Version 10.1: 2022-07-15

- Live data updating at 0.5 Hz is working fine by enabling 'Keep Refres hing' button.

- Limit the access of snapshot deletion function through the menu.
- Fix the performance regression for data refreshing:
 - Refresh tolerance, reference, alarm switches status when needed.
- Rename column names: State --> Live State, Last State --> State.
- Fix a bug regarding the multi-field device state display.

Version 10.0: 2022-06-22 ______

- As of this release, Settings Manager supports to work together with t he dedicated
 - Phoebus Display
 - Phoebus Alarm system, which is maintained as separated projects.
- Fixed the backcompatiblity of reading old snapshots that does not hav e device state info.
- Add support for Reference Setpoint set and visualization.
- Add support for device alarm controls.
- Add support for filtering reference set, alarm controls.
- Manage tolerance of live read and set with PVs.
- Add support to set tolerance/referece_set through context menus.
- Add support to publish snapshot as the one in operation.

Version 9.8: 2022-04-28

- Hide Position column, sort Device column by position.
- Support filter diff device state with a new filter button.
- Support show device state, and last saved device state.
- Support more blocking device types, e.g. AP, ATT, CHP etc.
- Improved data refresh speed.
- Swap the sign of dx02.
- Chanve the default policy for 'Take Snapshot':
 - Always save the full list of device settings, unless,
 - Enable WYSIWYC option (What You See Is What You Capture)
- Support '+' operation for batch apply settings, i.e. shift setpoint b y some value.
- Add scripts for snapshot generation.
- Other bugfixes.

Version 9.7: 2022-01-24

- Fix packages by adding missing files.
- Add new context menu action for data trending
 - Pull and visualize data from Archiver Appliance
- Add support for showing checked items stats.
- Add new button for unchecked all items.
- Update UI.

Version 9.6: 2021-12-09

- Update the routine for settings generation.

- Fix: no-write-access item could still be checked.
- Add STRIP_D2249 to read-only device list.
- New: support unchecked all items.
- New: add stat for globally checked items.
- Update UI.

Version 9.5: 2021-11-02

- Fix settings view style per write access
- Update carbon stripper position (FRIB only)
- Support Oxygen icon
- Drag and drop XLSX snapshots will also trigger database update
- Export snapshot only update cloned SnapshotData model
- Update the routine for generating snapshots from xlsx files.

Version 9.4: 2021-10-26

- Support visualize BPM signal saved along with SnapshotData.
- Support database backup, merge, etc.
- Update UIs and resources.

Version 9.3: 2021-10-22

- Clean up elements.json configuration file, which was used to keep user -customized high-level

device configurations. Now all the device info should be from phantasy -machines.

- Show disconnected status if the devices are not connected, but are still managed by MachinePortal
 - It will cause caget timeout and freeze the GUI before this fix
- Show warning dialog if the snashot to load has non-existing devices (usually happened after

machine reconfiguration), inside the dialog, show the saved settings for reconfigured devices.

- Add filter button for disconnected devices
- Refined feature of settings initialization from loaded lattice
 - Add support to initialize settings for those disconnected devices
- Add option to skip none settings or not, none is return for non-reac hable devices, uncheck

this option to make settings table for offline devices

- Now "Add Devices" tool only work with adding devices from pre-deployed machine configurations
- The field of interest for the high-level element is updated with STR IPPER, SLT device type.
- Ensure the database connection
- Update the configuration file for machine state data fetching (some BP Ms are relocated)

Version 9.2: 2021-10-01

- Implemented app configuration module

- use settings_manager.toml file to manage all the configurations
- Runtime change configuration from Preferences dialog
- Add a tool for database management
 - Initialize an empty database
- Update existing one with snapshot files (Settings Manager in FILE wo rking mode)

Version 9.1: 2021-09-29

- Support working with SQLite database for snapshot data
 - Also leave option of working with files
- Performance improvement when working with database
 - Use threading to shift data loading
 - Limit number of snapshots to display
 - Lazy-load snapshot table
- Other fixes and enhancements

Version 8.0: 2021-05-14

- Refactored SnapshotData class to support multi-sheet data
 - Adopt pandas.DataFrame to manage the data
 - Default data format: xlsx
 - Read and save from/to xlsx, h5, csv, etc.
- Store settings data, metadata for settings data, and machine state data
- Support capture and save machine state data when taking snapshot
- Support save power on/off status data into snapshot
- Support control device power switch via context menu
- Support search snapshot files by note and datetime range

Version 7.1: 2021-04-13

- Setting View
 - Support to show devices readonly by maintaining hardcode name list
 - Add field of interest for more diagnostic devices
 - Support switch power status via context menu

Version 7.0: 2021-02-22

- Setting View
 - Support only showing field-of-interest, defined in config/field.toml
 - Support show device power status in a new column
 - Support running with LIVE_MODE environmental variable
 - Do global data refreshing when any filter button is checked
 - F5 (Ctrl+F5) for single data refresher (continuously)
 - Manage all devices in phantasy-machines for ISRC1
- other bug fixes

