SPI Infrastructure for LCG Software Projects

Status and work plan for H2 2003
16 July 2003

A.Aimar - CERN

CVS service

- Status
  - In use and stable
  - On safe servers in computer center
    - Lcgapp servers
  - Hosting the LCG projects, App. Area and also others
  - Discussed and agreed to move to IT service when ready (end of Summer)
- To do
  - Continue user and project support
  - Pass the service to IT, follow-up the needs of the LCG projects when this is done
- Who
  - A.Pfeiffer

Code documentation

- Status
  - Doxygen, LXR and ViewCVS are in place
  - More customization is being added to Doxygen
    - Allow projects to choose what to publish
    - Customize where and how to publish
  - Making the scripts available to to the LCG developers
    - so anyone can Doxygen and see how it looks before it is seen publicly and committed
- To do
  - Complete the changes above and stabilize
- Who
  - L.Mancera

Scram

- Status
  - Used by the LCG projects
  - Implemented fixes and improvements
  - Improvements and and new features are going on
    - Improve performance
    - Configuration of the order of build
    - Generation of a standalone makefile
    - Working on Windows
    - Generation of MSVC++ project files
- To do
  - Uniform the way in which Scram is used in projects
  - Deliver the new features of Scram
  - Scram tutorial and adequate training
- Who
  - S.Ashby, I.Roman

Testing

- See next talk…
- Status
  - Simple but useful frameworks are available
    - CppUnit, PyUnit
    - Oval
  - Tools, templates and policies are in place
  - User support is available
- To do
  - User support and feedback will continue
  - Integration of QMtest
  - Provide training material and stabilize
- Who
  - M. Gallas Torreira

Automatic builds

- Status
  - Nicos is being adapted to be a general tool
  - Collecting the needs of the LGC projects
  - For now is mostly being implemented specifically for Pool and for Seal builds
- To do
  - Provide a general tools that is customizable by the projects to run
  - Provide standard configuration with the tools provided to LCG by SPI (for build and test)
- Who
  - A.Undrus

External software libraries

- Status
  - The service is in place and stable
  - Making available now:
    - External software for the LCG compilers/platforms
    - Gcc, icc and ecc compilers
    - external software on these compilers
  - Lot of software is installed with the help of the people in LCG or experiments, thanks !
- To do
  - Keep the service at pace with the needs of the projects
  - Deliver the external software for Windows and for new compilers/platforms, as decided by the AF (gcc 3.2.3, OSX, …?)
- Who
  - E.Poinsignon

QA and Policies

- Status
  - Policies are agreed and public
  - Templates are available and are really very simple
  - QA check lists are under definition
- To do
  - QA is still a difficult topic, but at least is present
  - Help and verify follow-up of the policies
  - Policies, naming, templates: to be used in the projects
  - Provide the projects with QA check list so everybody knows about his/her own work
  - Will be done more collecting numbers on the status of testing, policies and providing the result to the project
  - QA checklists will used and then fixed, as usual
- Who
  - M.Lamanna, J.Moscicki

Project Portal and Bug Tracker

- Status
  - Savannah is available and there are more the
    - > 50 projects, > 200 users
  - The service is stable and is shown to be useable
  - Transition between people that will support and develop it
  - Lot of work needed to be able to start merging the improvement
- To do
  - Transition to new people responsible of the service
  - Merge back our changes with the open source
  - Implement the changes that are mostly needed by the projects
- Who
  - D.Feichtinger,F. Orellana,Y.Perrin

Documentation

- Status
  - We have a web site that is used quite often, but more from people outside the projects
  - We do lot of personal meetings and coaching
  - Several How-To and templates are available, some more used than others
  - Other documentation is probably sufficient or not easily reachable and known
- To do
  - This is one of the major work in providing a workbook (long awaited, sorry) for each function in the projects
  - Training tutorial needed (Scram, Testing, etc)
- Who
  - A.Aimar, E. Tumbarello, and others

Status: People (from Aug 2003)

- Full time
  - Y.Perrin (savannah)
  - E.Poinsignon (ext. libraries)
  - I.Roman (scram)
- Part time (but fully in charge)
  - M.Gallas (testing)
  - L.Mancera (code documentation)
  - J.Moscicki (quality and policies)
  - A.Pfeiffer (cvs and lcgapp servers)
  - E.Tumbarello (web)
- Will continue to help SPI
  - S.Ashby (scram)
  - D.Feichtinger (savannah)
  - F.Orellana (savannah)
  - M.Lamanna (quality and policies)
- Lot of help by the people in the LCG projects. **Thank you.**

SPI Services (I)

CVS service and servers administration	Support and maintain the current CVS server and provide help to the users and projects	A.Pfeiffer
External Software Service	Install on the LCG platforms all external software needed the projects.	E. Poinsignon
LCG Librarian	Provide configuration and build for the software projects (Toolbox)	I. Roman
Scram Service	User support. Maintenance, development of the Scram software	I. Roman
Savannah Service	User support. Maintenance, development with the open source of Savannah	Y. Perrin

SPI Services (II)

QA and Policies	QA and verification of the policies in all projects. Define new policies and templates on the existing activities; foster the definition of new standards looking at how projects develop and what they use.	J. Moscicki
Code Documentation	User support. Maintenance, configuration, development of the tools used for the code documentation (Doxygen, lxr, viewcvs)	L. Mancera
Software Distribution	Basic release management. Tarfiles only for the moment.	J. Moscicki and E. Poinsignon
Automatic nightly build system	User support. Maintenance, configuration, development of the tools used (Nicos)	A. Undrus
Testing Frameworks	User support. Maintenance, configuration, development of the tools used for testing (CppUnit, PyUnit, Oval, QmTest)	M. Gallas

SPI Services (III)

Web management	Basic web templates for SPI and for LCG App.Area in general. Web support and editing	E.Tumbarello
SPI infrastructure and management	Manage the project, collect user feedback, define and steer the project. Represent the project in CERN ad in the LCG.	A.Aimar
Workbook and documentation, training material.	Develop and help the development of documentation for SPI and for the other projects. But not contribute to the contents or the verification of the contents of the projects documentation.	A.Aimar et al.

Each role must have two backup people for all needed activities during absence

Conclusions

- For later, unless new resources or simpler needs
  - Some solution will be very basic for now:e.g. packaging and distribution mechanism
  - There will be no new major tools and support on: e.g. no software design, specifications, no more automatized procedure and no some process.
- SPI will provide the services agreed
  - People transitions and "fire-fighting mode" are a problem
  - Some activities move faster or slower than foreseen often due to need (and help!) from the users
- Making people collaborate and work together is our job
  - Less trivial than it seems, and is more work than it seems.

Thanks

- Thanks to the people that helped SPI to get going and best wishes for their future work
  - Use some SPI stuff in your new job
  - Keep helping us when needed

- Thanks to the users in the LCG projects, in LHC experiments and in IT
  - They know on the subjects
  - Helped us in many situation to get going or in some difficult cases

  - Not in any order: Lassi, Ioannis, Jacek, Lorenzo, Fons, Lucas, Stephan, Giacomo, Ilka, David, Maria, John, Tim, Jan, Ian, Markus, Vincenzo, Rene, Matthias, Dirk, Pere, and many more.