



TCG Discussion on CE Strategy & SL4 Move

Discussed last Friday at the TCG

Overview



- Material shown at the TCG meeting
 - With some comments
- Summary of the result of the discussion

Introduction



Some terminology

- **Component releases rather than big-bangs**
 - 3.0 means built on SL3, VDT1.2.x (GT2) gcc-3.2
 - Build system: gLite (and old lcg)
 - 3.1 means built on SL4, VDT1.3.x (GT4) gcc-3.4, Java-1.5
 - and ETICS build system
 - Irrespective of actual code version!!!
 - Exceptions will be WMS/CE which is refactored code for 3.1
- **There is insufficient effort to build, test, certify and run every possible/desirable combination**

	<u>3.0:</u> SL3, VDT1.2/GT2	<u>3.1:</u> SL4, VDT1.3/GT4
lcg CE	yes	Runs on SL3 node or run SL3 binary on SL4 (not built with GT4 or VDT1.3)
gLite CE	yes	yes

Status

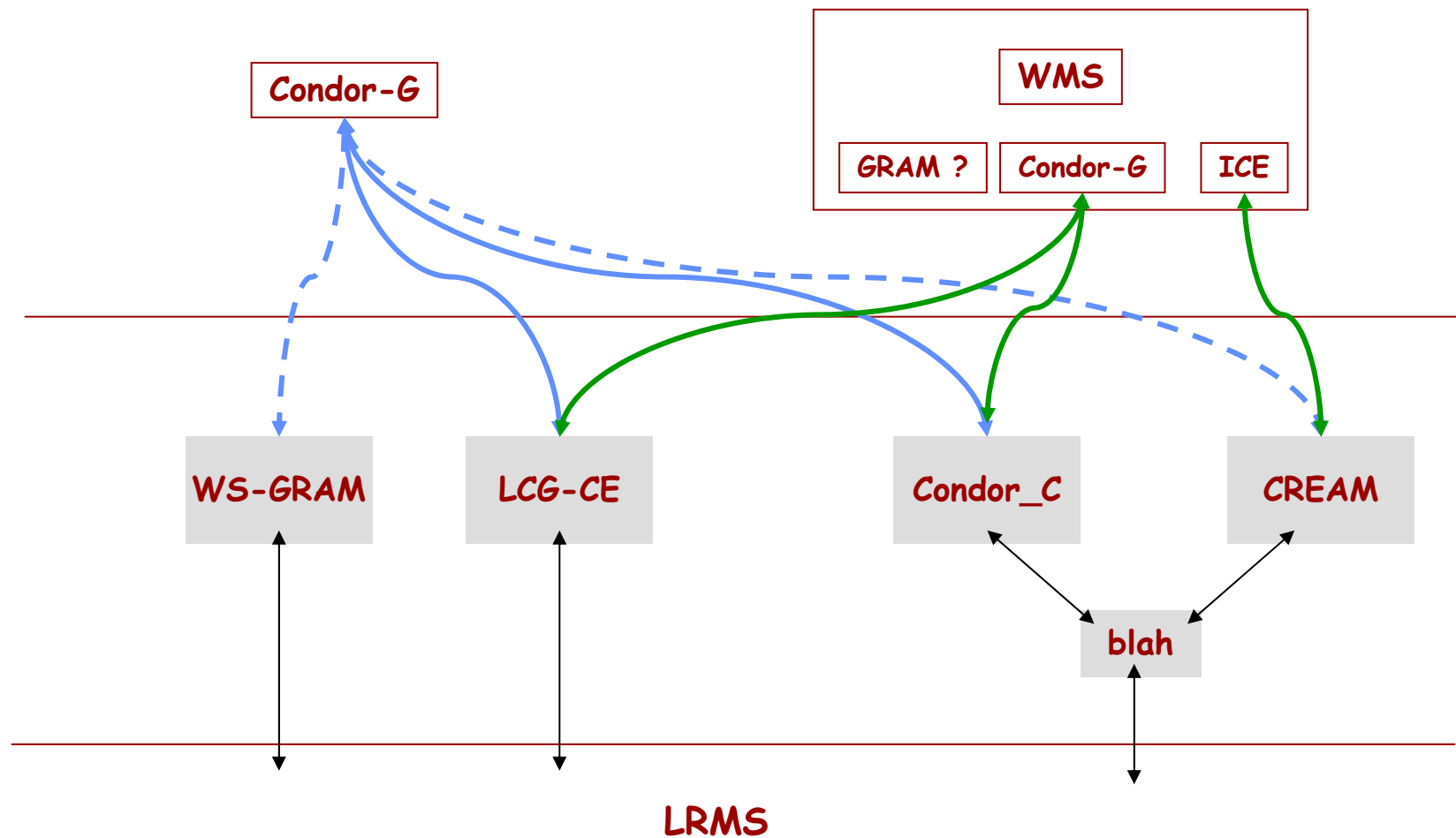


- **LCG-CE:**
 - Production CE, many improvements in last 4 years to make suitable for an operational environment
- **gLite-CE:**
 - Not really tested at all seriously yet - all effort has been on the WMS
 - Based on WMS experience CE testing will take at least 3 months
 - *And is more complex since need several instances who all react rapidly to patches etc. Not so easy to rapidly cycle fixes.*
