

PI TOOLSET

Version 11.0 (Build 5217)

23 June 2025

Abstract:

This document contains information for Pi Toolset, including:

- New features for this version: both complete and currently under development.
- Known issues for this version.
- A complete changelog of work completed up to and including this version.
- The supported operating systems.
- Contact information.

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NEW FEATURES

11.0

- Added the ability to version and add changelogs to a setup. **(Support Issue(s): Part of 337066)**
- Added the ability to configure auto-save of setups.
- Improved the performance of loading setups by ~60%. **(Support Issue(s): Part of 94824, Part of 338474)**
- Improved the performance of starting Toolset by ~50%.
- Improved management of setups within Toolset.
 - It is now possible to add tags to a setup.
 - It is now possible to mark a setup as a favorite.
 - It is now possible to filter setups.
 - It is also now possible to group setups. **(Support Issue(s): 339261)**
- Updated the Data tab to show the percentage of logging memory remaining for each connected device when supported by the device metadata.
- Added the ability for Toolset to perform a full reset of ECU devices after a setup send.
- Added a setting to control if setups are automatically updated to the latest available version of metadata within the current major minor version when opened.
- Added a setting governing whether parameter values are able to be updated separately from setup sends.
- Improved support for viewing bar controls vertically in the Live Data tab. **(Support Issue(s): 107676)**
- Added ability to import track maps created in the latest version of Toolbox.
- Improved the user experience of firmware updating.
- Renamed the most privileged user level to “Administrator”.
- Added the ability to paste text into name list filters.
- Added the ability to copy setup errors/warnings to the clipboard using CTRL+C, or via a context menu.

KNOWN ISSUES

- Floating-point signals imported from DBC files will not be identified as floats, but will be parsed as either U32 or S32.
- Merge previews may erroneously indicate that some nodes will be removed, then re-added.
- Toolset may take a long time to respond when connecting USB drives containing large remote logger outings.
- It is possible to have more than one entry for Pi Data Access in the list of installed applications. This behavior is by design, and only the most recent version of Pi Data Access will actually be installed. Pi Data Access will only be removed from your PC once all such entries have been removed along with all other Cosworth products that rely on Pi Data Access.

CHANGELOG

11.0 (Build 5217)

This build contains:

- Core Device Libraries: 1.0 (Build 47 - Update 8)
- Core Libraries: 3.2 (Build 804 - Update 4) - **(Updated)**

Pi Data Access:

- Data Access: 10.1 (Build 1557 - Update 15)

Changes included in this build are:

- Added the ability to version and add changelogs to a setup. **(Support Issue(s): Part of 337066)**
- Fixed an issue where watermark text would not wrap.

11.0 (Build 5215) (Beta)

This build contains:

- Core Device Libraries: 1.0 (Build 47 - Update 8)
- Core Libraries: 3.2 (Build 804 - Update 3)

Pi Data Access:

- Data Access: 10.1 (Build 1557 - Update 15)

Changes included in this build are:

- Fixed an issue causing unlicensed users to be able to remove manufacturer history when copying setups without history. **(Support Issue(s): 352900)**
- Fixed a typo in the advanced changelog copy options window title.
- Fixed an issue stopping versioned setups from being saved. **(Support Issue(s): 348414)**
- Fixed a crash that could occur when editing setup tags. **(Support Issue(s): 351277)**
- Added the ability to configure auto-save of setups.
- Fixed a crash that would occur when attempting to edit display device properties with a telemetry only device present in the devices tab. **(Support Issue(s): 342739)**
- Fixed a crash that would occur when importing code packages if an application other than Toolset had been set as the default application for .Toolset files in Windows. **(Support Issue(s): 349507)**

11.0 (Build 5214) (Beta)

This build contains:

- Core Device Libraries: 1.0 (Build 47 - Update 8) - **(Updated)**
- Core Libraries: 3.2 (Build 804 - Update 3)
- Data Access: 10.1 (Build 1557 - Update 15) - **(Updated)**

Changes included in this build are:

- Fixed an issue that could cause excessive log messages to be logged for failing telemetry connections.
- Fixed a crash that could occur when hitting enter in the Setups tab with no setup selected.
- Fixed an issue preventing the protection status of math channels from being edited.
- Fixed a crash that could occur when connecting to a device with a setup sent from a newer version of Toolset.
- Fixed an issue where certain code packages would be incorrectly reported as being incompatible with Toolset. **(Support**

