```
***************************************************************************
*              11.2.0 Driver Update RC                                    *
*              - December 14, 2018                      *
*              - PowerDB 11.2.0           (INSTALL CHANGE)  *
*              - AVO_MPRT.D100.16                    (DRIVER/FORM CHANGE)  *
***************************************************************************
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AVO_MPRT (MRCT):
* Fixed bugs in combined report
* Fixed the issue on enabling log for MVCT tablet by default

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***************************************************************************
*              11.2.0                                                     *
*              - December 12, 2018                   *
*              - PowerDB 11.2                       (DRIVER/FORM CHANGE)  *
*              - MEGGER_APC.D100.7        (DRIVER/FORM CHANGE)  *
*              - AVO_MPRT.D100.10                  (DRIVER/FORM CHANGE)  *
***************************************************************************
```

Main Application:
* Fixed an issue where the test status field was not saving correctly on forms that add the header dynamically.
* Fixed an issue that sometimes prevented PowerDB from site licensing when using a VPN.
* Fixed an issue that would sometimes prevent compliance from being enabled when enabling it for the first time.
* Updated the "Org Levels Used" setting in admin tools to default to the current number of org levels used.
* Updated the CSV export for the PowerDB Pro list views to support custom columns and column orders.
* Fixed a crash in compliance when using less than 8 org levels.
* Combined the active and historical views for the results list
* Fixed several issues with the CSV exports on the Job, Asset, Results and other views.
* Implement support for automatically recording GPS location of test sets.
* Fixed an issue with the instforms feature used by relay forms that was causing occasional crashes opening forms.
* Fixed an issue with the form designer watch window that was causing performance issues.
* Made traces thicker on print for the form 57850 - TJH2b DGA.
* Updated several warning messages to translate properly.
* PdbXml files can now be imported into the asset view.
* Updated the intelligent import subform list when importing form/subform definitions.
* Fixed an issue that was causing the list views to not display occasionally after being refreshed quickly.
* Added new feature to synchronize files in the program data folder or any subfolders.
* Fixed an issue that prevented external documents from being deleted if they were added through drag and drop.
* Fixed an issue where saved number values would not format correctly when switching between different window region settings.
* Fixed an issue with font weight while printing results imported from AVTS.
* Added show and sort by modification date options to the subform tree right-click menu.
* Fixed several issues with jobless mode in PowerDB Pro.

* Fixed an issue where archived relay forms would not load.
* Added support for importing FLIR T640 images.
* Fixed an issue where script and border buttons would not work in chart properties.
* Made changes to new job button when viewing all regions and cross-regional.
* Fixed a crash that occurred when adding an external doc with a filename that was longer than 100 characters.
* Made several improvements, changes, and clarifications to the As Found/As Left option.
* Fixed an issue with page scrolling on forms that are taller than the standard height (11 inches).
* Traces are now thicker when printing the 57850 – TJH2b DGA form.
* Fixed a crash that occurred due to infinitely growing tables.
* Added support for empty org levels in the PowerDB admin options.
* Added the ability to disable job list mode in the jobless style.
* Fixed an issue with the translation window.
* Made several improvements to Proactiv data imports.
* Fixed an issue during database creation that was preventing index maintenance.
* Made changes to the jobless asset dialogue.
* Fixed an issue where creating a new asset from asset list/tree in jobless mode would take the job number from the open job.
* Fixed an issue where an asset opened from the asset tree in jobless mode would not give you the option to copy the nameplate.
* Fixed an issue where opening a new asset from the asset list in jobless mode would not populate the header.
* Fixed several phrases that we're translating in dialogs with multiple pages.
* Fixed an issue with the value of the form open time form tag.
* Changed the PdfLocal temporary folder to delete old print jobs to save space.
* Fixed an issue when performing actions on multiple assets in the asset list while using filters.
* Fixed issues with sync moving records multiple times and added a setting to turn on the enhanced logging.
* Fixed an issue with the save button on the test equipment window.
* Added a checkbox to enable/disable the enhanced sync log in the advanced options.
* Added a new option in sync to use the sync start time as the synchwritedate when moving records. This fixes an issue where sync moves the same record multiple times.
* Implemented support for FLIR model T640.
* Fixed an issue where form dropdowns would sometimes appear on top of other applications.
* Fixed an issue where printing a selection of results in the results list would print additional results if a filter was used.
* Fixed the delete job option in the right click menu in the job list view.
* Fixed an issue where print to PDF was not removing temporary files after printing completes. On large printouts this was taking up a large amount of space.
* Fixed a bug where the variable watch window would continuously update.
* Fixed a bug where existing assets were not available in the add to job wizard.
* Added support for Vanguard version 7 in the Vanguard Import for the EZCT form.
* Corrected an issue causing the row-based csv form export to crash.
* Fixed a crash that occurred when creating certain types of external docs.
* Added support for color-coded test statuses in the job/asset tree views.
* Fixed an issue where underline and bottom border colors could not be changed from black.
* Renaming a folder level from the form header no longer deletes the folder level.

* Fixed an issue when printing results with external documents and implemented support for printing external documents on cover pages/letters.
* Fixed an issue where the import job from folder option was not available in version 11.
* Fixed an issue where rows in the equipment list dialog were sometimes duplicated while sorting.
* Updated the autosave description in User Options to be more accurate.
* The scroll bar now returns to top of the form when changing pages.
* Fixed an issue where PowerDB would crash after opening too many relay forms.
* Improved the way PowerDB handles very large printouts.
* Fixed an issue where PowerDB would crash when trying to create a new database.
* Combined the active and historical filters in the results view.
* Fixed an issue where selecting cancel after copy/pasting a job would copy the job anyway.
* Changed the configuration window title to Database Administration.
* Fixed a bug where changes to external documents were sometimes not being saved.
* Fixed an issue where only the first file would be imported when using the multiple PDBXml file import.
* Fixed an issue where form titles were not translating properly in the default PowerDB header.
* Fixed an issue where the PDBxml import was not importing the org levels.
* Fixed an issue with synchronizing test statuses after updating from version 10.
* Fixed a bug where users could enter more lines than can fit on some multi-line edit fields.

AVO_MPRT (MRCT):
* Added parallelogram in ANSI meter VT report
* Modified saturation test for TPX CT
* Showed assessment in report by default
* In assessment result, made value of RatioError@ 20*Isn to percent and added percent marks to several values.
* Created different accessment tables for metering CT and protection CT in report
* Modified "Add 2.5KV insulation test results" function in report to be generic and allowed ranges to be entered
* Changed for embedded to display results of 1st CT instead of all CTs in report to save time when opening a file
* Changed to limit total number of CTs and cores to 36 for PC software and 18 for embedded mode (12 for first generation STVI)
* Added functionality to test at non-line frequency
* Allow 3 decimal digits for Actual VA input
* Fixed a bug in validating combined report

AVO_MPRT (RTMS):
* General: Hover text added for identifying every icon in the software which requires description.
* Run a Predefined Test icon: It displays the available tests for the specific relay in groups. It can display a maximum of 14 Test group and 14 tests per group as of now.
* Run a Predefined Test icon: It does have "Run," "Run All," "View Results," "Go to Test Screen," "View/Edit notes," "Help,"
* Run a Predefined Test icon: "Edit Test Attributes script" and "Extended action" options.
* Run a Predefined Test icon: Run; run the selected test/s. Multiple tests can be selected using "Shift," "Ctrl" and "both" keys.
* Run a Predefined Test icon: Run All; Allows the user to run all test in the relay or the selected group, etc..
* Run a Predefined Test icon: Go To Test Screen; Allow the user to go to the test screen and edit.

* Run a Predefined Test icon: View/Edit notes; Allow user copy/paste test connections and notes.
* Run a Predefined Test icon: Edit Test Attributes script; Allow the user to define the test parameters using the script.
* Run a Predefined Test icon: Extended action; Allow the user to Duplicate test, Delete Test, etc..
* Global Setting: High burden (50mA -6 A) and Low Current (0A - 50mA) option added in the Hardware page. High Burden option for voltage channels also added in this version.
* Global Setting: the Last V as Bat Enabled, new options added.
* Global Setting: In system Page, Rogowski mode; Low voltage setting option added for new generations test kits.
* Global Setting: New Update Translation option added to update the translations without updating the software by connecting into the Internet.
* Global Setting: New Contact Name, Test specific and Global option allow the user to define the different test name for the same contact used in different tests.
* Global Setting: Default As found, As left As Found/As left, and clear options added.
* Global Setting: Healthy Values setting added in system page, which can be used globally for different tests.
* Home Screen: New setting screen added in Home Screen allows the user to Read, Import XRIO, Import TEX file, Import SEL RDB text file,
* Home Screen: Import RTMS CSV file and Export RTMS CSV file or create settings manually using edit option for the specific relay, and those settings can be used to define the tests.
* Home Screen: New Custom, Symmetrical, Power, Line-Line Voltage and Impedance selection added to view actual test values in a defined format for monitoring purpose.
* Home Screen: Pre-fault test screen time selection added with (ms) selection option along with (s) and (cy).
* Home Screen: New "Stop ramp when contact is closed" option added new to stop the test with contact feedback.
* Home Screen: New Library button is added to launch new predefine relay templates and relay curves from the home screen.
* Home Screen: New Pre-defined Test icon added to handle all tests for the single relay at one place.
* Home Screen: New Relay connection option added to defined the relay connections, it can copy and paste contents with the rich text format.
* Home Screen: Reset button removed from the home screen and added into a "Select New Test" button.
* Home Screen: Now binary inputs can be defined with Horn Enable and Disable.
* Home Screen: Allow the user to set 32A continuous from 30A continuous using Firmware version 4.789.
* Ramp Test: New Simple and Advanced ramp test screens added with advanced features; Including Step ramp, Pulse Ramp, Binary Search ramp and smooth ramp.
* Ramp Test: New Advanced ramp screen allow for ramping both voltage and current outputs at the same time.
* Ramp Test: New ramping screens allow to define 24 ramps maximum including with pre-fault on each ramp.
* Ramp Test: New Advanced ramp screen allow for ramping both voltage and current outputs at the same time.
* Ramp Test: 2nd ramp onwards we shall use "Start is Value," Start Is % last Value" and "Start is Last Value" options to define the start of the ramp as predefined way.
* Ramp Test: New Ramp screen can be linked with settings screen using the script.

* Ramp Test: Each ramp can be defined with different contact with different input action with horn option.
* Ramp Test: Test screens add with "Show/Edit Pre-Test Notes" to add/edit relay test notes and connection details.
* Ramp Test: New Custom, Symmetrical, Power, Line-Line Voltage and Impedance selection added to view actual test values in a defined format for monitoring purpose.
* Ramp Test: Advanced ramp pre-fault screen "Set Harmonic wave value" button allows the user to define the harmonic values for the test.
* Timing: TOC, TOV, and TUV elements add to test Time Over current, Overvoltage and Under voltage relays respectively.
* Timing: Each Timing screen can able to define five independent elements.
* Timing: Use Phase Compensation option added to compensate the un-faulty phases to create an actual fault scenario.
* Timing: In new Timing screen, selected BI cab to define for all test or individual test using "All Tests" and "This Test" option.
* Timing: Also now we display the selected contact name on the test screen.
* Timing: Reset icon in the Timing test screens removed and replaced with "Pre-defined Test " icon.
* Timing: Defined tolerance setting screen as " Elements and Tolerances."
* Timing: Added Tolerances for pickup currents in "Elements and Tolerances" page as "Max I" and "Min I."
* Timing: Relay setting is separate with page different page for each element.
* Timing: "Add Settings to Report" option added in the timing settings screen.
* Sequencer: Allows to define up to 100 states maximum and allows infinite iteration settings.
* Sequencer: Relay Connections allow suer to define test connections and notes.
* Sequencer: New Custom, Symmetrical, Power, Line-Line Voltage and Impedance selection added to view actual test values in a defined format for monitoring purpose.
* Sequencer: Timer setup screen allows the user to use any BI to start/stop any state timer any number of time.
* Sequencer: Timer setup screen adds with "Clear All" button to clear predefined selections.
* Sequencer: TEF test screen added into sequencer screen to test "Intermittent Earth fault" and "Transient Earth fault" function relays.
* Sequencer: Cut,Copy,Paste,Insert,Delete,Duplicate and Duplicate to End options add , delete , copy, paste and duplicate states in a particular test.
* Sequencer: Add new option to define state timer setting in "Cy" and "ms."
* Sequencer: Added New IRIG-B time setting screen. It added with "Refresh" option allow the user to refresh current time every 3 sec.
* Sequencer: It also allows the user to set the test time as "Set Time on the screen," "Set Time+1 Minute" and "Set Time + 5 Minute."
* Sequencer: "Plot States" option add with the new option "Include in Report," which allow the user to add the graphical view of state settings into the report.
* Sequencer: Remove play from a report on main report page and this feature added into "view results" option in the "Predefined Test" option.
* Easy Z Test: Removed option to "Add to results To Report" option.
* Click On to Fault: On the first launch allow the user to select Relay to select and Import RIO file without selecting Library icon or RIO icon.
* Click On to Fault: Predefined Test icon added into the launch screen. Removed the reset icon from Click on fault launch test screen.

