tap windows does not remember maximized setting
- #2510 Plugin Package Manager wrong URL connection functionality
- #2514 "Break at line" help button broken link #2524 GUI settings are not saved when Enabled<> Value is edited or when a list of elements is configured (Scpi Error levels)
- #2527 ResourceOpenBehavior.Ignore is being ignored on steps
- #2544 Race condition in ResultParameters can cause exceptions in result listeners

- #2546 Serialization: properties with nonpublic setter cause exception
- #2560 Tap.Package still requires KeysightLicenseRequired to trigger license injection
- #2569 Property Values and External Parameters do not persist for Dynamic Test Steps (i.e. Test Steps that implement IDynamicStep).
- #2577 Failed to open log folder
- #2580 Whitespace Display Name Causes TestPlan Pane to Become Corrupted
- #2582 Abnormal behavior when all sweep values are deleted
- #2591 Serialization of linear sweeps with references to properties of a step's parent property
- #2596 Sweep Step Values gui error
- #2597 Step ID is missing and Inverse [Index] in ResultViewer
- #2613 CLI Package Manager crashes
- #2622 ScpiQuery reading block with termination enabled fails
- #2623 "Caught exception while waiting for result propagation" error is shown in the log.
- #2629 TAP License not found when opening TAP within 5 seconds after every install
- #2632 "Caught unhandled GUI error." is shown when clicking "Load Test Plan" button without any plan specified
- #2634 Package Manager: crashes when no command line parameters
- #2637 Run Explorer Limit editor help cannot be displayed
- #2644 Dialog step not working
- #2647 Test steps inside TestPlanReference can have their enabled state toggled by pressing the spacebar
- #2648 Serializer should use roundtrip encoding of floats to avoid losing precision
- #2649 Missing help button from FilePathControl
- #2651 Package Manager does not open
- #2670 Accessing Help by pressing F1 or clicking "?" not working
- #2676 TAP doesn't start when launch with invalid -search parameter
- #2691 Bench connections "Delete Row" - unhandled GUI error

Other fixed issues:

- #849 List of objects GUI / Engine behavior should be documented
- #2019 Remove IDisposable from Resource
- #2135 Dependencies sub folder in TAP install dir
- #2136 Get rid of "spaces" in folder and file names
- #2180 Rename "TAP Plugin Package Manager" to "TAP Package Manager"
- #2192 Improved PackageManager CLI interface
- #2350 Get rid of "package.details" files
- #2368 Caching in assembly resolver
- #2372 Plugin Time Greater Than Console Time When Creating KMF Resource
- #2427 Keysight.Tap.Gui.exe ignores the current directory (which is inconsistent with the behavior of Keysight.Tap.Cli.exe)
- #2443 Tap Plan References store the referenced tap plan path as a relative path to the Tap GUI executable
- #2468 Support for specifying branch/version when installing using PackageManager CLI
- #2490 Cleanup ScpiInstrument API
- #2496 TAP start up time become longer by increasing the number of file in Results folder
- #2498 Make TAP SCPI interface control as plugin
- #2525 Align font size in PM search
- #2528 Rename Tap.PluginPackageManager.exe to Tap.PackgeManger.exe
- #2553 Add InterfaceBasedInstrument, ListOfObjects and ControlProvider to SDK/Examples
- #2584 Remove AppDomain from PluginManager
- #2585 Remove licensing sub system from Engine
- #2588 Abstract Visa dependency out of Engine
- #2617 LicenseInjector: signtool.exe not found
- #2618 CLI to use IRemoteEngine plugin for -service* features
- #2621 Test Plan Reference for .NET Core 2
- #2630 Cleanup in IRemoteEngine
- #2640 Build Core parts on Linux
- #2642 Replace use of System.IO.Packaging with System.IO.Compression
- #2653 Update welcome screen and about box with TAP 2018 Release Candidate info