

SAT Meeting 2014-09-02

Date

September 2, 2014 12:00-2:00 PDT

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Attendees

Kian-Tat Lim	<input checked="" type="checkbox"/>
Mario Juric	<input checked="" type="checkbox"/>
Jacek Becla	<input checked="" type="checkbox"/>
Unknown User (ciardi)	<input type="checkbox"/>
Andrew Connolly	<input checked="" type="checkbox"/>
Gregory Dubois-Felsmann	<input type="checkbox"/> (traveling)
Donald Petravick	<input checked="" type="checkbox"/>
Frossie Economou	<input checked="" type="checkbox"/>
Unknown User (rlambert)	<input type="checkbox"/>
Robert Lupton	<input checked="" type="checkbox"/>
Unknown User (xiuqin)	<input type="checkbox"/> (sick)
Jim Bosch	<input checked="" type="checkbox"/> (very interested party)
Simon Krughoff	<input checked="" type="checkbox"/> (interested party)

Discussion Items

Item	Who	Notes
Discussion	KTL/Jim	<p>Winter2015 Package Reorganization Planning</p> <ul style="list-style-type: none"> • More than a couple of packages may always need a tool • Build times affected by SWIG which depends on namespaces and possibly .i file structure <ul style="list-style-type: none"> ◦ AndyS also has a scanner fix to avoid unnecessary rebuilds • May need complex layering of geometry to separate Eigen dependency from Qserv • JBecla: Qserv has separate build system because it has many modules/products within single repo and package <ul style="list-style-type: none"> ◦ New organization would have multiple Python modules but still have eups package/product and git repo aligned • MJ: Why not 1000 packages (and repos)? <ul style="list-style-type: none"> ◦ FE: Disorienting, hard to keep in your head ◦ RHL: BaBar had many (GPDP not available) ◦ FE: Could do if have conceptual grouping (but tools don't really support) ◦ JBosch: Need to build and support our own tooling <ul style="list-style-type: none"> ▪ MJ: Android has something like this ▪ JBosch: But may be difficult to have that interact with eups ▪ MJ: And still need tooling anyway for more than a couple of packages • FE: Doesn't have to be uniform; can split out some small bits for sharing • FE: How many repos do I need to touch to do a small task? Should be small (ideally one) • FE: Short build times needed to get fast test turnaround <ul style="list-style-type: none"> ◦ scones should take care of that with multiple modules per package • RHL: Don't want people to have to build from source • DP: Controlling change, especially deploying to production, difficult with bigger packages; hard to get just changes you want and not ones you didn't • RHL: Things that are changing should be minimal in size <ul style="list-style-type: none"> ◦ Others: Not clear that size matters; this has to occur with small or big packages • RHL: Working on shared machines is different than independent machines; shared stack helps but requires smaller packages <ul style="list-style-type: none"> ◦ RHL: Want most things to be stable • RHL's shared development model: <ul style="list-style-type: none"> ◦ Stack that everyone shares, kept up to date ◦ Only packages needed to be built from source are the ones you are working on ◦ Essentially treat many packages like internal third-party dependencies ◦ KTL: Could use containers to deliver guaranteed environment ◦ JBosch: Valuable when working on large volumes of real data; less so for small changes • FE: Always need to transition from rapid change to stable deployment; requires release engineer • MJ: Worried about pulling in unnecessary things (especially third-party dependencies) <ul style="list-style-type: none"> ◦ Have some of both right now: afw is merged; pex_* and ctrl_* and meas_* are broken up. ◦ JBosch: Almost lowest-level code has almost all third-party dependencies • JBosch: Could split primitives into stable and unstable • Containers: not for everyone, but does solve some problems for people needing pushbutton environments • FE: Need a minimum size for reuse to develop a community • Splitting out third-party dependencies: cfitsio (would require a lot of refactoring work), minuit, gsl might be possible <ul style="list-style-type: none"> ◦ JBosch: Likely lose more than we gain trying to split these out • MJ: We should be like a Linux distribution with a core and lots of optional additions rather than like Fermi/GLAST with everything included <ul style="list-style-type: none"> ◦ FE: This is a spectrum

Action Items

- ☐ All: Add comments to Jim's page with specific alternate packagings or any desired subset
- ☒ Jim Bosch to add third-party dependencies so that we can see what is/would be brought in by what