



Potential Future Software Lifecycle Management Needs for WLCG

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Landscape after EMI



- EGI produces UMD releases
 - see Tiziana's presentation at the GDB
- INFN (Cristina) populates the emi repository periodically and announces changes
 - no EMI QA process applied
 - PTs announce packages to be fit for release
 - **How long will this continue??**
 - **Until March this will be covered by Cristina**
 - emi repository is hosted at CERN
 - no intention to turn it off
- Simplified view: UMD == EMIrepo + Staged Rollout
 - With EMIrepo == PTs + Cristina
 - globus etc. comes from EPEL

Other Services



- ETICS run at CERN
 - PTs have left and there is little use
 - Will be turned off in August
 - ETICS software will remain available
 - Repositories will be archived
 - One instance is running in Italy (but not for PTs)
- WLCG Repository
 - Managed by WLCG CERN (Maarten)
 - HEP_OS libs, xrootd monitoring, info-xx, yaim, vobox....
 - Mostly things that doesn't fit into EPEL
 - not a complete list.....
 - **UMD does NOT integrate these packages**

Is everything in EPEL?



- No and never will be
 - some can't (Java projects etc.)
 - some don't have the effort
- **→ A repository will always be needed**

Changes?



- Sites running pure UMD
 - **no operational changes**
- Sites running UMD + WLCG-Repo
 - **no operational changes**
- **However.....**
 - Some sites install directly from emi
 - at least some components (DPM etc.)
 - **covered as long as emi repos are managed**

Other ..



- dCache uses an independent release process for T1s
 - Several T2s follow these releases
- ARC releases through EPEL and emi

Questions



- Long term management of EMI repository?
 - currently best effort, binary RPM based
 - not linked to an automated build system
- UI/WN for WLCG?
 - emi UI/WN contains UNICORE etc.
 - should we create a WLCG UI/WN
 - slimming, adding WLCG
 - **Certification by experiments (like emi-1/2 tests)**
- ARC and OSG ?
 - release in EPEL, version conflicts?

Long Term



- What happens after emi repo management ends?
 - PTs could release directly to UMD...
- Planning and PT synchronization
 - Not a real issue
 - **Relevant changes are driven by the community**
 - Pre-GDB and GDB discussions
- Infrastructure transitions
 - EGI
 - WLCG Operations Coordination meetings
 - including task forces on IPV6
- “WLCG Baseline”
 - defines minimal acceptable versions
 - cannot be replaced by a repository
 - needs to be maintained

Gaps



- emi repo management
 - consistency verification etc.
 - PTs could release directly to UMD
- **Verification that new releases don't brake experiment production use cases on the most common deployment scenarios**
 - see emi1/2 WN tests
 - some resources on epel test + corresponding WLCG repos + some production jobs
- WLCG-testing repository (managed)
- WN/UI integration needs a long term home

Issues



- **The end of EMI didn't create issues**
 - Maintenance updates went smoothly
 - several components
- Latency is still an issue: PT→emi→UMD→Sites
 - overlapping release windows effect
 - some sites use snapshots of "WLCG" versions
- Probably too early to tell whether it works
 - have to see how a major, non backward compatible release works
 - not likely to happen suddenly unless a PT is eager to bring down the wrath of the Gods on to them....
- EPEL is a moving repo not under our control
 - not everything can live in EPEL

Summary



- UMD covers most of our needs
 - **without UMD WLCG needs to invest**
 - repositories, coordination, meta packages, testing etc.
 - best copy the EPEL approach
 - Continuous releases with two layers of repositories
 - EPEL stable + WLCG stable , EPEL test + WLCG test
- Coordinated verification of new releases by sites and experiments needs to be organized