Issue(s): 352104)

- Fixed an issue that caused errors relating to a Weight Jacker calibration to remain in the setup after the calibration was disabled.
- Fixed an issue where Toolset discovery applied an incorrect limit to the metafile name length.
- Fixed an issue causing constants to become corrupt when received via real-time. **(Support Issue(s): 349892)**
- Fixed an issue causing legacy multicast real-time data to be trimmed incorrectly when using cache file size limiting.
- The real-time data cache size limit will now only be applied to channel data, whereas previously setup and display information were included in the limit.
- Fixed an issue that could prevent lap markers from appearing in real-time data when using a legacy multicast connection.

11.0 (Build 5213) (Beta)

This build contains:

- Core Device Libraries: 1.0 (Build 47 - Update 7) - **(Updated)**
- Core Libraries: 3.2 (Build 804 - Update 3)
- Data Access: 10.1 (Build 1557 - Update 13)

Changes included in this build are:

- Fixed an issue where certain device hardware revisions were not detected as being compatible.
- Fixed a crash that could occur when opening a setup.
- Fixed an issue where the help text in the Watch section could remain on screen.
- Fixed a crash that could occur when messages were added to the log.
- Improved the performance of loading setups by ~60%. **(Support Issue(s): Part of 94824, Part of 338474)**
- Fixed an issue preventing device FPGA versions from being added when importing code packages. **(Support Issue(s): Part of 344896)**
- Fixed an issue causing auto-coding firmware information not to be displayed for pre-release firmware. **(Support Issue(s): Part of 344896)**
- Fixed an issue where the error dialog would open multiple times when importing corrupt setups.
- Fixed an issue where importing setup allowed blank spaces at the beginning or end of names.
- Improved the performance of starting Toolset by ~50%.

11.0 (Build 5199) (Beta)

This build contains:

- Core Device Libraries: 1.0 (Build 47 - Update 2)
- Core Libraries: 3.2 (Build 804 - Update 3)
- Data Access: 10.1 (Build 1557 - Update 13)

Changes included in this build are:

- Fixed an issue with erroneous progress notifications when sending a setup to multiple devices. **(Support Issue(s): 201586)**
- Fixed an issue where real-time connections could end up connecting to themselves.
- Fixed an issue preventing double-precision floating point channels from being scaled.
- Fixed a crash that could occur when creating a new Pi Dataset file.
- Fixed a crash that could occur when receiving real-time data. **(Support Issue(s): 340903, 340798)**
- Fixed an issue with the setup management tab which could cause the application to use more system resources than required.
- Corrected the inconsistent spelling of "Licence" in the installer text.
- Updated the message shown when no release notes could be obtained for device updates. **(Support Issue(s): 338671)**
- Fixed an issue where the refresh button was enabled for the main logger when a secondary logger was configured.
- Fixed an issue where the time would stop updating for live outings on the main logger after navigating to the Devices tab and back to the Data tab.
- Fixed an issue where the secondary logger was still shown as the active device in the top panel after being deleted.
- Fixed an issue causing Toolset to crash when the main logger was deleted directly after the secondary logger.
- Fixed an issue where no outings would be shown for the main logger until Toolset was restarted after navigating to the Data tab in some cases.

