Astroid Planning Release Notes

Version: 2.0.0-rc1
Date: Jul 6, 2017

The first official release candidate build of the Astroid Planning App is now available. It is recommended that all users start with a fresh clean bucket for testing with this version.

The following changes (since 2.0.0-beta3i) are part of this release:

- Fixed potential errors when a structure with no voxels is assigned a constraint/objective
- Fixed bug where dose would not display in history view
- "Delete" now changed to "Archive" to better reflect actual behavior of patient record removal
- "Open Patient" button during import is fixed
- Aperture mill tool radius moved to machine settings
- Fraction Group type added to summary UI (e.g. IMPT / SFO)
- Snout extension value now shown in AirGap block
- Prescriptions are now cumulative when computing the default 100% dose level
- Default DRR opacity is now 50%
- Right Side structure opacity sliders & values condensed to single line
- Beam target is now highlighted when editing the beam
- Solver and optimizer iteration limits increased to 4 billion (formerly 2 billion)
- Solver and optimizer intelligent stopping options are now separate
- Dose image data size reduced (values converted from 64 bit float to 32 bit float)
- Patient Model DICOM header data updated
- Option for auto-computing all dose scopes added to right side dose options menu
- BEV per layer view implemented (energy banded structure view added and layer scrolling via mouse wheel)
- Minimum target margin option added to aperture generation block
- Spot placement defaults and culling distance are now machine settings
- Treatment room selection now supports multiple machines
- Deletion of last prescription is prevented if plan exist for the course
- Fixed a bug in the computed mean dose values when structures have varying voxel sizes
- Can now assign to "matched" structures during import if the matched structure is deselected
- Warnings added to show that a plan does not implement the complete prescription
- MCO slider performance improved
- Max dose "jump to" temporarily removed due to performance issue (this will return in the future)
- Non-clinical test features removed (Plan/Dose Export buttons in Navigation block & edit MRN option)

Version: 2.0.0-rc2
Date: Jul 27, 2017

A new release candidate build of the Astroid Planning App is now available. It is recommended that all users start with a fresh clean bucket for testing with this version.

The following changes (since RC1) are part of this release:

- Updated various structure selection lists to prevent duplicate selection of structures (RSP overrides, structure combinations, etc)
- References to "Directive" have been changed to "Course"
- Structure ROI Types (Target, Organ, etc) are now set based on information from DICOM file (for custom structures)
- All custom "Target" structures are defaulted to "Course" level during import
- Optional User defined display label added to plan level structures
- Highlight thickness toned down
- Option added to Right Side menu for toggling all structures between Solid/Contour view
- Option added to Right Side menu for expanding/collapsing all structures in the list (enables quick access to transparency settings for all structures)
- Gantry and Couch angle +/- buttons set to increment at 5 deg (can still type or slide to any desired value though)
- Fraction groups now require at least one constraint
- Warning icon added to closed blocks that have sub-tasks open in an editing state
- In-place edit mode added for Fraction Groups
- Edit/View mode separated for Navigation Block
- Implemented function to override RSP for all pixels outside of the "External" structure (RSP set to "air" in this region 0.001)
- Fixed target highlight bug when editing beams
- Changed default view for AirGap sub-block
- Objective for min_max "external" structure dose is automatically added to all plans
- Shortened the beam display length beyond isocenter
- Updated the layout of the Import task (now categorized by type)
- Reimplemented Max Dose point
- Re-ordered items in Course UI
- Patients now automatically open directly into the Course edit task if no Prescription exists (guiding users on the first step that they must do after import)
- Fixed issue with data refresh after import
- Updated the style of the "Create" buttons
- Changed MCO Navigation sliders to allow direct entering of values for the slider position
- Fixed issue with view state resetting when changing display
- Fixed bug where list selection was not set when creating a new point from the beam isocenter selector
- Improved the accuracy of the partial voxel calculations

Version: 2.0.0-rc3
Date: Sept 01, 2017

A new release candidate build of the Astroid Planning App is now available. It is recommended that all users start with a fresh clean bucket for testing with this version.

The following changes (since RC2) are part of this release:

- Planning App can now launch "Integration Apps" with proper site config updates
- Aperture "minimum margin" option now available on a per avoidance structure basis
- Zoom direction made consistent in all views
- BEV display now available when editing isocenter during beam creation

- Archive Icon updated
- Original DICOM structure names kept in label when "assigned" during import
- Patient External structure selection is now warned if it's not the largest volume structure being imported
- Minimum WET to target now shown in shifter block
- Fixed several importing refresh issues
- DICOM uploads now show quickly (within 10 seconds) but in a pending state until upload is complete
- RSP image calc now triggers on plan open
- Fixed bug with field size scaling for usable spot area
- Course level structures can now be edited for type
- Machine gantry and couch limits added to site model and enforced in UI
- Fixed issue with numbers rounding that caused slight differences in App vs API calculations
- Fixed bug with iteration count summary display (signed int error)
- Notification added for loss of network connection
- Updated "Captured scope" UI text
- Duplicate structures now longer disabled in Assignment list during import
- Link added in point creation to set point to current scroll position
- Optional display labels added to points (matches structures now)
- Clearer warning when importing SS into patient but now matching CT found
- Clean up to FG summary display for "simple" FG mode
- Dose overlay labels moved to header row only
- Display labels now use : instead of - to avoid "negative sign" confusion
- Airgap +/- buttons now work in 5mm increments
- Meta calculations now posted as MessagePack (ensures App matches API)
- Patient Model Data updated (Gender & DOB added, and other cleanup)
- Fixed bugs with re-importing course level structures
- Snout added to display and sizes added to machine data model
- MCO solver parameters defaults added to Site Config
- Fixed bug with IPC communications (caused provider crash on long running jobs)
- Fixed issue that could cause blurry button text with some systems

Version: 2.0.0-rc3c
Date: Sept 07, 2017

A minor update to rc3 was just released (2.0.0-rc3c). This update includes the following minor changes:

- Renamed "Directive" text to "Course" in several spots to match the new nomenclature
- Fixed bug that could cause plan names to repeat in patients containing multiple Patient Models
- Fixed a bug that could cause MCO sliders to disappear if bounds were set beyond the available remaining limits
- Updated the Thinknode provider compile options to remove coverage analysis tools (5x increase in threaded calculation speed should be seen, e.g. Dij calcs)

Version: 2.0.0-rc4
Date: Oct 11, 2017

- Added support for updated Thinknode queue levels

- Improves RSP curve interpolation accuracy
- Updates Results API functions to provide more complete plan data output, including proper DICOM UID generation for rt_plan output
- Fixes bug with 3D aperture rendering for rectangular snouts
- Updates hot key behavior for "cntrl + s" key (solid / wire toggle)
- UI options that could edit site info (physician and protocol) removed
- Snout extension calculation error was corrected (only issue if device_gap > 0)

Version: 2.0.0-rc5
Date: Oct 30, 2017

Release candidate 5 is now available (2.0.0-rc5). This update includes the following minor changes and bug fixes:

- Fixes bug where apertures may have only been applied to a single energy layer
- Updates layer spacing calculations to provide more consistent layer spacing
- Fixes bug with course name not always populating
- Fixes import structure set selection dropdown to refresh structure list when changed
- Ensures scanner energy is pulled and displayed based on DICOM CT image file data
- Fixes error in spot order output from results API, spots and fluences are not consistent (as evidenced QA calculations in water phantom
- Fixes bug with structure names and labels being used interchangeably in some instances
- Updates facility model data to support using independent positions for AP and shifter positions
- Improves the various summary data types in the results API