* Click On to Fault: Added Import/Export option define with the specific file type in click on the fault settings screen.
* Click On to Fault: Added "Add/Remove settings from the report" option; which allows the user to add or remove settings in the main report page.
* Click On to Fault: Added Edit mode, allows user edit/delete setting name, min/max values and setting descriptions.
* Click On to Fault: "Auto Generate Test Points" option added with "Fewer Lines" and "More Lines" option in case of Search test screens.
* Click On to Fault: RIO icon, Library icon and Predefined Test icons added into the test screen.
* Click On to Fault: "Edit with %Z" option disabled in this release.
* Click On to Fault: Fixed CT direction selection option for all relays.
* Click On to Fault: BI selection grid option added in this release using Advanced mode in BI selection.
* Click On to Fault: BO mapping selection adds in this release as a new feature.
* Click On to Fault: Remove play from a report on main report page and this feature added into "view results" option in the "Predefined Test" option.
* Undefined Characteristics: Add new feature to find "Mho" and "Quad" undefined characteristics of Impedance relays.
* Differential: Removed differential library icon in the main Transformer setting page.
* Differential: Added Differential relays templates in this release; ABB RET670, SIEMENS 7UT613,SIEMENS 7UT85,
* Differential: MICOM P633,MICOM P64x, NARI PCS978, SEL 387, SEL 587, SEL 787 and SIFANG CSC326 relays.
* Differential: "Add settings to Report" option added in the differential setting page.
* Differential: Rearranged the "Characteristics shot test" location in "Change Test" picker.
* Differential: Predefined Test icons added to the differential test screens.
* Differential: "Characteristics Test" renamed as "Characteristics Slope Test."
* Differential: New "Add to Script" option allows the user to add settings to test screen and change those set for a specific test.
* Differential: BI horn setting option enabled.
* Transducer: Transducer Setup screen added with "Constant Voltage," "Constant Current" and "Aux. Voltage" settings for all type of Transducers.
* Transducer: For Frequency Transducer "Aux. Voltage" setting value will apply on the V2 channel for auxiliary input to the transducer.
* Transducer: Phase angle settings for Power factor Transducer is corrected based on element selection.
* Transducer: Now Power factor Max. The setting can set at 0.5pf.
* Transducer: Settling Time and Warm UpTime applied for each test point instead only first test point.
* Transducer: 0% Input percentage error calculation corrected for all transducer types.
* Transducer: Predefined Test icon and Relay Connections icons are added into the Transducer test screens.
* Transducer: Now transducer test screens hold the test result values of the last test.
* Meter: Meter test screen add with, "CT/ PT Ratio settings," "Applied Secondary settings," "Open delta selection setting" and "Hide power section" in the Meter test screen.
* Meter: "Predefined Test icon" add into the Synchronizer test screen.
* Meter: Each voltage and current channels in the test screen can apply with different percentage values, percentage selection setting option added.
* Meter: "Read from relay option" added for all SEL relays using play button on test screen.
* Meter: Measured current values can be now entered as Primary values directly.
* Synchronizer: "Add Setting to Report" option add into setting page.

* Synchronizer: "Vector Group Shift" setting in the "Circuit Breaker Settings" column now editable and it is used to compensate the frequency test lines starting phase angle.
* Synchronizer: "Predefined Test icon" add into the Synchronizer test screen.
* Synchronizer: "Point of Origin" test point selection removed from the Synchronizer test screen.
* Frequency: "Add Setting to Report" option add into setting page.
* Frequency: "Predefined Test icon" add into the Frequency test screen.
* AVTS: AVTS icon removed in this release.
* COMTRADE: "Predefined Test icon" add into the Comtrade test screen.
* COMTRADE: Now we can save imported Comtrade files as a test and reopen to run the test.
* COMTRADE: "Start On Cursor" option timer also can be saved in the file.
* COMTRADE: Added feature to clear all wavenum commands automatically once test completes.
* Power Swing: "Predefined Test icon" add into the Power Swing test screen.
* SS1: New SS1 allow the user to import test files with IRIG-B time setting and also with additional wait time to add.
* SS1: "Short Report" option allows the user to get only executed test results in a particular test file.
* SS1: Current version of SS1 runs on Run using state sequencer test module, which allows users to edit the test easily.
* SS1: New SS1 file can run with Wait IRIG-B option.
* Report: All the tests in the Power DB XML file can run from a single test report page. None of the tests could be run from master report page unless it created with special subforms.

MEGGER_APC (SPIS):
* Fix GETCAL RTS command when using USB connection
* Fixed compiler warning. Modified QC to check for 246 instead of 249
* Updated minimum firmware to 1.0246
* Added Initial PWM to QDYNK response for SPI 4000
* Modified GET_SPI_MEASUREMENT to get OV also(SPI 4000)
* Update to QRYDYNK Response logic for SPI 4000.
* Update Simulation for SPI 4000
* Added support to report No Zero Cross Error
* Changed Waiting for Idle to Initializing SPI
* Fixed Simple reports
* Fix to Save to PDF of the report with multiple pages

MEGGER_TRAX:
* Added support for import of TRAX files into new form 90002.

AVO_TTR:
* Added support for importing data files from new instrument TTRU3.

AVO_BITE:
* Fixed an issue where the Test AC would not populate on import.
* Fixed an issue where header data was not being carried into new results.

AVO_S1:
* Added filter settings to show in the forms.

PROGRAMMA_TORKEL:

* Fixed chart/graph issues


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******************************************************************************
*               11.1.4                                                       *
*               - February 27, 2018                    *
*               - PowerDB 11.1.4            (APP CHANGE)    *
*               - MEGGER_SMARTCLAMP.D100.4        (DRIVER/FORM CHANGE) *
*               - PROGRAMMA_TORKEL.D100.3         (DRIVER/FORM CHANGE) *
*               - AVO_S1.D100.4                   (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.D100.6      (DRIVER/FORM CHANGE)  *
*               - AVO_MPRT.D100.10                      (DRIVER/FORM CHANGE) *
*               - NA_RELAY.D100.2                       (DRIVER/FORM CHANGE) *
*               - AVO_MTO.D100.10                       (DRIVER/FORM CHANGE) *
*               - AVO_TTR.D100.5                        (DRIVER/FORM CHANGE) *
*               - AVO_DELTA2000.D100.6                  (DRIVER/FORM CHANGE) *
******************************************************************************
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PowerDB:
* Added Sizing Buttons to ribbon bar
* Enabled Ethernet passthrough for instruments running Lite
* Added Curve Not Found logic to GetBreakerCurve().
* Instantaneous tolerance was not consider in ST Pickup.
* Fixed display of LT portion of breaker curves when didn't reach full Y scale.
* Adding new automation functions to serialize and deserialize tags to the external documents table.
* Added ability to NOT save Forms controls to PDBXML file.
* Added GetYScale tag command to chart control.

DRIVER/FORMS:
AVO_MPRT(ITMS):
        * Modified CVT ratio test
        * Added logged info to help finding the right test in log file
        * Removed 1A limit on DC saturation graph without knee for TPY/TPZ
        * Fixed a bug of screen scale messing up after loading a file
AVO_MTO:
        * Added support for the MTO330A (12" top panel)
        * Last Digit Stability indication added
        * Added CEE winding difference calculations
        * Added $\mu\Omega$ Max Winding Difference ($\mu\Omega$Max – $\mu\Omega$Min) for windings in $\mu\Omega$ that exceed
traditional CEE or ANSI/IEC difference calculation
MEGGER_APC/SPIS:
        * Fixed Errors and Warnings logging.
        * Fixed Save to PDF issue. Moved Home button. Updated logic to go always to Home after
closing a report from loading from a pdbxml file.
        * Modified RESISTOR bmp.
        * Fixed cursor flicker on the advance test. Fixed Auto Pickup Ramp in Simulation w/Slaves.
Remove Warnings.

* Added support to collect and display output current waveform.
* Added logic to support store and retrieval of Temp sensors water mark.
* Added logic to display Water Marks in Device Status form.
* Updated DoFirmwareUpdateCheck() logic to automatically update if the user requires it.
* Removed version number from the files used to update firmware.
* Fixed SPI firmware update from STVI (embedded).
* Fixed display message during SPI firmware update for (embedded) STVI.
* Updated SetErrorMsgStr() to handle a variable length message.
* Fixed ExecuteDynamick() and CheckFirmwareVersion() for languages that exchange . with ,
* Added logic to support a pre-fault test in a Basic Long Time Timing Test.
* Do not allow milliseconds in LT timing.
* Updated DynamicK logic to report errors except for BAD_INIT_DYN_K.
* Fixed possible issue with minimum Tap current on Dynamick.
* Updated DynamicK logic to support 3 phase mode.
* Updated Error and Warning codes.
* Implemented use of m_fInstrumentRev.
* Changed default DynamicK current from 50 to 30.
* Added setting DisableCsv form var to zero.
* Fixed PowerDB hang on shutdown.
* Added Tag command to not save forms controls.

AVO_TTR:
* Added support for the TTR330A (12" top panel)
AVO_TTR/AVO_MTO(MWA):
* Will no longer detect MWA or TTR on incorrect com ports due to ports echoing commands
* Wait timer disabled if the TTR com port does not appear due to Windows Update driver installation
AVO_DELTA2000:
*Improved DFR options on Power Factor forms (93500/94500/95500/95001)
*ITC Calculated when running DFR test on CHL/CHT (93500/94500/95500/95501) and DFR results populated for CHL/CHT if an ITC test was performed – Only one test required for both results
*Simplified Delta Graphs
PROGRAMMA_TORKEL

FORMS:
RTMS
ITMS
SPIS
10759
56000:
*3Ø Form – MTO 3XX, MTO 250, TTR 3XX, TTR 550503 support added
*3Ø Form – Base Form modified, options moved to Test Settings button (top left hand corner of form)
    i.   Change Active Instrument
    ii. Enable/Disable Test Sections
    iii. General Form Settings
    iv. TTR Test Settings
    v.   MTO Test Settings

56365
92510
92520
93500
94500
95500
95501

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****************************************************************************
*              11.1.2 Driver Update Release              *
*              - January 5, 2017                    *
*              - PowerDB 11.1.2          (NO CHANGE)    *
*              - MEGGER_SMARTCLAMP.D100.4      (DRIVER/FORM CHANGE) *
****************************************************************************
```

DRIVERS:
MEGGER_SMARTCLAMP: Fixing critical issue with Torkel 800 legacy form where BVM data is deleted when the form is opened.

FORMS:
10756

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****************************************************************************
*              11.1.2 Driver Update Release              *
*              - November 6, 2017                    *
*              - PowerDB 11.1.2          (NO CHANGE)    *
*              - AVO_MPRT.D100.5                 (DRIVER/FORM CHANGE) *
*              - MEGGER_SMARTCLAMP.D100.3      (DRIVER/FORM CHANGE) *
*              - PROGRAMMA_TORKEL.D100.3      (DRIVER/FORM CHANGE) *
*              - AVO_S1.D100.4               (DRIVER/FORM CHANGE) *
****************************************************************************
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DRIVERS:
MIT/S1: Fixed issue where the S1/MIT 525 and 568 series had some text that was getting cut off at certain resolution and text scaling combinations.
MIT/S1: Fixed an issue with the second column of form 13000. The instrument data was importing into the first column.

Torkel 900:
Added support for printing individual cell voltage charts, and a horizontal cell bar chart.

Torkel 800/BVM:
Added a new form (10759) for constant current discharge. Removed the old form (10756) from the recommended list.

DLRO:
Fixed issue on form 90515 that caused data to not be saved.

FORMS:
13000

10756
10758
10759
90515

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*****************************************************************************
*               11.1.2 Driver Update Release              *
*               - October 12, 2017                        *
*               - PowerDB 11.1.2          (NO CHANGE)     *
*               - AVO_MPRT.D100.5                         (DRIVER/FORM CHANGE)  *
*****************************************************************************
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DRIVER/FORM:
AVO_MPRT/ITMS: Fix crash in onboard when loading ITMS.
RTMS: Meter Test: Fix saving the number of rows in the report.
AVO_MPRT: Removed "RE," that was only needed for a particular model of test set.

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*****************************************************************************
*               11.1.2 Driver Update Release              *
*               - October 11, 2017                        *
*               - PowerDB 11.1.2          (NO CHANGE)     *
*               - AVO_MPRT.D100.5                         (DRIVER/FORM CHANGE)  *
*****************************************************************************
```

DRIVER/FORM:
RTMS: Meter Test: Removed ability to change Test Set Label between Phase-Phase and Phase-Neutral.
AVO_MPRT/RTMS: Adding new 46X test set for use.
AVO_MPRT: Added "RE," to fix phase outputs.

```
*****************************************************************************
*               11.1.2 Driver Update Release              *
*               - October 9, 2017                         *
*               - PowerDB 11.1.2          (NO CHANGE)     *
*               - AVO_MPRT.D100.5                         (DRIVER/FORM CHANGE)  *
*****************************************************************************
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DRIVER/FORM:
RTMS: Meter Test: Hide Relay Password when not able to run the full test.
RTMS: Meter Test: Removed meter test message.
RTMS: Meter Test: Corrected bug where percentage error would not show correct color if less than 0.
RTMS: COF (ZIV/ZLV): Fixing issues with drawing when top line hits bottom before side line.
RTMS: COF (PCS902): Fixing "bullet" characteristic.
RTMS: (Comma as decimal): Fixing issue where parser not properly fixing float when user using comma as decimal.
RTMS: (Diff Line Segments): Updating Diff Line Segments same restraint note text.

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*****************************************************************************
*               11.1.2 Driver Update Release              *
```

```
*              - October 6, 2017                        *
*              - PowerDB 11.1.2         (NO CHANGE)     *
*              - AVO_MPRT.D100.5                        (DRIVER/FORM CHANGE)  *
****************************************************************************
```

DRIVERS:
Torkel 800: Fixed an issue with one of the message boxes, and a problem with how the limits were updating.
AVO_MPRT: Fix crash when detecting current IRIG time during October.

