

Product Release Notes

Product: Ponemah
Model: P3 Plus
Version: 5.00
Build: 006008-001 (CD Build)
Date: July, 2010

Product release notes for PONEMAH Physiology Platform (P3 Plus) Version 5.00 indicate revisions made to the Ponemah core application since release of Ponemah Version 4.90. For information regarding changes to the software from previous versions, please refer to the Release Notes folder located on the Version 5.00 CD. Product release notes indicate only revisions to application contents that are part of a specific CD build.

NOTE: A new column, “**Previously Fixed**”, has been added to the tables below. Earlier release notes only included changes that occurred from the previous release which could have been an interim service pack and not a full release of the software. Therefore, information regarding all changes between versions (this includes service packs and analysis only releases) were obtained by accessing the individual service pack release notes located in the Release Notes folder on the CD. For ease in accessing all changes from the 4.90 release, changes from service packs or analysis only CD releases have been added and their versions when fixed noted in the **Previously Fixed** column.

Product Release Notes for Ponemah do not include information regarding revisions of the Ponemah Analysis Modules. Information regarding revisions of the Ponemah Analysis Modules is indicated in separate Product Release Notes.

Notice for organizations that must comply with FDA’s Good Laboratory Practices (GLP) and 21 CFR Part 11 Electronic Records; Electronic Signatures: Ponemah Versions may contain **Preview Features**. These **Preview Features** are listed in the Product Release Notes table under the column, “Type of Change”. A **Preview Feature** indicates that enhancements have been made to Ponemah, but have not been validated. Instead, Data Sciences International (DSI) has opted to delay complete validation until receiving comments from customers regarding use of these features. Further validation of these features will be performed in later releases of Ponemah. There may be additional **Preview Features** that had been documented in previously released versions that are not documented here. These features are not available unless manually enabled by the user. If documentation is needed regarding these features, please contact the Technical Support Group at DSI.

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
Ponemah Core - General			
N/A	N	N/A	<p>Added support for the HD-S21 small animal transmitter. This small animal device offers the following:</p> <ul style="list-style-type: none"> • Dual pressures • Digital Transmission of: <ul style="list-style-type: none"> ○ Animal ID - This prevents data being incorrectly recorded if an animal is placed in the incorrect cage. ○ Battery Odometer – Keeps track of the time the transmitter has been on. ○ Battery Voltage – Monitors the status of the battery. ○ Calibration – Stored within the device and loaded automatically. Removes entry errors by eliminating the need to hand enter values.
N/A	N	N/A	<p>Added support for the D70-PCTR transmitter. This transmitter provides respiratory measurements for both restrained and ambulatory subjects. Additionally, a new analysis module has been developed, Pulmonary Volume (PVO), to analyze the volume signals from this transmitter.</p> <p>This module was released prior to version 5.00. It was released independent of any other software and is compatible with versions 4.6 and higher. In order to use this module with versions prior to 5.00, an updated database definition file is needed. Consult Sales for a list of available options.</p>

DSI Corporate Headquarters

119 14th Street NW Suite 100
St. Paul, MN 55112

P: +1 (651) 481.7400 • F: +1 (651) 481.7404
www.datasci.com

Ponemah Operations

5525 Cloverleaf Parkway
Valley View, OH 44125

P: +1 (216) 328.7000 • F: +1 (216) 328.7400
www.ponemah.com

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	N	N/A	<p>Preventative measures to automatically restart acquisition if necessary PC resources are temporarily unavailable have been added. During acquisition, applications such as virus scanners and defrag may have taken necessary PC resources causing Ponemah to close. While it is not recommended to run such applications while collecting data, an automatic restart has been added to maintain the current acquisition, if at all possible. Ponemah will attempt to continue acquisition and data will be appended to the current RAW file.</p> <p>As Ponemah attempts to maintain the acquisition, the screen may appear to be frozen or not responding. This is expected and will last on the order of seconds before signals are again displayed and collection continues.</p>
N/A	E	N/A	<p>Improvements have been made to the content of various message dialogs. Some message dialogs did not contain enough information to allow the user to respond to the message without consulting Technical Support. Content has been added to the original message, where possible, to provide some guidance as to potential solutions to the error condition.</p> <p>Note that additional text in the dialogs is the only change.</p>
N/A	N	N/A	<p>Support for an integrated communication between Ponemah and AeroMP has been added. This new menu selection appears in the Setup pull-down menu, if enabled in the license file, as Remote Connection. This provides beat data information to AeroMP for purposes of determining how much test article has been received which will in turn drive changes to the AeroMP delivery controls in restrained, respiratory experiments.</p>

