



Contribution ID: 213

Type: Poster

## VGRID: Virtual Machine Life Cycle Management Portal

**Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).**

VGrid platform's build upon Xen Virtualization to provide secure, isolated and fine-grained environments which could be deploy and terminated on demand. They are very useful in testing/certification of the middle ware where new software patches and releases have to be regularly tested on clean machine. Another activity domain could be where root access is required for the testing/certification on the host machines and making sure that the host machine always stays in a consistent state.

**Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.**

Following projects have been so far using VGRID portal in their activities:

- 1) gLite certification team members deploy virtual machines via vgrid portal on demand for testing the new software patches and releases. Its been almost a year since its been deployed and rigorously upgraded with new features.
- 2) gLite data management team is using vgrid portal and virtual machine in their testing and certification activity.
- 3) ICEAGE Grid Training school have used virtualization for their approach to set-up a grid in a box. They deployed on-demand virtual machines with pre-configured gLite software components and made them available to students to get hands on experience with out any risk of disturbing the host machine or environment.

Presently VGrid portal is been deployed on test environments and later on could be deployed production systems.

**Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications**

Modern day virtualization is enabling consolidation of hardware resources for better utilization, over all resource saving as less number machines required which further lowers administration and maintainance costs. The added advantage of having VGrid portal in test environments would be that productivity could be significantly increased as the man hours and efforts lost previously required for machine re-installations would not be necessary due to the fact that clean, isolated and secure virtual machine environments could be deployed from the VGrid's browser interface on demand.

Such an approach reduces inconsistency on the host systems, and is extremely useful for the communities and activities where hardware and human resources are restricted but requires multiple operating system distributions.

Presently 6 different GNU/Linux distributions are available to VGrid users with host machines running Scientific Linux 4.

**Primary author:** Mr KHALID, Omer (CERN)

**Presenter:** Mr KHALID, Omer (CERN)

**Track Classification:** Demo and Poster session