

Using R, self scaling Matlab clusters and Galaxy clusters on a HPC cloud infrastructure

Wednesday, 19 September 2012 17:00 (30 minutes)

Description of the work

BiG Grid, the Dutch NGI started with a production IAAS HPC cloud infrastructure based on OpenNebula and KVM. With a self-service portal individuals and projects can have access to a virtualised infrastructure they can configure at will.

Offering users and projects such a development opportunity created a lot of creative projects and approaches.

Offering services such as Matlab, R and Galaxy workflows as a hosted infrastructure that scales on demand emerged as the way to go.

In the past 10 months we've been co-developing and implementing these type of compute services.

In this talk these experiences are presented, as well as issues and challenges.

Link for further information

www.biggrid.nl
www.cloud.sara.nl

Wider impact of this work

We think the community can learn from our development approach and can be inspired by the possibilities of having a IAAS / SAAS infrastructure that can be used as a piloting test-bed to quickly develop such dynamically scaling clusters.

We also welcome input for collaboration and discussion.

Printable Summary

BiG Grid, the Dutch NGI started with a production IAAS HPC cloud infrastructure based on OpenNebula and KVM. With a self-service portal individuals and projects can have access to a virtualised infrastructure they can configure at will.

In this talk experiences with R, Matlab(tm) and Galaxy (cloudman) are presented, where a clear shift from IAAS to SAAS is shown.

Primary author: VISSER, Tom (SARA)

Presenter: VISSER, Tom (SARA)

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Track Classification: Virtualised Resources: challenges and opportunities (Michel Drescher: track leader)