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
N/A	E	N/A	<p>Recent changes to correct hardware issues, which stopped the PCIe board from resetting, resulted in potential issues with the DSI Sync Service. This change allowed the sync between OpenART and the ACQ unit to drift outside of the specified ± 10ms tolerance. To correct this issue, Ponemah verifies that the appropriate computer services are running. At startup or change in the acquisition interface of Ponemah, a check to verify these services is performed. If the services are incorrect, a message will be posted asking the user to restart the computer in order to start the appropriate service.</p> <p>The service pack which disrupted the sync service was the Dataquest Software Service Pack P/N 271-0100-001.</p>
N/A	N	N/A	<p>Added Support for Windows 7 and Service Pack 3 for Windows XP (32 bit operating systems only).</p>
N/A	E	N/A	<p>Updated dialog for Acquisition and Replay to prevent users from accidentally overwriting data. Previously, an error message was displayed asking to continue and erase the current dataset if that dataset name already existed. If Yes was selected, the dataset was overwritten. To help prevent users from accidentally overwriting, the dialog was updated to automatically increment the file name for the user. Therefore, the user is not able to accidentally click a button and overwrite data. If data is to be overwritten, the user must remove the suffix from the end of the file name in the text box.</p> <p>This feature will place an “_” at the end of the file followed by a numerical value. If an “_” already exists in the filename, the system will read the data after the underscore and place a numerical value which is incremented with each subsequent acquisition or replay with the same name.</p> <p>Note: If an underscore is used and followed by the date, for example 7-16-10, the software will not interpret this as a date and increment the number to 7-16-11. The software will continue to increment the number until 9999.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	E	N/A	<p>Data Manager moves/copies/deletes data based on file names. It is useful when moving data since it automatically grabs all files with that naming convention without requiring the user to select individual files. It is also useful in secured systems (Data Security Option) since it moves files that are not visible to typical Windows Users.</p> <p>However, there are files that have different naming conventions or may reside in different locations than the acquisition or post processed data. Template files do not follow the normal naming convention and can be used outside a specific study or with other non-related studies. These files also default to a specific directory within the LSS Data directory. Therefore, a message has been added to the Data Manager dialog that alerts the user to the fact that not all files are handled when selecting a dataset name when performing a move/copy/delete.</p> <p>Note that if all data resides in a single folder, Data Manager will display these files and allow the user to move/copy or delete them.</p>
N/A	E	N/A	<p>Added a Refresh Time for the XY Loop graph page. This allows the user to define the time, in seconds, at which the XY Loop graph page will refresh its screen.</p>
N/A	N	N/A	<p>The ability to concatenate two or more RAW files has been added (under the File menu and within Study). This allows the user to combine data to form a single run for purposes of reporting data. An event such as a power failure or acquisition shutdown would force the user to restart the acquisition resulting in two (or more) separate RAW files as well as separate derived and data reduction outputs for each of those collections. Therefore, two separate runs will be listed in the database for this one acquisition which would result in an issue for DSI Reporting or other reporting software. This feature may be used to combine these RAW files into the desired single run which allows reporting on all data for that acquisition.</p> <p>Note that this is also listed as a fix in Tracker since this resolves a potential error condition although it is a new feature to the system. The Tracker ID is #3301.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	E	N/A	<p>An auto-reconnect has been added in case the eAPR1 was lost. In the event that the eAPR1 is lost, the user shall be notified. The user will also be notified when reconnected. This information will be placed in the Experimental and Application Logs.</p>
3645	F	N/A	<p>Ponemah has restrictions on how much data can be loaded and processed in Review. The amount of data that can be handled is based on time and sample rate. For typical Ponemah acquisitions, this is not an issue. However, converting extremely long Dataquest files could exceed this limit. This could result in incorrect Marks information as well as incorrect or missing derived data. If converting an extremely long Dataquest acquisition, the software will alert the user that the file is too large to convert and suggest that the file be converted in sections.</p> <p>The sample rate of the channels directly affects the duration permitted. To provide an example, sampling at 1000Hz would yield a maximum of 24.8 days permitted. Going beyond this time would result in the error condition described above. The faster the data is sampled, the less time is allowed.</p> <p>Note that the number of channels does not factor into this calculation.</p>
3038	F	N/A	<p>Selecting the JET acquisition interface in the Application Configuration dialog would generate an error when using a POST only system (or Review only system). POST systems do not use an acquisition interface but the software was searching for devices that were not there causing the system to fail. This has been updated to prevent the user from accessing the JET acquisition selection when using a POST only system.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3351	F	N/A	<p>In situations where overwriting data was stopped or not allowed (Canceling a copy/move or data security settings), Data Manager would stop copying/moving files but did not provide sufficient information to alert the user as to which files were copied or not copied. Changes have been made to list all files not copied (due to data files already existing in that location) in a dialog box at the conclusion of the copy. Additionally, the copying of files will continue when a duplicate file is encountered in the destination directory, where previously this process stopped.</p>
3340	F	N/A	<p>Derived data tables may not have updated if the following steps were performed multiple times, one after another.</p> <ul style="list-style-type: none"> • Right click and select Analyze in Review • Select Additional Channels tab and select all • Reanalyze the entire channel • Repeat multiple times <p>If the tables were not updated, the DRx window would display 0% complete in the title bar.</p>
3357	F	N/A	<p>Ponemah did not prompt users to save the protocol settings if only Channel Mapping information was modified. A message is now posted asking the user if changes should be saved when modifying the contents of this dialog.</p>
3395	F	N/A	<p>Converting a Dataquest file with a sample rate of 750Hz caused Ponemah to close unexpectedly. 750Hz is not a supported sample rate for this application (only supported in JET). When converting files with this sample rate, Ponemah will post a message stating that the file cannot be converted and the process will be stopped.</p>
3399	F	N/A	<p>Removed the 750Hz sample rate from the USB and OpenART acquisition interfaces. This resulted in signals being outside the specified sync tolerance of ± 10ms when using the ACQ USB-OpenART sync feature due to how time samples were handled for this rate. If loading an older protocol with the 750Hz rate saved, a message will be posted when an acquisition is attempted informing the user that the rate is not supported and an alternate rate must be selected. Acquisition will not continue until the rate has been changed.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3485	F	N/A	<p>Typing an apostrophe or quote (‘ or “) into the cells in the Experimental Protocol Header caused the ODBC output (Excel or Access) to be blank. A check for the following special characters has been added which will result in a dialog being posted if used:</p> <p> < > : " ? * ! \ & / % ^ + { } , . ` ~ 0x00</p> <p>Work-around: RAW data was saved and derived data could be produced when the special character was removed and the post processing of data repeated (if not implementing the fix).</p>
3542	F	N/A	<p>Disabling a channel in the Channel Input Setup menu may have caused the A/D sample rate to change. If multiple channels were set to a Secondary rate in the A/D Sample Rate dialog, disabling the first channel set to that Secondary rate in the Channel Input Setup dialog would result in the A/D rate changing to 1Hz for all other channels (set to that Secondary rate).</p>
3548	F	N/A	<p>Adding a filter (Low Pass/High Pass) to converted Dataquest data could result in a spike being seen on the waveform data. This was due to limits being set for the file conversion based on the sample data. When a filter was added, the data could appear to be railed based on those limits resulting in a spike in the data.</p>
3632	F	N/A	<p>Changing the hardware interface from Jacketed External Telemetry (JET) to JET-OpenART did not post a message stating that Ponemah needed to be restarted in order for the change to take effect. A message has been added.</p>
3622	F	N/A	<p>In-house testing revealed a potential for a Data Buffer Overflow condition if the Data Reduction spreadsheet contained 2978 lines of data or more. This large number of lines is not typical for Data Reduction but the issue has been resolved by implementing the acquisition restart feature. It is worth noting that the automatic restart after the overflow will occur within seconds when using Excel 2003. However, if using Excel 2007, the recovery will be on the order of tens of minutes.</p>
3619	F	N/A	<p>Data Manager reported incorrect information for .xlsb files. Data Manager counted one extra occurrence and listed the size as double for .xlsb files when compared to Windows Explorer. Data Manager has been updated to correctly report the number and size of the files.</p>

