

## Wrap-Up

CernVM Users Workshop 6th March 2015



## Many thanks for the encouraging, positive, and constructive comments!

- Feedback from all LHC experiments
- Feedback from ASGC, OSG, EGI, WLCG
- Exciting developments:
  - Shoal
  - Vac and Vcycle
  - Cern@School
  - EGI Cloud Federation Marketplace
  - · CernVM-FS uploaders in OASIS and EGI
  - Data Bridge to connect volunteer computing resources
  - . . .
- In general two themes:
  - How to harness HPC resources
  - Carving out products from "CernVM service"



- There is interest in the CernVM image building toolchain (instead of CernVMs being handed over)
  - In particular for communities outside WLCG
  - For creating Open Data Portal snapshots
- CernVM Online: measurement context popularity
- "Tutorial" style documentation would be helpful for less technical users
- Some interactive tasks difficult: OpenGL, latex

## Comments on CernVM-FS



- Use of CernVM-FS without root privileges (HPC, containers, opportunistic clusters)
- "Secured repositories": we would be happy to work with interested parties and integrate patches; how are the priorities from our community on this topic?
- Interest in full OS X support beyond LHC communities
- CernVM-FS packages should be available on CERN worker nodes
- Publish turn-around time could be shorter and more predictable (traceability of the cache propagation)
- It would be helpful to be able to inspect (block) new and updated files on Stratum 0/1
- Installation of the Stratum 0 could be easier, perhaps assisted by a Puppet module
- Precise client side diagnose tools would be appreciated to quickly figure root cause of problems
   In particular difficult on NFS installations

## Questions for Discussion



- Should we have a knowledge base of VM best practices and performance tuning?
- How are the priorities from our community wrt. encrypted repositories?
- How do we proceed with the maintenance of the "config repositories"
  One for EGI. one for OSG?
- Are the CernVM-FS uploader service from EGI/OASIS seen as products that can be given to other users? Is there a need for a dedicated API access to the release manager machines (instead of ssh login)?
- For the union file system on the server: would OverlayFS be acceptable given it is a technology preview for RHEL7.1?
- How can we improve Stratum 1 DoS protection? Is the fallback proxy an answer or do we just create a default bottleneck?
- What would it take to use Shoal in WLCG?
- Can the data bridge replace Co-Pilot?