- Fixed an issue where errors were shown erroneously in the RLU configuration window.
- Fixed an issue that could cause code packages to incorrectly be reported as incompatible for the connected device.
- Fixed an issue where the device firmware update notification did not take AutoCoding projects into account.
- Fixed the setup view taking a long time to respond to tag changes. **(Support Issue(s): Part of 339370)**
- Fixed an issue with device automatic offload settings not being obeyed.
- Fixed an issue that caused configuring some USB sticks for use with an RLU to fail.
- Fixed an issue causing the UI to appear unresponsive when opening setups on startup. **(Support Issue(s): Part of 338474, Part of 94824)**
- Fixed an issue causing setups to be updated on close even though no changes had been made. **(Support Issue(s): Part of 339370)**
- Fixed a crash with a watch page which could occur when changing screen resolution.
- Fixed an issue with the selected channel in a watch page chart being invisible when changing screen resolution.
- Fixed an issue where watch page charts could have duplicate axes when changing screen resolution. **(Support Issue(s): 218885, 205452)**
- Fixed an issue that could cause code packages to incorrectly be reported as incompatible for the connected device.
- Fixed an issue where a device was showing as idle when its IP address was changed to a different subnet.
- Fixed a crash that could occur when configuring the channels displayed on a watch page.
- Added minimum size to the Tags window to stop it becoming invisible. **(Support Issue(s): 339954)**
- Fixed an issue where the UI could freeze when modifying a setup in a collapsed group. **(Support Issue(s): 339819)**
- Fixed an issue where it was not possible to open a setup when grouped by tags. **(Support Issue(s): 339371)**
- Fixed an issue that could cause configuring a USB drive for use with an RLU to fail. **(Support Issue(s): 340058)**
- Improved management of setups within Toolset.
 - It is now possible to add tags to a setup.
 - It is now possible to mark a setup as a favorite.
 - It is now possible to filter setups.
 - It is also now possible to group setups. **(Support Issue(s): 339261)**
- Fixed a crash that could occur when updating a setup's metadata version. **(Support Issue(s): 339289)**
- Fixed a crash that could occur when buffering real-time data.
- Fixed an issue where previously offloaded outings would turn orange when another outing was offloaded.
- Fixed an issue that caused error messages in the installer to be truncated.
- Fixed a crash that would occur when navigating to the data tab when any connected device has combined outings present. **(Support Issue(s): 338965)**
- Fixed the behavior of bitwise shift math operators at edge cases in math channels.
- Fixed the behavior of cast math operators at edge cases in math channels.
- Fixed a crash that could occur when receiving real-time data.
- Fixed an issue where real-time data could not be obtained through the RT Reader API. **(Support Issue(s): 336630)**
- Fixed an issue that could cause deadlock in a telemetry server if the configured real-time port is already in use.
- Fixed an issue preventing setups from being sent to devices using the Pi Toolset API.
- Fixed a crash that could occur when navigating around a setup after a device had been disconnected. **(Support Issue(s): 218765, 264475, 249696, 330146)**
- Fixed a hang when launch conditions fail for a silent installation.
- Updated the Data tab to show the percentage of logging memory remaining for each connected device when supported by the device metadata.
- Fixed an issue causing acos and asin math operators to return NaN when supplied with values < -1.
- Fixed an issue that could cause problems with backfilled real-time data.
- Fixed an issue preventing single sample blocks from being treated as continuous.
- Fixed a crash that could occur when removing a real-time outing. **(Support Issue(s): Part of 327162)**
- Fixed an issue with unit conversion parameters being incorrect at the 16th and 17th decimal places. **(Support Issue(s): 327961)**
- Fixed an issue where data from secondary loggers could be missed when performing a combined offload and there is a significant difference in device clock times.
- Fixed an issue with incorrect text displayed for firmware update stages.
- Added the ability for Toolset to perform a full reset of ECU devices after a setup send.
- Added a setting to control if setups are automatically updated to the latest available version of metadata within the current major minor version when opened.
- Fixed a crash that could occur if the device unexpectedly disconnects during a send. **(Support Issue(s): 134498)**
- Updated automatic offload functionality description to avoid confusion. **(Support Issue(s): 309961)**
- Added a setting governing whether parameter values are able to be updated separately from setup sends.
- Improved support for viewing bar controls vertically in the Live Data tab. **(Support Issue(s): 107676)**
- Added ability to import track maps created in the latest version of Toolbox.
- Added missing 'Source' and 'Target' labels to the Setup Comparison View. **(Support Issue(s): 308231)**