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
3535	F	NA	<p>The settings for a Trend graph may have been altered if a Replay was performed after disconnecting the ACQ acquisition interface. The channels set in the Trend graph could potentially change (i.e. was set to channel 2, switched to channel 1). This was due to the software still checking the hardware channel count when the acquisition unit was disconnected. When it did not find channels due to the unit being disconnected, it removed configured channels from the Trend graph and set them to defaults. This issue did not affected Review, only Replay.</p>
3328	F	NA	<p>An error message may have been posted when changing settings on a graph page after selecting OK or Apply to confirm the change. The error message "End offset time must be greater than start offset time" is linked to XY (PV Loop) graph pages. However, this message may have appeared randomly when making changes to other types of graph pages such as Primary or Trend.</p>
3284	F	NA	<p>In Review, the trace color for an axis could not be changed unless the user selected the Advanced box. Once checked, selections from the color palette would be utilized.</p>
3251	F	NA	<p>Changes were made to mitigate the chance of Ponemah becoming unresponsive with changes to the acquisition engine. A previous issue existed with the Carrier signal conditioner where communication could be disrupted causing a fault in the communication between the Carrier and the USB module. This resulted in a firmware update to the Carrier signal conditioner (#2936). Even though this issue was linked to the Carrier signal conditioner, software updates were made in the acquisition engine to improve communication when the acquisition devices are modified (signal conditioners, transmitters, etc.) to alleviate the potential for the system to become unresponsive.</p>
3227	F	V49-SP1	<p>The Activity signal was collected incorrectly. The value listed would read 512 and, if graphing, the signal would appear as a flat line (railed signal). This issue occurred as Ponemah was collecting the data, not analyzing. Therefore, there is no fix for previously collected data.</p> <p>This occurred in versions 4.80 and 4.90. The issue of saving data incorrectly has been remedied.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3237	F	V49-SP1	<p>4.90 introduced additional features in Data Reduction. Several of the features were reporting the Start Time and End Time for an interval as well as the Duration (End Time minus Start Time). If a time format was chosen that included Real Time (Settings menu), the format and values for the Duration parameter may have been incorrectly reported. This has been corrected to report the correct values and time format for the Duration parameter.</p>
3161	F	V49-SP1	<p>Modifying the OpenART settings after saving could result in an incorrect setup file. The scenario to create this issue would be to configure the telemetry devices, save the protocol and then reenter the Edit DSI Setup menu and make changes to the configuration. If modifications were made to the transmitter information, the system did not properly handle the new channel configuration. This may have been seen by viewing the Channel Input Setup menu. Incorrect channel information or multiple Ambient pressure channels may have been displayed.</p> <p>NOTE: Incorporating this fix will result in label information or other settings not being recalled from the 7700 Amplifier Setup menu, when loaded. Entering this information after implementing the fix will correctly save this information.</p> <p>Work-around: If this fix is not implemented, the user may delete the associated .amp file and reconfigure the settings if changes are needed or do not make modifications in the Edit DSI Setup menu after saving the protocol. If using the Sync functionality, configure the OpenART sources first.</p>
3244	F	V49-SP1	<p>Similar issue related to Tracker #3237 with regards to time format. With the introduction of a separate Start Time and End Time, the format for the End Time was not consistent with the Start Time during acquisition or replay. The End Time would report Real Time. In previous versions, T0 was always reported in Real Time. This has been updated to report Elapsed Time to match the rest of the Data Reduction output. This was not an issue in the previous version since only the End Time was reported for an interval.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3245	F	V49-SP1	<p>The Application Log did not list default values for pressure compensation if an eAPR-1 was not available when starting an acquisition using the JET interface.</p> <p>If an eAPR-1 is not available when starting an acquisition, the user will be warned but may still continue with the acquisition using a default ambient pressure value of 760mmHg. The Application Log has been updated to list that the eAPR-1 unit was not available and that 760mmHg was used as the default value.</p>
3253	F	V49-SP1	<p>Various error messages are placed in the Application Log file, as well as presented to the user, as they occur during system operation. Several messages were placed in the log file but not presented to the user. These messages are as follows:</p> <ul style="list-style-type: none"> • Some DSI sources did not start • No DSI source available • DSI Acquisition Error • DSI Acquisition Error(unknown) <p>The messages have been updated to be presented to the user as well as placed in the log file.</p>
3268	F	V49-SP1	<p>When synchronizing hardwired and telemetry signals using a Dell 755 PC, the system would ultimately lose its sync. This was a result of an incompatibility between the PC's processing speed, the sync card and the software. The software was requesting information faster than the sync card could answer the request which resulted in the information not propagating through the system as expected. This could be seen by opening Window's Event Viewer. Information would be logged in Event Viewer denoting that 7700 ticks have stopped/started.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3270	F	V49-SP2	<p>When using the sync feature to synchronize the USB-OpenART acquisition units (ACQ7700/ACQ16 and OpenART), the Event Viewer log was not updated if the service was stopped.</p> <p>If the time sync service was stopped during acquisition and then restarted, the dsiTimeSync log (Event Viewer) was not updated with any information stating that the 7700 ticks had stopped. This has been corrected to post a message when the service is stopped during acquisition.</p> <p>This issue does not exist when synchronizing JET and OpenART.</p>
3272	F	V49-SP2	<p>If the Measurement Computing PCI card (used to sync two acquisition units) was removed from the workstation, no information was placed into the log file indicating that the card was not found.</p> <p>Two new error messages have been added to the dsiTimeSync log to indicate that the PCI card was not found and the 7700 counter could not be read.</p>
3277	F	V49-SP2	<p>If an acquisition was stopped unexpectedly (for example, power loss), the possibility of not having the Jump table information properly written to the end of the RAW file was possible. This could result in an error message when the file was replayed or reviewed stating that the Jump table is missing or corrupt. Replaying the file and performing a Jump to Event/Time from the toolbar menu (or Functions menu) would recreate the needed information and correct the issue. However, the mechanism to correct for this issue did not always function as expected. A correction has been made to allow the user to fix missing or corrupt jump information in these rare instances by performing a Jump to Event/Time in replay as intended.</p>
3285	F	V49-SP2	<p>Default synchronization timing for the JET-OpenART interface is +/-100ms. However, the synchronization for these two acquisition engines can be set as low as +/-20ms. It was found that after acquiring data for several hours, the tolerance could have been greater than the user defined +/-20ms. Updates have been made to ensure that the level of synchronization for this setting does not exceed the +/-20ms.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3287	F	V49-SP2	<p>Channel Mapping (Channel Configuration menu) allows users to move and group channels together that do not follow each other in a consecutive fashion in the Channel Input Setup menu. This is utilized primarily with the sync feature when synchronizing two acquisition units. The order in which the channels appear may be modified using mapping but the sample rates for the channel stay with the input from the Channel Input Setup menu.</p> <p>For example, the Channel Input Setup dialog has channels 1-3 enabled which are assigned to the BP, ECG, and Temp analysis, respectively. Additionally, BP and ECG are assigned to a primary sample rate of 1000Hz and Temp is assigned to a secondary sample rate of 50Hz. Using the mapping feature, input 3 (Temp) is moved above input 2 (1, 3, and 2). While the order has changed, the sample rate defined for input 3 remains in that position and therefore channel 2 (BP) will be sampled at 50Hz (and Temp at 1000Hz).</p> <p>The software now posts a message when changes are made to this menu alerting users to the fact that the A/D sample rates may need to be modified due to changes in the channel mapping.</p>
3380	F	V49-SP2	<p>Ponemah Version 4.90 did not function properly on the French Windows operating system. For new installations, this issue would present itself when selecting a license file (after installing the software program) which would result in Ponemah closing unexpectedly.</p>
3383	F	V49-SP2	<p>When running long acquisitions or acquisitions that had a very short logging rate such as 1 epoch, raw data would become corrupt when Excel reached the line limit (for example 65,535 lines) and posted the warning message alerting the user to this condition. The corruption of data would continue until the warning message was cleared and then acquisition would return to normal. This has been corrected.</p>

