



### Virtualisation for WLCG

#### Tony Cass WLCG GDB, 11<sup>th</sup> November 2009

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- Enable experiments/users to choose environment for job execution.
- Ensure sites have control/traceability over resource usage.



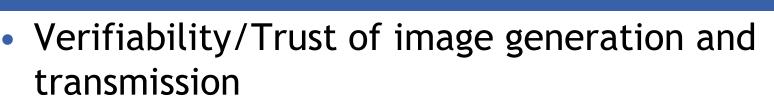
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# @ HEPiX

- Repeated GDB presentation of 9<sup>th</sup> September
  - Same slides & steps
    - 1. Users choose between virtual images created locally
    - 2. Distribution of virtual machine images between sites
    - 3. Distributed image includes experiment software
    - 4. Distributed image connects to pilot job framework
    - 5. Pilot job frameworks replaced by commercial/OS sol<sup>ns</sup>
  - But different words...
- Warmer reception to idea of running remotely generated images than in Umeå
  - Working Group established to see this a reality by end-2010

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# Working Group Issues



- Contextualisation
- Efficiency of transmission
- Multi-hypervisor support

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# **Related Issues**



- Many Tier2s concerned about overhead, especially if they don't controll (all) resources
  - Cannot assume that all WNs will be virtual
- Need progress on ways to express resource requirements (and transmit to sites)
  - Environment(s) acceptable (real or virtual)
  - #cores
  - other? (in addition to CPU/memory/...)

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