Formiga cloud

The cloud integration in labs computers

Contents

- **Introduction**

- **The work done**

- **What are we doing now ?**

- **Where are we going ?**

Introduction

- **Make a cloud computational service (IaaS) in order to create management infrastructure of VM**

- **This service will be adapted for that we can run VM into university scenary in computer rooms**

- **We should be able to create some kind of mechanism to make easy the deployment of the VM**

- **The researchers of several VO's should be able to run jobs with low demand of resources in computer laboratories when the computers aren't been used**

The work done

- **Installation and evaluation of managements cloud software**

  - **Cloud**

    - **OpenNebula**

    - **Eucalyptus**

    - **CloudStack**

- **Obtaining user requirements**

The work done

CLOUD - OpenNebula

- **Open-source Software**

- **Cloud supports private, public and hybrid**

- **Can be integrated with any type of network and**

- **storage system**

- **Supports Xen hypervisor, KVM and VMWareESXi**

- **simultaneously supports multiple hypervisors**

- **Installation and evaluation report**

- **http://www.cesga.es/component/option, com_docm n / task, doc_details / gid, 580/lang, en /**

- **Features**

  - **Managing users, nodes, images, virtual machines, virtual networks, planning for deployment, context**

The work done

Eucalyptus

- **Open-source Software**

- **Supports private and hybrid cloud**

- **Can be integrated with any type of network and storage system**

- **Supports Xen and KVM hypervisors**

- **Compatible with Amazon AWS**

  - **Installation and evaluation report**

  - **http://forge.cesga.es/docman/view.php/31/331/DO_SIS_formigacloud_software_gestion_clo**

- **Features**

  - **Managing users, nodes, images, virtual machines, virtual networks, planning for deployment, context**

The work done

CloudStack

- **Open-source Software**

- **Supports cloud private, public and hybrid**

- **Supports the Xen hypervisor, and KVM Server**

- **Installation and evaluation report**

- **http://forge.cesga.es/docman/view.php/31/415/DO_SIS_formigacloud_software_gestion_cloud_**

- **Top Features**

  - **Managing users, nodes, images, templates, virtual machines, virtual volumes, the scheduler deployment of monitoring**

The work done

Funcionalidades implementadas y NO implementadas			OpenNebula	Eucalyptus	CloudStack	Amazon AWS
Nº funcionalidades predefinidas	116	Nº funcionalidades implementadas	68	59	79	57
		Nº funcionalidades NO implementadas	48	57	37	59

What are we doing now ?

- Infrastructure in order to work

- http://cloudstack2.cesga.es:8080/client/

- https://portal-dirac.cesga.es/DIRAC/

- http://lhcbsrv01.igfae.usc.es/opt/ilc/

Where are we going ?