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
3288	F	V49-SP4	<p>Analyzing a signal that contained railed data may have resulted in a shift in the signal's baseline. If a section of data was railed (flat line at the top or bottom of the scale due to exceeding the High and Low limits of the hardware), applying a Low Pass filter could have resulted in the signal not returning to its original baseline after the signal came back on line from the railed position. This shift in baseline could have been both positive and negative. This issue occurred randomly only in Review when a Low Pass filter was enabled.</p> <p>This would affect presentation signals, trend graphs and derived (calculated) data where the derived data was dependent on a baseline reference as opposed to a reference on the signal itself (for example, Q wave for ECG analysis is considered the iso-electric point).</p> <p>Work-around: Disable the Low Pass filter in Ponemah if not implementing the fix.</p>
Video Option			
N/A	E	N/A	<p>Added additional features to the video option for tracking and syncing while in Review. A cursor has been added that tracks video time in all graph pages associated with that camera, except XY presentations. Additionally, derived parameter and data reduction windows shall be synced with video as it plays. Users may still sort and scroll on the derived data which will stop the synchronization. The user may then double-click on a derived data line or click on the Sync button (video window) to resume the sync. Users may disable the sync feature in the Review menu in the Application Configuration dialog.</p>
Data Security Option (DSO)			
3353	F	N/A	<p>Data Manager would stop when attempting to move/copy files if that file(s) already existed in the destination directory. Also, no message was posted to the user alerting them to the fact that all files were not copied. This occurred when the security preferences (access card) did not have the ability to overwrite the files. See also 3351.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3471	F	V49-SP3	<p>The Study Search Paths dialog did not have security restrictions similar to other dialogs/functions. This meant that the settings in this dialog could not be restricted under the Data Security Option and could be modified by any user.</p> <p>A security bit (Study- Study Search Path) has been created for the Study Search Paths and can be enabled or disabled through the Setup Access Levels dialog. When the feature is restricted, users cannot modify any settings in the dialog. If access to this feature is available, the user will have the ability to change any information in the dialog.</p>
Jacketed External Telemetry (JET)			
N/A	E	N/A	<p>Automatic checks have been added to JET to ensure proper optimization of the JET Receivers. When an optimization is performed, Ponemah shall save the optimization, ID, time, receivers included, and the RF band for each receiver to each receiver on study. When an acquisition is started, Ponemah will read this information from all visible receivers to ensure that the current optimization is valid. If this information does not match the receiver configuration recognized at startup, Ponemah will post a message and not allow acquisition to continue.</p> <p>The JET startup dialog has been modified to include a listing of those receivers expected to be used on study and those that are visible but not recommended to be used in the Bluetooth environment (not optimized with the current configuration).</p> <p>If receivers have not been previously optimized or if optimized in an earlier version of Ponemah, a message is displayed recommending that optimization is performed.</p> <p>To better represent the changes to this functionality, the name has been changed from JET receiver RF Optimizer to JET System Bluetooth Optimizer.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	N	N/A	<p>Added three additional channels for JET devices to display the accelerations in Gs for the X, Y, and Z directions. Previously, the only output for Activity was the sum of these three directions. If opening an old protocol file, Ponemah will set the new X, Y, and Z channels to inactive through channel mapping to maintain the original protocol setup.</p>
3627	F	N/A	<p>If WRAPs were optimized and then immediately set up in the Jet Device Configuration menu before they completed initialization, Ponemah could close unexpectedly. An occasional error message may have also been posted. The first generation WRAPs were more susceptible to this issue than later generation WRAPs. Changes have been implemented to keep this error from occurring.</p>
3623	F	N/A	<p>In-house testing revealed that replacing batteries during an acquisition would cause Ponemah to close if the batteries were replaced greater eleven hours after failure.</p>
3628	F	N/A	<p>Ponemah became unresponsive if attempting to start an acquisition with all JET devices disabled. Updated the software to disable the JET Graphical User Interface (GUI) when no JET channels are active.</p>
3384	F	N/A	<p>In the JET Device Configuration dialog, JET devices are displayed when detected. If the model type of a device was changed in the detected list, then added to the Active JET Devices list, subsequently clicking on OK would result in a run time error and Ponemah would need to be restarted.</p>
3367	F	N/A	<p>Slight modifications to the Activity calculation have been made. Previously, the Activity calculation had sample rate dependencies which included the Primary A/D Sample Rate. By changing the primary sample rate, Activity values could vary slightly. Changes to the calculation have been made to remove sample rate dependencies for a more precise and accurate calculation.</p>
3273	F	N/A	<p>Calibration values, device type and ID were not outputted to any log file for future identification/review for the JET-BP transmitters. These values have been added to the Experimental Log.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3499	F	N/A	<p>A remote possibility existed where inputs would switch positions if the JET BP jack became partially unplugged. If the jack was pulled from the input connector, but still making contact, signals would still be transmitted but these signals may appear on other channels. To circumvent this potential issue, straps have been added to the JET devices that secure the jack in place.</p>
3267	F	V49-SP2	<p>JET devices may have had trouble reconnecting if taken out of range in large installations. Reconnects may have been slower than expected with a potential to not reconnect for hours, although this was extremely rare. Therefore, additional safeguards have been placed to monitor the stopping and starting of data from the transmitters to better handle situations when transmitters are transitioned back into the data stream. Note that proper optimization would help to avoid this issue.</p> <p>This entry is related to Tracker #3285 which was previously listed in Service Pack 2.</p>
N/A	E	V49-SP1	<p>Added auto reconnect functionality to the eAPR-1. The software will automatically attempt to reconnect to the device during acquisition if the connection has been lost. This only affects JET BP systems.</p>
2529	F	V49-SP2	<p>No message was posted in the log file if a WRAP server lost connection during an acquisition. The log file now displays a message that connection has failed.</p>

DSI Corporate Headquarters119 14th Street NW Suite 100

St. Paul, MN 55112

P: +1 (651) 481.7400 • F: +1 (651) 481.7404

www.datasci.com

Ponemah Operations

5525 Cloverleaf Parkway

Valley View, OH 44125

P: +1 (216) 328.7000 • F: +1 (216) 328.7400

www.ponemah.com

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3466	F	V49-SP4	<p>A communication issue existed where data could be discarded or displayed on an incorrect channel. The likelihood of this issue occurring was extremely remote since a number of specific conditions needed to be met in order to create this issue. Additionally, this issue is theoretically not plausible in any system configuration other than version 4.90-SP2 (Service Pack 2).</p> <p>The triggers for this issue to occur are as follows:</p> <ul style="list-style-type: none"> • A noisy Bluetooth environment where disconnects would be vastly increased resulting in greater amounts of data needing to be buffered. • A disconnect of a JET device followed by a reconnect of the device in a very short period of time. • 4.90 SP2: With Service Pack 2, the identified period for reconnects would be within 1-4 seconds. All other versions are in the magnitude of microseconds, thereby eliminating the possibility of this happening in any other version. <p>If the above conditions are met, the data would be affected in the following manner:</p> <ul style="list-style-type: none"> • If multiple sample rates exist, the channels sampled at the Primary A/D rate will display invalid data every 20ms. Channels sampled at the Secondary A/D rate will display data from another channel. <p>If all channels are sampled at the Primary sample rate, 100ms of data will be discarded which would result in lost time and would compromise alignment of data if the Sync feature was being utilized.</p>
Study Protocol Option			