FORMS:
10759
RTMS: Meter Test: Created new sub to hide/show the replay and chain buttons for the Meter report.
RTMS: Meter Test: Make sure that formatting for Meter screen does not change formatting for Home screen.
RTMS: Meter Test: Only show message box about only being "enabled for Advanced or Pro" once.
RTMS: Meter Test: Updated decimal precision for Current and Voltage values.
RTMS: Transducer: Fixing issues with Transducer test not properly handling converting read value from testset for comma as decimal.
RTMS: Transducer: Adding expected column to results data table.
RTMS: Differential: Fixing issues with comma as decimal when selecting point in characteristic shot chart.
RTMS: Differential: Fixing issue where diff shot test not properly deleting active results


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****************************************************************************
*              11.1.2 Driver Update Release              *
*              - October 2, 2017                        *
*              - PowerDB 11.1.2         (NO CHANGE)     *
*              - AVO_MPRT.D100.4                        (DRIVER/FORM CHANGE)  *
*              - NA_RELAY.D100.2                        (DRIVER/FORM CHANGE)  *
****************************************************************************
```

DRIVERS:
NA_RELAY: Allow parsing for MET values from models: 87T, SEL311L, SEL351, SEL551

DRIVER/FORMS:
AVO_MPRT/RTMS:
* Split settings screen up into 2 sections: Hardware, and System Settings.
* Fault Calculator needs to add Re/RL and Xe/XL ground compensation.
* Save as seconds should be allowed to be saved as a default in ramp screen.
* Change Vab, Vbc, Vca to Vpp or Cross Polarization in Directional TOC Reference Voltage.
* In TOC when we apply L1, we would apply L1 magnitude and then L2 and L3 would be half magnitude and 180° out of phase.
* Add Pickup and Dropout Test for TOC. Make Dropout selectable and not mandatory. (Only microprocessor based relays.)
* In Frequency screens, designate that the prefault voltage is phase to neutral to reduce ambiguity.

* In impedance, have a Time vs Z graph, the points from one of the lines will be a stair step characteristic based on the time of the relay zones. This is hidden by default and shows one chart per fault type with both shot and search points.
* Ability to switch which winding will take the primary current channels in differential screen. (Greater current should have primary channels.) (Add new connections image, manual switch on settings screen.)
* Add shot test to differential screen.
* Add graphic representation of the slope characteristics in our settings screen.
* Additional equations for the differential screens that are based on the ZIV differential relays that India has (I1+I2-Id / 2). The request came directly from ZIV.
* Fix Power Factor Transducer Screen.
* Add Metering Test.
* Transducer Test report screen label issue for mA output
* "Default setting Options" - Add button for "Restore factory hot environment". If this is selected set min fan speed off to 30% and min fan speed on to 60%

AVO_MPRT/ITMS:
* Changed home screen appearance
* Added functionality to import saturation graph from a csv file
* Changed report format
* Increased maximum CT number to 18
* Added minimum fan speed
* Added feature to use Binary Input to stop test
* Added Set Logo button on Settings screen for STVI
* Added more nameplate items for IEC
* Added special IEC calculations in report
* Added new IS standard Ratio Error tables in report
* Added color on pass/fail text for assessment
* Added BH graph for demag process
* Changed error popup window for more sophisticate looking
* Prompt for demag when run winding test only
* Limited max current of winding resistance test to 0.5A
* Fixed scale issues between test screens and report view
* Other bug fixes

****
*   11.1.2 Driver Update Release   *
*   - September 12, 2017   *
*   - PowerDB 11.1.2   (NO CHANGE)   *
*   - AVO_MPRT.D100.3   (DRIVER/FORM CHANGE) *
****

DRIVERS:
AVO_MPRT(12406) - V4 Batsim - Frequency issue fix.

****
*   11.1.2 Driver Update Release   *
*   - August 25, 2017   *

```
*               - PowerDB 11.1.2              (NO CHANGE)      *
*               - AVO_MPRT.D100.2                             (DRIVER/FORM CHANGE)  *
***************************************************************************
```

DRIVERS:
AVO_MPRT

FORMS:
RTMS: Added Comtrade, Power Swing, and SS1 screens; All report sections can now be reordered or removed from report; misc. other fixes/enhancements.

```
***************************************************************************
*               11.1.2 Driver Update Release              *
*               - August 22, 2017                    *
*               - PowerDB 11.1.2              (NO CHANGE)      *
*               - MEGGER_OTD.D100.3             (DRIVER/FORM CHANGE)  *
*               - AVO_TTR.D100.4                             (DRIVER/FORM CHANGE)  *
*               - AVO_MTO.D100.8                             (DRIVER/FORM CHANGE)  *
*               - AVO_DELTA2000.D100.4      (DRIVER/FORM CHANGE)  *
***************************************************************************
```

DRIVERS:
MEGGER_OTD.D100.3
AVO_TTR.D100.4
AVO_MTO.D100.8
AVO_DELTA2000.D100.4

FORMS:
Cables:
96005
Circuit Breaker:
92500
92510
92520
92529
92530
92550
Generator:
98000
Instrument Transformers:
27600
27610
Miscellaneous:
91510
91515
Rotating Machinery:
98005
98006

Transformers:
93500
94500
95500
95501

```
***************************************************************************
*              11.1.2 Release                    *
*              - August 15, 2017                  *
*              - PowerDB 11.1.2        (NO CHANGE)    *
***************************************************************************
```

FORMS:
MRCT - Change mod date on form.

```
***************************************************************************
*              11.1.2 Release                    *
*              - August 14, 2017                  *
*              - PowerDB 11.1.2        (NO CHANGE)    *
***************************************************************************
```

FORMS:
57952 - WEIDMANN-ACTI DGA
MRCT - Scroll to top after closing report.

INSTALL:
MRCT firmware updated to 2.270.

```
***************************************************************************
*              11.1.2 Release (Pro Customer Release)          *
*              - July 10, 2017                  *
*              - PowerDB 11.1.2        (APP CHANGE)    *
*              - MEGGER_OTD.D100.2              (DRIVER/FORM CHANGE) *
*              - AVO_DLRO.D100.2                      (DRIVER/FORM CHANGE) *
*              - AVO_TTR.D100.3                       (DRIVER/FORM CHANGE) *
*              - AVO_MTO.D100.7                       (DRIVER/FORM CHANGE) *
*              - AVO_MPRT.D100.1                      (DRIVER/FORM CHANGE) *
*              - MEGGER_PMM1.D100.2        (DRIVER/FORM CHANGE) *
*              - AVO_S1.D100.3                 (DRIVER/FORM CHANGE) *
*              - AVO_DELTA2000.D100.3      (DRIVER/FORM CHANGE) *
*              - MEGGER_SMARTCLAMP.D100.2         (DRIVER/FORM CHANGE) *
*              - PROGRAMMA_TORKEL.D100.2    (DRIVER/FORM CHANGE) *
*              - MEGGER_APC.D100.4       (DRIVER/FORM CHANGE) *
***************************************************************************
```

Branched this release from 11.1.2 RC.
Rolled back AVO_MPRT and MEGGER_APC drivers, RTMS, SPI, and MRCT forms to previous official release.

```
******************************************************************************
*                11.1.2 Release (Pro Customer Release)            *
*                - June 29, 2017                          *
*                - PowerDB 11.1.2          (APP CHANGE)    *
*                - MEGGER_OTD.D100.2           (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                   (DRIVER/FORM CHANGE) *
*                - AVO_TTR.D100.3                    (DRIVER/FORM CHANGE) *
*                - AVO_MTO.D100.7                    (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.D100.2                   (DRIVER/FORM CHANGE) *
*                - MEGGER_PMM1.D100.2       (DRIVER/FORM CHANGE) *
*                - AVO_S1.D100.3                  (DRIVER/FORM CHANGE) *
*                - AVO_DELTA2000.D100.3     (DRIVER/FORM CHANGE) *
*                - MEGGER_SMARTCLAMP.D100.2       (DRIVER/FORM CHANGE) *
*                - PROGRAMMA_TORKEL.D100.2    (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.D100.5        (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVERS:
MEGGER_APC: Fixed DynamicK seeded command issue.
MRCT: Scroll to top of view when returning from report.


```
******************************************************************************
*                11.1.2 Release (Pro Customer Release)            *
*                - June 29, 2017                          *
*                - PowerDB 11.1.2          (APP CHANGE)    *
*                - MEGGER_OTD.D100.2           (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                   (DRIVER/FORM CHANGE) *
*                - AVO_TTR.D100.3                    (DRIVER/FORM CHANGE) *
*                - AVO_MTO.D100.7                    (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.D100.2                   (DRIVER/FORM CHANGE) *
*                - MEGGER_PMM1.D100.2       (DRIVER/FORM CHANGE) *
*                - AVO_S1.D100.3                  (DRIVER/FORM CHANGE) *
*                - AVO_DELTA2000.D100.3     (DRIVER/FORM CHANGE) *
*                - MEGGER_SMARTCLAMP.D100.2       (DRIVER/FORM CHANGE) *
*                - PROGRAMMA_TORKEL.D100.2    (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVERS:
AVO_MPRT:
MRCT: Don't clear show saturation data check box when loading report with Pro.
MRCT: Fixed the bug on secondary current display in true ratio when there are mutiple CTs with different secondary settings.

```
********************************************************************************
*                11.1.2 Release (Pro Customer Release)            *
*                - June 12, 2017                       *
*                - PowerDB 11.1.2              (APP CHANGE)     *
*                - MEGGER_OTD.D100.2               (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                         (DRIVER/FORM CHANGE) *
*                - AVO_TTR.D100.3                          (DRIVER/FORM CHANGE) *
*                - AVO_MTO.D100.7                          (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.D100.2                         (DRIVER/FORM CHANGE) *
*                - MEGGER_PMM1.D100.2          (DRIVER/FORM CHANGE) *
*                - AVO_S1.D100.3                     (DRIVER/FORM CHANGE) *
*                - AVO_DELTA2000.D100.3      (DRIVER/FORM CHANGE) *
*                - MEGGER_SMARTCLAMP.D100.2          (DRIVER/FORM CHANGE) *
*                - PROGRAMMA_TORKEL.D100.2     (DRIVER/FORM CHANGE) *
********************************************************************************
```

DRIVERS:
AVO_TTR: Increased size of ttr retest button for Spanish language.

```
********************************************************************************
*                11.1.2 Release (Pro Customer Release)            *
*                - May 22, 2017                       *
*                - PowerDB 11.1.2              (APP CHANGE)     *
*                - MEGGER_OTD.D100.2               (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                         (DRIVER/FORM CHANGE) *
*                - AVO_TTR.D100.3                          (DRIVER/FORM CHANGE) *
*                - AVO_MTO.D100.7                          (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.D100.2                         (DRIVER/FORM CHANGE) *
*                - MEGGER_PMM1.D100.2          (DRIVER/FORM CHANGE) *
*                - AVO_S1.D100.3                     (DRIVER/FORM CHANGE) *
*                - AVO_DELTA2000.D100.3      (DRIVER/FORM CHANGE) *
*                - MEGGER_SMARTCLAMP.D100.2          (DRIVER/FORM CHANGE) *
*                - PROGRAMMA_TORKEL.D100.2     (DRIVER/FORM CHANGE) *
********************************************************************************
```

MAIN APPLICATION:
POWERDB: Changed it so that results opened from Results View and Asset View in standard style are displayed as read-only.
POWERDB: Added alternate low range pattern for newer P640 images so as to fix temperature scale on image import.
POWERDB: Added ability to print multiple assets or results from their respective list views.

```
********************************************************************************
*                11.1.2 Release Candidate 13                    *
*                 - May 22, 2017                       *
*                 - PowerDB 11.1.2.RC13           (APP CHANGE)     *
```

```
*               - MEGGER_OTD.D100.2                    (DRIVER/FORM CHANGE)  *
*               - AVO_DLRO.D100.2                             (DRIVER/FORM CHANGE)  *
*               - AVO_TTR.D100.3                              (DRIVER/FORM CHANGE)  *
*               - AVO_MTO.D100.7                              (DRIVER/FORM CHANGE)  *
*               - AVO_MPRT.D100.2                             (DRIVER/FORM CHANGE)  *
*               - MEGGER_PMM1.D100.2         (DRIVER/FORM CHANGE)  *
*               - AVO_S1.D100.3                        (DRIVER/FORM CHANGE)  *
*               - AVO_DELTA2000.D100.3      (DRIVER/FORM CHANGE)  *
*               - MEGGER_SMARTCLAMP.D100.2          (DRIVER/FORM CHANGE)  *
*               - PROGRAMMA_TORKEL.D100.2     (DRIVER/FORM CHANGE)  *
*****************************************************************************
```

MAIN APPLICATION:
POWERDB: The edit control in the Onscreen Keypad dialog now highlights all at the end of its initialization.
POWERDB: Added trigger to run form message / script from main thread without running OnUpdate().
POWERDB: Adding in flag to determine if we are saving to PDF or not.

DRIVERS:
AVO_MPRT:
COMTRADE: Fixed scaling issue in comtrade.
Relay Settings: Added a numeric input for MPRT Relay Settings subform.
COF: (Micom Zone 7/8 issues): Adjusting code to allow access to zones 7/8 so they are selectable when using Play All.
COF: Enable ABB KD-10 and the new GE GCY for release. Hide PG settings/options/timers for KD-10.
COF: Adding %Line testing to P446 relay.
COF: Added in tag to ensure %Z testing button appears in shot mode for this relay.
COF: Taking P446 out of WIP and making fully available in RTMS.
COF: Adjusting so Single phase relays should not turn on channels that are not being tested.


```
*****************************************************************************
*               11.1.2 Release Candidate 12                  *
*               - May 3, 2017                           *
*               - PowerDB 11.1.2.RC11            (APP CHANGE)     *
*               - MEGGER_OTD.D100.2                    (DRIVER/FORM CHANGE)  *
*               - AVO_DLRO.D100.2                             (DRIVER/FORM CHANGE)  *
*               - AVO_TTR.D100.3                              (DRIVER/FORM CHANGE)  *
*               - AVO_MTO.D100.7                              (DRIVER/FORM CHANGE)  *
*               - AVO_MPRT.D100.2                             (DRIVER/FORM CHANGE)  *
*               - MEGGER_PMM1.D100.2         (DRIVER/FORM CHANGE)  *
*               - AVO_S1.D100.3                        (DRIVER/FORM CHANGE)  *
*               - AVO_DELTA2000.D100.3      (DRIVER/FORM CHANGE)  *
*               - MEGGER_SMARTCLAMP.D100.2          (DRIVER/FORM CHANGE)  *
*               - PROGRAMMA_TORKEL.D100.2     (DRIVER/FORM CHANGE)  *
*****************************************************************************
```

PowerDB:

Fixed an issue with the onscreen keyboard and keypad that occurred while using aliased controls.
Changed humidity and job number so that they would not count as nameplate tags in the lite header.
When updating all relay records related to the job to update, don't include PDB_FSR_GUID so that the org levels from this job don't show up in other jobs.

MWA:
Fixed miscellaneous two inch printing format issues.
Fixed several issues with row highlighting.
Fixed an issue where the MTO current wasn't displaying on three phase tests if the first phase was skipped.

Torkel:
Fixed an issue with the historical capacity graph, and disabled log messages on the form.

BVM:
Disabled log messages on the form for performance.

AVO_MPRT:
TOC: Fixing issue where Timing Tests not setting WANY to 0 when in NC mode.
TOC: Adding in different BIN for Timing/Pickup tests.
TOC: Updated trip mask creation in Timing test to properly set 1 and 0 based on the users BIN settings.
TOC: Fixing issue where Timing Tests not setting WANY to 0 when in NC mode.
SS1: Adding simulate contact and reset button to dialog.
COMTRADE: Allow COMTRADE files to be selected from embedded mode.
Power Swing: force AutoOffMode to zero; removed unnecessary Hsu() call.

MRCT:
Removed msg "Please disconnect SMRT..." when opening MRCT.

Subforms:
Header - Lite

Forms:
10756
10757
56000
56002
RTMS
MRCT


