AtlasSetup
Status & Issues

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Enhancements: Documentation

- Documentation split into two
  - Users Guide
    - https://twiki.cern.ch/twiki/bin/view/Atlas/AtlasSetup
  - Reference Manual
    - https://twiki.cern.ch/twiki/bin/viewauth/Atlas/AtlasSetupReference

Enhancements: Project Support

- Support added for TDAQ projects, GAUDI and LCGCMT

- Extension of search paths, replacing and extending earlier explicit support for GAUDI and LCGCMT

- No runtime or platform support for TDAQ projects

  - Different internal structure

- GAUDI projects searched in builds or externals areas (releases by default)

  - asetup tdaq-common,tdaq-common-01-17-00,ignore

  - asetup dqm-common,dqm-common-00-14-02,ignore

  - asetup GAUDI,v21r9p4

  - asetup LCGCMT,LCGCMT_59a

The list argument

- Ability to list the available projects and releases
  - asetup list
    - Displays list of all available projects and releases
  - asetup 16.0.X.Y,list
    - Displays list of all 16.0.X.Y projects and releases
  - asetup JetMetAnalysis,list
    - Displays list of all JetMetAnalysis releases

- Ignores platforms
  - So can't search for all x86_64-slc5-gcc43-opt releases

- Still fixing some bugs
  - Sometimes displays too many releases

Other Enhancements

- Support added for icc11 and llvm compilers
- The "here" argument to setup the test area at ${PWD}
  - asetup 16.0.3,here
- Last "save" file cloned in ${HOME} directory so --restore (or autorestore) in that directory will restore last configuration
- The "autocdtest" command to move to test area, creating it if necessary

Issues

- Two problems have caused some disruption

- Bug in handling of release search paths for GRID installations

  - Highlighted inadequate regression testing

- Use of ${PWD} as default test area in conjunction with production system

  - Short term fix in place

  - But long term solution needed

- Discussion in following slides

AtlasSetup Regression Testing

- test_asetup.py application within AtlasSetup package

- Compares results of new AtlasSetup version against version in production and optionally against AtlasLogin version in production

  - Tests against AtlasLogin are less extensive

- Currently 53 AtlasSetup baseline tests of different branch/project/release/ platform configurations across nightlies, builds, releases, externals projects for each of bash, zsh, tcsh

  - Comparison against complete environment and paths and stdout/stderr output

- Currently 16 AtlasLogin baseline tests performed

  - Slightly looser comparison of environment

Testing for Remote Sites

- Complexity of reproducing site differences
  - CERN: Full and patch releases in <base-release> subdirectory
    - <path>/<base-release>/AtlasOffline/<base-release>
    - <path>/<base-release>/AtlasProduction/<patch-releases>
  - Tier1&2: Releases in rel_<rr>-<nn> subdirectories
    - <rr> is major release number - e.g. 15 or 16
    - <nn> is a sequence number
  - Tier3: Different platforms in different paths rather than within release
    - <path>/i686_slc4_gcc34_opt/<base-rel>/AtlasOffline/[...]/InstallArea/i686-slc4-gcc34-opt
    - <path>/i686_slc5_gcc43_opt/<base_rel>/AtlasOffline/[...]/InstallArea/i686-slc5-gcc43-opt
- Regression tests extended to reproduce both Tier1&2 ad Tier3 sites
  - Using symlinks against the CERN releases area
- Also extending AtlasSetup beta-release testing to availability of pacman kit so Alessandro can try new versions in his test site
  - pacman -get http://atlas-computing.web.cern.ch/atlas-computing/links/kitsDirectory/projects/beta/cache:AtlasSetup

${PWD} as default test area

- This default caused problems with the production system

- Short term fix to patch ${AtlasSetup}/../cmtsite/asetup_defaults for some releases at some sites to include "testarea = none"

- Need long term fix - 3 possibilities:

  - 1. Fix pilot to add "notest" to the configuration - will be done but not quick to deploy

  - 2. Modify kit installation scripts to add "testarea = none" - being done

  - 3. Change AtlasSetup default (to what?)

- My preferred solution is 1+2+3

  - Change the AtlasSetup default to "none" (only sensible alternative to ${PWD})

  - 1+2 are actually redundant in this case, but good to ensure stable against future changes

- My reasoning - better to suffer one-time disruption now for subset of users who don't already override the default than suffer ongoing confusion

  - Since default will be different if using AtlasSetup from a kit installed release (e.g. Laptop or GRID) or the primary installation at CERN