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3630	F	N/A	<p>No data may have been placed into the SQL database for the Data Reduction values if the protocol was changed and the derived output for these protocols did not match.</p> <p>An example would be where a Study is created using Protocol A. Data is then acquired with this protocol. If Protocol A is then replaced with Protocol B and the number of derived parameters saved in these two protocols do not match, no data will be placed into the database. If the same number of derived parameters were in each protocol but the parameters were not the same (for example, HR, R-H and RR-I for protocol A but HR, ST-I and QT-I for protocol B), data could be placed in incorrect columns in the database.</p>
3634	F	N/A	<p>Synchronizing data to other workstations after data collection has commenced (example, adding additional predose days after an initial predose collection) could result in an incomplete synchronization between workstations. This only occurs if workstations that data are being pushed to currently have the Ponemah program open during the sync. If the Ponemah program is open on the workstations, only a partial sync is performed. The additional day, in this example, will be displayed in the Modify Study dialog but not in the Run Study dialog.</p> <p>To prevent users from experiencing this issue, the following message is posted when synchronizing data or selecting the Become Primary button in order to modify the study configuration.</p> <p>“Ensure that Ponemah is not running on any network workstation.”</p>
See 3399	F	N/A	<p>Removed the 750Hz sample rate. This will affect saved protocols by not allowing acquisition to continue. See Tracker #3399.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3411	F	N/A	<p>When synchronizing data between multiple workstations, the database did not maintain the order of the ColumnID field between the systems. This was not an issue for Ponemah. However, data reported by DSI Reporting could appear out of order if the number of lines generated by Data Reduction was extremely large. The potential for this to occur was very small. With a small number of lines, SQL returned the values in the correct order. As the number of lines increased for Data Reduction (thousands of lines) the likelihood that this would occur would increase.</p>
3523	F	N/A	<p>Using a secured system, the first two entries in the Experimental Protocol Header (by default, Scientist Name and Date) would be overwritten with information from the user's access card. This issue only occurred when acquiring data using the Study Protocol Option and only occurred for Group A.</p>
3213	F	V49-SP1	<p>Zeros were reported for Data Reduction lines in the Summary/Report Setup box when in the Run Study dialog even though valid data existed. This occurred when Subject IDs began with a number. This issue did not occur if Subject IDs started with an alpha character. This has been corrected to accept Subject IDs beginning with a number.</p>
3224	F	V49-SP1	<p>Derived and Data Reduction values would not properly synchronize with other workstations when performing a network study when Subject IDs began with a number (see Tracker #3213). No error would be reported to the user and the user would only be alerted to this issue if attempting subsequent syncs, since this action would fail. This has been corrected.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3132	F	V49-SP2	<p>Ponemah would appear to be unresponsive when saving a very large Marks Section (Save Run) within Study.</p> <p>A progress dialog is displayed when a save is performed. However, after the dialog closes additional processing is still taking place making it appear to the user that the system is not responding. The system could still process data for up to 20 minutes after the progress dialog has disappeared depending on the workstation specifications and file size. However, if the system was not stopped and allowed to continue processing, the saving of data completed as expected.</p> <p>Changes have been made to how the data is processed and ordered to optimize saving. For very large files, some additional processing may take place after the progress dialog has disappeared. However, this time should be minimal.</p>
3275	F	V49-SP2	<p>Within Study, saving a Marks Section during Review would create an .xlsb file (Microsoft Excel 2007) with no dot prior to the file extension. This has been corrected to create the file extension appropriately.</p>
3282	F	V49-SP2	<p>An incorrect permissions setting resulted in an error message being posted when performing the Backup Study function that did not adequately identify the issue.</p> <p>The error message was posted when the account used by SQL Server (by default, the SYSTEM account) did not have write access to the P3PlusTempDirectory which caused the backup to fail. The following message was posted:</p> <p>“Cannot open backup device ‘C:\LSS\P3PlusTempDir\TmpBackupFile.sdybkup’. Device error or device off-line. See the SQL Server error log for more details. BACKUP DATABASE is terminating abnormally.”</p> <p>The following hint was added to help users better understand why the issue occurred and allow them to correct the issue internally:</p> <p>“This can be caused by permission problems for directory <‘C:\LSS\P3PlusTempDir’>. SQL Server service needs to be run under an account that has full access to the directory.”</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3296	F	V49-SP2	<p>Version 4.90 utilized Microsoft SQL Server 2005 Express Edition which was an updated version of the database. The previous version was Microsoft SQL Server 2000 (MSDE). Data generated using the Study Protocol Option is placed into the database as well as the ODBC generated files (Access and Excel). It is not possible to back up a study using 2005 and restore the backup file to a workstation running 2000. When an attempt is made to perform a back up to a previous version of the database, the following message is posted alerting the user to an error condition:</p> <p>“Too many backup devices specified for backup or restore; only 64 are allowed. RESTORE DATABASE is terminating abnormally.”</p> <p>This error does not adequately explain the issue. The following information was added to the message for clarity:</p> <p>“This can be caused by invalid backup devices or restoring a database created by a newer version of SQL server.”</p>
3361	F	V49-SP2	<p>If a Saved Parsed Run was performed during Review, an error was generated after Study was shut down and reopened. The error upon reopening the Study stated that the system was unable to read the RAW file (the specific file was listed) and that another file should be selected. The ability to select the same file and open the file as expected is permitted. However, this error occurred every time the Study was closed, reopened and the Review file selected.</p>
3391	F	V49-SP2	<p>The Study Data Log records information such as calibration values, setup information and changes to analysis when using the Study Protocol Option. This information is also recorded in the individual Experimental Logs through the ODBC interface. However, if the ODBC Interface (Application Configuration menu) was disabled and no Excel or Access files were generated, information for the Data Log did not update. This has been corrected to allow the ODBC Interface to be disabled while still maintaining updates to the Data Log.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3461	F	V49-SP3	<p>If a user performed the Synchronize Entire Study function while logged on as a User to Windows, the sync would not be performed resulting in no data being copied over due to incorrect impersonation for the User accounts. However, if logged on as an Administrator, the synchronization occurred as expected.</p> <p>Files are copied to the temporary directory, P3PlusTempDir, impersonation is performed and files are copied to the desired directory under the P3 Administrator account.</p>
3463	F	V49-SP3	<p>When synchronizing study data, the Study Data Logs were not synchronized and combined with other Data Logs from other workstations. The Data Log was originally designed to reside locally. This has been updated to include the Study Data Log information when synchronizing data from workstations.</p> <p>Study Data Log information will now be combined in a single database table and include information from all workstations when sync is performed.</p>
3467	F	V49-SP3	<p>If mapped drives were configured in the Study Search Paths dialog and these mapped drives later removed from Windows, performing a Synchronize Entire Study would result in Ponemah closing since it no longer had access to the mapped drives.</p> <p>This was limited to an error check when searching for the missing drives.</p>
3448	F	V49-SP3	<p>A “?” was displayed next to files in the Verify Files dialog (if using the Data Security Option) after performing a Synchronize Entire Study when a check mark indicating that the files have not been modified should have been displayed. This was a result of the signature files not being copied over.</p> <p>This corrects for broken call to copy signature files when the security option is enabled.</p>

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3472	F	V49-SP3	<p>A potential gap in system configuration settings existed where information from the Study Search Paths was not recorded.</p> <p>Initial configuration information from these dialogs will be logged in the Application Log along with any changes that occur after a Study has been created. After loading Service Pack 3 (or later) and running the Ponemah application, this information will be logged to the Application Log file automatically. Any changes that occur will be placed in the Application Log file after selecting OK in the Study Search Paths dialog. This information is placed in the Application Log, as opposed to Study specific logs, since this information is a global system setting and not a study specific setting.</p>
3469	F	V49-SP4	<p>Previously, the ability to verify a Study configuration prior to acquiring data was not possible through the Study Log files. This Log information was only displayed after the first acquisition was performed on a workstation. An Export button has been added to the Manage Studies dialog. This will allow the Study setup information to be exported to Excel (not Access) for review prior to any data being collected.</p>
3475	F	V49-SP4	<p>If a Sync was performed and one of the files that was to be copied was not present in the specified location (for example, .EVT or .SIG file), a message was posted alerting the user to that fact that the file(s) did not exist. However, the message did not inform the user that no files would be copied. The message has been expanded to notify the user that no data will be copied as a result of not finding all files.</p>
3478	F	V49-SP4	<p>If a Network Study was configured, and one of the workstations configured had not run an acquisition, the study directory (folder structure created in Windows) was not created. If Synchronize Entire Study was performed by that workstation, no data would be copied to the workstation. However, when a Review was performed, the directory would be created and the appropriate files copied for that Run. After a Review, a Synchronize Entire Study could be performed and would function as expected.</p>
Data Review			