```
***************************************************************************
*           11.1.2 Release Candidate 11              *
*            - May 3, 2017                    *
*            - PowerDB 11.1.2.RC11         (APP CHANGE)    *
*            - MEGGER_OTD.D100.2              (DRIVER/FORM CHANGE)  *
```

```
*               - AVO_DLRO.D100.2                        (DRIVER/FORM CHANGE) *
*               - AVO_TTR.D100.3                         (DRIVER/FORM CHANGE) *
*               - AVO_MTO.D100.7                         (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.D100.2                        (DRIVER/FORM CHANGE) *
*               - MEGGER_PMM1.D100.2        (DRIVER/FORM CHANGE) *
*               - AVO_S1.D100.3                          (DRIVER/FORM CHANGE) *
*               - AVO_DELTA2000.D100.3       (DRIVER/FORM CHANGE) *
*************************************************************************
```

Optional Driver Installer:
Installing the MWA component will now install the MTO component as well.
Updated the MWA drivers.

MWA:
Enabled support for the two inch printer in onboard.
Decreased the connection time to the MWA.
Fixed an issue where the tap information in the TTR test dialog was wrong after using test next tap feature.
Enabled the series resistance table for IEC YNa0 and corrected the labels.
Current and stability readings are now displayed on winding resistance tests for all windings.
Failed winding resistance tests are now added to the deficiencies.
Updated the tags classified as nameplate, and fixed an issue where the tertiary was disabled after opening saved results.
Manual sections on the MWA three phase form are now hidden by default.
Improved the MWA connection timeout message, and greatly reduced the time it takes to cancel the MWA detection window.
Fixed a crash that would occur if you closed PowerDB immediately after canceling the MWA detection window.
Enabled support for the MWA beacon during turns ratio tests.
Corrected the label for the turns ratio column in the turns ratio table.

MTO:
Nameplate recommended current will now display "None" if it was not calculated.
Enabled temperature correction for manual winding resistance tests.

TTR:
Removed the "Edit Highside" and "Edit Lowside" buttons from below the winding diagram on the magnetic balance form.
TTR phase shift tests can now be ran at any supported TTR voltage.
Fixed an issue where the error % displayed in the TTR test dialog could be wrong after retesting

Delta 4000: Implemented support for new onboard only features.

S1/MIT: Fixed an issue on the cable PI form.

13000 - S1 - CABLE PI TEST
27700 - TTR - CT RATIO PHASE DEV
27750 - TTR - PT VT RATIO PHASE DEV

27800 - MTO - CT WDG RESISTANCE
27850 - MTO - PT VT WDG RESISTANCE
56000 - MWA - 3Ø WINDING RES TURNS RATIO
56001 - TTR - QUICK TEST
56002 - TTR - TURNS RATIO QUICK TESTS
56003 - TTR - SINGLE PHASE QUICK TESTS - MULTIPLE RESULTS
56006 - TTR - TX WITH PHASE SHIFTING
56301 - MTO - RESISTANCE QUICK TESTS [GENERATORS]
56353 - MTO - 3Ø WINDING RESISTANCE
56356 - MTO - TX HEAT RUN
56365 - TTR - 3Ø TX WITH TAP CHANGER
56370 - TTR - VOLTAGE REGULATOR
93510 - TTR - MAGNETIC BALANCE


```
********************************************************************************
*              11.1.2 Release Candidate 10                  *
*               - April 28, 2017                      *
*               - PowerDB 11.1.2.RC10          (APP CHANGE)     *
*               - MEGGER_OTD.D100.2               (DRIVER/FORM CHANGE)  *
*               - AVO_DLRO.D100.2                        (DRIVER/FORM CHANGE)  *
*               - AVO_TTR.D100.2                         (DRIVER/FORM CHANGE)  *
*               - AVO_MTO.D100.6                         (DRIVER/FORM CHANGE)  *
*               - AVO_MPRT.D100.2                        (DRIVER/FORM CHANGE)  *
*               - MEGGER_PMM1.D100.2          (DRIVER/FORM CHANGE)  *
********************************************************************************
```

DRIVERS:
AVO_MPRT: Power Swing changes to add Out-of-step option.
AVO_MPRT: Power Swing - shortened start time from 3 to .5 seconds.
AVO_MPRT: Power Swing - removed extended time from Power Swing test.
AVO_MPRT: Power Swing - fixed issue with waveform lasting longer than timeout.
AVO_MPRT: Power Swing - moved RE back to previous location. Removed RECRSET.


```
********************************************************************************
*              11.1.2 Release Candidate 10                  *
*               - April 27, 2017                      *
*               - PowerDB 11.1.2.RC10          (APP CHANGE)     *
*               - MEGGER_OTD.D100.2               (DRIVER/FORM CHANGE)  *
*               - AVO_DLRO.D100.2                        (DRIVER/FORM CHANGE)  *
*               - AVO_TTR.D100.2                         (DRIVER/FORM CHANGE)  *
*               - AVO_MTO.D100.6                         (DRIVER/FORM CHANGE)  *
*               - AVO_MPRT.D100.2                        (DRIVER/FORM CHANGE)  *
*               - MEGGER_PMM1.D100.2          (DRIVER/FORM CHANGE)  *
********************************************************************************
```

DRIVERS:
AVO_MPRT: COMTRADE - Fix crash when loading large files.
AVO_MPRT: (TRL Issue) Undoing changing of TRL to tr.

```
*******************************************************************************
*           11.1.2 Release Candidate 10              *
*           - April 20, 2017                    *
*           - PowerDB 11.1.2.RC10        (APP CHANGE)    *
*           - MEGGER_OTD.D100.2           (DRIVER/FORM CHANGE) *
*           - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE) *
*           - AVO_TTR.D100.2                     (DRIVER/FORM CHANGE) *
*           - AVO_MTO.D100.6                     (DRIVER/FORM CHANGE) *
*           - AVO_MPRT.D100.2                    (DRIVER/FORM CHANGE) *
*           - MEGGER_PMM1.D100.2        (DRIVER/FORM CHANGE)  *
*******************************************************************************
```

MAIN APPLICATION:
POWERDB: Added registry setting "bAllowPowerDBUpdateCheck" to disable the automatic update check and the check for updates button in PowerDB.
PDBSYNCH: Make "MinVerLock" checks in Sync use all 4 parts of the version number before allowing synchronization.

DRIVERS:
AVO_MPRT: COF: Fixing issue where loading of TRUNK schema not properly working due to not properly updating schema check.
AVO_MPRT: FREQ:
*Fixed the issue of start contact post overwriting stop contact post.
* Changed fault vector for all freq tests: remove the phase values and add "SBP:1" command for each phase.
* Removed df0 and set phase only when applying prefault vector for the first time for ROC pickup test
* Sent syssetf command if system freq is not equal to nominal freq for all timing tests

```
*******************************************************************************
*           11.1.2 Release Candidate 9               *
*           - April 20, 2017                     *
*           - PowerDB 11.1.2.RC9         (APP CHANGE)    *
*           - MEGGER_OTD.D100.2           (DRIVER/FORM CHANGE) *
*           - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE) *
*           - AVO_TTR.D100.2                     (DRIVER/FORM CHANGE) *
*           - AVO_MTO.D100.6                     (DRIVER/FORM CHANGE) *
*           - AVO_MPRT.D100.2                    (DRIVER/FORM CHANGE) *
*           - MEGGER_PMM1.D100.2        (DRIVER/FORM CHANGE)  *
*******************************************************************************
```

MAIN APPLICATION:
POWERDB: Disabled launching directly to the form list for delta in /instrument mode.
POWERDB: Fixed /instrument to use v11 driver GUIDs instead of vTrunk driver GUIDs. This should allow Lite/Advanced/Embedded to load the correct drivers when /instrument is used.

DRIVERS:
AVO_MPRT: MRCT: Roll back to the released code. MRCT is not ready for all TRUNK changes that were merged to RC by the RTMS update.

FORMS:
RTMS: RTMS is now installed in the ProgramData\InstForms folder as "BEQIAAANKWT4JP4RYH2K".

```
******************************************************************************
*              11.1.2 Release Candidate 8              *
*                - April 18, 2017                       *
*                - PowerDB 11.1.2.RC8          (APP CHANGE)    *
*                - MEGGER_OTD.D100.2              (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                         (DRIVER/FORM CHANGE) *
*                - AVO_TTR.D100.2                          (DRIVER/FORM CHANGE) *
*                - AVO_MTO.D100.6                          (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.D100.2                         (DRIVER/FORM CHANGE) *
*                - MEGGER_PMM1.D100.2          (DRIVER/FORM CHANGE) *
******************************************************************************
```

MAIN APPLICATION:
POWERDB: Fix printing and page numbering when using "HideOnPrint" to hide particular pages in normal printing and save as pdf.
POWERDB: Scale spacing if the text on a line is longer than will fit on that line at the current zoom level. This should fix text being printed past the end of the edit control.
POWERDB: Fix crash when adding translations.

POWERDB: Added support for run tag commands for controls that have not been paged to yet on dynamic subforms.
POWERDB: Adding a new tile for the VF System Settings button on the new 12" displays.
POWERDB: Implementing autosave directory
POWERDB: Added support to conditionally disable the instrument initialization button on the PowerDB toolbar.
POWERDB: Adding system settings icon to PowerDB lite ribbon bar when using /instrument PFTS/MWA/TTR/TWR
POWERDB: Added functionality to launch VF instruments in lite /instrument mode directly to the new form window.
POWERDB: Added a registry setting to turn off the instrument configuration dialog for instruments in /instrument mode. This only works for the instrument specified by commandline.

DRIVERS:
ALL DRIVERS: Adding functionality to handle the VF system settings tile in the base driver.
AVO_MPRT: Comma-as-decimal fixes for COMTRADE and Power Swing.

```
******************************************************************************
*              11.1.2 Release Candidate 7              *
*                - April 10, 2017                       *
```

```
*              - PowerDB 11.1.2.RC7        (APP CHANGE)    *
*              - MEGGER_OTD.D100.2          (DRIVER/FORM CHANGE) *
*              - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE) *
*              - AVO_TTR.D100.2                     (DRIVER/FORM CHANGE) *
*              - AVO_MTO.D100.6                     (DRIVER/FORM CHANGE) *
*              - AVO_MPRT.D100.2                    (DRIVER/FORM CHANGE) *
*              - MEGGER_PMM1.D100.2        (DRIVER/FORM CHANGE) *
*************************************************************************
```

MAIN APPLICATION:
POWERDB: Curve Library: Instantaneous tolerance was not considered in ST Pickup.

DRIVERS:
DLRO 100: Fixed an issue where DLRO 100 tests were reported to the asset manager even when they failed.
AVO_MPRT: All development changes.
MEGGER_PMM1: Adding 180Lead drawing functionality to the PMM1 form. Allows users to select 180Lead as vector style.

FORMS:
RTMS

```
*************************************************************************
*              11.1.2 Release Candidate 6                *
*              - March 22, 2017                     *
*              - PowerDB 11.1.2.RC5        (APP CHANGE)    *
*              - MEGGER_OTD.D100.2          (DRIVER/FORM CHANGE) *
*              - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE) *
*              - AVO_TTR.D100.2                     (DRIVER/FORM CHANGE) *
*              - AVO_MTO.D100.6                     (DRIVER/FORM CHANGE) *
*              - PdbSynch.11.1.2                      (APP CHANGE)    *
*************************************************************************
```

MAIN APPLICATION:
PDBSYNCH: Synchronization fix for results that attempt to sync to a region that their asset doesn't belong to.

```
*************************************************************************
*              11.1.2 Release Candidate 6                *
*              - March 22, 2017                     *
*              - PowerDB 11.1.2.RC5        (APP CHANGE)    *
*              - MEGGER_OTD.D100.2          (DRIVER/FORM CHANGE) *
*              - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE) *
*              - AVO_TTR.D100.2                     (DRIVER/FORM CHANGE) *
*              - AVO_MTO.D100.6                     (DRIVER/FORM CHANGE) *
*************************************************************************
```
DRIVERS:
MWA: Improved connection speed.

MTO/TTR/Delta: Fixed an issue with the nameplate voltages rounding incorrectly.
TTR: Changed TTR to allow test voltages other than 8V on form 56006.

FORMS:
27700
27750
56365
56370

SUBFORMS:
MTO Nameplate
MTO Nameplate Heat Test
Transformer PF (2and3Winding) Nameplate
Transformer PF (Autotransformers) Nameplate
MagneticBalance PF (2and3Winding) Nameplate
MWA Nameplate


```
********************************************************************************
*            11.1.2 Release Candidate 5              *
*              - March 22, 2017                  *
*              - PowerDB 11.1.2.RC5        (APP CHANGE)   *
*              - MEGGER_OTD.D100.2            (DRIVER/FORM CHANGE)  *
*              - AVO_DLRO.D100.2                    (DRIVER/FORM CHANGE)  *
********************************************************************************
```

MAIN APPLICATION:
POWERDB: Fix bug with radio buttons in growing tables where radio buttons would be duplicated to have the same value (caused by changes to growing/paging logic in 11.1/11.0.4 and fixes for radio buttons that followed those changes).
POWERDB: Job List Selection Criteria: Fix Order by to actually sort descending when selected.
POWERDB: Fix user needing to click in the job tree before they could add to job.
POWERDB: Job/Asset/Result Lists: Fix column sorting being reset after a refresh.
POWERDB: Fixing an error message during bite import in lite. PowerDB is attempting to refresh the address book on some installations. Disabling the ValidateJob function in lite resolves the issue.
POWERDB: Asset List: Fix SN column not being populated. The SN will be populated with the Serial Numbers data from the most recent non-deleted Test Date.
POWERDB: TOOLS > Admin > Labels - Fix user's org level labels being untranslated to keys on (like two_inch_print_substation) that are used on certain forms.
POWERDB: Changed the DTA 6 import to use the correct org levels from the currently selected asset.
POWERDB: Changed DTA 6 import so that tests with one result saves on import.
POWERDB: Makes DTA 6 import find Relay by using GUID rather than org levels.

DRIVERS:
AVO_DLRO:
* DLRO100: Added Test Summary form format and implemented support for new DLRO 100 firmware.
* DLRO 10HDX: Added Test Summary form format.

MEGGER_OTD: Fixed comport connection and closing issues, updated data importing to match new format from the instrument

FORMS:
90514
90515
57600

```
****************************************************************************
*              11.1.2 Release Candidate 4                  *
*                  - February 14th                     *
*                  - PowerDB 11.1.2.RC4          (APP CHANGE)    *
****************************************************************************
```

MAIN APPLICATION:
POWERDB: Add a registry setting to allow update checks to be turned off. If the custom splash screen is used, default this value to FALSE so that we don't instruct users to update or tell them that there are updates available unless specifically forced to TRUE.

