# **OrbitDisplay To-Do**

Orbit Display Release was 7/16/2008

#### Accomplishments:

- \* All contributing java projects are released individually at the phase 0 + level
- \* Orbit Display Application, comprised of multiple packages is ~2/3 of what SCP currently does
- \* Release procedures in place and documented \$PHYSICS TOP/README
- \* Since projects are released separately, the new releases are picked up at loadtime. We should consider tagging the set of projects which contribute to a working application at least on a weekly basis (if any are modified) so that we can always roll back to a previous working set of releases.

## To Do (SCORE - Monday, July 21 - Debbie)

\* Debbie get re-packaged slac SCORE into control room

Add "Gun to TD11" and "TD11 to BSY" regions to replace Injector and 21-BSY regions, respectively, in order to reconfigure the magnets to physicists liking

- \* Remove Injector and 21-BSY regions from being included in Save the World, as they are "archival"
- \* Add BSA-All region to support Orbit Display. Spreadsheet blessed by Emma
- \* Test extensively

#### GUI To Do (Sergei mostly)

- \* Code Review of slac packages used in Orbit Display
- \* Resize app when it launches to about the size of Iclshome
- \* Be able to drag vertical bar to eliminate any side view
- \* Show a bit of the "hidden" global control panel on right
- \* Sync x, y, tmit plots when zooming out
- \* Z uses madName (only choice now is meters) across bottom axis
- \* Show area :Use Oracle area definitions (not score areas); show unit number labels sideways; have vertical bars along axis delimiting areas with area labels. ( have BSADevices return area and unit #) Z axis options madname / area # 1!!!!!!!! Sergei (Debbie to provide unit # and area markers, etc)
- \* TMIT needs nC (get the constant with which to multiply Nel/1E09); keep in N3l/1E09 for score/matlab. Sergei
- \* Show Dispersion above a certain threshold place a red box at top of vertical reading when above threshold. Sergei
- \* Get etaX and Y from model Debbie
- \* Show magnets show indicator of magnet health status via color identical w EDM get PV. Tool tip what magnet and what the STATMSG is. When saving to score, need the magnet status too. Sergei
- \* tool tip widen by 1 pixel
- \* Show Obstructions (Ask Stephen/Stephen for list query MPS RDB; see Collaborations) -Debbie for now
- \* If axis is frozen and a device reading is off the range of the frozen display, show its value above its reading's vertical line. (if eta x threshold exceeded, place red box around value?)
- \* Right click menu to include abilty to type in Y axis range (such as -1.5, 1.5 mm) to manually enter range.
- \* Need configurable background colors, axes color

### Other To Do

- \* Figure out message window. Use filtered cmlog view, create different package..., how to write to this window.... Sergei
- \* Fix timestamp calcs using pulse id . Currently 1 sec is subtracted from timestamp retrieved from first getValues() for the 2800 deep buffer. For pulseid, check on using msec since 1990 what is RTEMS v Red Hat time stored in? Mike
- \* Buffered Acq / Histogram See Jim Turner for requirements. (buckets/fit to Gaussian..) -Mike
- \* Diane Implement Orbit Fitting
- \* Debbie Implement BSA as monitors in background. Change getValues, getLatestValue to return from the monitored values in ram.
- \* Debbie Implement client edefs
- $^{\star}$  Debbie integrate logbook saves into physics-elog instead of TESTelog

## Collaborations

- \* Ask about use cases for client edefs in context of Orbit Display Debbie
- \* Ask Stephen/Stephen for list of obstructions. Debbie
- \* Figure out message display windows for all apps. Sergei

## Releasing

- \* Add feature, then release often to keep physicists happy so that they use it. (good PR)
- \* Always tag at the java project level not the file level
- \* Email release notes to controls-sw-release
- \* Put release into physics-elog too for physicists, with screen shots if GUI changes
- \* Follow \$PHYSICS\_TOP/README
- \* Tag weekly or upon app milestone for roll-back purposes