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	N	N/A	<p>Bad Data Marks Percentage is a feature that allows the user to determine the percentage of valid cycles that have been detected in a segment. The numerical values are displayed along with graphical information. This allows the user to quickly identify if enough data has been analyzed for a given experiment. From this information, the user can determine if attributes such as Noise need to be adjusted in order to satisfy minimum data requirements.</p> <p>This feature can be enabled in the Advanced dialog in the Application Configuration menu. Change the value from 0 to 1 to enable. When enabled, this feature can be accessed under the File menu while in Review.</p>
N/A	N	N/A	<p>Added HRV analysis for ECG data and BPV (blood pressure variability) for blood pressure data. Users can configure and save settings for the variability analysis including Windowing method, Binning of frequencies, interpolation method, as well as other standard functions for frequency analysis of the signals. Note that only frequency domain is currently supported.</p>
3374	F	N/A	<p>In the Review Print Setup dialog, users could decide how validation marks would be printed by selecting one of the options under Validation Marks. Template graph pages would print all marks regardless of what was selected. This has been corrected to match the user's selection.</p>
3626	F	N/A	<p>Performance may have been impacted with Group mode for bad data mark enabled. Opening a Review file may have taken longer than typically needed if this feature was enabled in the Settings dialog. Also, if adding Bad Data Marks in Review with this setting, the software may have appeared to be frozen for an extended period of time before updating as expected. This has been updated to process the data in a time frame expected for this functionality.</p>
3459	F	N/A	<p>A file specific error was encountered when loading a Review file which stated the error existed in TemplMatches.cpp (exact error for this file was "Error 536870914 at line 528 in file TemplMatches.cpp"). This prevented the Review file from opening. The current mechanism to verify that template matches exist was slightly modified to allow the Review file to continue to load if the match does not return the expected information.</p>

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3643	F	N/A	<p>A message is posted when opening a review file if insufficient disk space is available. The calculation has been updated to be more precise for cases where hard disk space is limited. Additionally, the message has been updated which recommends selecting a channel or group of channels to open in Review as opposed to opening the entire file.</p>
3190	F	N/A	<p>Opening a Review file after an acquisition may have shown that the derived tables did not complete calculations. Looking at the title bar for the derived window, the indicator would register 99% complete. This was due to how the last few marks may have been handled at the very end of the data file.</p> <p>Work-around: If not implementing the fix, Replay the file and then open the newly created Review file. The final marks at the end of the file will be correctly handled and the indicator will register 100% complete.</p>
3590	F	N/A	<p>Modifying the QTcK IACF attribute in the ECG attributes dialog did not update the Data Reduction calculations in Review. However, the derived output (DRx) was updated. If a reanalysis was performed or the logging rate modified, the change in the QTcK IACF parameter was used correctly in Data Reduction. This has been corrected in Review to update when a change is made to the attribute.</p>
3191	F	V49-SP1	<p>Analyzing data between Parser View Mode and normal view (all data) could potentially result in an error message being posted stating that an issue in allocating memory exists. This unlikely scenario is only recreated by analyzing data in Parser View Mode, switching back to normal view and analyzing data and then repeating this process over and over. Eventually, the system will post an error message.</p>
3257	F	V49-SP1	<p>Entering Parser View Mode with a Template graph page configured with no template cycles in the page would cause Ponemah to close. This has been corrected so that Ponemah does not close under these conditions.</p>

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
3261	F	V49-SP1	<p>Ponemah would close if a cycle with partial validation marks was added to the template library and analyzed. The scenario where partial validation marks existed and Ponemah closed involved Parser Segments. If a Parser Segment was created that intersected a cycle (the full cycle not within the Parser Segment), entering Parser View Mode would remove some or all validation marks from that cycle (depending on where the Parser Segment intersected that cycle) due to insufficient cycle information contained in the segment. If this cycle, with partial marks, was added to the template library, an error was posted stating, "Invalid data to setup up template". The user was allowed to continue and add the cycle to the library. If data was then analyzed using that cycle, the software would close.</p> <p>This has been corrected to not allow cycles to be added to the template library that are affected by the borders of Parser Segments which would result in insufficient cycle information being added.</p>

DSI Corporate Headquarters119 14th Street NW Suite 100

St. Paul, MN 55112

P: +1 (651) 481.7400 • F: +1 (651) 481.7404

www.datasci.com

Ponemah Operations

5525 Cloverleaf Parkway

Valley View, OH 44125

P: +1 (216) 328.7000 • F: +1 (216) 328.7400

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Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
2534	F	V49-SP2	<p>The Snap Zoom In feature in Review has a limit as to how far the ratio of samples per pixel may be expanded in order to preserve signal resolution by requiring a fixed number of samples be visible at all times in the graph.</p> <p>An issue occurred that did not allow the user to fully utilize the zoom feature if two sample rates were used during data collection and the secondary channels were configured but not graphed when in Review. If all channels sampled at the slower rate were configured in the Graph Setup dialog but were disabled, it would be expected that the limit would be based only on those channels being displayed in the graph page (enabled graph channels only). However, this was not the case. If a channel with a secondary sample rate was configured but disabled, Ponemah used this information to determine the minimum number of samples to be displayed in the graph at any one time.</p> <p>Therefore, if data were acquired with two sample rates, when in Review the Snap Zoom In feature was limited by any channel configured in the Graph Setup dialog (even when disabled) with a secondary sample rate. This has been updated to calculate the minimum number of samples based on currently enabled channels.</p> <p>Work-around: Change any disabled channels with a secondary rate to a channel with a primary sample rate and disable again (if not implementing the fix).</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3266	F	V49-SP2	<p>The ability to move a validation mark from one parser segment to another existed resulting in two cycles within one Parser Segment with the same cycle number. This could ultimately lead to Ponemah closing. However, this issue is not easily recreated and multiple steps are needed to move a validation mark into another Parser segment.</p> <p>This issue occurred when a validation mark from the first cycle in a Parser Segment is dragged to the left edge of the Parser Segment. Once the validation mark was placed at the left edge of the segment, the user could not drag the mark any further. At that point, zooming in on the signal to a very high resolution would allow the validation mark to be moved to the parser segment on the left. Zooming in on the signal typically had to be performed multiple times in order to recreate this issue and the segments had to be contiguous (no gaps between segments). The software now guards against this situation and does not permit the validation mark to move across Parser Segments.</p>
3280	F	V49-SP2	<p>Opening a Review file with an XY presentation enabled could have resulted in Ponemah closing unexpectedly. This has been corrected.</p>
3305/3326	F	V49-SP2	<p>When working with very large Review files, analyzing multiple channels before the file was fully loaded (calculations at 100%) may have resulted in Ponemah closing unexpectedly. A change has been implemented to allow the user to analyze large data Review files, prior to the file being fully loaded, without incidence.</p>
3358	F	V49-SP2	<p>Review calculates data based on beat information. This resulted in an inconsistency in how the Line parameter (Data Reduction) was calculated and reported between acquisition and Review. When Line was specified in Review, the last cycle (not the last logged line of data) was pulled into the Data Reduction sheet.</p> <p>An update to the Line parameter calculation provides consistency with the calculation during acquisition (or replay). When in Review, the data for the Line parameter will match the last logged line of data in the DRx list view for a given Data Reduction interval.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3370	F	V49-SP2	<p>If a Review file was opened using Open Review File and then Review was closed, the protocol listed in the title bar while in idle mode would still list the protocol name that was loaded prior to loading the review file but the settings would be that of the Review file. If the review file is loaded using Recent Review Files, this problem did not occur. This has been corrected.</p>
3316	F	V49-SP2	<p>Event files (.EVT) were inadvertently not signed after an acquisition. The .EVT files were marked with a question mark instead of a green check mark when a verification of the files was performed.</p>
3364	F	V49-SP2	<p>Data Manager had a single security permission which either permitted the user to access the dialog or restricted the user from entering the dialog. If the user had access, the ability to Move, Copy, and Delete files were available. Greater control was needed since deletion of data is generally restricted in typical user environments. The security permissions have been updated to allow individual control over moving, copying and deleting data. The original security permission has been removed.</p> <p>NOTE: This change requires an update to Access Levels on all workstations. Each Access Level must be reconfigured to support this update. By default, loading the service pack will disable access to the Data Manager dialog.</p>
2996	F	V49-SP2	<p>When attempting to open a review file from a mapped network drive on a secured system, an error message appeared stating that the review file was unable to be opened and that the access permissions should be checked. An update has been made to address how review files are recognized when using mapped drives to browse for the files.</p>
3382	F	V49-SP2	<p>Microsoft Excel files (.xls) may not have appeared in the Verify dialog under a secured system. If .xls and .xlsb files were both present in the Verify Files dialog, when .xlsb files were found alphabetically in the dialog no subsequent .xls files would be listed.</p>

