



# **EMI-1 WN middleware support in ATLAS**

- Local setup EMI-1/EMI-2 aware already in place in the sites since a few weeks
  - WN tarball not yet supported, will need a testbed to include them
- **■** EMI-1 WN (SL5)
  - Tested successfully in several sites
  - No particular problem found, but the local setup needed to be tweaked to reach the new library locations
  - DPM sites do not have libdpm.so compiled at 32 bits
    - No direct access to storage elements via rfio
    - The support was supposed to be there since last month but was not included, it was declared it will be available in EMI-2 only
      - https://ggus.org/tech/ticket\_show.php?ticket=81508
  - No 32-bit Ifc support





## **EMI-2 WN middleware support in ATLAS**

#### **■** EMI-2 WN (SL5)

- Not so many differences between EMI-1 and EMI-2
- Several nodes already in production in Roma and Frascati
- No problem from the point of view of ATLAS
- DPM sites still do not have libdpm.so compiled at 32 bits
  - · Beta support for them, but no time estimate yet, will need to push again
- No 32-bit Ifc support yet, could come together with the dpm libs
  - Possible tweak to install the beta libs, but VERY tricky!
- Some problems with the nagios tests
  - ATLAS test running the direct storage access tests with a 32 bit release
    - · should have been fixed by Alessandro Di Girolamo
    - non-critical test
  - OPS tests not recognizing EMI-2
    - Wrong regexp, should be fixed

#### ■ EMI-2 WN (SL6)

- SL6 not yet supported by ATLAS
- Native SL6 build started but still experimental, no time estimate yet
- We should have a compatibility (SL5 executables over SL6) available by the end of this year





### EMI-2 DPM

- The DPM version 1.8.2 in EMI-1 is not really useful for ATLAS
  - Some instabilities, incomplete xrootd support for federations, only the EMI-2 version now really supported
- The DPM version 1.8.3 in EMI-2 should be the one to be used
  - https://svnweb.cern.ch/trac/lcgdm/wiki/Dpm
  - The current version needs several manual tweaks to be installed
    - Globus threading model on the head node
      - echo 'export GLOBUS\_THREAD\_MODEL=pthread'>> /etc/sysconfig/dpm
      - echo 'export GLOBUS\_THREAD\_MODEL=pthread' >> /etc/sysconfig/dpnsdaemon
    - Manual xrootd installation, including a patched xrootd version from a private repository
      - https://svnweb.cern.ch/trac/lcgdm/wiki/Dpm/Xroot/Setup
  - Not really tested, only early adopters
  - We'll probably need to extend the upgrade deadline (Oct 31) by 1 month