Eddynet® and RevospECT, Velocity® and RevospECT HX – Zetec Software ET

Product Bulletin

For Version 1.18.0, Release

This is an official version of software that is released in accordance with the Zetec Quality Management System (QMS). For software design, validation, and release, Zetec's QMS is based on the ISO 9001 International Quality Standard. Zetec's Quality Assurance Manual and quality certifications are available for download at https://www.zetec.com/about-zetec/quality-compliance/.

*Please see your authorized Zetec sales contact or **www.zetec.com** for more information.*

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NOTES

INSTALL FIRST

With the 1.18.0 release, the product core now runs in 64-bit mode. This enables greater memory access and more efficient use of the CPU.

Operating System, 64-bit:

- Microsoft Windows 10 Enterprise or Pro
- On the radar: evaluating Windows 11

Zetec has validated the product to work on Windows 10 Enterprise versions of software. Zetec will be evaluating our install and performance on Windows 11 over the next year.

VERSION 1.18.0 AND GREATER

With the 1.18.0 release, Zetec has transitioned *Eddynet & RevospECT* and *Velocity & RevospECT HX* products to run in 64-bit mode. This enables greater memory use and more efficient use of the CPU.

With this release, the products have transitioned to PostgreSQL 15 64-bit, running on port 7679. During install, there is an optional migration process to transfer databases from an existing local install to the new PostgreSQL server. Once all databases from the earlier versions of PostgreSQL have been backed up or transitioned by the installer to 15, earlier versions of PostgreSQL can be uninstalled, and the data directory removed.

With this release, MATLAB algorithms used in some filters and parts of RevospECT were replaced with custom implementations for significant performance benefits.

JUMP TO VELOCITY RELEASE NOTES

JUMP TO EDDYNET RELEASE NOTES

INSTALLATION NOTES

This combined installer enables a user to install the products (*Eddynet & RevospECT* and *Velocity & RevospECT HX*) as they need, including on the same machine. Although the products can all be safely installed on the same machine, they cannot be run at the same time. For example, a user can run Eddynet OR Velocity but not at the same time.

Supported User Models

Single User, Shared Data

The software was designed around a single user model. A single user model is where all users share the same user login. This is like the model implemented in EddynetSuite on the HP-UX operating system (for those that go that far back). For example, if you have used our software in the past, you are likely familiar with user1. Shared data refers to users of the same computer sharing data such as licensing, results paths, and the like.

Multi-User, Shared Data

Multi-user refers to more than one user logging into the same computer with different accounts. Windows is not a true multi-user computer system, so a user cannot use the computer simultaneous to another user. Shared data refers to users of the same computer sharing data such as licensing, results paths, and the like. This model is most likely suited to a lab type environment where IT (Information Technology) requires users to log into computers as themselves. Given the variety of IT requirements, Zetec encourages customers to perform their own due diligence prior to deployment to ensure the software can conform to the precise needs of the job.

Users vs. Administrator Groups

Installing the software requires the user's privileges to be elevated to Administrator credentials. However, once installed the software can be operated with lesser credentials. It is recommended to have all operation of the software be by users of the same permission level. Given the variety of IT requirements, Zetec encourages customers to perform their own due diligence prior to deployment to ensure the software can conform to the precise needs of the job.

> **NOTE:** If transitioning from an Eddynet version prior to 1.8.x, the user must return all in-use licenses via Eddynet License Manager before installing Eddynet 1.10.0 or greater.
>
> **NOTE:** if transitioning from an earlier version of Velocity, the user must return all in-use licenses via License Manager before installing 1.18.0 or greater.

TO INSTALL THE SOFTWARE

Step 1. Uninstall any previously installed version of Eddynet and RevospECT and/or Velocity.

Step 2. Double-click the ZetecSoftware executable (ZetecSoftware.*exe*): The Installation Wizard is displayed.

Step 3. Click the Next button to begin the installation.

Step 4. Read the license agreement; select the "I accept the terms in the License Agreement" radio button, and then click the Next button.

Step 5. Optional Database Migration – Read the message and proceed as desired. Note the migration process only happens to database currently available in the PostgreSQL Server running locally. Backed up databases can be imported in the programs once installed.

Step 6. Feature Selection – Select the products you desire to license and run. Click Install

Step 7. Click the Finish button.

NOTE: To install and configure the Eddynet Web Portal (Eddynet/WP), please see the Cal Board Quick Start Guide.

TO UNINSTALL THE SOFTWARE

NOTE: If downgrading a product (for example, uninstalling Eddynet 1.7.2 and installing Eddynet 1.6.4), please return all licenses prior to uninstall. This will prevent any incompatibilities when moving to an older product.

Step 1. Select Start > Control Panel: The Control Panel is displayed.

Step 2. Select Uninstall a program: A list of installed programs is displayed.

Step 3. To remove *Zetec Software*, highlight the entry and click Uninstall.

Step 4. Follow the steps detailed in the wizard.

MICROSOFT LICENSING RESPONSIBILITY

The software is built and tested for operation on the Microsoft Windows® 10 operating systems. However, it is the customer's responsibility to obtain a Windows operating system and maintain proper and valid Windows licensing with Microsoft. Please contact a local Microsoft representative regarding licensing requirements.

ZETEC LICENSING RESPONSIBILITY

See the installed License Manager User Guide for a definition of features and license explanation for each product.

It is not recommended to run the License Manager on a virtual machine as this has been a source of instability.

For Eddynet/WP, there is no specific license. However, Site Configuration needs to be run to configure Eddynet/WP.
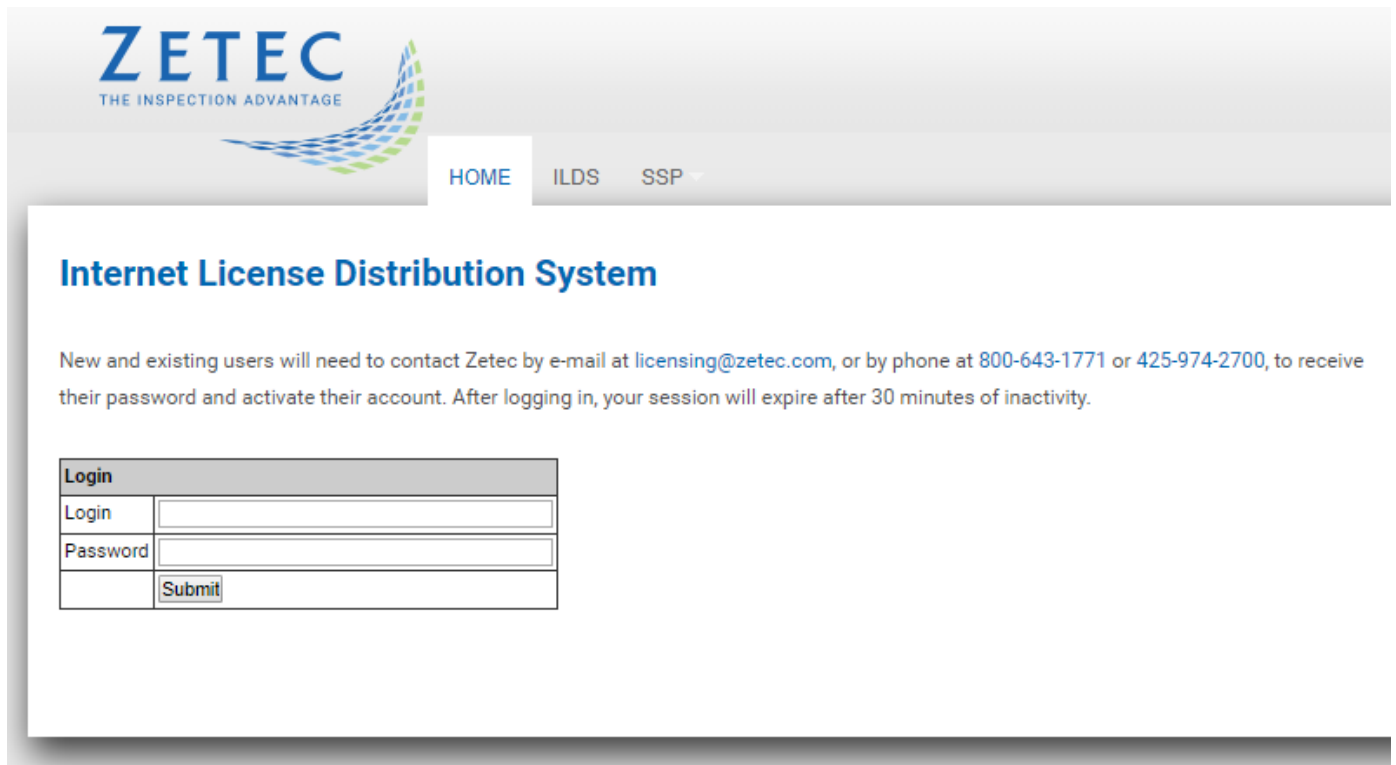
> ☑ **NOTE:** As with all our products, Zetec welcomes feedback.