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
3490	F	V49-SP4	<p>Ponemah would close unexpectedly when exiting Review due to graph pages being configured to a size not recognized by the system. If graph pages were sized such that only the title bar or a portion of the title bar was visible (scaled to minimum size possible), Ponemah would close upon exiting Review.</p>
3515	F	V49-SP4	<p>Older versions of Ponemah created a .JMP file (Jump file) which was separate from other files. In recent versions of the software, the Jump file has been appended to the .RAW file. An issue was reported where Ponemah would post a “PPP3.exe” error alerting the user that Ponemah must shut down when the Review file was opened. This was due to the corruption of the separate .JMP file from the older version of Ponemah. A message has been added to notify the user that the .JMP file has been corrupted.</p> <p>To correct the corrupted .JMP file, delete or rename the .JMP file in the directory and reopen the Review file. Review will create a new .JMP file if no file exists and the Review file will open as expected.</p>
3374	F	N/A	<p>Print displayed marks option did not function as expected. All validation marks would be included when printing a Template graph page in Review regardless of what marks were enabled.</p>
OpenART			
N/A	N	N/A	<p>Added support for OpenART 4.3. Ponemah 5.00 is only compatible with OpenART version 4.3 (included on CD) which supports the HD transmitter platform.</p>
N/A	N	N/A	<p>Ponemah checks to see if all sources (transmitters) are found when starting an acquisition. Any sources that are not found are displayed to the user in a message box. If acquisition continued, those sources would not be included in the data collection. Therefore, users would need to wait and restart acquisition until the source was found or physically move the animal in its cage in order to detect the signal.</p> <p>Ponemah now has the ability to continue to search for a source after acquisition has started. The software will continually search for the source and, once found, will bring that source on line with the other sources.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
N/A	E	V49-SP1	<p>New transmitter definitions have been added to allow the configuration of a BPR channel (Respiration from Blood Pressure analysis module, model PNM-BPR100W) from the current pressure transmitters. The following transmitters have been added:</p> <p>TA11PA-C20-BPR TA11PA-C10-BPR TA11PA-C40-BPR TA11PA-D70-BPR TL10M2-D70-PC-BPR TL11M2-C50-PT-BPR TL11M2-C50-PXT-BPR TL11M2-D70-PCT-BPR TL11M3-D70-CCP-BPR TL11M3-D70-CCTP-BPR TL11M3-D70-PCP-BPR TL11M3-D70-PCTP-BPR</p> <p>Previous modifications to the BP (Blood Pressure, model PNM-BP100W) and BPR analysis modules have resulted in the BPR analysis being removed from the BP analysis. This change allowed BPR to be available during Review.</p> <p>NOTE: In order to utilize the new transmitter definitions, the .mdb file will need to be copied to the correct location. The default location is C:\Dataquest OpenART. Copy the file from the Service Pack over the existing file that resides in that directory.</p>
3516	F	V49-SP4	<p>Data could rail (positive or negative) when a card reset occurs on the PCI or PCIe card. This rail would occur at one second boundaries after a reset on any channel set to a Secondary A/D sample rate.</p>
ACQ 7700 Signal Conditioners			
N/A	N	V49-SP1	<p>The 13-7715-59 Universal XE signal conditioner has been developed and is the latest signal conditioner to be added to the 7700 series line. This signal conditioner replaces the current Universal, model 13-7715-58, and provides all of the features of the previous conditioner as well as enhancements such as four channels per unit and an expanded gain range.</p>

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3556	F	N/A	The log entries for the Low Pass filter settings in the Carrier signal conditioner were incorrect. The entries that were logged to the file were “ Off, 10, and 30Hz . The supported filter settings are 10, 30, and 100Hz . There was no issue with the function of the filters and all performed as expected at the selected cut-off frequency while acquiring data. This issue was isolated only to reporting the correct filter setting in the log file.
3480	F	V49-SP4	Setting the High Pass filter in the signal conditioner to Probe should have defaulted to DC . However, a 0.05Hz High Pass filter was enabled when selecting the Probe setting. This has been corrected to default to DC .
3481	F	V49-SP4	When Probe was set for the High Pass filter, an incorrect value of 300Hz was placed in the log file. This has been corrected.
3502	F	V49-SP4	Changing High Pass filter settings would result in an offset. To create the issue, a High Pass filter must be selected (something other than DC or Probe). If the filter setting was then changed to DC , an offset from zero could be seen on the signal.
CRS 800 Recorder			
3347	F	V49-SP2	Configuration and Offsets/Scales were not properly recalled when replaying data which prohibited the user from changing Configurations and using the Offsets and Scaling functions. It may have also led to incorrect signals being printed. This issue occurred if the software did not recognize the acquisition hardware device upon starting Ponemah (device was not attached or the device was not powered). If the acquisition unit was recognized, this issue did not occur. This has been corrected to allow the Configuration and Offsets/Scales functionality to be utilized without hardware being recognized.
Open Issues and Miscellaneous Items			