Version 6.0: 2021-01-19

- Snapshots Window:
 - Add support to show 'Ca' icon
 - Refactor the snapshot data model --> SnapshotData
 - Create unittests for snapshot data
 - Eliminate 'filepath' attribute
 - Support freely re-organize data directory structure
 - Change default naming rule: eliminate ':' from file name
 - Refactor treeview of snapshot data presentation
 - Create context menu actions to perform snapshot operations
 - Fix duplicated signal emit issue
 - Fix 'wrong index when mapFromSource' issue
 - Rename operation 'cast' to 'Load'
 - Treat empty tags as 'NOTAG' when doing tag filtering
 - Fix wrong hit statistics when doing tag/ion filtering
 - New action to copy snapshot data as a table
- Settings View:
 - Add loose/strict wildcard option for filtering
- Preload default machine and segment when starting up app

Version 5.2: 2020-12-04

- Snapshots Window:
 - Add Selenium icon
 - Fix window height retaining issue
 - Rename 'Cast' to 'Load'
- Settings Treeview:
 - Fix bug: cannot invert selection from unchecked to checked

Version 5.1: 2020-12-03

- Settings Treeview:
 - Bugfix: invert selection
 - ENH: dblclick to toggle item selection
- Snapshot Treeview:
 - Update 1st level node style
 - Do not show parent node if no children hit when filtering

Version 5.0: 2020-11-05

- Single data refresher:
 - Update with multiple processes
 - Not show progress bar
- SettingsModel:
 - Remove CSET and RD PVs, and regarding view aspect

Version 4.3: 2020-10-26

- Single data refresher:
 - Add support to show progress
 - Improve the GUI responsiveness
- Continuous data refresher:
 - Only do value updating for the items in current view
- SettingsModel:
 - Speed up the model initialization, FRIB/LINAC 6s --> 2s

Version 4.2: 2020-10-19

- Settings view filtering:
 - Add support to 'in' test to Settings View filtering.
 - Add support compound 'and' filter for settings view.
 - Compare x0 and x2 with precision number.
 - Implement buttons for filtering with dx12, dx02 warning signs.
- Apply settings:
 - Skip setting device if current setting is close to the proposed.
- Fixes:
 - Fix crash when do inverse selection on all checked items.
 - Fix delta x0, x2 updating retarding issue.
 - Hint typoes.
- Scaling factor:
 - Set scaling factor format with '.5g'.
- Maintaince:
 - Update default device sp/rd tolerance list.
 - Always keep set log file.
 - Load elements from config.
 - Update notebook for generating settings files.
 - Support add note meta in contrib notebook for generating settings.
 - Update the notebook to generate settings files for cavity tuning.
- GUI:
 - Hide settings statistics info by default.
 - Update symbol for dx02 and dx12.
 - SettingsModel support 'auto_fmt' argument, '{0:{n}g}' as auto format
 - Handle the widget control permission for data updaters.
 - Add option to set .{n}g format for presenting data.
 - Add min/max-imize buttons to floating snapshots window.
 - Close device set log by default.
- Tools:
 - Update the command to evoke ipython console.
- Data/FRIB:
 - Update settings data file for cavity tuning.

- Add generated settings file for 129Xe50 cavity tuning.
- Add revised settings xlsx file for LS2 phasing.
- Add setting files for 129Xe27 to 50 from MEBT to FS1A,B, FS2.
- Add xlsx file for 129Xe27 to 50 for MEBT to FS1A/B, FS2.
- Add settings with reduced solenoid current, 2020-10-06.
- Append timestamp to the generated filename.
- Update settings files for LS1,2 cavity tuning.
- Add settings files for LS1,2 cavity tuning.

- Doc:

- Update settings manager guide doc, pdf.
- Add user guide .doc file.

Version 4.1: 2020-10-01

- Refactor SnapshotDataModel, w.r.t. the solution to handle buttons in row
- Implement dynamic filter buttons for ion names and tag names to Snapsh ots
- Add support to delete snapshot from memory or disk drive
- Enable sorting of Snapshots
- Change the naming rule of SnapshotData to avoid name collision
- Other bug fixes and feature enhancements

Version 4.0: 2020-09-25

- Hide Save and Load Settings tools, use Save and Cast in Snapshots Wind ow instead
- Initialize cofiguration files for new users
- Update values before taking snapshot
- Add x2/x0 column to show the ratio between current setpoint and saved one
- Auto fill scaling factor if loaded snapshot working with different Q/A
- Updated settings view
- Support open Help contents from menu or F1
- Snapshots Window:
- Support manage data files from a directory, recursively search all possible files
- Update TableSettings, SnapshotData and SnapshotDataModel to support show more metadata
 - Support in-place saving data
 - Support input tags, golden setting indicator, ion species
- Keep cast status after taking snapshot or auto refreshing working di rectory
- Settings Apply:
 - Remove setdone status
- Implement applying progress bar, and highlight current applying device
 - Support saving snapshot before apply option
 - Show log messages when applying
 - Support Cancel before Apply
 - Update values after applying is done

- Device Set Log Window: - Capture all set log when doing settings apply - Support open in system text editor, e.g. do searching Version 3.0: 2020-09-15 _____ - Initial settings: - Add support initialize settings with loaded lattice - Settings apply: - Add support to input math expression as scaling factor - Show progress bar when iterating devices - Snapshots: - Add module to manage snapshots from CSV files - Ensure fetch the most recent setpoints before taking snapshot - Add support to manage snapshots via drag and drop - Add support to preload snapshots from working directory (Preferences - Introduced cast feature of snapshot - Add support to input metadata to snapshots
- Add tool dialog to fix LS1,2 corrector name issue for old saved CSV fi les,

due to the changes of phantasy-machines (commit: 39c94e5)

- Do not need to manually load lattice before load settings from CSV fil е.