License Compatibility:

To manage your *Eddynet & RevospECT* or *Velocity & RevospECT HX* software licenses, use the software licensing website called Internet License Distribution System (ILDS, https://ssplicensing.zetec.com), see FIGURE 1.

Figure 1 Internet License Distribution System login screen

Contact your authorized Zetec sales representative for further information.

DOCUMENTATION

All manuals for the installed software programs are included in the install package.

See Start Menu→All Programs→Zetec→Documentation

EDDYNET AND REVOSPECT 1.18.0

EDDYNET/AN

New Array Historical Data Compare (HDC)

All the tools and performance of the Bobbin HDC product has now been applied to Array probes. Evaluate changes for full or partially collected tubes of array coil data.

New Tube Tracker feature

To facilitate continuous resolution, a new feature which is like a per-tube Cal Board has been layered over the existing AN, RevospECT, and DM products. The goal of this feature is to have a minimal impact on the existing experience of analysts, while allowing results to be generated, resolved, and appended as fast as possible.

➤ Production analysis will consider a tube closed when the analyst leaves the tube, meaning that validation must be complete per tube. We've tracked down and addressed several issues in validation to keep this moving smoothly.

➤ RevospECT will optionally support closing tubes immediately, or after manual review by the operator.

➤ All analysts will have access to a Tube Tracker version of the Dashboard to help facilitate working on multiple Cal groups at one time and monitoring the migration of data through the pipeline.

➤ The flow of groups which need to touch a datafile is defined in Site Configuration and ensures that resolution won't see a file until the source and target groups are done, and DM won't append the data until all required EReso passes are complete.

See the *Eddynet/AN* manual for an Appendix covering the use of this new way of working in Eddynet.

Type 5 Locating Improvements

Helping the user to automate the mundane parts of eddy current tubing analysis starts with accurate locating. Eddynet's long standing locating algorithm called Type 5 will require fewer user interactions to allow the user to focus on other critical areas of the analysis process.

Type 5 landmark locating received a new 'Adaptive' option which enables it to dynamically adjust to amplitude variation between landmarks and better handle speed fluctuations. The adaptive option is on by default.

Enhancements

➤ **B4320** – Added support for reporting plugs or obstructions with a single manually located landmark and entering an acceptable 3+3 extent.

➢ **E0054** – Allow specific analysis groups to opt out of specific indication codes in Unaddressed History checking. For example, secondary may not be required to report DNT, so it should not get Unaddressed History errors.

➢ **E0922** – When Comparison Views are added, DS1 and DS2 would be populated even if no views are configured for those data slots. This wasted time, memory, and polluted the title bar. They will now only be loaded when needed.

➢ **E0960, E0961** - Added ability for Array HDC to support History/Baseline/Delta data underlays in C-Scan stripchart and Lissajous.

➢ **E0962** - When viewing HDC data underlay for History and/or Baseline along with current data, the historical datafile details will be provided in the status bar rather than the current data details.

➢ **E0967** – Restore expanded chart number of slices if changed during AutoCal.

➢ **E0969** – When "Tie Strip/Liss Chan" option is active in Operator Selectables, the Data Set Index selection will also be synchronized.

➢ **E0976** – Added landmarks to the manual from/to report entry creation user interface.

➢ **E0989** – In Report Editor's Validation pane, Unaddressed History issues will include the Indication Code in the error message to help disambiguate which entry needs to be addressed.

Bugs Fixed

➢ **B3148, B3358** – Resolved an issue where HDC wouldn't work correctly when changing vessels.

➢ **B4577** - Resolved an issue where axial length (AXL) was not computed correctly for MRPC data.

➢ **B4796** – Removed minimum number of triggers so that short tests can still be displayed.

➢ **B4798** – Resolved an issue where EReso in Single Party Review mode would not properly handle % Deleted calls when doing a re-compare in append mode.

➢ **B4801** – Resolved an issue where exports in Report Editor could hang.

➢ **B4802** - Addressed an issue where the popup menu for setting landmarks could have some landmarks hidden off screen.

➢ **B4806** – Addressed an issue where filter setups could become corrupted and cause a crash.

➢ **B4807** – Addressed an issue with the floating landmark window where it would not refresh correctly while changing tubes.

➢ **B4902** – Restored functionality of the EReso Comment button.

➢ **B4933** – Resolved an issue with C-Scan-style displays blocking global keyboard shortcuts from executing.

➢ **B4934** – Properly handle situation with HDC when history data could not be loaded.

➢ **B4950** – Addressed an issue where AN would crash with a setup where profiling was enabled.

➢ **B4965** – Addressed an issue where adjusting the databases with a local override would cause problems with Report Editor.

➢ **B4974** – Addressed issues related to APTS setups not retaining their active state with various ways of adjusting them.

➢ **B5002** – Addressed an issue when adding a manual report entry and deleting a RevospECT report entry would generate an NDD.

EDDYNET/AQ

Enhancements

➢ **E0998** - Added a new optional Encoder Secondary Verification feature for use with ZR-100 robot. This feature is intended to be used to improve location confidence when Machine Vision is not available.

➢ **E0999** - Added tab highlighting and dialog to warn user when machine vision module is loaded but the machine vision box does not appear to be connected to AQ.

➢ **E1000** – Added support for the ZR-100 - 12 configuration, including adding new W_Delta_110_replacement model files to replace existing Waterford model files.

➢ **E1010** - Added a new user defined RETEST color to robot display options for tubes marked as retest in the data management test plan. Once tested these tubes would be displayed using the TESTED color.

Bugs Fixed

➢ **B4312** – Addressed an issue where the CSV to Datafile Converter could exit unexpectedly when converting an RPC CSV file in Windows 10.

➢ **B4770** - Addressed an issue when using the Model IV 10D PS, where an air pressure fault would occur whenever you started acquire or performed a hardware null.

➢ **B4788** - Addressed an issue where if you have No Robot Control selected in your procedure and do not have the Robot module selected, you will get the wrong mode.

➢ **B4814** - Addressed an issue where the ZR-100 could have ended up with only one gripper gripped if the user were to select 'ignore and continue' after a failed grip.

➢ **B4877** - Addressed an issue for RPC techniques where single left-click in thresholding stripchart would zoom the data rather than simply set the desired location.

➢ **B4878** - Addressed an issue where if an X-Probe inspection was interrupted by an error or status message of any type, the next record cycle resulted in strip chart data remaining green instead of changing to blue.

➢ **B4880** - Addressed an issue where selecting 10D-1 pusher, the Jog/Run FWD goes REV and REV goes FWD.

