

@GridPP

@twhyntie

# **CERN VM: Notes from the GridPP New User Engagement Programme**

T. Whyntie\*, †

*\* Queen Mary University of London; † Langton Star Centre*



# Tom's role

- GridPP
  - *Introducing new users to the WLCG (via the GridPP Collaboration);*
  - *Non-particle physics and industrial use of GridPP resources.*
  - *<http://www.gridpp.ac.uk>*
- CERN@school
  - *Scientist and end user for STFC-supported CERN@school programme;*
  - *Enabling school pupils across the UK to conduct real research;*
  - *Based on the Timepix hybrid silicon pixel detector (Medipix2 Collaboration);*
  - *<http://cernatschool.web.cern.ch>*
  - *ICHEP 2014 summary talk – [here](#).*

# CERN VMs and GridPP

We are using CERN VMs to:

- *Provide a standardised UI for new users with a contextualised CERN VM;*
- *Provide a standardised SL6 VM for giving school pupils (and teachers!) access to the computing facilities needed to carry out research for the CERN@school programme.*

We are using the CernVM-FS for:

- *Easily deploying CERN@school software (GEANT4 simulations, analysis code) for use on GridPP WLCG resources;*
- *[Coming soon] Direct access to CERN@school analysis software via a contextualized CERN@school VM.*

# Feedback on the CERN VM service I

- A wonderful facility – we were using the CERN OpenStack for remote VMs but local VMs via VirtualBox hosts have provided a very useful solution for working with new users and schools.
- Contextualization solves many problems too - once we setup configuring custom CernVM-FS repos (e.g. RAL Stratum-0) we'll be all set for both GridPP and CERN@school work.
- Not needing a CERN account is essential - ability to create new accounts and use the service has been brilliant. This was a big stumbling block before.

# Feedback on the CERN VM service II

- The MarketPlace is a nice idea too – very useful to see what others are doing and what else is possible (e.g. CMS Open Data VMs for CMSSW).
- CERN is a trusted brand and this adds to user "buy-in" - particularly in schools where students can say they are genuinely using CERN technology to do real science. Inspiring stuff!

# Questions

- Is it possible to track the number of pairings of a given VM context?
  - *Would be useful for feedback/evaluation (funding-wise) to be able to say how many VMs have been paired from a given context.*
  - *Might be a nice feature for the MarketPlace too - tracking popularity of contexts etc.*

*Many thanks once again!*