- Fixed an issue that could cause the close setup button to be out of alignment.
- Fixed a crash that could occur when adding multiple channels to a zeroing group. **(Support Issue(s): 327174, 329340, 333686, 333687)**
- Fixed a crash that could occur when importing DBC files with invalid default attribute values. **(Support Issue(s): 190826)**
- Fixed an issue that could cause data to be erroneously marked as continuous.
- Fixed various issues when loading real-time data following lap markers. **(Support Issue(s): 139695, 261921)**
- Fixed an issue that could cause telemetry clients to disconnect, resulting in holes in the data.
- Fixed an issue preventing media channels from being added to older .pds files.
- Fixed an issue that could cause real-time outings to drop data if time goes backwards. **(Support Issue(s): 261907)**
- Fixed an issue causing telemetry data to be combined incorrectly when receiving data from multiple radios.
- Fixed an issue that could cause crashes when using $\text{poly}([x], 0, 1)$ in math equations.
- Fixed an issue causing inserted lap markers, and updated lap marker distances to be lost when changing the first lap number. **(Support Issue(s): 294080)**
- Fixed an issue causing math channels using $\text{pow}(\text{value}, 2)$ to calculate incorrect values. **(Support Issue(s): 252434)**
- Fixed an issue causing performance issues when reading channel information with lots of channels present.
- Fixed a hang that could occur when removing a real-time data source if the transmission socket failed to create.
- Fixed an issue where no data would be provided for some channels in outings created using Pi Card Management. **(Support Issue(s): 246049)**
- Fixed an issue where the reported version text does not always include the update number.
- Fixed a bug causing newer telemetry clients to only expose watch channels when data is sourced from older telemetry server components.
- Fixed an issue preventing real-time outings from connecting.
- Fixed an issue preventing the repair of an installation.
- Fixed an issue that could cause holes in Pi Toolbox math channels after un-pausing real-time data.
- Fixed an issue where the "C:\Pi Research\Data Access\Logs\" folder remained after uninstallation.
- Fixed an issue that could cause a crash when using broadcast telemetry. **(Support Issue(s): 287122)**
- Fixed an issue that caused cached real-time data to be deleted if resuming wasn't enabled.
- Fixed an issue where the Bit-Field Maintenance GUI progress bar reaches 100% before process is complete.
- Fixed an issue causing the contents of some nodes to be able to expand beyond the available space in the application window.
- Fixed an issue causing the side menu in the setup editor view to resize incorrectly.
- Fixed a crash that could occur if any corrupt setups are present.
- Fixed an issue that could prevent Toolset from correctly restoring its window position on startup.
- Fixed an issue that could cause telemetry data to be updated less frequently for higher rate data when receiving data from multiple radios.
- Fixed an issue which was causing timeouts between telemetry server and clients. **(Support Issue(s): 222368)**
- Fixed an issue causing Toolset to fail to retry creation of logged telemetry files when the local file is locked by another application. **(Support Issue(s): Part of 314452, 308680)**
- Fixed an issue where refreshing previously offloaded outings with warnings could disappear or then appear successful. **(Support Issue(s): 26738)**
- Fixed an occasional crash which could happen when updating device firmware. **(Support Issue(s): Part of 306832, 174268)**
- Fixed an issue causing it not to be possible to move math channels between groups. **(Support Issue(s): 318302, 321144)**
- Fixed an issue causing setup errors not to be correctly added when some names contain invalid characters.
- Fixed an issue that could cause a blank screen to be displayed after opening a setup.
- Fixed an issue where firmware updates would fail when the connection to the device operates at a slow speed.
- Fixed an issue where progress updates were not provided for writing firmware updates into flash.
- Fixed an issue that caused firmware updates to wait indefinitely when messages from the device were blocked by a firewall.
- Improved the user experience of firmware updating.
- Fixed an issue that could cause firmware upgrade failures when upgrading the FPGA or Flexray components.
- Renamed the most privileged user level to "Administrator".
- Fixed an issue that could prevent Toolset from completely closing after deleting a device.
- Fixed an issue that was preventing Toolset from obtaining update files from Azure.
- Fixed an issue that could result in the device entering the offloading state on connection to Toolset. **(Support Issue(s): Part of 245957)**
- Fixed an issue causing Toolset to lock up when navigating to the Channels tab.
- Fixed an issue causing the Alarm Enabled setting in the Channels tab not to be applied correctly.
- Fixed an issue which could cause Toolset to lock up when opening with a device connected.
- Removed red error highlighting that could occur in the LED configuration node.
- Fixed an issue causing all outings to show as scrutineering outings when the user has a scrutineering license.
- Fixed an issue where device associations weren't being updated correctly.