EDDYNET/CORE

Enhancements

➢ Improved the crash handler for C++ applications. The crash handler will create a .dmp file in the C:\ProgramData\Zetec\Logs folder and allow the user to restart the application. These .dmp files have information to greatly improve Zetec's ability to fix crashes, so please send them in.

➢ **RQ 7.3.25.1.1,2** – To better test "real world" behavior, the Data Stripper application now has a straight spooling mode which has various options to control rate of spooling and transfer of setup files.

➢ **E0945** - In Site Configuration, Analysis related items which were previously part of the Config page have now been moved to their own dedicated page, 'Config and Databases'.

➢ **E0968** - Added new STF/STE adaptor type to Site Config for STE probe support.

➢ **E1007** - Added IC Network program to the EVR installer. Previously this was only available with the Habitat installer.

Bugs Fixed

➢ **B2258** – Resolved an issue where the splitter in Site Configuration would resize any time the user changed which page is selected.

➢ **B4829** – Removed disabled pass filters from the summary of indication codes in EReso Pass Rules Configuration. Additionally added support for reviewing the filters while in read only mode.

➢ **B4980** – Resolved an issue where Probe Codes, Landmarks, and Channels used in Report Validation specific validation setups were not kept unique. Duplicates will now be consolidated when revisiting Site Configuration.

EDDYNET/DM

Enhancements

➢ **RQ 7.4.4.1,2** – Added a "Using Tube Tracker" option. When active, DM will respect the state of each tube, only appending if it has fully proceeded through the configured analysis. Can be disabled, but this is not recommended if analysis is using continuous resolution unless something has gone wrong.

➢ **B4510** - Allowed pdf reports to be displayed in viewers other than Acrobat Reader, though they will not open minimized in other viewers.

➢ **E0812** – Provided the ability to correct invalid vessel ids during history import.

➢ **E0986** - Reduced queries used during append and other areas evaluating report entries.

➢ **E0990** - Added the ability to DM to remember the last database used.

Bugs Fixed

➢ **B4707** – Adjusted append from Eddynet/AN to ensure that invalid values in percent or phase fields will not prevent results from being appended. The invalid values will be set blank. Ideally, the report entry will be re-created in these situations.

➢ **B4802** – Addressed an issue where the popup menu for setting landmarks could have some landmarks hidden off screen.

➢ **B4888** - Addressed an issue where creating or editing a label using the Edit Tubesheet Labels window would result in that label not being displayed correctly.

➢ **B4894** - Addressed an issue where PID import could fail to transfer / select probe codes as part of the Resolver Info.

➢ **B4896** - Addressed an issue where SI import could fail to import manual setups.

➢ **B4903** - Addressed an issue where SI import could fail to transfer / select probe codes as part of the Resolver Info.

➢ **B4964, E0985, E0991** - Improved speed of appending AN database into DM.

➢ **B4977** - Addressed an issue where DTD validation errors could occur unnecessarily during DM queries.

➢ **B4979** - Addressed an issue where a specific DM database would not import successfully into DM.

REVOSPECT PRO

Enhancements

➢ **RQ 7.3.25.1.3** – Primarily for hands-off testing of a pre-configured inspection, *Auto Add Calgroups* and *Auto Run Calgroups* options were added to the General tab in Dashboard. *Auto Add Calgroups* could be beneficial for jobs with a single Dashboard operator, as well.

➢ **RQ 7.3.25.5.2** – Added new Alert option to RevospECT Configurations, allowing a state like RBD or Abort, but which keeps all the report entries that would be made otherwise. This allows the Dashboard operator to delete or edit the offending alert call and mark the tube Complete or Discard the tube. Especially helpful with Tube Tracker, to avoid the tube being marked complete and moving on to EReso.

➢ **E0344, E0153** - Added the ability to specify channel for preliminary and final acceptance initial and final overlap rules.

➢ **E0571** - Added the ability in RevospECT Configuration to limit noise analysis to Custom Locale regions.

➢ **E0910** - Added an optional 'Minimum Volts Ratio' qualifier to RevospECT Configuration preliminary and final acceptance initial and final overlap rules.

➢ **E0937** - Added the ability to rename detectors and classifiers using RevospECT Configuration (similar to the capsule renaming function).

➢ **E0943** - Added number of tubes analyzed and average extra calls per tube statistics to the RPTS display.

➢ **E0976** - Added the ability to RevospECT to perform automated ID Mag Measurements.

➢ **E0979** – Added logic to speed up loading Cal groups with existing report entries in Dashboard, especially noticeable at startup.

➢ **E0993, E0995** – Adjusted the Status and Abort Criteria columns in Dashboard so that the values are more readable, e.g., AxSamples => Axial Samples.

Bugs Fixed

➢ **B4786** - Reduced the amount of work the Farm was doing related to independently looking up timestamp in the database for every report entry being added to the database.

➢ **B4808** - Addressed an issue where adjustment of the target depth % field of AI final acceptance filters would result in a crash of the RevospECT Configuration application.

➢ **B4911** - Addressed an issue in Dashboard Abort Criteria where 'none' could be displayed rather than the appropriate abort issue.

➢ **B4965** – Addressed an issue where adjusting the databases in Site Configuration with a local database override would cause Dashboard to crash.

EDDYNET AND REVOSPECT 1.17.3

EDDYNET/AN

Enhancements

➢ **E0543** – Restoring the Expanded chart length after closing the displayed dialogs (Locating Setup, Voltscale, PChan Editor, etc.).

➢ **E0917** – Added support for toggling through pre-configured filters in the C-Scan. They are selectable using an arrow in the lissajous or a keyboard shortcut and configured with a middle click on the filter button in the lissajous.

➢ **E0925** – Added support for changing all C-Scans to predefined sets of channels rather than one at a time. This replaces the behavior of the C-Scan lissajous pre-selected channel button.

➢ **E0951** – Added the Auto Report Entry buttons to the Comparison View tab.

Bugs Fixed

➢ **B0182 –** Modified the zoom1/zoom2 behavior to be like the legacy analysis product, allowing switching between the two zoom levels with a single click. Also fixed a drawing issue in the waterfall plot when un-zooming.

➢ **B4554 –** Changed the layout of the tear off landmark menu to better support plants with many landmarks. A second column of entries will be displayed when needed.

➢ **B4573 –** Addressed an issue after having recalled a report entry, the axial location in the upper C-Scan lissajous was not updating while scrolling data.

➢ **B4784 –** Addressed an issue with Auto Scroll, setting it to 0 was not turning it off.

➢ **B4790 –** Addressed an issue where right-clicking the new floating quick edit buttons would open a menu, obscuring the buttons and preventing the right-click.

➢ **E0954** – Addressed an issue where the C-Scan lissajous would not highlight the measurement button when recalling indications.

EDDYNET/AQ

Enhancements

➢ **E0955 –** Added the model file for the CAP-1400 steam generator.

➢ **E0964 –** Added support for the UFC based fixtures for limited non-manway mount, non-trunk-based, applications.

EDDYNET/CORE

Bugs Fixed

➢ **B4628 –** Addressed an issue where users wanted to include the use of the _ (underscore) or a single character for the Id Alias for History.

➢ **B4793** – Addressed an issue when importing the same database multiple times.

EDDYNET AND REVOSPECT 1.17.2

EDDYNET/AN

Enhancements

➢ **E0886** – Added the AN database name to the RPTS main window to help the user ensure they are working from the correct source.

➢ **E0932** – Added *Quick Edit* buttons for use with the C-Scan. The buttons are on a toolbar that can be torn off and floated and re-docked as needed.

Bugs Fixed

➢ **B2113 –** Addressed a message presented to the user telling them to refresh the Report Editor, now the software will perform the refresh rather than prompt the user to do so.