Reference #	Type of Change	Previously Fixed	Key: N = New Feature; E = Enhancement; F = Fix Description
N/A	N/A	N/A	<p>An issue has been discovered when using the Sync functionality (OpenART plus an ACQ USB device) with a Dell 960 workstation. There appears to be a conflict with the PCIe card and the USB host controller. This conflict results in card resets and possible termination of the acquisition. DSI currently sells and tests software using the Dell Optiplex series computers. No issue exists with this configuration.</p> <p>Currently, no solution exists for the Dell 960 and testing all available computer configurations is not feasible. If you have questions regarding the Sync configuration, please contact technical support.</p>
2881	N/A	N/A	<p>Files can be overwritten if data is moved, replayed and then acquisition performed without changing dataset names. After acquisition, if all files are copied to a subdirectory in LSS_Data, those files then replayed and then an acquisition performed (dataset name not changed), the original files will be overwritten.</p> <p>Work-around: If the user views/accesses the Data Set Name menu from the Acquisition pull-down menu or the Data Paths option in the Application Configuration dialog, data will be written to the correct location.</p>
3356	N/A	N/A	<p>After configuring a protocol with video cameras, disconnecting the interface cables to the cameras and starting an acquisition will post errors. Clicking No to all the video errors will finally post a message asking if you would like to continue with the acquisition. At that point, Ponemah will close.</p>
3390	N/A	N/A	<p>If a Replay is performed on a secured system (Data Security Option) with a study that was created without security, Ponemah will close.</p> <p>Work-around: Unsecure the system to perform the Replay.</p>
3398	N/A	N/A	<p>Ponemah will close unexpectedly if specific steps are performed while in Study and after exiting study.</p> <p>While in Study, select Edit DSI Sources dialog after stopping an acquisition. Next, exist Study and select Product Information from the Help pull-down menu. Ponemah may close.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3425	N/A	N/A	<p>Ponemah may close under the following conditions. Select a RAW file to Replay and then save a Data Set Name under the Replay drop down menu. Next, save a Data Set Name under the Acquisition Drop down menu to a different directory than the Data Set Name saved under the Replay drop down menu. Select Start Replay and Ponemah may close.</p>
3470	N/A	N/A	<p>If logged on to Windows as a User under the DSO environment (Data Security Option), Ponemah will close if using the Copy Previous Study option. A Windows C++ Runtime Error is posted and Ponemah will close upon clearing the message.</p> <p>Work-around: Log on as an Administrator under the DSO environment to copy the study or create the study without using the copy feature (when using User privileges).</p>
3489	N/A	N/A	<p>Open a large review file with Data Parser segments. Go into Parser View Mode immediately and then select other menu options as quickly as possible. This may cause Ponemah to close. This is a speed issue when accessing the menus. Under normal navigation, this issue is not seen.</p> <p>Work-Around: Access dialogs under normal conditions (speed).</p>
3531	N/A	N/A	<p>When performing a backup in the Study Protocol Option, Ponemah may become unresponsive. This occurred less than 1% of the time through in-house testing.</p>
3536	N/A	N/A	<p>Review will close when opening a file with a large number of events in a logging period. The logging period is how often data is reported and logged into the spreadsheets. If 21 events (or greater) exist in a logging interval, Ponemah will close upon opening the Review file. Also, if 21 events are added during Review, Ponemah will close.</p> <p>Work-around: Do not exceed this limit when placing events in a logging period.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3539	N/A	N/A	<p>Study Logs (Study Protocol Option) are not transferred to all other workstations when performing a sync operation. This is by design. Study Logs contain more global or system information and not study specific details like the Data Logs.</p> <p>Work-around: Archive the SQL database information from the local machines. This information can be found in Program Files => Microsoft SQL Server => MSSQL\$P3PLUS (or P3PLUSTEST) => Data.</p>
3545	N/A	N/A	<p>The parameter Avg%Chg (Data Reduction) will report x's in Review if Scatter or Trend graphs are redrawn before the calculations have completed.</p> <p>Work-around: Do not manipulate Trend or Scatter graphs until calculations have completed.</p>
3546	N/A	N/A	<p>If a Restore of a study is done from two different backups (from two different computers), the information in the Study and Data logs is overwritten and not appended.</p> <p>Work-around: If restoring from multiple machines, Archive the SQL database information from the local machines prior to restoring. This information can be found in Program Files => Microsoft SQL Server => MSSQL\$P3PLUS (or P3PLUSTEST) => Data.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3551	N/A	N/A	<p>Using Network Study, information and data can be synced to other workstations automatically. However, if a workstation receives information while Ponemah is open, this information may not be immediately available. For example, Workstation 1 has made changes to the study configuration and this information has then been sent out to all other workstations permitted to receive the updates. Workstation 2 has Ponemah open when receiving this information. If Workstation 2 has the same study loaded as what is being pushed by Workstation 1, the new information is not immediately available on Workstation 2. The database will update appropriately but the Ponemah program will not have the information until the study is reloaded.</p> <p>Work-around: Ensure that all systems receiving data from a sync do not have Ponemah running. If Ponemah is running and the active study on the workstation receiving the information is the same on the workstation providing the updates, close and reopen Ponemah or reload the study by going to Manage Studies and selecting the study being used.</p>
3564	N/A	N/A	<p>If connection to the SQL database is lost during an acquisition, the error message settingshelper.cpp will appear and Ponemah may close. This error can be reproduced if the network cable is unplugged during acquisition. Also, if the network connection is removed after an acquisition and a Review is done immediately following, Marks sections cannot be saved. In addition to the settingshelper.cpp message, database error messages may also be posted.</p> <p>Work-around: It is not recommended to run acquisitions while networked. If systems are networked, preserve the network connection at all times.</p>
3576	N/A	N/A	<p>The Windows print drivers for the WR-1100-11 are no longer supported. Loading Version 5.00 will still allow normal printing functions of waveforms but it will not support the Window's printer functions. Also, support for <Alt><O> functionality is no longer available.</p>

Reference #	Type of Change	Previously Fixed	<p>Key: N = New Feature; E = Enhancement; F = Fix</p> <p>Description</p>
3593	N/A	N/A	<p>Restoring a Study (data collected using the Study Protocol Option) changes the permissions for that restored database. This has no effect when using Ponemah or DSI Reporting. However, if it is desired to access the SQL database outside of Ponemah in order to pull data into some other program, Window's Users will not be able to access the database.</p> <p>Work-around: Log on as an Administrator to Windows in order to access the database. Another option is to have an Administrator grant permissions in SQL to the appropriate Window's accounts that need access to the database outside of Ponemah.</p>
3597	N/A	N/A	<p>An issue exists with versions 4.80-SP2 and earlier. If using JET receivers with firmware version 3.2 or greater, optimization cannot be performed (RF Optimizer) and the receivers need to be reprogrammed before they may be used again. This is not an issue with versions greater than 4.80-SP2.</p>
3618	N/A	N/A	<p>Under specific conditions, analyzing an ECG signal in Review results in the error, ECG.C - Unexpected error: Time not found in segment. This occurs if the Noise feature is enabled and the first x number seconds of data being analyzed does not have a valid complex (no marked cycle). The x seconds refers to the beginning data that is visible in the attributes window when selecting OK in the Effects and Scope of Changes dialog. The time is variable and is based on Min HR. If Min HR is set to 20 (BPM), then no valid cycles within 3 seconds will produce this error. If Min HR is set to 30, then no valid cycles within 2 seconds will produce this error.</p>
3635	N/A	N/A	<p>Ponemah 5.00 will not run if video components from earlier versions (video components version 1.03) are installed.</p> <p>Work-around: Install video components that are included on the Ponemah 5.00 CD if using this option.</p>