- **CREAM:**
 - Unknown status - therefore not on the horizon for production use for at least 1 year (optimistic(!) based on past experience)
- **WS-GRAM:**
 - Unknown status - OSG will do testing of it - timescale unknown

CE Universe - who can talk to what?



- Condor strategy is to connect to any CE
- Why do we need to reproduce that? - Why not just stay with Condor-G?



Other problems



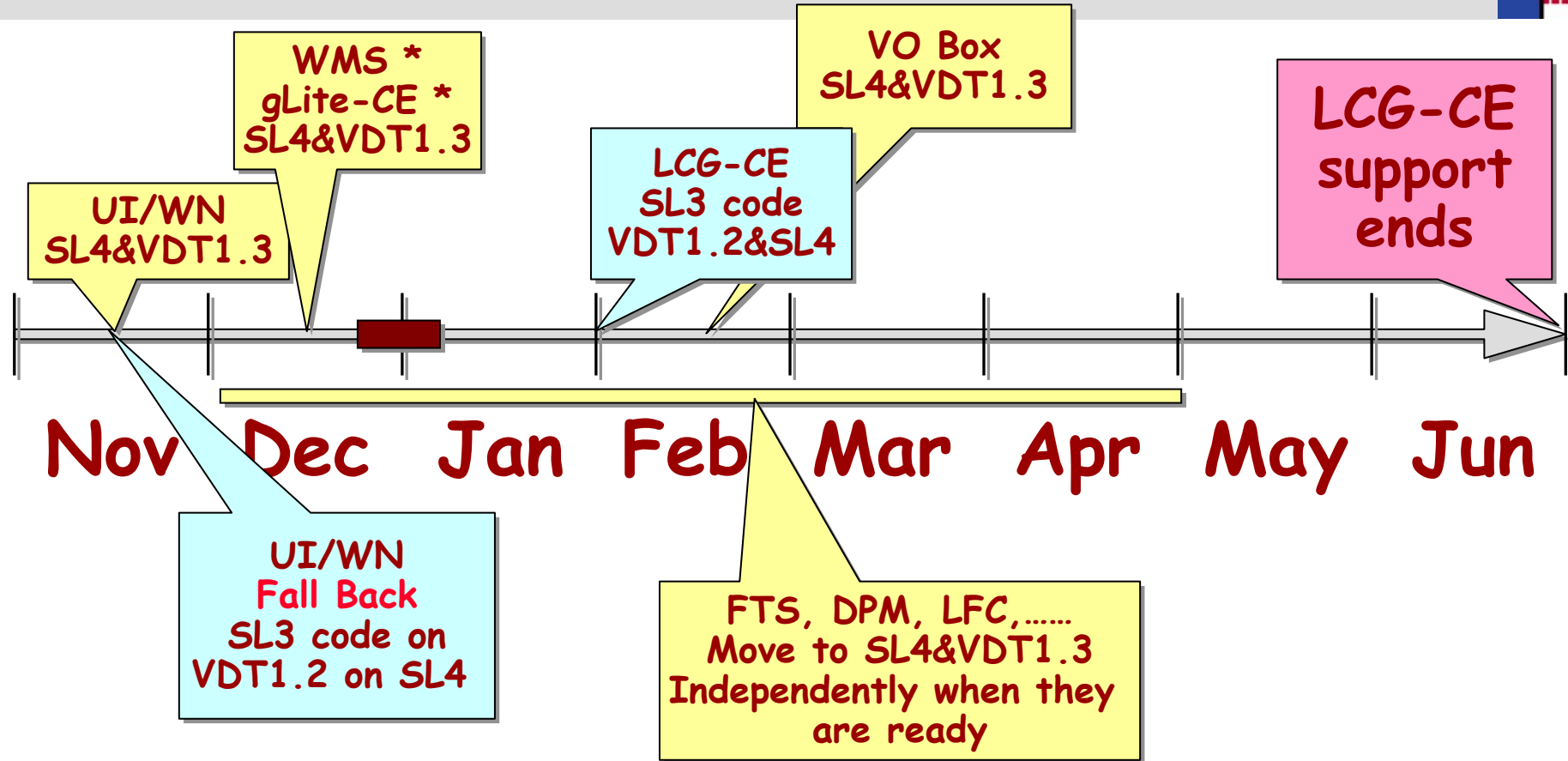
- **LCG-RB vs gLite WMS:**
 - 3.0 code base:
 - 3 months effort to make useable for applications; BUT still many outstanding operational issues:
 - Sandbox management - solution of LCG-RB has not been implemented
 - Too many processes - memory use - frequent restarts
 - Filling of disk partitions; need for log files to be pruned by hand frequently
 - Gang-matching breaks WMS
 - It is NOT REALLY ready for production use!
 - 3.1 code base:
 - Much has changed vs 3.0! First tests show 30% failures!
 - Will it require an additional 3 months of testing???
- **VO Boxes:**
 - Based on LCG-CE; functions must be ported to SL4 (and repkaged)
 - Experiment VOBox sw must be ported also
- **DGAS:**
 - DGAS is added to LCG-CE since we have not gLite CE yet ...
 - requires 2 versions of DGAS - SL4/GT4 + version on SL3 for lcg-ce