➢ **B4583** – Addressed an issue where the Landmark Override dialog would get hidden and allowed multiple dialogs to be created. Now only one will be created and it will be a top-level window.

➢ **B4766** – Addressed an issue with COMB where backups would fail because of a timing issue.

➢ **B4769** – Addressed an issue where MRPC data would not plot if the number of slices were more than ~100 per scanline.

➢ **B4773** – Addressed an issue with the Encode Search, it was not allowing user to double-click to open a file.

➢ **B4777** – Addressed a crash with E-Reso when re-comparing a calibration group.

EDDYNET/AQ

Enhancements

➢ **E0939** – Added support for setting the colors used for *Tested* and *Untested* tubes in the ZR-100 robot display. Also removed two unnecessary color options and added a color swatch to the menu.

➢ **E0940** – Changed the increment the bowl boundary button changes from 1 to .1 of an inch (or active length unit). The user will want to manually get the bowl boundary close and then fine tune it with the buttons.

EDDYNET/CORE

Enhancement

➢ **E0944 –** Logging for some of the .NET based applications can have two sources (technology based, C# or C++). When using the *Tail Log* menu item or F12, both logs will be opened and when complete, the user will need to manually close these. This can be used when Zetec requests logging information for troubleshooting purposes.

REVOSPECT PRO

Enhancements

- ➤ **E0931** – Added multiple selection support to the Indication Code Summary in RPTS.

- ➤ **E0935** – For the RevospECT Noise Only license, added the ability to add and modify canned filters.

- ➤ **E0942** - For the RevospECT Noise Only license, added the ability to use history to prevent noise measurements from happening where there is a known indication.

Bugs Fixed

- ➤ **B4673** – Addressed an issue with Dashboard loading temporary files and hanging which would require the program get closed and restarted.

- ➤ **B4703** – Addressed an issue with RPTS where the counts were wrong when using the Force or Break match feature.

- ➤ **B4771, B4778, B4783** – Addressed an issue with RevospECT Visualization tool when display sets did not follow the assumed naming patterns. For example, +Pt, +pt, +PT or pp. This could affect the creation of the graphs, MAPOD outputs and CSV exports.

EDDYNET AND REVOSPECT 1.17.1

EDDYNET/CORE

Bug Fixed

➢ **B4775 –** Addressed a bug where the changes to a Display Set label in Site Configuration would fail to be read and displayed to the user as expected. This bug was identified when trying to read a single channel Display Set. This could also apply to other parts of the product. Because the bug is on the read, settings that may have been affected may not have to be recreated. We recommend confirming your setups are as expected.

EDDYNET AND REVOSPECT 1.17.0

EDDYNET/AN

Enhancements

➢ **B4650 –** Results IQ - Expanded the Outage column width in the *Outages to Synchronize* section of the *Select DM Database* dialog making it easier to see the complete outage name.

➢ **B4743 –** To support analyzing third-party data which we don't have full details of, non-ZAC techniques can have their sample rate overridden in Site Configuration.

➢ **E0649, E0919 –** Added support for displaying up to 4 C-Scans in the C-Scan and Comparison tabs. Additionally, channels of comparison views are now stored to the display setup, supporting use of comparison views as screening tools.

➢ **E0810 –** Added access to the Encoder Settings from the Standard Analysis pull down and fixed issues related to initialization and persistence with historical data.

➢ **E0823 –** Added the ability for the user to carry over Volt scale and the Mix coefficients in their AutoCal setup. When calibrating in AN, the user will be prompted to carry over the settings.

➢ **E0831 –** Added additional visibility to Tube Comments in the Dashboard through a tooltip and in the *Progress Messages* section, the complete text of the comment. Additionally, in AN and the Report Editor the Tube comment is accessible.

➢ **E0833, E0835, E0903 –** Added support for reading the EPRI XML based data file format (includes summary and messages).

➢ **E0861 –** When moving data in the lissajous with the right-button, the data is not centered first, allowing repeated adjustment. Left click will still null the data.

➢ **E0900 –** Increased the limit on scanline and xhatch skip in the C-Scan to 99. This makes analyzing high density data a little simpler.

➢ **E0905 –** In the C-Scan for RPC, the display set name is included along with the channel and mix description (if applicable). This helps clarify which coil is being displayed.

➢ **E0907 –** Updated nomenclature from *Remeasure From/To* to *Measure Endpoints*.

➢ **E0916 –** Made improvements to the Keyboard shortcuts used to manipulate the data displays and made access to how to use them easier. From the About menu, select Keyboard Shortcuts to see help for all displays. Other additions:

  ▪ ? – now available from all displays which have keyboard shortcuts

  ▪ d - hide/show display controls in the current tab

  ▪ D - hide/show channel controls in the current tab

  ▪ m – median filter on/off for current C-Scan

  ▪ Shift M – median filter on/off for all C-Scans in the current tab

  ▪ s – Spike filter on/off for current C-Scan

  ▪ Shift S – Spike filter on/off for all C-Scans in the current tab

➢ **E0918 -** Added an "Apply All" button to the C-Scan adjust filter dialog, and an 'f' keyboard shortcut to bring up the dialog from the waterfall and C-Scan.

Bugs Fixed

➢ **B2998** – Added the active tab to the display setup, so it will be activated upon load setup or restore config, rather than going to the last tab on startup or staying on the current tab when loading setups.

➢ **B4761** – Addressed an issue where an incomplete AutoCal config would slow down the process of loading data with an incomplete technique. The user is presented with a Notification about the situation, once.

➢ **B4764** – Addressed a naming issue with Comparison tabs, names could not include angle brackets.

EDDYNET/AQ

Enhancements

➢ **E0914** – Updated the MIZ-8x MRPC 3-coil template. Gains for several of the inputs were set high (dropped from 33 to 29dB).

➢ **E0915** – Updated the MIZ-8x 2x19 X-Probe template to not include unused frequencies.

➢ **E0921 –** Added the model file for the OPR-1000 steam generator.

EDDYNET/CORE

Enhancements

➢ **E0837** – Added Merge 2nd Max option to array merge type options.

➢ **E0904 –** Added default Bobbin, MRPC and Array coil types to the Coil Type setup.

➢ **E0912 –** To help users get up and running quickly, there now exists a default Procedure (Z1234 login, default technique, vessel, analysis database, etc.). These enable a user to get up a running quickly. However, to create results of record, it is recommended to ensure the Procedure is setup appropriately.

Bugs Fixed

➢ **B2529** – The software no longer uses c:\tmp as a temporary file location. This was causing challenges with security postures which prevented access to this location. It now uses %ALLUSERSPROFILE%\Zetec\tmp.

➢ **B4581** – Addressed an issue where user was not able to add licenses to the local grid until the grid was cancelled.

EDDYNET/DM

Bugs Fixed

➢ **B4546 –** Addressed some deficiencies in support for the EPRI XML results format.

➢ **B4689** – Addressed an issue in Tubesheet Builder where the editing of the From/To Row and Column values were not saving.

REVOSPECT PRO

Enhancements

➢ **E0824** – Added a feature that allows a single zone mapping in locale mapping. Leave the selection for Feedwater location blank to have the inlet straight leg beyond the tubesheet be a single zone.

➢ **E0828** – Enable the ZRB detectors to detect in the circumferential direction.

➢ **E0832, E0841** – Added an auto noise rotation filter for use in Bobbin, MRPC and Array classifiers.

➢ **E0836** – Improved the error message when there are RevospECT farm incompatibilities to help aid the user in resolving the issue(s).

➢ **E0844** – Added a feature to change the Indication Code of a current report entry to each address History line.

➢ **E0848** – Added tooltips in the Dashboard's Override column to limit times the user may need to reference the manual.

