Contribution ID: 41 Type: Training/Tutorial

Federated Cloud image lifecycle management

Friday, 23 May 2014 11:00 (1h 30m)

The EGI Applications Database has evolved as the defacto EGI FedCloud Virtual Appliance Marketplace, offering the easiest way to automate distribution of heterogeneous cloud infrastructures for scientists for managing virtual machine lifecylces within the EGI federated cloud infrastructure.

Under this context, the main mission of the service has been enhanced to:

In order to accomplish this, the HEPiX VMCaster/VMCatcher technology has been inherited. A technology that was developed to provide secure and coherent distribution of virtual appliance to multiple cloud infrastructures. EGI has tested and built upon the successful usage of publishing and subscription as a model providing, caching and validation of virtual appliances.

The user-submitter and/or the Resource Provider will be able to learn about:

- · What is a Virtual Appliance?
- What is an image-list? Trust and the security model.
- · How to register a Virtual Appliance
- · How to upload VM image lists either using the AppDB Web interface or the VMCaster tool
- · Publishing an image list
- 'Propose' images to be included into a VO-wide image bundle
- · Subscribing to an image list and select an image
- · Blocking an identity and blocking an image
- · Integrating resources with the federated cloud

Wider impact and conclusions

The proposed training session could be characterized as of significant importance for the EGI Virtual Appliance marketplace (AppDB) and for the EGI fedCloud infrastructure as a whole.

- Users and communities will have the chance to be familiar with the EGI Virtual Appliance marketplace (AppDB) and be able to submit, update and publish their Virtual Machine Images either through the AppDB portal or the vmcaster command line tool.
- Resource Providers and communities will learn how they could subscribe to the produced image lists by
 using the vmcatcher command line tool, in order to download and keep up-to-date the virtual machines
 images of interest.
- VO managers will experience the way they should select the corresponding images in order to include them into the VO-specific image list for being further used by the EGI fedCloud infrastructure (Resource providers)
- Finally, we are planning to allocate a considerable segment of time, for an open discussion with the audience.

URL(s) for further info

https://wiki.egi.eu/wiki/Fedcloud-tf:WorkGroups:Scenario8:AppDB-VA-Marketplace https://github.com/hepix-virtualisation/vmcaster https://github.com/hepix-virtualisation/vmcatcher https://appdb.egi.eu/

Description of work

^{*} store and provide Virtual Appliances and their meta data.

^{*} act as a distribution mechanism between the submitters/community and the Resource Providers.

The EGI Applications Database has evolved as the defacto EGI FedCloud Virtual Appliance Marketplace, offering the easiest way to automate distribution of heterogeneous cloud infrastructures for scientists for managing virtual machine lifecylces within the EGI federated cloud infrastructure.

Under this context, the main mission of the service has been enhanced to:

The user-submitter and/or the Resource Provider will be able to learn about:

- What is a Virtual Appliance?
- What is an image-list? Trust and the security model.
- How to register a Virtual Appliance
- How to upload VM image lists either using the AppDB Web interface or the VMCaster tool
- · Publishing an image list
- 'Propose' images to be included into a VO-wide image bundle
- · Subscribing to an image list and select an image
- · Blocking an identity and blocking an image
- Integrating resources with the federated cloud

Primary authors: CHATZIANGELOU, Marios (IASA); SYNGE, Owen (DESY (HH))

Co-author: PINTO, Salvatore (EGI.EU)

Presenters: CHATZIANGELOU, Marios (IASA); SYNGE, Owen (DESY (HH)); PINTO, Salvatore (EGI.EU)

Session Classification: Federated Cloud image lifecycle management

Track Classification: Advanced cloud services (Track Leaders: D. Wallom, M. Drescher, K. Nordlund)

^{*} store and provide Virtual Appliances and their meta data.

^{*} act as a distribution mechanism between the submitters/community and the Resource Providers. In order to accomplish this, the HEPiX VMCaster/VMCatcher technology has been inherited. A technology that was developed to provide secure and coherent distribution of virtual appliance to multiple cloud infrastructures. EGI has tested and built upon the successful usage of publishing and subscription as a model providing, caching and validation of virtual appliances.