

Running SL(C)4 64-bit on WNs

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WLCG Collaboration Workshop



- SL(C) 4 WNs
 - Small impact on middleware
 - Potentially important impact on applications
- 64-bit WNs
 - Medium impact on middleware
 - Potentially important impact on applications
- Other services SL4 and/or 64-bit
 - Potentially larger impact on middleware, no impact on applications
 - Probably not as important, except for UI

- Started with SL4 (4.3) 64-bit on WNs with LCG 2.7..
 - Added the support in Quattor QWG templates
 - A recipe available for 6 months... but never published
 - Choice : let a SL4 64-bit WN/UI appear as SL3 32-bit compatible
 - Done installing the required RPMs from SL3
 - No test with other services
 - Currently only 2 SL3 WNs (4 CPUs) over 100 CPUs...
 - Ability to restrict a VO to SL3 (or SL4) with MAUI
- Result : all applications can run in such an environment... if prepared to configure the environment (e.g. CMT for Atlas)
 - Compiler name is gcc32 instead of gcc
 - Python 32-bit is python32
 - No try to run current VO SW in 64-bit

- From a site administrator point of view...
- Do we need to advertize SL4 64-bit WNs differently from SL3 WNs
 - Current choice : no... as they are 100% compatible !
 - Specific advertizing : risk of under utilization of resource
- Probably some work in gLite packaging could lower the number of dependencies
- Will a 64-bit version of the middleware be compatible with 32-bit applications
 - Problem of using a 64-bit library from a 32-bit application
 - E.g. LFC Python interface has a so library