➢ **E0863** – Added a feature to RPTS that allows the user to segregate results that were resurrected from History (not count as Hits) to help understand the effectiveness of the configuration.

➢ **E0865** – Added a feature to enable reporting from the upper or lower edge only.

➢ **E0926** – Added an option to Dashboard to hide tube comments. See related ENHANCEMENT.

Bugs Fixed

➢ **B4342** – Addressed an issue with RPTS where matching was not producing the optimal results when there were multiple targets.

➢ **B4562** – The Presence of Data check now includes *Include Min Voltage Variation* and *Additional Tube End Correction* settings.

➢ **B4651** – Address an issue with RPTS where there could be a false miss or overcall at the end of the reports.

➢ **B4757 –** Addressed an issue with the Dashboard's *Full Reload Of Files* button not being available when paused. Also fixed a problem where files would go straight from Submitted To Farm to Complete, and a bug where Dashboard wouldn't allow you to exit a Cal group.

VELOCITY AND REVOSPECT HX 1.18.0

VELOCITY/AN

New Array Historical Data Compare (HDC)

All the tools and performance of the Bobbin HDC product has now been applied to Array probes. Evaluate changes for full or partially collected tubes of array coil data.

Type 5 Locating Improvements

Helping the user to automate the mundane parts of eddy current tubing analysis starts with accurate locating. Velocity's long standing locating algorithm called Type 5 will require fewer user interactions to allow the user to focus on other critical areas of the analysis process.

Type 5 landmark locating received a new 'Adaptive' option which enables it to dynamically adjust to amplitude variation between landmarks and better handle speed fluctuations. The adaptive option is on by default.

Enhancements

➢ **B4320** – Added support for reporting plugs or obstructions with a single manually located landmark and entering an acceptable 3+3 extent.

➢ **E0054** – Allow specific analysis groups to opt out of specific indication codes in Unaddressed History checking. For example, secondary may not be required to report DNT, so it should not get Unaddressed History errors.

➢ **E0922** – When Comparison Views are added, DS1 and DS2 would be populated even if no views are configured for those data slots. This wasted time, memory, and polluted the title bar. They will now only be loaded when needed.

➢ **E0960, E0961** - Added ability for Array HDC to support History/Baseline/Delta data underlays in C-Scan strip chart and Lissajous.

➢ **E0962** - When viewing HDC data underlay for History and/or Baseline along with current data, the historical datafile details will be provided in the status bar rather than the current data details.

➢ **E0967** – Restore expanded chart number of slices if changed during AutoCal.

➢ **E0969** – When "Tie Strip/Liss Chan" option is active in Operator Selectables, the Data Set Index selection will also be synchronized.

➢ **E0976** – Added landmarks to the manual from/to report entry creation user interface.

➢ **E0989** – In Report Editor's Validation pane, Unaddressed History issues will include the Indication Code in the error message to help disambiguate which entry needs to be addressed.

Bugs Fixed

➢ **B3148, B3358** – Resolved an issue where HDC wouldn't work correctly when changing vessels.

- **B4577** - Resolved an issue where axial length (AXL) was not computed correctly for MRPC data.

- **B4796** – Removed minimum number of triggers so that short tests can still be displayed.

- **B4798** – Resolved an issue where EReso in Single Party Review mode would not properly handle % Deleted calls when doing a re-compare in append mode.

- **B4801** – Resolved an issue where exports in Report Editor could hang.

- **B4802** - Addressed an issue where the popup menu for setting landmarks could have some landmarks hidden off screen.

- **B4806** – Addressed an issue where filter setups would become corrupted and cause a crash.

- **B4807** – Addressed an issue with the floating landmark window would not refresh correctly while changing tubes.

- **B4902** – Restored functionality of the EReso Comment button.

- **B4933** – Resolved an issue with C-Scan-style displays blocking global keyboard shortcuts from executing.

- **B4934** – Properly handle situation with HDC when history data could not be loaded.

- **B4950** – Addressed an issue where AN would crash with a setup where profiling was enabled.

- **B4965** – Addressed an issue where adjusting the databases with a local override would cause problems with Report Editor.

VELOCITY/AQ

Enhancement

- **E0980** - Updated MIZ-200 firmware to prevent an issue where probe coils could be getting energized unnecessarily.

Bugs Fixed

- **B4312** – Addressed an issue where the CSV to Datafile Converter could exit unexpectedly when converting an RPC CSV file in Windows 10.

- **B4791** - Addressed an issue where the Cal Time Limit in Zac/Acquisition was being limited to less than what the user entered when the user entry was greater than 3:30.

- **B4877** - Addressed an issue for RPC techniques where single left-click in thresholding strip chart would zoom the data rather than simply set the desired location.

VELOCITY/CORE

Enhancements

- **E0945** - In Site Configuration, Analysis related items which were previously part of the Config page have now been moved to their own dedicated page, 'Config and Databases'.

- **E0958** - Added Data to CSV conversion capability back to Velocity.

- **E1007** - Added IC Network program to the EVR installer. Previously this was only available with the Habitat installer.

Bugs Fixed

➢ **B2258** – Resolved an issue where the splitter in Site Configuration would resize any time the user changed which page is selected.

➢ **B4829** – Removed disabled pass filters from the summary of indication codes in EReso Pass Rules Configuration. Additionally added support for reviewing the filters while in read only mode.

➢ **B4980** – Resolved an issue where Probe Codes, Landmarks, and Channels used in Report Validation specific validation setups were not kept unique. Duplicates will now be consolidated when revisiting Site Configuration.

VELOCITY/DM

Enhancements

➢ **B4510** - Allowed pdf reports to be displayed in viewers other than Acrobat Reader, though they will not open minimized in other viewers.

➢ **E0812** – Provided the ability to correct invalid vessel ids during history import. Also added a new 'Check/Update Historical Component IDs' tools action.

➢ **E0986** - Reduced queries used during append and other areas evaluating report entries.

➢ **E0990** - Added the ability to DM to remember the last database used.

Bugs Fixed

➢ **B4389** - Added support for importing a historical CSV file with separate XTT and XTF columns. The Extent field selection can now be used to import the extent fields regardless if they are a combined field or a pair of separate from, to fields.

➢ **B4707** – Adjusted append from Eddynet/AN to ensure that invalid values in percent or phase fields will not prevent results from being appended. The invalid values will be set blank. Ideally, the report entry will be re-created in these situations.

➢ **B4802** – Addressed an issue where the popup menu for setting landmarks could have some landmarks hidden off screen.

➢ **B4888** - Addressed an issue where creating or editing a label using the Edit Tubesheet Labels window would result in that label not being displayed correctly.

➢ **B4894** - Addressed an issue where PID import could fail to transfer / select probe codes as part of the Resolver Info.

➢ **B4896** - Addressed an issue where SI import could fail to import manual setups.

➢ **B4903** - Addressed an issue where SI import could fail to transfer / select probe codes as part of the Resolver Info.

➢ **B4964, E0985, E0991** - Improved speed of appending AN database into DM.

➢ **B4977** - Addressed an issue where DTD validation errors could occur unnecessarily during DM queries.

➢ **B4979** - Addressed an issue where a specific DM database would not import successfully into DM.

REVOSPECT PRO HX

Enhancements

➢ **RQ 7.3.25.1.3** – Primarily for hands-off testing of a pre-configured inspection, *Auto Add Calgroups* and *Auto Run Calgroups* options were added to the General tab in Dashboard. *Auto Add Calgroups* could be beneficial for jobs with a single Dashboard operator, as well.

➢ **RQ 7.3.25.5.2** – Added new Alert option to RevospECT Configurations, allowing a state like RBD or Abort, but which keeps all the report entries that would be made otherwise. This allows the Dashboard operator to delete or edit the offending alert call and mark the tube Complete or Discard the tube. Especially helpful with Tube Tracker, to avoid the tube being marked complete and moving on to EReso.