```
****************************************************************************
*              11.1.2 Release Candidate 3                  *
*                  - February 13th                     *
*                  - PowerDB 11.1.2.RC3          (APP CHANGE)    *
****************************************************************************
```

MAIN APPLICATION:
POWERDB: "Open Document" option on right-click menu on external document was never being enabled.
POWERDB: Fix allowing copy/paste in tree with 8 maximum org levels. (Copy/paste was only allowed in last 3 levels of tree. This was fine until we increased the number of org levels - users with 4 levels could not copy/paste.)
POWERDB: EZCT Vanguard import fix.
POWERDB: Fixes the DTA6 import to allow multiple results in the file.
POWERDB: Attempt to fix crashes related to the AutoComplete window.
POWERDB: Fix bug where "FormUseMultilineEditDlg" dialog can be opened at first and then cannot be opened anymore.
POWERDB: Fixed wrapped text issue looking for next tab object instead of creating a new line and causing crash.
POWERDB: Attempt to fix crashes related to the AutoComplete window.
POWERDB: Image controls: Disable transparency on Save to PDF since this was causing the whole image to be drawn transparent. This should duplicate the behavior that we have always had when performing a normal print. Transparency will be re-enabled at a later date.
POWERDB: Fix crash in trending with improperly formatted logging statement.

FORMS:
10750 - BATTERY IMP COND TEST
13000 - CABLE PI TEST

24210 - GROUND RESISTANCE TWO TERMINAL
27210 - INSTRUMENT TRANSFORMER GAUGES
46200 - POLYPHASE POWER DIRECTIONAL GGP
50050 - MV SWITCHBOARD HIPOT
56910 - TWO-WINDING TRANSFORMER
5710T - TRANS. LIQUID COOLANT TRENDING
5711T - TRANS. LIQUID COOLANT TRENDING
66500 - INSPECTION SHEET
OCR - Maintenance Report

SUBFORMS:
CtRatio
Comments


```
*****************************************************************************
*              11.1.2 Release Candidate 2                *
*                - February 2nd                   *
*                - PowerDB 11.1.2.RC2          (APP CHANGE)    *
*                - AVO_S1.D100.2                      (DRIVER/FORM CHANGE) *
*                - AVO_DLRO.D100.2                        (DRIVER/FORM CHANGE)  *
*****************************************************************************
```

MAIN APPLICATION:
POWERDB: Fix lockup on webserver when PowerDB updates are available.
POWERDB: Fix crash when switching databases when the recent list cannot be loaded.
POWERDB: Fixed Spell check to check all pages and re-enabled the F7 shortcut.
POWERDB: Fix case where radio buttons were not saving if they weren't on the active page when save was pressed.
POWERDB: Print Job Results: COM/DEF report checkboxes now default to checked when there are comments or deficiencies in the job.
POWERDB: Don't allow Add To Job on completed jobs.
POWERDB: Job List right-click now checks for Completed Job status on the selected job (was getting status of last selected job even if filtering has changed and that job isn't in the list anymore).
POWERDB: Disable "Completed" option on Job List right-click menu if no job is selected.
POWERDB: Make counts at the bottom of the job list match the number of jobs that are actually queried and added to the list.
POWERDB: Check org level labels (set in TOOLS > Admin) and don't enable AddToJob pages for org levels with empty labels.
POWERDB: Fix allowing copy/paste in tree (broken by checks that aren't compatible now that we have > 4 org levels).
POWERDB: Asset List View: Add "Serial Numbers" column pulled from most recent active result.
POWERDB: Results List View: Add "Asset ID" (from Asset table), rename "Asset ID / Serial #" to "Serial Numbers" (from Result table) and add "Manufacturer" and "Model" columns (from Asset).
POWERDB: Launch the DashboardUploader when the user confirms in the message box that the last Pdf that was printed is the one that needs to be uploaded. (This would previously confirm, but then not launch the uploader.)
POWERDB: Fix DashboardUpload conflict with PdbGPSLocator's Newtonsoft.Json.dll by putting the DashboardUpload files in their own folder.

DRIVERS:
AVO_DLRO: Fixed an issue with the DLRO10X form list in lite.

FORMS:
90511

```
*******************************************************************************
*            11.1.1 Driver Update RC1                *
*               - December 6th                     *
*               - PowerDB 11.1.1          (APP CHANGE)    *
*               - AVO_MTO.D100.4                       (DRIVER/FORM CHANGE)  *
*******************************************************************************
```

DRIVERS:
AVO_MTO: Fixed an issue preventing MTO heat run form from saving results.

FORMS:
56356

```
*******************************************************************************
*            11.1.1 (limited) Release                *
*               - December 6th                     *
*               - PowerDB 11.1.1       (APP CHANGE)    *
*******************************************************************************
```
MAIN APPLICATION:
POWERDB: Adding org 5-8 to add compliance.

```
*******************************************************************************
*            11.1 Release                    *
*               - November 29th                    *
*               - PowerDB 11.1          (APP CHANGE)    *
*******************************************************************************
```

```
*******************************************************************************
*            11.1 Release Candidate 20               *
*               - November 28th                    *
*               - PowerDB 11.1.RC20       (APP CHANGE)    *
*******************************************************************************
```

Updated form 92510.

```
*******************************************************************************
*            11.1 Release Candidate 19               *
*               - November 27th                    *
*               - PowerDB 11.1.RC19       (APP CHANGE)    *
*******************************************************************************
```

DRIVER CHANGES:
AVO_MTO (VF Task 2070): Added error handling for the MTO RunTest function.

Translations updated.

```
*****************************************************************************
*             11.1 Release Candidate 16              *
*                - November 18th                     *
*                - PowerDB 11.1.RC16        (APP CHANGE)    *
*****************************************************************************
```

MAIN APPLICATION:
PowerDB: "/instrument detect" command-line now works for MDCT. (Main app support only. Driver will not be updated until instrument is ready for release.)
PowerDB: Fix an issue where the new org levels show the wrong data in some columns of the Results grid view.
PowerDB: Fixing orgs when using tree item as template to add to asset tree in jobless mode.

```
*****************************************************************************
*             11.1 Release Candidate 15              *
*                - November 17th                     *
*                - PowerDB 11.1.RC15        (APP CHANGE)    *
*****************************************************************************
```

MAIN APPLICATION:
PowerDB: Interstate battery import, straps capability.
PowerDB: Removed " / Serial Number" from the AssetID column header text in the Asset List.
PowerDB: Fixing printing when using indicate dropdowns.
PowerDB: Fixed an issue with the new autosave functionality that was causing the form to sometimes not save.

Updated Translations.

SUBFORMS:
Job MultiUse Report
Logo 3

```
*****************************************************************************
*             11.1 Release Candidate 14              *
*                - November 16th                     *
*                - PowerDB 11.1.RC14        (APP CHANGE)    *
*****************************************************************************
```

MAIN APPLICATION:
PowerDB: Fix crash in PowerDB if PdbGpsLocator cannot be loaded.

```
********************************************************************
*            11.1 Release Candidate 13              *
*               - November 16th                     *
*               - PowerDB 11.1.RC13      (APP CHANGE)   *
********************************************************************
```

MAIN APPLICATION:
PowerDB/PdbSynch: Add support for Org Levels 5, 6, 7, 8.
PowerDB(lite): When updating pdblite.mdb, remove old pdblite.mdb first and log the actions.
PowerDB (VF Task 2242): Implemented the onscreen keyboard for the save PDF dialog, added a default
pdf name, and removed the "all files" filter.

```
********************************************************************
*            11.1 Release Candidate 12              *
*               - November 15th                     *
*               - PowerDB 11.1.RC12      (APP CHANGE)   *
********************************************************************
```

Super Cap (File Save on close) changes for VF.

```
********************************************************************
*            11.1 Release Candidate 11              *
*               - November 15th                     *
*               - PowerDB 11.1.RC11      (APP CHANGE)   *
********************************************************************
```

Changes for VF that Kevin merged and I don't have a change log for... :P MTO, Delta, TTR

```
********************************************************************
*            11.1 Release Candidate 9               *
*               - November 2nd                      *
*               - PowerDB 11.1.RC9       (APP CHANGE)   *
********************************************************************
```

MAIN APPLICATION:
PowerDB/Lib_Latest(BUG11937): Fix or catch exceptions found in crash reports.

DRIVER/FORM CHANGES (to match 11.0.3):
RTMS
MRCT
SPI

```
********************************************************************
*            11.1 Release Candidate 8               *
```

```
*              - October 27th                      *
*              - PowerDB 11.1.RC8          (APP CHANGE)    *
*********************************************************************************
```

MAIN APPLICATION:
PowerDB: PdbUpdateService - Added exception handling when trying to close the client.
PowerDB: Sync: New relays will no longer sync to all regions the first time that region is synched.

DRIVER/FORM CHANGES (to match 11.0.3):
RTMS
MRCT

```
*********************************************************************************
*              11.1 Release Candidate 7                 *
*              - October 14th                      *
*              - PowerDB 11.1.RC7          (APP CHANGE)    *
*********************************************************************************
```

MAIN APPLICATION:
PowerDB (BUG11875): Fix user paths for Webserver when running on SYSTEM account.
PowerDB (BUG11887): Check "UseTrustedConnection" registry setting to allow
"Trusted_Connection:yes;" connection string.
PowerDB: Added proxy configuration so that the service won't be affected by the default user registry.
PowerDB (BUG10086): CommentsAndDefMailMerge.doc cannot query the database from the install
directory, so we move it to the ProgramData directory and run it from there.

DRIVER/FORM CHANGES (to match 11.0.3):
RTMS
MRCT
SPI

FORMS:
15800
52230

Updated User Manual.
Updated Lite User Manual.
Added spell check files to installer.
Updated translations.

```
*********************************************************************************
*              11.1 Release Candidate 6                 *
*              - October 5th                      *
*              - PowerDB 11.1.RC6          (APP CHANGE)    *
*********************************************************************************
```

MAIN APPLICATION:

PowerDB (BUG11866): Fix for defaulting to AmericanEnglish translation if the desired languageKey column doesn't have a translation.
PowerDB (BUG11191): Fix InstForms not loading subforms from the file.
PowerDB (BUG11191): InstForms now load in Lite without "This file cannot be used in PowerDB Lite." error message.
PowerDB (BUG11849): Fixed javascript bugs in PdbGPSLocator.

Translations updated.

```
*****************************************************************************
*              11.1 Release Candidate 5                *
*                 - September 29th                   *
*                 - PowerDB 11.1.RC5          (APP CHANGE)    *
*****************************************************************************
```

MAIN APPLICATION:
PowerDB (11846): Disabled serial numbers for 11.1 release.
PowerDB (11844): Fixed spelling error in IDD_BACKSTAGE_PAGE_OPEN DIALOGEX for the "Open New Form" LTEXT. The "Save Results in XML" LTEXT was wrong in IDD_BACKSTAGE_PAGE_SAVE DIALOGEX, made change to fix it.
PowerDB (BUG11847): Prevent users from getting stuck in an infinite message box loop when attempting to view the USER ACCOUNTS tab when they don't have permission to do so.

DRIVER CHANGES:
ANTON_DMA: Update model names.

```
*****************************************************************************
*              11.1 Release Candidate 4                *
*                 - September 26th                   *
*                 - PowerDB 11.1.RC4          (APP CHANGE)    *
*****************************************************************************
```

MAIN APPLICATION:
PowerDB: (BUG11591/11822) PdbXml Import: Use GUIDs in file if applicable; Find matching asset based on form/asset name/user entered org levels; Fix multiple test dates coming in with first date in the file; Fix crash if dialog is closed before import is done by not allowing the dialog to close until done.
PowerDB: (BUG11829) Fix crash when clicking sort arrows in Job List.
PowerDB: (BUG11073) Roll back csv import to v11.0.3 version until we can rewrite it for a future release - the new import was missing too much functionality and was too big of a step backward.

DRIVER CHANGES:
AVO_MTO (VF Task 2180,2119): Test current is now reported in the form after an MTO test and manual test.

FORM CHANGES:
56600 - TRANSFORMER PI TEST
57952 - WEIDMANN-ACTI DGA
AUTOMATIC TRANSFER SWITCH

BACK-UP POWER SYSTEM INSPECTION
CABLE TEST SHEET
CURRENT OR POTENTIAL TRANSFORMER RATIO
ENGINE GENERATOR INSPECTION
GROUNDING SYSTEM RESISTANCE TEST
GROUND FAULT SYSTEM TEST
GROUND TEST INSPECTION - HEALTH CARE
INSTRUMENT METER CALIBRATION TEST
INSULATION RESISTANCE-DIELECTRIC TEST
INSULATION RESISTANCE TEST RECORD
INSULATION TEST FOR ROTATING MACHINERY
LINE ISOLATION TEST - HEALTH CARE
MAIN POWER ENERGIZATION CHECKLIST
MEDIUM VOLTAGE VACUUM BREAKER
MOTOR TEST INFORMATION
OVERLOAD RELAY TEST REPORT
PANELBOARD CIRCUIT BREAKER TEST
TORQUE VALUE RECORD
TRANSFORMER (DRY TYPE) INSPECTION RECORD
TRANSFORMER (LIQUID FILLED) INSPECTION
TRANSFORMER OIL SAMPLE REPORT
TRANSFORMER OIL TRENDING REPORT
TRANSFORMER TEST AND INSPECTION REPORT
UPS SYSTEM INSPECTION
VRLA BATTERIES
VRLA MAINTENANCE
WATT-HOUR METER TEST SHEET

SUBFORM CHANGES:
_SDMYERS Liquid ScreenTest Data


```
******************************************************************************
*              11.1 Release Candidate 3                    *
*                 - September 14th                       *
*                 - PowerDB 11.1.RC3              (APP CHANGE)     *
******************************************************************************
```

MAIN APPLICATION:
PowerDB: (BUG11802) Changed text for IDC_USE_LOGON_FOR_SYNC from "Require credentials for PdbSynch" back to the original "Use logon credentials for sync".
PowerDB: (BUG10086) "CommentsAndDefMailMerge" file name should not be PowerDB version specific.
PowerDB: (BUG11807) Fix the "Form Update Description" dialog not showing after the first save of a form/subform change in the current instance of PowerDB.
PowerDB: (BUG11806) Anchor "Manage Equipment Types" button to bottom of dialog so that it moves when the dialog is resized.

PowerDB: (BUG11806) Anchor "Run On Change" button to bottom of dialog so that it moves when the dialog is resized.

DRIVER CHANGES:

All drivers updated from 11.0.3.1.

FORM CHANGES:
00002 - COVER LETTER
AvtsImport
CabaWinImport
57952 - WEIDMANN-ACTI DGA
57860 - TJH2b INSULATING FLUID
57850 - TJH2b DGA
90515 - MICROHMMETER_MEASUREMENTS - DLRO 10HDX
Relay Test Management Software (RTMS)
MRCT
Smart Primary Injection Software (SPIS)

SUBFORM CHANGES:
Header
Footer
Comments
ComDef
EnterTemp
Header - Basic Info
(and narrow versions of these)
INST_INSUL_RES

LookupTables N and O were updated with 'Multiplier' columns to make queries for correction factors work.
Translations were updated.

