



GridPP

UK Computing for Particle Physics

LCG2 Migration onto SL3

Steve Traylen

Sep 14th 2004

GridPP 11, Liverpool



LCG2 Migration on to SL3

- Current Situation
- Upcoming Changes
- Longer Term Changes
- Fabric management
- Quattor
- Discussion



Curent Situation

- In the UK LCFG is standard, no working exceptions...?
- Everyone running Redhat 7.3.
- What's Good
 - We all have identical sites, identical problems and identical limitations.
 - LCFG has been used a long time within GridPP so lots of help available.



Current Situation

- LCG and LCFG continued.
- What's Bad
 - Redhat 7.3 is old. Security and hardware issues.
 - Middleware and OS very tightly coupled.
 - Makes adding an OS security patch difficult.
 - Makes integrating into an existing install framework tricky.
 - Manual install notes have existed for a while but their use is limited in the UK.



Upcoming Changes

- Migration to SL3 is starting.
- Next public release of LCG supports SL3 WNs, certification complete.
 - Service nodes remain at RH7.3 for now.
 - LCFGng is not an option SL3 nodes.
 - LCG supports one install method for SL3.
 - Manual install technique (Actually not very manual).
- This release expected this month.



- Complete Migration to SL3.
 - SL3 Port of service nodes is ongoing but not complete, expected by end of September.
 - 7.3 WNs will still be supported if desirable.
 - LCFG will completely vanish once the last RH7.3 node goes --- A long time probably.
- Also LCG WN install on the fly will appear.
 - Very good for shared resources.
 - Removes assumption of “any” software..
Fantastic.



- LCG default method for install is “manual”
 - apt repositories for installing RPMs.
 - Configure text files.
 - Run a script.
- This can be built into any framework you already use for installing managing.
 - Kickstart and scripts, Cfengine, NPACI Rocks, Quattor, stateless linux or even LCFG (Edinburgh version, not datagrid version)



Quattor

- Community effort for quattor installation of LCG2 nearing completion. 98% done.
- Quattor has similar architecture and concept to LCFG. LCFG effort not wasted.
- Advantages
 - CERN and the RAL Tier1/A will use quattor for LCG. - Support and self help for others available .
 - LCG M/W will not be tied to or released with quattor.
- Disadvantages
 - A lot to learn before any pay back.



- Quattor
 - <http://www.quattor.org/>
 - Tutorials , Pan language description,.....
 - <http://agenda.cern.ch/fullAgenda?ida042133>
 - State of LCG Quattor community effort.



- Should the UK use or at least favour one fabric management solution?
- Once SL3 port is available is RH73 still wanted anywhere?
- Is an OS other than SL3 needed for GridPP sites or users?
- Does any site have a conflict with proposed deployment of LCG into SL3?
- Is there a site to work with RAL learning quattor?