➢ **E0344, E0153** - Added the ability to specify channel for preliminary and final acceptance initial and final overlap rules.

➢ **E0571** - Added the ability in RevospECT Configuration to limit noise analysis to Custom Locale regions.

➢ **E0910** - Added an optional 'Minimum Volts Ratio' qualifier to RevospECT Configuration preliminary and final acceptance initial and final overlap rules.

➢ **E0937** - Added the ability to rename detectors and classifiers using RevospECT Configuration (like the capsule renaming function).

➢ **E0943** - Added number of tubes analyzed and average extra calls per tube statistics to the RPTS display.

➢ **E0976** - Added the ability to RevospECT to perform automated ID Mag Measurements.

➢ **E0979** – Added logic to speed up loading Cal groups with existing report entries in Dashboard, especially noticeable at startup.

➢ **E0993, E0995** – Adjusted the Status and Abort Criteria columns in Dashboard so that the values are more readable, e.g., AxSamples => Axial Samples.

Bugs Fixed

➢ **B4786** - Reduced the amount of work the Farm was doing related to independently looking up timestamp in the database for every report entry being added to the database.

➢ **B4911** - Addressed an issue in Dashboard Abort Criteria where 'none' could be displayed rather than the appropriate abort issue.

➢ **B4965** – Addressed an issue where adjusting the databases in Site Configuration with a local database override would cause Dashboard to crash.

VELOCITY AND REVOSPECT HX 1.17.3

VELOCITY/AN

Enhancements

➢ **E0543** – Restoring the Expanded chart length after closing the displayed dialogs (Locating Setup, Voltscale, PChan Editor, etc.).

➢ **E0917** – Added support for toggling through pre-configured filters in the C-Scan. They are selectable using an arrow in the lissajous or a keyboard shortcut and configured with a middle click on the filter button in the lissajous.

➢ **E0925** – Added support for changing all C-Scans to predefined sets of channels rather than one at a time. This replaces the behavior of the C-Scan lissajous pre-selected channel button.

➢ **E0951** – Added the Auto Report Entry buttons to the Comparison View tab.

Bugs Fixed

➢ **B0182 –** Modified the zoom1/zoom2 behavior to be like the legacy analysis product, allowing switching between the two zoom levels with a single click. Also fixed a drawing issue in the waterfall plot when un-zooming.

➢ **B4554 –** Changed the layout of the tear off landmark menu to better support plants with many landmarks. A second column of entries will be displayed when needed.

➢ **B4573 –** Addressed an issue after having recalled a report entry, the axial location in the upper C-Scan lissajous was not updating while scrolling data.

➢ **B4784 –** Addressed an issue with Auto Scroll, setting it to 0 was not turning it off.

➢ **B4790 –** Addressed an issue where right-clicking the new floating quick edit buttons would open a menu, obscuring the buttons and preventing the right-click.

➢ **B4792 –** Addressed an issue with the reading of MIZ-27 files. The user was receiving an encode mismatch error message.

➢ **E0954 –** Addressed an issue where the C-Scan lissajous would not highlight the measurement button when recalling indications.

VELOCITY/CORE

Bug Fixed

➢ **B4793** – Addressed an issue when importing the same database multiple times.

VELOCITY AND REVOSPECT HX 1.17.2

VELOCITY/AN

Enhancements

➢ **E0886** – Added the AN database name to the RPTS main window to help the user ensure they are working from the correct source.

➢ **E0923** – Updated support for reading Corestar collected data.

➢ **E0932** – Added *Quick Edit* buttons for use with the C-Scan. The buttons are on a toolbar that can be torn off and floated and re-docked as needed.

Bugs Fixed

➢ **B2113** – Addressed a message presented to the user telling them to refresh the Report Editor, now the software will perform the refresh rather than prompt the user to do so.

➢ **B4583** – Addressed an issue where the Landmark Override dialog would get hidden and allowed multiple dialogs to be created. Now only one will be created and it will be a top-level window.

➢ **B4766** – Addressed an issue with COMB where backups would fail because of a timing issue.

➢ **B4769** – Addressed an issue where MRPC data would not plot if the number of slices were more than ~100 per scanline.

➢ **B4773** – Addressed an issue with the Encode Search, it was not allowing user to double-click to open a file.

➢ **B4777** – Addressed a crash with E-Reso when re-comparing a calibration group.

VELOCITY/CORE

Enhancement

➢ **E0944 –** Logging for some of the .NET based applications can have two sources (technology based, C# or C++). When using the *Tail Log* menu item or F12, both logs will be opened and when complete, closed. This can be used when Zetec requests logging information for troubleshooting purposes.

REVOSPECT PRO HX

Enhancements

➢ **E0931** – Added multiple selection support to the Indication Code Summary in RPTS.

➢ **E0935** – For the RevospECT Noise Only license, added the ability to add and modify canned filters.

➢ **E0942** - For the RevospECT Noise Only license, added the ability to use history to prevent noise measurements from happening where there is a known indication.

Bugs Fixed

➢ **B4673** – Addressed an issue with Dashboard loading temporary files and hanging which would require the program get closed and restarted.

➢ **B4703** – Addressed an issue with RPTS where the counts were wrong when using the Force or Break match feature.

➢ **B4771, B4778, B4783** – Addressed an issue with RevospECT Visualization tool when display sets did not follow the assumed naming patterns. For example, +Pt, +pt, +PT or pp. This could affect the creation of the graphs, MAPOD outputs and CSV exports.

VELOCITY AND REVOSPECT HX 1.17.1

VELOCITY/CORE

Bug Fixed

➢ **B4775 –** Addressed a bug where the changes to a Display Set label in Site Configuration would fail to be read and displayed to the user as expected. This bug was identified when trying to read a single channel Display Set. This could also apply to other parts of the product. Because the bug is on the read, settings that may have been affected may not have to be recreated. We recommend confirming your setups are as expected.

VELOCITY AND REVOSPECT HX 1.17.0

VELOCITY/AN

Enhancements

- ➢ **B4650 –** Expanded the Outage column in the Outages to Synchronize column list making it easier to see the complete outage name.

- ➢ **B4743 –** To support analyzing third-party data which we don't have full details of non-ZAC techniques can have their sample rate overridden in Site Configuration.

- ➢ **E0649, E0919 –** Added support for displaying up to 4 C-Scans in the C-Scan and Comparison tabs. Additionally, channels of comparison views are now stored to the display setup, supporting use of comparison views as screening tools.

- ➢ **E0810 –** Added access to the Encoder Settings from the Standard Analysis pull down and fixed issues related to initialization and persistence with historical data.

- ➢ **E0823 –** Added the ability for the user to carry over Volt scale and the Mix coefficients in their AutoCal setup. When calibrating in AN, the user will be prompted to carry over the settings.

- ➢ **E0831 –** Added additional visibility to Tube Comments in the Dashboard through a tooltip and in the *Progress Messages* section, the text of the comment. Additionally, in AN and the Report Editor the Tube comment is accessible.

- ➢ **E0833, E0835, E0903 –** Added support for reading the EPRI XML based data file format (includes summary and messages).

- ➢ **E0861 –** When moving data in the lissajous with the right-button, the data is not centered first, allowing repeated adjustment. Left click will still null the data.

- ➢ **E0880 –** Added the Bobbin Tubesheet Profile feature to Velocity/AN (requires a C-Scan license).

- ➢ **E0900 –** Increased the limit on scanline and xhatch skip in the C-Scan to 99. This makes analyzing high density data a little simpler.

- ➢ **E0905 –** In the C-Scan for RPC, the display set name is included along with the channel and mix description (if applicable). This helps clarify which coil is being displayed.

- ➢ **E0907 –** Updated nomenclature from *Remeasure From/To* to *Measure Endpoints*.