- Fixed an issue that could cause telemetry logging to become disabled if the dataset was being accessed by another application. **(Support Issue(s): 290884)**
- Fixed a crash with processing watch data requests over Telemetry. **(Support Issue(s): 139619)**
- Fixed a crash that could occur when comparing setups. **(Support Issue(s): 296058)**
- Fixed the need to save an empty setup when being used for comparison.
- Fixed a potential crash when cleaning up Toolset telemetry connections. **(Support Issue(s): 138735)**
- Fixed an issue causing the contents of some nodes to be able to expand beyond the application window.
- Fixed an issue that could cause display devices to report the incorrect state on the Devices tab.
- Fixed an issue where a device with an associated display could get stuck trying to initialize.
- Fixed an issue that could cause the serial number of a display to be shown as zero when first added.
- Fixed an issue preventing the chart recorder from displaying holes in telemetry data.
- Fixed an issue that could cause the UI to navigate to the wrong location after an undo/redo operation.
- Fixed crash sending setup without telemetry to a device with telemetry already enabled.
- Fixed an issue where the Toolset chart recorder didn't update correctly where channel values remained constant.
- Fixed an issue with merging in Toolset which could lead to a broken setup.
- Fixed an issue where some controls were not being selected correctly when edited.
- Fixed an issue where some controls had to be clicked on twice to be editable.
- Fixed an issue with the clarity of the message shown when trying to update firmware using a code package that is not supported by the current version of Toolset.
- Improved error message when a preliminary step of a device firmware upgrade fails.
- Improved reliability of the preliminary steps of a device firmware upgrade. **(Support Issue(s): Part of 247520, 287363, 275890, 283809)**
- Fixed a bug which sometimes caused buttons in Toolset to be incorrectly disabled.
- Fixed Watch page in Toolset not displaying data when a constant Math channel was being requested.
- Fixed an issue causing some types of additional files in code packages to not be installed when double clicking or using the context menu option to install a code package.
- Fixed an issue causing Toolset library files included in code packages to be named incorrectly when added to the library.
- Fixed an issue causing metadata not to be retrieved from a device when first connected to customer editions of Toolset.
- Fixed a crash that could occur if a Toolset cache file becomes corrupt. **(Support Issue(s): 164380)**
- Fixed a crash starting Toolset if a device is present that is only providing telemetry data. **(Support Issue(s): 343499)**
- Fixed an issue preventing Toolset from warning of missing loggers when performing combined offloads.
- Fixed an issue that caused a crash when attempting to copy data to the clipboard in the streams node. **(Support Issue(s): 119642)**
- Fixed an issue that could prevent all the consumers of a resource from being displayed in the resources pane.
- Fixed an issue that meant resources wouldn't always be shown when navigated to from a consumer in the resources pane if a filter was applied. **(Support Issue(s): Part of 245456)**
- Added the ability to paste text into name list filters.
- Added the ability to copy setup errors/warnings to the clipboard using CTRL+C, or via a context menu.
- Fixed an issue where it would not be possible to edit protected math and logic channels after saving a setup. **(Support Issue(s): 262248, Part of 218094)**
- Fixed an issue causing the default device IP address to be populated incorrectly when configuring a USB stick for remote logging. **(Support Issue(s): 275425)**
- Fixed an issue causing combined offloads to fail following a firmware update.
- Improved the tooltip messages displayed for failed combined offloads. **(Support Issue(s): Part of 251007)**
- Fixed an issue causing metadata not to be installed when double clicking a code package to install it from Windows Explorer.
- Fixed an issue with corrupt metadata being cached when importing a setup or code package.
- Fixed a crash attempting to open older versions of setups after migration from a previous version of Pi Toolset.
- Fixed an issue causing telemetry logging to be disabled after the first update. **(Support Issue(s): 270647, 288650)**
- Fixed the options presented on the setup tab after saving an open setup.

COMPATIBILITY

The following operating systems are supported:

- Microsoft Windows 10 (64-bit)
- Microsoft Windows 11 (64-bit)

Data Access compatibility:

- Offloaded outings require Data Access 10.0 to be installed in order to be opened.
- Data Access 10.0 is installed by default by Toolbox 12.4 and higher.

CONTACT INFORMATION

For more information about Cosworth products and details of world-wide-authorized agents, please contact:

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