```
********************************************************************************
*              11.1 Release Candidate 2                  *
*                 - September 1st                     *
*                 - PowerDB 11.1.RC2           (APP CHANGE)    *
********************************************************************************
```

All Main Application changes up to 8/29/16 (PowerDB check-in 29468) are included in this build.
All Lib_Latest changes up to 13467 (except 13428, 13430) are included in this build.

```
********************************************************************************
*              11.1 Release Candidate                  *
*                 - August 16th                     *
*                 - PowerDB 11.1.RC1           (APP CHANGE)    *
```

```
*******************************************************************************
```

All Main Application changes up to and including 8/5/16 (PowerDB check-in 29320) are included in this build.
All Lib_Latest changes up to 13440 (except 13428, 13430, 13438) are included in this build.

All instrument/form changes in install_powerdb_11.0.3_DRIVER_UPDATE_RC30_14AUG16 are included in this build.

All drivers have had their version numbers changed to the "D100.x" format.

PowerDB standard forms have updated manufacturer and model controls so that these values will appear in the asset list:
10000 - BATTERY_DISCHARGE
10050 - BATTERY_INSPECTION
10100 - BATTERY_INSPECTION_SPECIFIC
10200 - BATTERY_INSPECTION_RESISTANCE
10500 - UPS_BATTERY_DISCHARGE
10760 - BATTERY_TEST - CELLCORDER
14000 - BUS_DUCT_INSULATION_TEST
14100 - SWITCHBOARD_BUS_CONNECTION_TEST
15501 - BOLTED_PRESSURE_SWITCH_TEST
15510 - LOW_VOLTAGE_AIR_SWITCH
15800 - MOLDED_CASE_CIRCUIT_BREAKER_INSP
16600 - VACUUM_IN_OIL_RECLOSER
18300 - RELAY_DATA
19400 - ANNUAL_ENGINE_GENERATOR
19600 - GENERATOR
22900 - GROUND_FAULT_PROTECTION
27010 - CURRENT_TRANSFORMER
27400 - CONTROL_POWER_TRANSFORMER_TEST
27450 - CONTROL_POWER_TRANSFORMER_TEST
27500 - CT_RATIO___EXCITATION_TEST
27655 - CURRENT_TRANSFORMER_(ADWEL_DCT)
29001 - LOADBREAK_DISCONNECT
30000 - MOTOR_CONTROL_CENTER_INSPECTION
31200 - MOTOR_CONTROL_MCC_TEST_REPORT
32900 - VARIABLE_FREQUENCY_DRIVES_(VFD)
49550 - CEY51A_RELAY
50300 - POWER_PANEL_INSULATION_TEST
56502 - TRANSFORMER_TTR_(VANGUARD)
56900 - TWO-WINDING_TRANSFORMER
56910 - TWO-WINDING_TRANSFORMER
57300 - INSULATING_EQUIPMENT_INSULATING
57700 - ONCOR_INSULATING_FLUID_ANALYSIS
61100 - WATTHOUR_METER_TEST
61101 - WATTHOUR_METER_TEST
61600 - MULTIFUNCTION_METERING_MODULE

65150 - CAPACITOR_BANK_TEST
65500 - LIGHTNING_ARRESTER_TEST
77777 - AERIAL_BUCKET_UNIT
81000 - CALIBRATION_DATA_LOG
90000 - TRANSFORMER
_SDMYERS_Nameplate

FORM CHANGES:
5710T - TRANS._LIQUID_COOLANT_TRENDING


```
********************************************************************************
*              11.0.3 - Driver Update                 *
*                - June 21st                        *
*                - PowerDB 11.0.3          (NO CHANGE)     *
*                - AVO_DELTA2000.v11.0.3.9    (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.100.2          (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.100.1           (DRIVER/FORM CHANGE) *
*                - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
*                - MEGGER_OTSAFPB.100.3       (DRIVER/FORM CHANGE) *
********************************************************************************
```

DRIVER/FORM CHANGES:

Common Driver Changes:
Ignore Serial Number check in waiting for BootLoader when in AutoIpConfig.
Removed Sleep and Modified DetectBootLoader() to ignore serial number if in IpAutoConfig.

SPI (MEGGER_APC.dll and "SPI FRONT PANEL" form):
34. Fixed no display of "Slave Not In Phase" message.
35. Added logic to detect if Master and Slaves are not in the same State. Updated error codes.
36. Added logic to retry Dynamick.
37. Updated logic to retry DynamicK.
38. Implemented manual continuous ramp update every 250ms.
39. Disabled State check during Auto Pulse Ramp. Added logging of Master and Slaves states.


```
********************************************************************************
*              11.0.3 - Driver Update                 *
*                - June 20th                        *
*                - PowerDB 11.0.3          (NO CHANGE)     *
*                - AVO_DELTA2000.v11.0.3.9    (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.100.1           (DRIVER/FORM CHANGE) *
*                - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
```

```
*               - MEGGER_OTSAFPB.100.3      (DRIVER/FORM CHANGE) *
*****************************************************************************
```

DRIVER/FORM CHANGES:
OTS: Fixed an issue with the degree symbol.
DLROH200/MOM2: Fixed a communication issue.


```
*****************************************************************************
*               11.0.3 - Driver Update                    *
*                - June 7th                            *
*                - PowerDB 11.0.3              (NO CHANGE)     *
*                - AVO_DELTA2000.v11.0.3.9     (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.100.1            (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*                - PDB_NOINST.100.1            (DRIVER/FORM CHANGE) *
*                - MEGGER_OTSAFPB.100.2        (DRIVER/FORM CHANGE) *
*****************************************************************************
```

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
40. COF: REL 670v2 - Fixed Xld R-direction clipping


```
*****************************************************************************
*               11.0.3 - Driver Update                    *
*                - June 6th                            *
*                - PowerDB 11.0.3              (NO CHANGE)     *
*                - AVO_DELTA2000.v11.0.3.9     (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.100.1            (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*                - PDB_NOINST.100.1            (DRIVER/FORM CHANGE) *
*                - MEGGER_OTSAFPB.100.2        (DRIVER/FORM CHANGE) *
*****************************************************************************
```

DRIVER CHANGES:

AVO_DELTA: Moving designation from note to Skirt # for DTA6 export.

```
*****************************************************************************
*               11.0.3 - Driver Update                    *
*                - June 6th                            *
*                - PowerDB 11.0.3              (NO CHANGE)     *
*                - AVO_DELTA2000.v11.0.3.8     (DRIVER/FORM CHANGE) *
*                - MEGGER_APC.100.1            (DRIVER/FORM CHANGE) *
*                - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*                - PDB_NOINST.100.1            (DRIVER/FORM CHANGE) *
```

```
*             - MEGGER_OTSAFPB.100.2      (DRIVER/FORM CHANGE) *
*********************************************************************
```

DRIVER CHANGES:

AVO_DELTA: Moving designation from note to Skirt # for DTA6 export.

```
*********************************************************************
*           11.0.3 - Driver Update                  *
*             - June 3rd                       *
*             - PowerDB 11.0.3          (NO CHANGE)     *
*             - AVO_DELTA2000.v11.0.3.7    (DRIVER/FORM CHANGE) *
*             - MEGGER_APC.100.1         (DRIVER/FORM CHANGE) *
*             - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*             - PDB_NOINST.100.1         (DRIVER/FORM CHANGE) *
*             - MEGGER_OTSAFPB.100.2      (DRIVER/FORM CHANGE) *
*********************************************************************
```

Rebuilt AVO_DELTA2000 with merged changes.

```
*********************************************************************
*           11.0.3 - Driver Update                  *
*             - June 2nd                       *
*             - PowerDB 11.0.3          (NO CHANGE)     *
*             - AVO_DELTA2000.v11.0.3.6    (DRIVER/FORM CHANGE) *
*             - MEGGER_APC.100.1         (DRIVER/FORM CHANGE) *
*             - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*             - PDB_NOINST.100.1         (DRIVER/FORM CHANGE) *
*             - MEGGER_OTSAFPB.100.2      (DRIVER/FORM CHANGE) *
*********************************************************************
```

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
35. COF - REL670v2 - added clipping by XLd
36. COF - changed display name of REL 670 and made it not WIP.
37. Fixed results not saving when Save has already been clicked but the user hasn't changed screens.
38. COF- ABB REL 670 v2 - fixed CT/PT ratios for Xld clipping.
39. Tracking number of BIV channels in use and then doing a read per channel to prevent text appearing on screen.

DRIVER CHANGES:
AVO_DELTA: Fixing several minor issues with the DTA6 export.
MEGGER_OTS: Fixed an issue with the degree symbol on the OTS AF100 .sql import.

FORM CHANGES:
57390 - OTS OIL TEST

92510 - PF OIL CIRCUIT BREAKER
92520 - PF SF6 DEAD TANK CIRCUIT BREAKER
93500 - PF TWO-WINDING TRANSFORMERS
94500 - PF THREE-WINDING TRANSFORMERS
95500 - PF AUTO TRANSFORMER WITH TERTIARY
95501 - PF AUTO TRANSFORMER WITHOUT TERTIARY


```
******************************************************************************
*              11.0.3 - Driver Update                    *
*               - May 20th                          *
*               - PowerDB 11.0.3              (NO CHANGE)      *
*               - AVO_DELTA2000.v11.0.3.5     (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.100.1             (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*               - PDB_NOINST.100.1             (DRIVER/FORM CHANGE) *
*               - MEGGER_OTSAFPB.100.1        (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVER/FORM CHANGES:
DELTA: Fixed issue with the labelling on the Oil Tests when imported into DTA6.

```
******************************************************************************
*              11.0.3 - Driver Update                    *
*               - May 20th                          *
*               - PowerDB 11.0.3              (NO CHANGE)      *
*               - AVO_DELTA2000.v11.0.3.4     (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.100.1             (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*               - PDB_NOINST.100.1             (DRIVER/FORM CHANGE) *
*               - MEGGER_OTSAFPB.100.1        (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVER/FORM CHANGES:
DELTA: Implemented support for the export of oil tests on form 92510 for DTA6.

FORM CHANGES:
92510
92520


```
******************************************************************************
*              11.0.3 - Driver Update                    *
*               - May 20th                          *
*               - PowerDB 11.0.3              (NO CHANGE)      *
*               - AVO_DELTA2000.v11.0.3.3     (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.100.1             (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.100.1              (DRIVER/FORM CHANGE) *
*               - PDB_NOINST.100.1             (DRIVER/FORM CHANGE) *
```

```
*              - MEGGER_OTSAFPB.100.1        (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVER/FORM CHANGES:

SPI (MEGGER_APC.dll and "SPI FRONT PANEL" form):
31. Added collection of Slave Data during Pulsing for specific firmware versions.
32. Fixed USB buffer overrun issue.
33. Fixed no display of "Slave Not In Phase" message.

FORM CHANGES:
93500
94500
95500
95501


```
******************************************************************************
*              11.0.3 - Driver Update                 *
*                 - May 20th                          *
*                 - PowerDB 11.0.3           (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.2    (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.100.1         (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*                 - PDB_NOINST.100.1        (DRIVER/FORM CHANGE) *
*                 - MEGGER_OTSAFPB.100.1      (DRIVER/FORM CHANGE) *
******************************************************************************
```


DRIVER CHANGES:
MEGGER_OTS: Implemented support for the new OTS refresh.

FORM CHANGES:
27650
57390
93500
94500
95500
95501

Set Manufacturer and Model data types on appropriate tags on several forms.


```
******************************************************************************
*              11.0.3 - Driver Update                 *
*                 - May 18th                          *
*                 - PowerDB 11.0.3           (NO CHANGE)    *
```

```
*               - AVO_DELTA2000.v11.0.3.1     (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.100.1           (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.100.1             (DRIVER/FORM CHANGE) *
*               - PDB_NOINST.100.1           (DRIVER/FORM CHANGE) *
******************************************************************************
```

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
11. Update comma-as-decimal for Firmware number.
12. Fix phase issue in ramps for +/-180 min/max pass/fail values.
13. Make status text for fixed IP in firmware update stay on screen longer.
14. Fix 36 x 3 18 currents label to be 60/15.
15. Fix fault calc not clearing harmonics when not in use.
16. Transducer - Fixed float formatting for commas as decimals.
17. Fixed issue where VorI value was being overwritten by "I" in a conditional that had '=' operator instead of '=='.
18. Fixed check for decrementing NumConvIAvailable using bHasVGens and HasBatterySim.
19. Zeroed out unfaulted channels in fault calculator.
20. Updates to stop Fault calc from clearing healthy Voltage values.
21. COF: ABB REL670 v2.1.0, Siemens 7SA522, and Toshiba GRZ100-101A implementation.
22. COF: Fixing float values in XRIO import so they properly convert for comma as decimal.
23. COF: Splitting P43X into 5 different relays with different names
24. COF: Adding new buttons for Micom P43x relay types.
25. TOC: For ERDF curves, ignore the pickup and multiples - only use the test current.
26. TOC: Making sure timing report tables doesn't have blue entries and that they are read-only.
27. SyncCheck: fixed voltage and frequency ramp prefault phase values.
28. SyncCheck: changed phase shift for frequency ramping
29. Ramp: fixed abort banner staying up after binary search ramp tests
30. SyncCheck: changed phase shift for voltage ramp.
31. TOC: Allow setting and turning on currents for convertible channels to allow tests to be run with chained SMRT1's.
32. COF Protecta DRFP Percent Relay: Changed Min reach values to 0.01 for all R and X settings.
33. FREQ: fix drawing of pickup test points to include last point in test.
34. SyncCheck - adjust phase angles for voltage delta and frequency delta tests.

```
******************************************************************************
*               11.0.3 - Driver Update                    *
*               - May 13th                          *
*               - PowerDB 11.0.3            (NO CHANGE)     *
*               - AVO_DELTA2000.v11.0.3.1     (DRIVER/FORM CHANGE) *
*               - MEGGER_APC.100.1           (DRIVER/FORM CHANGE) *
*               - AVO_MPRT.100.1             (DRIVER/FORM CHANGE) *
```

```
*                - PDB_NOINST.100.1        (DRIVER/FORM CHANGE) *
**************************************************************************
```

DRIVER/FORM CHANGES:

Delta 4000:
Implemented support for the DTA6 export in PowerDB Lite.
Generators and Rotating Machinery forms now use no suppression.
Made multiple minor fixes and improvements to the labels and correction factors in the transformer bushing tables.
Implemented row highlighting for the active row on Delta forms.
Fixed an issue where the correction factor was automatically populating in manual tests.