- ➢ **E0916 –** Made improvements to the Keyboard shortcuts used to manipulate the data displays and made access to how to use them easier to access. From the About menu, select Keyboard Shortcuts to see help for all displays. Other additions:

    - ▪ ? – now available from all displays which have keyboard shortcuts

    - ▪ d - hide/show display controls in the current tab

    - ▪ D - hide/show channel controls in the current tab

    - ▪ m – median filter on/off for current C-Scan

    - ▪ Shift M – median filter on/off for all C-Scans in the current tab

    - ▪ s – Spike filter on/off for current C-Scan

    - ▪ Shift S – Spike filter on/off for all C-Scans in the current tab

- ➢ **RQ 7.3.15.5** – Improved reading of Magnifi formatted data.

➢ **E0918** - Added an "Apply All" button to the C-Scan adjust filter dialog, and an 'f' keyboard shortcut to bring up the dialog from the waterfall and C-Scan.

Bugs Fixed

➢ **B2998** – Added the active tab to the display setup, so it will be activated upon load setup or restore config, rather than going to the last tab on startup or staying on the current tab when loading setups.

➢ **B4761** – Addressed an issue where an incomplete AutoCal config would slow down the process of loading data with an incomplete technique. The user is presented with a Notification about the situation, once.

➢ **B4764** – Addressed a naming issue with Comparison tabs, names could not include angle brackets.

VELOCITY/AQ

Enhancement

➢ **E0875** – Updated the MIZ-200 MRPC 3-coil template. Gains for several of the inputs were set high.

VELOCITY/CORE

Enhancements

➢ **E0837** – Added Merge 2nd Max option to array merge type options.

➢ **E0904 –** Added default Bobbin, MRPC and Array coil types to the Coil Type setup.

➢ **E0912 –** To help users get up and running quickly, there now exists a default Procedure (Z1234 login, default technique, vessel, analysis database, etc.). These enable a user to get up a running quickly. However, to create results of record, it is recommended to ensure the Procedure is setup appropriately.

Bugs Fixed

➢ **B2529** – The software no longer uses c:\tmp as a temporary file location. This was causing challenges with security postures which prevented access to this location. It now uses %ALLUSERSPROFILE%\Zetec\tmp.

➢ **B4581** – Addressed an issue where user was not able to add license to the local grid until the grid was cancelled. Software licensing only.

VELOCITY/DM

Bugs Fixed

➢ **B4546 –** Addressed some deficiencies in support for the EPRI XML results format.

➢ **B4689** – Addressed an issue in Tubesheet Builder where the editing of the From/To Row and Column values were not saving.

REVOSPECT PRO HX

Enhancements

➢ **E0824** – Added a feature that allows a single zone mapping in locale mapping. Leave the selection for Feedwater location blank to have the inlet straight leg beyond the tubesheet be a single zone.

➢ **E0828** – Enable the ZRB detectors to detect in the circumferential direction.

➢ **E0832, E0841** – Added an auto noise rotation filter for use in Bobbin, MRPC and Array classifiers.

➢ **E0836** – Improved the error message when there are RevospECT farm incompatibilities to help aid the user in resolving the issue(s).

➢ **E0844** – Added a feature to change the Indication Code of a current report entry to each address History line.

➢ **E0848** – Added tooltips in the Dashboard's Override column to limit times the user may need to reference the manual.

➢ **E0863** – Added a feature to RPTS that allows the user to segregate results that were resurrected from History (not count as Hits) to help understand the effectiveness of the configuration.

➢ **E0865** – Added a feature to enable reporting from the upper or lower edge only.

➢ **E0926** – Added the option to the Dashboard to hide tube comments. See related ENHANCEMENTS.

Bugs Fixed

➢ **B4342** – Addressed an issue with RPTS where matching was not producing the optimal results when there were multiple targets.

➢ **B4562** – The Presence of Data check now includes *Include Min Voltage Variation* and *Additional Tube End Correction* settings.

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➢ **B4651** – Address an issue with RPTS where there could be a false miss or overcall at the end of the reports.

➢ **B4757 –** Addressed an issue with the Dashboard's *Full Reload Of Files* button not being available when paused. Also fixed a problem where files would go straight from Submitted To Farm to Complete, and a bug where Dashboard wouldn't allow you to exit a Cal group.

KNOWN ISSUES

GENERAL

➢ **Setup Instructions**

o (Refer to the AQ Getting Started Guide for more information on setup.)

Site Configuration: When creating a Vessel or Component, pay attention to setting the units of measure as they are intended to be used for the job. Setting the units of measure prior to creating techniques will help avoid any confusion that may arise from changing this later in the setup process.

➢ **Time zone reliability**

o When using EREDB exports, to ensure that all timestamps are captured accurately, all machines contributing to the Analysis and Data Management for a job should be set to the same time zone.

➢ **File name conventions**

o The following characters should not be used when creating file names through the Eddynet, velocity and RevospECT products. These characters are restricted for use in filenames by Windows, not all interfaces will correctly help the user with this issue: \ / : * ? " < > |

➢ Downloads from Zetec's https://ssplicensing.zetec.com website that take longer than 15 minutes will fail as the server times out. If this is a problem, please contact Zetec and we will review with our IT Team.

➢ [Velocity] For users of the MIZ-28, it is recommended to collect data in the Eddynet format for ease of integration with Velocity software (both MIZ-28 data formats are supported in Velocity).

➢ Velocity/AQ, Velocity/AN, & Velocity/DM are intended for tubing applications.

➢ If License Manager does not show any applications, restart License Manager. When switching from local to remote licenses, at times the application list may be empty. Restarting License Manager will populate the list.

EDDYNET/AN AND VELOCITY/AN

➢ In 1.16.6, E0550 added support for mapping multiple Vessels or Components to one AN database. This works properly only when Cal group names are unique across an inspection. If using non-Zetec acquisition or not being careful across multiple Zetec acquisition stations, multiple components can have the same name, e.g. 000001.CAL. Results will get mixed up if sharing an AN database and using duplicate Cal group names.

➢ **Analysis – B4900**

o Report Editor had extensive work to support multiple analysts using E-Reso at the same time without errors. Unfortunately, this led to significant slowdown in some operations, such as when all report entries are deleted in the RevospECT Dashboard and at times with changing Cal groups.

EDDYNET/AQ

➢ **Acquisition — B0711**

o When recording data in Partial Manual mode with the MIZ-85iD, the operator needs to click the All Stop button at the conclusion of the test.

➤ **Acquisition — B0996**

  o If planning on using a mixture of eddy current instruments (MIZ-80iD, MIZ-81iD, MIZ-85iD) from the same Eddynet/AQ-installed computer, it is necessary to remove some of the XML files when switching from one to another. Find these files in the %ALLUSERSPROFILES%\Zetec\AppData directory. Delete all directories which have technique names associated with them. If the user accepts the default install location, %ALLUSERSPROFILES% will be defined %SystemDrive%\ProgramData. For most users, this will be C:\ProgramData.

➤ **Acquisition — B0544**

  o When testing the end-to-tubesheet with MRPC and a tube end extent of TEH+0 (or any positive elevation), and recording during the push, the expected extent will not collect. Test with an extent of TEH-# (some negative elevation).

➤ **Acquisition, MIZ-85*iD* – B1779**

  o When configuring auto acquisition with the MIZ-85*iD* care needs to be taken to ensure Start/End Delays factor in ramping. An example considering the far tube end:

    ▪ Assuming coils are 2 inches out on the far tube end
    ▪ Record/Reverse speed of 60 in/sec
    ▪ Start Delay, time based, is 0.25 seconds
    ▪ Distance covered by the probe based on ramping (1 sec ramp = acceleration of 60 in/sec)
    ▪ Distance = 0.5 * acceleration * time equals a distance of 1.875 inches which is still in air, the probe will stop.
    ▪ Record/Reverse speed of 40 in/sec, equals a distance of 2.11 inches which means some hit and miss at the tube end

➤ **Data Stripper and Conversion Spooler – B1818**

  o To perform a re-conversion on a directory, the user must double-click the source data directory. The tool does not monitor for deleted destination files nor for editing of source files.

