

# **HEPiX Virtualisation Working Group**

**Status, July 9<sup>th</sup> 2010**

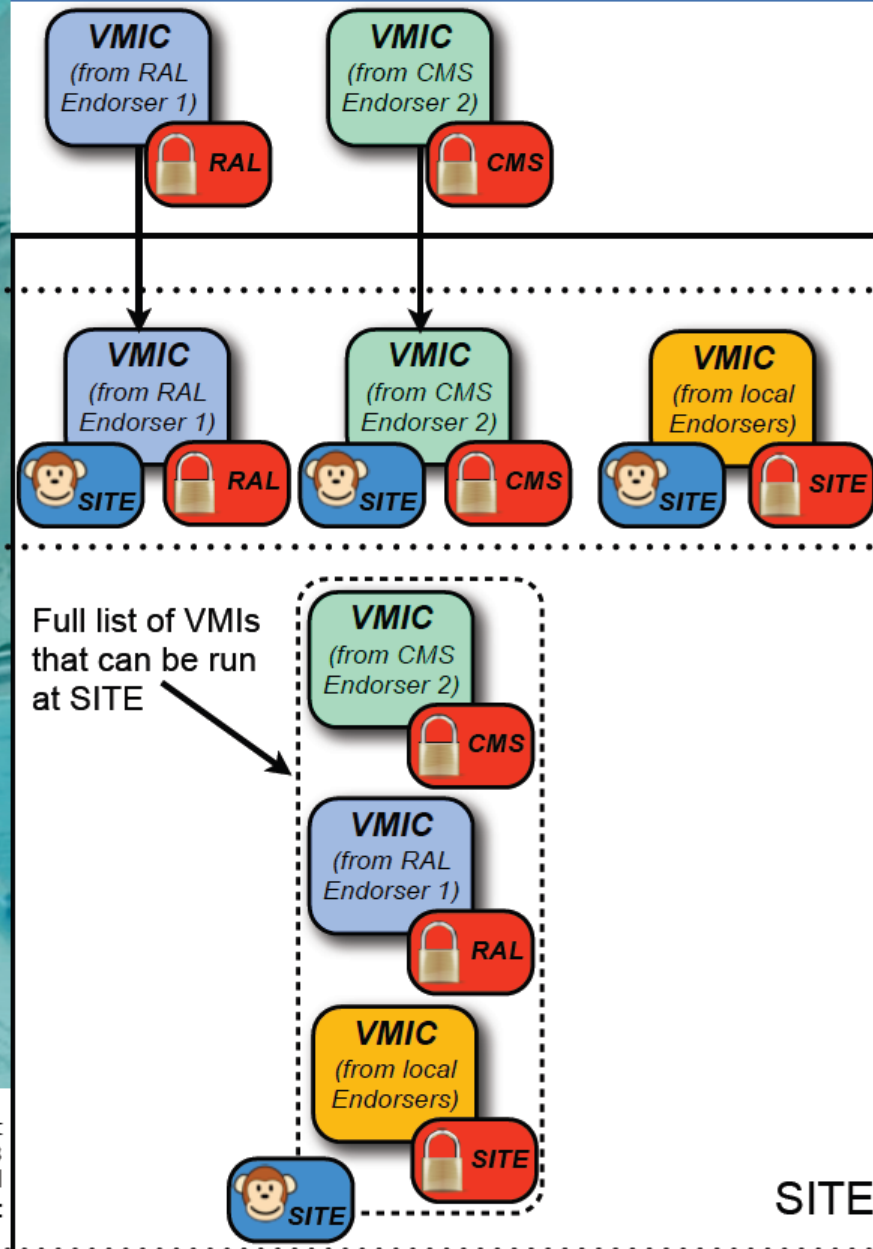
**Tony.Cass@cern.ch**

# Summary


- ◆ A year ago, sites were rejecting any possibility of running remotely generated virtual machine images.
- ◆ Today, we have the skeleton of a **scheme that will enable sites to treat trusted VM images exactly as normal worker nodes.**
  - This enables
    - › VOs to be 100% sure of the worker node environment
    - › (potentially) inclusion in the VM image of the pilot job framework enabling “cloud like” submission of work to sites.
- ◆ **Active involvement of VOs is now highly desirable** as we move towards delivering a proof-of-concept system.
- ◆ Nothing in what is being done
  - prevents sites that wish to do so from implementing Amazon EC2-style instantiation of user generated images, or
  - precludes use of CernVM. In fact, CernVM-FS looks to be a good solution for delivering VO software.

# Delivered/Deliverables

- ◆ Policy for Image Endorsement
- ◆ Tools for Image Cataloguing & Distribution
- ◆ Image Contextualisation policy & mechanism
- ◆ Support for Multiple Hypervisors



1. SITE decides to approve VMIs endorsed by (  ) RAL and CMS

2. VMIs are approved (  )  
Sites has fine-grained control over VMIs being approved (but can also approve them all)

3. The RAL and CMS VMIs are added to complement the VMIs produced locally

4. The resulting list of VMIs (endorsed by different entities) is approved by the local site



SITE

# Summary

- ◆ A year ago, sites were rejecting any possibility of running remotely generated virtual machine images.
- ◆ Today, we have the skeleton of a **scheme that will enable sites to treat trusted VM images exactly as normal worker nodes.**
  - This enables
    - › VOs to be 100% sure of the worker node environment
    - › (potentially) inclusion in the VM image of the pilot job framework enabling “cloud like” submission of work to sites.
- ◆ **Active involvement of VOs is now highly desirable** as we move towards delivering a proof-of-concept system.
- ◆ Nothing in what is being done
  - prevents sites that wish to do so from implementing Amazon EC2-style instantiation of user generated images, or
  - precludes use of CernVM. In fact, CernVM-FS looks to be a good solution for delivering VO software.