FORM CHANGES:

27600
27610
91510
91515
92500
92510
92520
92529
92530
92550
93500
94500
95500
95501
96005
98000
98005
98006

10760
92600 - Help updated

PF Manual Control
PF Chart Legend
Delta Sweep Graph
Optima Data - Do Not Change


```
**************************************************************************
*           11.0.3 - Driver Update              *
*            - May 13th                  *
*            - PowerDB 11.0.3        (NO CHANGE)    *
*            - AVO_DELTA2000.v11.0.3.0    (DRIVER/FORM CHANGE) *
```

```
*              - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*              - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*              - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
****************************************************************************
```

Updated translations database.

DRIVER/FORM CHANGES:

SPI (MEGGER_APC.dll and "SPI FRONT PANEL" form):
7. Fix to NEED TO RUN DYNAMICK message.
8. Modified SpiQryMac() to handle slaves in Simulation Mode.
9. Added support to program SPIR in embedded mode.
10. Added support to program a SPIR (SPI and VIGEN.
11. Fixed buffer overrun issue.
12. Made QRYALL the only cmd executing during the ON Loop.
13. Modified logic to support new QRYALL format and Error and Warnings processing.
14. Fixed Not in Phase Error report. Added SetOVRange().
15. Added 2 sec delay and CWARN after set range.
16. Fixed Simulation for new QRYALL. Fixed ErrorManager for Slave Errors.
17. Added support for Firmware Update Check.
18. Added support for Relay_Firmware.ldr.
19. Fixed current unit display in Manual Mode.
20. Fix current unit display when going from A to kA.
21. Fixed Simulation of Manual Pulse.
22. Modified SpiQueryMaxCurrent() to save max current in Cfg_SysMaxCurrent.
23. Fixed one pulse ramping on 25A Tap.
24. Fixed display of mixed time and current units in Advance screen;
    Fixed display of mixed time and current units in Advance screen;
        Fixed display of mixed time and current units in Advance screen.
25. Increased to 2 sec delay before pretest.
26. Fixed unknown error message.
27. Added code to debug 5 cycles pulses (enabled only with Firm 1.02291).
28. Fixed Estop and Unknown error messages in parallel mode whit two slaves.
29. Fix for 2sec Max Time on Pretest Error.
30. Updated Pulse debug code.


```
****************************************************************************
*              11.0.3 - Driver Update                  *
*              - April 29th                       *
*              - PowerDB 11.0.3          (NO CHANGE)     *
*              - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*              - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*              - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*              - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
****************************************************************************
```

DRIVER/FORM CHANGES:

SPI (MEGGER_APC.dll and "SPI FRONT PANEL" form):
1. Fixed current unit display in Manual Mode.
2. Fix current unit display when going from A to kA.
3. Fixed one pulse ramping on 25A Tap.
4. Fixed display of mixed time and current units in Advance screen.
5. Increased to 2 sec delay before pretest.
6. Fixed unknown error message.


```
*******************************************************************************
*              11.0.3 - Driver Update                 *
*                 - April 22nd                    *
*                 - PowerDB 11.0.3          (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.0    (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*                 - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
*******************************************************************************
```

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
9. Fixing issue where when already connected to testset opening results was not properly sending user to Report view;
10. TOC - Allow setting and turning on currents for convertible channels to allow tests to be run with chained SMRT1's.

FORM CHANGES:
92600 - OCR


```
*******************************************************************************
*              11.0.3 - Driver Update                 *
*                 - April 21st                    *
*                 - PowerDB 11.0.3          (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.0    (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*                 - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
*******************************************************************************
```

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):

6. COF: Recalculate start/end points of test line during validation of test lines for Constant Voltage;
7. COF: Protecta DRFP Percent Relay: Update setting validation ranges for R and X settings;
8. Ramp Report: Updating to fix min/max issue when converting between 0-360 and +/- 180.


```
****************************************************************************
*               11.0.3 - Driver Update                   *
*                 - April 20th                      *
*                 - PowerDB 11.0.3                          (NO CHANGE)     *
*                 - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.100.1          (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.100.1          (DRIVER/FORM CHANGE) *
*                 - PDB_NOINST.100.1          (DRIVER/FORM CHANGE) *
****************************************************************************
```

DRIVER CHANGES:

MEGGER_APC, AVO_MPRT, PDB_NOINST: Updated version number to new format (just "100.1" without "D" at the start). (No other changes for MEGGER_APC and PDB_NOINST).

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
1. Update Firmware version number in message box for Automatic Firmware Update when using comma-as-decimal;
2. Fix phase comparison issue in ramps for +/-180 min/max pass/fail values;
3. Display status text for fixed IP telling user that we cannot update a unit using fixed IP during firmware update for longer so that the user has time to read it;
4. Fix 36 x 3 18 currents label to be 60/15;
5. Fix fault calculator not clearing harmonics when not in use.


```
****************************************************************************
*               11.0.3 - Driver Update                   *
*                 - April 19th                      *
*                 - PowerDB 11.0.3                          (NO CHANGE)     *
*                 - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.D100.1          (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.D100.1          (DRIVER/FORM CHANGE) *
*                 - PDB_NOINST.D100.1          (DRIVER/FORM CHANGE) *
****************************************************************************
```

DRIVER CHANGES:
MEGGER_APC, AVO_MPRT, PDB_NOINST: Updated version number to new format (without ".0.0" at the end). (No other changes.)

```
*******************************************************************************
*               11.0.3 - Driver Update                    *
*                 - April 18th                      *
*                 - PowerDB 11.0.3                              (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.D100.1.0.0      (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.D100.1.0.0        (DRIVER/FORM CHANGE) *
*******************************************************************************
```

DRIVER CHANGES:
MEGGER_APC: Updated version number to new format.
AVO_MPRT: Updated version number to new format.

DRIVER/FORM CHANGES:

RTMS (AVO_MPRT.dll and "Relay Test Management Software (RTMS)" Form):
<Moved all changes and bugfixes from development to release.>

```
*******************************************************************************
*               11.0.3 - Driver Update                    *
*                 - April 8th                      *
*                 - PowerDB 11.0.3                              (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*                 - MEGGER_APC.v11.0.3.3       (DRIVER/FORM CHANGE) *
*******************************************************************************
```

DRIVER CHANGES:
MEGGER_APC: Added 2 sec delay and CWARN after set range.

```
*******************************************************************************
*               11.0.3 - Driver Update                    *
*                 - April 8th                      *
*                 - PowerDB 11.0.3                              (NO CHANGE)    *
*                 - AVO_DELTA2000.v11.0.3.0     (DRIVER/FORM CHANGE) *
*******************************************************************************
```

FORM CHANGES:
Delta - Changed all instances of "Independent" to "Individual" on the Delta 4000 forms.

```
*******************************************************************************
*               11.0.3 - RELEASE                      *
*                 - March 23rd                      *
*                 - PowerDB 11.0.3          (APP CHANGE)     *
*                 - AVO_DLRO.v11.0.2.3       (DRIVER/FORM CHANGE) *
*                 - AVO_MPRT.v11.0.3.3        (DRIVER/FORM CHANGE) *
```

```
*              - AVO_S1.v11.0.3.0        (DRIVER/FORM CHANGE) *
*              - AVO_TTR.v11.0.3.1       (DRIVER/FORM CHANGE) *
*              - MEGGER_APC.v11.0.3.2    (DRIVER/FORM CHANGE) *
*              - MEGGER_ODEN.v11.0.3.0   (DRIVER/FORM CHANGE) *
*              - MEGGER_SVERKER.v11.0.3.0 (DRIVER/FORM CHANGE) *
*              - PDB_NOINST.v11.0.3.0    (DRIVER/FORM CHANGE) *
**************************************************************************
```

MAIN APPLICATION:

POWERDB: Fixed instrument selection translatable items in Lite.
POWERDB: Fixed an issue with the BITE2/3 import test date.
POWERDB: Adding the option to change header in Lite.
POWERDB: Adds button to the Lite ribbon for exporting DTA6 files. Hide option if not enabled by form.
POWERDB: Fixed rare crash when exiting edit controls on the form.
POWERDB: Set any field on a form that uses "AddReqColorBox" RunTagCmd to have a green box if it has a value and is not read only. Previously only fields that were required, not read only, and had a value would be given a green box.
POWERDB: Fixed crash with assign compliance.
POWERDB: Fixed minor issue with Add to Job wizard and labelling on database admin dialog.
POWERDB: Serial Communications - Fixed Parity and ByteSize not being set as specified in instrument configuration dialogs.
POWERDB: Fixed issue with previous test dates not showing up on the compliance view.
POWERDB: Fixed Org4 not showing up in compliance view.
POWERDB: New Asset Dialog - Fixed Pop-Up message that appears when an asset cannot be added so the wording is easier to understand.
POWERDB: Fixed a crash that would occur if attempting to close the trend data selection when it doesn't exist.
POWERDB: Fixes the Asset Assign Compliance and Properties dialogs to match the update that allowed dynamic Org levels.
POWERDB: Fixes Save As button in Lite "File" view.
POWERDB: Fixed constant "wait" cursor that occurs when doing data entry.
POWERDB: Add to Job dialog now takes the Highest Org Level option into account.
POWERDB: Implemented a fix for the FormUseMultilineEditDlg feature. The dialog should now display all rows of values instead of starting at the selected row.
POWERDB: Added new format to CSV export.
POWERDB: Fixed crash with exporting to CSV.
POWERDB: Added an option on the Result ribbon for restoring results. Only PowerUsers and Above should be able to use this function. The function also checks if the corresponding assets are deleted. If so, the user is asked whether they want to restore them as well and thus restore the results or not restore the assets and leave the results deleted as well. Only results with active assets or approved assets to be restored will be restored.
POWERDB: Fixes the crash related to the db startup message.
POWERDB: Fixes the compliance view to say "No Test Status" instead of "Not Tested" when the result does not have a test status.
POWERDB: Print external doc after the related result.
POWERDB: Fixes issue where the administration dialog does not properly load the values from the database into the dialog. ("Automatically log off after", "Automatically save test after", etc.)

POWERDB: Fixes issue where some form dialogs would not scale right with certain styles enabled.
POWERDB: Fixed incorrect scaling of text when zooming in and out.
POWERDB: Fixes issue with the equipment list dialog populating the type too many times.
POWERDB: Fixed pasted field only blue for first two pages.

PDBSYNCH: Fixes issue when updating localdb to version 11 after a backup of the database.

Curve Library: Imported S&C curves.

DRIVER CHANGES:

AVO_S1: Fixed communication loss with MIT/S1 525/568 instruments during live streams.
MEGGER_SVERKER: Recompiled with Serial changes to fix Parity.
MEGGER_ODEN: Recompiled with Serial changes to fix Parity.
CommonInstLib: Modified the ForceTCPIP logic to allow forcing TCPIP for some models of an instrument and not for others.
AVO_DLRO: Fixed localization issue in languages that use the comma as a decimal separator, and improved the way we handle unexpected responses during remote control for the DLRO 100.
AVO_DLRO: Set minimum values for ramp time, plateau duration, and test current, and changed the visual style of the property sheet.
AVO_TTR: Added support for the TTR 310 Ethernet communication.

AVO_MPRT(MPRT): Fix errors for MPRT caused by unsupported commands and sending voltage commands when all voltages are converted to currents.
AVO_MPRT(MPRT): Fix sequence test for MPRT. (Don't send "digcap" commands.)
AVO_MPRT(MPRT): Don't send extra WAI0 command to MPRTs during prefault-fault test. This fixes getting either a "NOP" or the timeout value back as a result.

PDB_NOINST: Rebuilt for 11.0.3 to solve onboard instrument detect problems.

DRIVER/FORM CHANGES:

RTMS ("Relay Test Management Software (RTMS)" Form):
1. Change scripting to work with new Lite Header options.

MRCT (AVO_MPRT.dll and MRCT form):
1. Add Dc saturation test feature
2. Add feature to combine reports for multiple CTs/VTs
3. Add parallelogram limits for accuracy classes 0.15 and 0.15S
4. Add VT lead swap warning on connection diagram
5. Modify VT terminologies and settings
6. Make manual test graph trace wider
7. Copy number of taps at nameplate copy when the current CT has not been tested
8. Return to Run All Tests screen when tests finish if tests are started from this screen (after report closed)
9. Save ShowSaturationData setting in file and do not clear them when printing in PowerDB Pro
10. Change error text display for winding measurement error

11. Changed Embedded header to standard header as Lite and Pro.
12. Turned off deviation alarm for winding and burden tests.
13. Added new Lite Header options.