Proposed Strategy



- Strategy for CE: (for the foreseeable future)
 - CE must allow the application interface based on Condor-G:
 - Condor is integral part of interoperation strategy, must keep some constant for apps (e.g. like that in NL)
 - Phase out LCG-CE by July 2007
 - no more globus-job-run or GRAM
 - Sites that support VOs that need GRAM-like access need to maintain LCG-CE and gLite-CE together while apps migrate to use Condor-G submission
 - We will only support LCG-CE until end June.
- No effort goes into LCG-CE
 - Will be frozen, all new effort goes into gLite-CE (functionality)
- What to do with LCG-RB?
 - Handling jobs - WMS 3.0 is on same level as LCG-RB
 - But: cannot remove LCG-RB until outstanding management issues resolved
 - End-of-life: April 2007?
 - Will not be migrated to SL4

Timeline



Build with ETICS

*) The code version depends on test results

TCG's Strategy



- Overall the proposed plan was accepted
- The LCG-CE will be supported at least until end of June
 - Minor adjustments for accounting, but otherwise 'stable'
 - Further steps depend on the quality of the gLite-CE
- Sites can add the GT4-pre-webservice-gram standard job managers to the gLite-CE
 - We will not provide certification for this at the moment
 - Future decisions depend on several factors
 - Applications, LCG-CE's future, etc...
 - Sites who are interested in this should become part of the PPS
 - SA3 will be initially not directly involved in this.
 - Practical aspects will be discussed between NIKHEF SA3 and TCG
 - This will become only relevant towards the end of life of the LCG-CE
- CREAM-CE
 - JRA1 should investigate to add ▪ GT4 WebServices Gram
 - JRA1 should continue to work with OGF on standard interfaces
- Policy: EGEE should support multiple interfaces on the CE
 - As far as required by apps and feasible

Update on SL4



- ETICS build is in progress
 - Alberto is helping with the transfer
 - Discussed right now at the JRA1 all hands
- No tests yet with native ports
 - Until they start any time estimation is very imprecise
- SL3 WNs running on SL4 are ready and going to PPS (today or tomorrow)
- Additional nodes will follow as needed (hopefully this is not needed)