➤ **Inspection Test — B0553**

  o For plugs to show on the Robot tubesheet display when loading an EIMS database, first ensure the plugs exist on the model file that is loaded in addition to the EIMS database. The model file can be edited with the EIMS-TSB program if needed.

➤ **Machine Vision — B0782**

  o The Machine Vision box can beep on occasion for no reason. The beep is not associated with any known failure mechanism and has not been shown to effect performance.

➤ **Machine Vision 2 — B0529**

  o Typical lighting intensity should be set to 1% - 5%. Higher intensity settings could interfere with the calibration process.

➤ **PIMS — B0828**

  o When viewing reports in the Excel format, the Zetec logo is presented in the foreground preventing cells beneath it from being selected.

➤ **PIMS — B0967**

  o When viewing reports in the Excel format, an error may be received indicating there is "unreadable content" in the file. The report will still be viewable despite the warning.

➤ **ZR-100**

  o It is recommended to move the robot into position when calibrating and not move it until the calibration process is complete. The software does not prevent the operator from clicking the Move button during this time, but doing so can lead to an invalid, though successful, calibration. In addition, it is recommended to perform a Positive Verification when calibration is complete.

➢ **ZR-100 — B0874**

o When uninstalling the robot, it is recommended to use the Install Wizard and click the Reset button to remove previous calibration information. This will help avoid some potentially confusing messages that are no longer applicable.

➢ **ZR-100 — B0567**

o ZR-100 Controller firmware updates can occasionally be problematic. Verify the following two things before starting the firmware update: Ensure there are no Eddynet/AQ programs connected to the ZR-100 controller. If problems arise, cycle power to the ZR-100 Controller being updated and then initiate the firmware update process.

➢ **ZR-100 — B1040**

o The user needs to select a block to test when using Nearest Block or Block Serpentine test methods. The user may be misled by the ability to select sort direction.

EDDYNET/DM

➢ **Migrating previous versions of DM database – B0683**

o Migration script may fail for old databases with atypical column naming conventions.

➢ **Report Symbol Manger – B0608**

o Report Symbol Manger - Symbol Query widget is missing default values for Row, Col, Volts, Deg, Pct, Extent, and Elevation.

EDDYNET/WP

➢ **Analysis Team Cal-Board Editing – New RQ**

o Analysis team is presently required to update the Cal-Board outside of the Eddynet/AN application (using the Eddynet Cal-Board Editor application).

➢ **Apache Server may not start if Microsoft Internet Information Services (IIS) is running.**

o There may be a port conflict between Apache and IIS which will prevent the Apache service from starting. If this happens you can turn off IIS by opening Control Panel / Programs and Features / Turn Windows Features On or Off. Navigate to Internet Information Services and deselect it. Start the Apache Services by clicking the Apache icon in the hidden icons of the sys tray and click start.

VELOCITY/CORE

➢ The Outage Name and component analysis database are linked. Do not change the Outage Name after having created results for a component; otherwise, the results will not display in the Report Editor. To get them back, change the Outage Name back to original name.

➢ Site Configuration for Analysis Groups: include a short name. Without a short name, the 'Export For DM' feature will not work properly.

➢ If the License Expiration Pending message displays in License Manager and is not dismissed, License Manager will lock up and prevent the software from working properly.

VELOCITY/SA

With the 1.16.0 release of Velocity, Velocity/SA is not included in the installer. Please use UltraVision ET 3.12R1 or later release for Surface Array inspections.

EDDYNET/VELOCITY HABITAT SDK

COMPATIBILITY

Eddynet/Velocity 1.18.0 is compatible with:

➢ Eddynet/Velocity Habitat SDK 1.18.0

Customer software will need to re-implement any applications using this interface if transitioning from a version prior to Eddynet Habitat SDK 1.18.0. The documentation installed with the Habitat SDK includes documentation for the revision to the interface.

FIRMWARE NOTES

🖉 NOTE: All firmware can be found in the following location: [installed directory]\firmware. Example, C:\Program Files\Zetec\ZetecSoftware\firmware.

Eddynet Firmware

Table 1   Lists Eddynet devices and the currently recommended firmware versions.

Device	Firmware Version	Compatible Eddynet Version
Machine Vision	ZMV Setup 1.3.5	Eddynet 1.8.0 and greater
ZR-100	zr100.2.2.5	Eddynet 1.13.0 and greater
MIZ-80iD	Instrument — miz80i.3.2.2 TURC — miz80t.4.1.2	Eddynet 1.14.5 and greater
MIZ-81iD	Instrument — miz81i.2.3.2 TURC — miz81t.3.1.9	Eddynet 1.8.0 and greater
MIZ-85iD	Instrument — miz85i.5.1.7 MRPC — miz85mrpc.5.0.11	Eddynet 1.8.0 and greater
ZR-1	1	Eddynet 1.8.0 and greater
UFC1A (5100 CPU)	ufc1_5100.2.0.2 Transition File – UFC1A	Eddynet 1.8.0 and greater
UFC1 (2301 CPU)	ufc1_2301.2.0.1 Transition File – UFC1	Eddynet 1.8.0 and greater
UFC1 (5500 CPU)	1.0 (not currently included on install)	Eddynet 1.8.0 and greater

Velocity Firmware

Table 2   Lists Velocity devices and the currently recommended firmware versions.

Device	Firmware Version	Compatible Velocity Version
MIZ-200*iD*	MIZ-200 1.4.9	Velocity 1.16.0 and greater

REVISION HISTORY

MIZ-80*iD*

Instrument 3.2.2

➢ Added support for ScrAAS encoder-based scripts.

➢ Better support newer browsers.

MIZ-85*iD*

Instrument 5.1.7

➢ Adjustment to the Diagnostics gain check.

Instrument 5.1.6

➢ Drive and balance update when using the Intelligent probe.

MRPC 5.1.11

➢ Addressed an issue with the wheel pressure status signal resulting in faults being reported in AQ.

MIZ-200*iD*

Instrument 1.4.9

➢ Addressed an issue where after connection to the instrument and prior to start acquire, the coils on an array probe could have voltage applied that can overheat the coils.

Instrument 1.4.7

➢ Added a new RPC configuration.

Instrument 1.4.6

➢ Addressed an issue with the MIZ-200 Webserver performance.
➢ Added support new probe modes.
➢ Added support for the VPP alarm type.
➢ Addressed issues with the pie alarms phase and amplitude accuracies.

Instrument 1.4.5

➢ Adjust drives to prevent noise spikes when encoder/external triggering.

Instrument 1.4.3

➢ Addressed bug causing noise in high heat environments.
➢ Updated a PIM mode for 4pin driver pickup mode that enables inputs 2,3,4,6,7,8 and gen 2.

Instrument 1.4.2

➢ Addressed bug with Diagnostics Gain Drive Amplitude check.
➢ FPGA fixed Continuous mode when external or encoder sampling.

EARLIER RELEASES

EDDYNET AND REVOSPECT VERSIONS

To limit the size of this document, releases notes prior to Eddynet 1.17.0 have been removed. These can be requested from Zetec Customer Service or download an older Release Bulletin from https://ssplicensing.zetec.com.

VELOCITY AND REVOSPECT HX VERSIONS

To limit the size of this document, releases notes prior to Velocity 1.17.0 have been removed. These can be requested from Zetec Customer Service or download an older Release Bulletin from https://ssplicensing.zetec.com.

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