SPI (MEGGER_APC.dll and "SPI FRONT PANEL" form):
1. Fix CAN NOT FIND TAP message in Parallel Mode.
2. Fixed Simple screen current update after running Advance Pickup Test.
- Fixed Simple Screen Momentary Pickup.
- Fixed Advanced Pickup Screen current update.
3. Added Error Codes for SPI 6000.
- Updated error code logic to support slaves errors and warnings.
4. Errors and Warnings slave support update.
5. Added ADV_SOFT_KEY_CMD and QRY_SOFT_OPT_CMD.
6. Added SpiTesterRunningBinInpTest to support Binary test in SPI Tester.
7. Fixed NT reading in Functional Tester.
8. Fixed vbscript error on SPI Tester.
9. Added ERC command to PRETEST_CMD.
10. Added support for Continuous pickup test.
11. Added support to log IIR registers.
12. Adjusted controls on SpiReport* subforms to display and print correctly with a vertical text orientation.
13. Added DC_OFFEST_CMD and DBG_CMD, fixed Open Breaker between pulses issue, fixed connected icon indicator.
14. Fixed time reported on Open breaker between pulses.
15. Added new Lite Header options.

FORM CHANGES:

27660 - MULTI-WINDING CT TEST: Updated to work in PowerDB Lite with MCT
27650 - CURRENT TRANSFORMER TEST: Updated to work in PowerDB Lite with MCT
16101 - VACUUM CIRCUIT BREAKER
92600 - OCR: Added special case to display full curve names for a few particular curves with names that don't fit in the space provided in the Curve Library.
Job MultiUse Report


```
***************************************************************************
*              11.0.2 - Driver Update                 *
*                - January 26th                     *
*                - PowerDB 11.0.2                    (NO CHANGE)        *
*                - AVO_DLRO.v11.0.2.1                (DRIVER/FORM CHANGE) *
*                - PROGRAMMA_TORKEL.v11.0.2.1        (DRIVER/FORM CHANGE) *
***************************************************************************
```

DRIVER CHANGES:
AVO_DLRO: Fixed an issue on the DLRO 100 where the control panel cuts off asset tags at the first space in downloaded results.

PROGRAMMA_TORKEL: Fixed communication issue with the torkel in version 11.

```
***************************************************************************
*            11.0.2 - RELEASE                     *
*              - January 19th                   *
*              - PowerDB 11.0.2                    *
***************************************************************************
```

MAIN APPLICATION:
POWERDB: Fixes error with DTA import.
POWERDB: Fix Lite SMRT/FREJA Desktop shortcut startup.

```
***************************************************************************
*            11.0.1 - Driver Update                 *
*              - December 8th                    *
*              - PowerDB 11.0.1                 (NO CHANGE)      *
*              - AVO_S1.v11.0.1.1                      (DRIVER/FORM CHANGE)  *
***************************************************************************
```

DRIVER CHANGES:
AVO_S1: Fixed crash that occurs if the data stream is interrupted during a S1 525 download.

```
***************************************************************************
*            11.0.1 - RELEASE                     *
*              - December 8th                    *
*              - PowerDB 11.0.1      (APP CHANGE)      *
*              - AVO_MPRT.v11.0.1.0     (DRIVER/FORM CHANGE) *
*              - PDB_NOINST.v11.0.1.0     (DRIVER/FORM CHANGE) *
***************************************************************************
```

MAIN APPLICATION:
Correct version numbering.
The DLRO 100 button in PowerDB Lite now goes directly to the DLRO 100 form.
Fixed an issue with how tests are sorted in the open PdbXml file dialog in PowerDB Lite.
Fixed a crash that occurred when saving to PDF in PowerDB Onboard mode.

DRIVER CHANGES:
PDB_NOINST: Correct resource includes that were removed by Visual Studio so that dialogs can be loaded again.
AVO_MPRT: FREQ Over/Under Timing: Fix test set error when Nominal is within min/max tolerance band and a negative ramp time is calculated.

```
***************************************************************************
*            11.0.0 - Driver Update                 *
*              - December 1st                    *
*              - PowerDB 11.0.0        (NO CHANGE)        *
*              - PROGRAMMA_TORKEL.v11.0.0.1   (DRIVER/FORM CHANGE) *
```

```
*              - AVO_MPRT.v11.0.0.1        (DRIVER/FORM CHANGE) *
*              - AVO_DLRO.v11.0.0.1        (DRIVER/FORM CHANGE) *
***********************************************************************
```

Remove RC designation from PROGRAMMA_TORKEL, AVO_MPRT, AVO_DLRO for driver update release.
DLRO: Added support for the DLRO 100.
Torkel/Anton DMA: Added a button on the hydrometer data table to import results from the hydrometer.

MRCT: Added software version check to decide if ratio error calculation is available when opening a file.

AVO_MPRT: Ramping - Fixed comma-as-decimal float formatting for smooth ramping command.
AVO_MPRT: Timing - Fixed comma-as-decimal float formatting for timing tests.
AVO_MPRT: Timing - If abort is pressed during 2x injection, don't show NoOPeration during 2x status.
AVO_MPRT: Synchronizer - Fixed comma-as-decimal float formatting for process commands.
AVO_MPRT: Synchronizer - Fixed PDB crash on when selecting row in test table.

FORM CHANGES:
10756 - AUTOMATED BATTERY DISCHARGE

SUBFORM CHANGES:
MctReport
MprtSyncTable

```
***********************************************************************
*           11.0 RELEASE                    *
*             - November 5th                  *
*             - PowerDB 11.0                        *
***********************************************************************
```

DRIVER CHANGES:
PowerDB: Changed the way PowerDB detects com ports. This fixes an edge case where PowerDB could occasionally time out during detection, and fail to find all of the comports available.
PowerDB: Fixed the time format on SQL timestamps generated in scripting. This was causing localization issues in Mexico on the battery forms.
PowerDB: Fixed a status message that appeared to be in a foreign language when PowerDB Onboard is loading.
PowerDB: Fixed an issue in PowerDB onboard that caused the instrument name and serial number not to display correctly in the instrument detect dialog.

MTO: Improved the performance of the MTO form.
MTO: Reorganized MTO Test Wizard and fixed a rare crash that could occur if users hit F2 while starting a test.
MTO: Disabled MTO Test Wizard tap dropdowns when they are empty.
MTO: Disabled the MTO manual tests when using MTO 210.

MTO: Fixed an issue that was causing the standard to not update on the form when changed in the settings.
MTO: Fixed an issue with the style of the test wizard buttons in onboard mode.
MTO: Enabled the show differences checkbox in onboard.

DELTA: Added ability to calculate ITC for overall and bushing sections of the delta forms.
DELTA: Added automatic reading of temperature/humidity from instrument when performing an ITC test.
DELTA: Added support for updating ITC when oil/ambient temperature is changed on the form.
DELTA: Corrected the labels on the overall test section of form 95501.
DELTA: Renamed the suppression settings in the quick tests section to be more descriptive.
DELTA: Fixed an issue where suppression was being forced to Frequency Variation in manual tests.

TTR: Fixed an issue where PowerDB Onboard would freeze following a prompt to save on form 56006.
TTR: Fixed an issue that was causing phase C on the TTR forms to always display phase in minutes.
TTR: Fixed an issue where PowerDB would not close properly after running TTR test.
TTR: Fixed an issue where PowerDB would freeze if the user stopped an in progress TTR test.
TTR: Fixed an issue with the TTR firmware/serial number not being displayed in the form.
TTR: Fixed an issue where initialization of the TTR 330 sometimes failed in remote testing.

BITE: Reorganized the form to allow translations to fit better.
BITE: Reorganized the charger section of the form.

MEGGER_DET24C: Adding support for the new bluetooth version of the DET24C.

AVO_S1: Fixed an issue with simulation data for S1-5010 loaded data.
AVO_S1: Fixed an issue with data download for the S1-5010 in version 11 due to unicode changes.

TORKEL: Added an autosave prompt in lite and fixed test data not clearing when opening a new form.
TORKEL: Fixed a number of minor and cosmetic issues with the Torkel/BVM form.
TORKEL: Fixed an issue where the autosave prompt would display twice if you start Torkel/BVM at the same time.
TORKEL: Added several new log messages for the Torkel data capture parameters.
TORKEL: Modified the F1 switch message to appear before we initialize the test set rather than after.

BVM: Removed several unnecessary log messages for the BVM.
BVM: The BVM should now pause if the Torkel pauses.
BVM: Added a BVM connection diagram to the Torkel/BVM form.

ANTON_DMA: Added a new hydrometer import.
ANTON_DMA: Fixed an issue with the number of significant digits on the specific gravity value.

RTMS: Added new Timing module.
RTMS: Added Smooth Ramping option to ramping module.
RTMS: Added/Updated Help files.
RTMS: Added support for new SMRT and Freja models.
RTMS: Added Impedance modules for:
  - ABB REF630;

- PROTECTA DRFP, DRFP %;
- ALSTOM P438, P44T;
- AREVA P441, P442, P444 (replaces P44X option for clarity);
- GE GCX, GCY.

RTMS: Added RTMS Pro modules:
- AVTS integration
- Frequency
- Synchronizer

MRCT: Added VT ratio and winding tests
MRCT: Added functionality for users to add/delete secondary current ratings
MRCT: Added Chinese and Korean language support
MRCT: Fixed a bug on zoom scale when switching from report to test screens

FORM CHANGES (SINCE 10.5):
MRCT
Relay Test Management Software (RTMS)
10750 - BATTERY IMP/COND TEST
56353 - MTO - 3ï¿½ WINDING RESISTANCE
92500 - PF AIR-MAG CIRCUIT BREAKER
56356 - MTO - TX HEAT RUN
92520 - PF SF6 DEAD TANK CIRCUIT BREAKER
92510 - PF OIL CIRCUIT BREAKER
92530 - PF VACUUM CIRCUIT BREAKER
92550 - PF VACUUM CIRCUIT RECLOSER
SPI FRONT PANEL
10756 - AUTOMATED BATTERY DISCHARGE
94500 - PF THREE-WINDING TRANSFORMERS
95501 - PF AUTO TRANSFORMER WITHOUT TERTIARY
95500 - PF AUTO TRANSFORMER WITH TERTIARY
93500 - PF TWO-WINDING TRANSFORMERS
98005 - PF ROTATING MACHINERY TIP UP
56352 - MTO210 WINDING RESISTANCE
56050 - TRANS. DISSIPATION FACTOR
32500 - SYNCH MOTOR DISSIPATION FACTOR
32100 - MOTOR DISSIPATION FACTOR TEST
16300 - OIL CIRCUIT BREAKER DISSIPATION
92529 - PF SF6 LIVE TANK CIRCUIT BREAKER
91510 - PF MISCELLANEOUS EQUIPMENT
00001 - COVER PAGE
00002 - COVER LETTER
00100 - Test Procedures
00110 - PLACEHOLDER
82000 - PHAZER REPORT
AvtsImport

CabaWinImport
CabaWinImport_FormExport
ChangePrintReportOrder
Compliance Report
Form Update Report
Form Version Report
Full Form Search
Maintenance Report
Manufacturer Report
OCR - Maintenance Report
ProtestImport
RtsImport
SubForm Revision Report
Tests Run Report
Current & Voltage Sensing Device
27610 - PF CURRENT TRANSFORMER
32400 - SYNCH MOTOR PI TEST
10754 - BASIC BATTERY DISCHARGE
93500 - PF TWO-WINDING TRANSFORMERS (2)
27600 - PF PT/VT TRANSFORMER
56004 - TTR TESTING via NAMEPLATE INPUT
90000 - TRANSFORMER
60080 - CUSTOM SV TEST
60000 - PI TEST
60070 - SV TEST
60010 - IR TEST
45444 - INFRARED INSPECTION FLIR P640
56301 - MTO - RESISTANCE QUICK TESTS [& GENERATORS]
56365 - TTR - 3ï¿½ TX WITH TAP CHANGER
54100 - AUTOMATIC TRANSFER SWITCH TEST
54000 - AUTOMATIC TRANSFER SWITCH TEST
50300 - POWER PANEL INSULATION TEST
50100 - LV SWITCHBOARD INSULATION
50001 - MV SWITCHBOARD INSULATION
31301 - MEDIUM VOLTGE VACUUM MOTOR START
31300 - MEDIUM VOLTGE VACUUM MOTOR START
31001 - MOTOR STARTER TEST
32000 - MOTOR PI TEST
32450 - SYNCH MOTOR PI TEST ARMATURE
97560 - ROTATING MACHINERY PI TEST
98500 - ROTATING MACHINERY STEP VOLTAGE
30100 - MOTOR CONTROL CENTER INSULATION
56006 - TTR - TX WITH PHASE SHIFTING
92000 - CIRCUIT BREAKERS
91000 - INSULATION - MISC. EQUIPMENT
65500 - LIGHTNING ARRESTER TEST
27450 - CONTROL POWER TRANSFORMER TEST
27400 - CONTROL POWER TRANSFORMER TEST

27200 - VOLTAGE TRANSFORMER TEST
27000 - CT PRIMARY INJECTION RATIO
29101 - DISCONNECT SELECTOR SWITCH
29001 - LOADBREAK DISCONNECT
15602 - FUSE DISCONNECT INSP. TEST
15501 - BOLTED PRESSURE SWITCH TEST
16201 - OIL CIRCUIT BREAKER TEST
16101 - VACUUM CIRCUIT BREAKER
16001 - MEDIUM VOLTAGE AIR CKT. BKR
14000 - BUS DUCT INSULATION TEST
27800 - MTO - CT WDG RESISTANCE
27850 - MTO - PT/VT WDG RESISTANCE
98006 - PF STATOR COIL TIP UP
93510 - TTR - MAGNETIC BALANCE
91515 - PF BUSHING
56001 - TTR QUICK TEST
15055 - LOW VOLT. PWR. CKT. BKR. TEST
96005 - PF CABLES
56003 - TTR SINGLE PHASE QUICK TESTS - MULTIPLE RESULTS
27700 - TTR - CT RATIO & PHASE DEV
56600 - TRANSFORMER PI TEST
56002 - TTR - TURNS RATIO QUICK TESTS
93002 - MULTIPLE POWER FACTOR QUICK TESTS
94000 - TRANSFORMER TIP-UP TEST
27750 - TTR - PT/VT RATIO & PHASE DEV
98000 - PF GENERATOR TIP UP
57952 - WEIDMANN-ACTI DGA
MRCT BurnIn Test
13000 - CABLE PI TEST
49900 - GENERIC MULTIFUNCTION RELAY
66500 - INSPECTION SHEET
56502 - TRANSFORMER TTR (VANGUARD)
15300 - BREAKER ANALYZER VANGUARD VCBA-2
57100 - TRANS. LIQUID COOLANT ANALYSIS
92600 - OCR