【初音ミク】「HATSUNE MIKU EXPO 2016 Japan Tour」Zepp Tokyoライブ映像ーBlue Star/八王子P【MIKU EXPO 2016】
Hybrid Clouds: Dancing with virtual machines

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TNC17 - The Art of Creative Networking
Linz, Austria  29 May - 2 June 2017
✓ The catalan University services consortium

✓ What about Hybrid Cloud?
  – ¿Why? ¿Why not?
  – Position and strategies

✓ Cloud Bursting in a real multicloud context
  – Our vision & mission, and of course values

✓ Conclusions
✓ Q&A
Vision: Farther than just network services
Collaboration is a Messy!!!
Collaboration is a Messy!!!
A WORLD WITHOUT CLOUD
My dog has two speeds:

Zero miles-per-hour

and

SHIT-YEAH-LIGHTSPEED-MOTHERFUCKER miles-per-hour

The Oatmeal
The MIRISCH COMPANY Presents

Steve McQUEEN · James GARNER · Richard ATTENBOROUGH

A GLORIOUS SAGA OF THE R.A.F

JOHN STURGES’

THE

ESCAPE

CLOUD
Vision: Hybrid by default

'True Hybrid Cloud consists of at least one or more private clouds with most of public cloud features and at least one or more public clouds'

Some challenges:
- Procurement Strategy
- Network Strategy
- Mgmt Strategy
- Security Strategy
ALL OR NOTHING
Vision: Hybrid by default

Travelling to a ‘common point of view’

“What is available and How much is it? How can it help my business need?”

Business Team Point of View

“How can my solutions use the services?”

Solution Designer Point of View

Hybrid Cloud

“What do the infrastructure services look like?”

Infrastructure Team Point of View
CSUC -> IaaS and PaaS services

- Selfservice or managed services
- **MULTICLOUD** Hybrid Architecture
- OpenNebula 5.x ecosystem
- Aligned to DevOps ‘culture’

Example PaaS environments

- moodle
- edX
- MongoDB
Open Cloud Power
✓ Inter-operable
✓ 100% Open Source
✓ Service oriented
✓ WebUI & CLI

Free to test: R&E catalan institutions
https://iaas.anella.csuc.cat
AFTER AN INTENSE OPEN PROCUREMENT PROCESS

Local CSP’s focused
Hybrid Cloud with the first CSP
Hybrid Cloud with the first CSP
Hey, Waldo-watchers! Saw some truly terrific sights today—someone burning trousers with an iron; a long thin man with a long thin tie; a glove attacking a man. Phew! Incredible!

Waldo
The OpenNebula Features

Features for Virtual Infrastructure Management and Cloud Orchestration

Cloud Management
- VDC multi-tenancy
- Simple cloud GUI and interfaces
- Service elasticity/provisioning
- Federation/hybrid

OpenNebula

Virtual Infra Management
- Capacity management
- Multi-VM management
- Resource optimization
- HA and business continuity

OpenNebula

vCenter

KVM
Xen
VMware

OpenNebula.org
Getting Started with InnerSource
New OpenNebula VCLOUD driver: Building Hybrid Clouds with VMware cloud providers

October 18, 2016 / 0 Comments / in Community, Experiences, News / by Jordi Guijarro

Based in its definition, the “Hybrid Cloud Computing” is a model which combines the use of multiple Cloud services across different deployment models, including combining the use of services of public cloud services private cloud outside or inside organization / institution.

Most companies and organizations have not been born in the “cloud”, a situation that often causes the cloud resources are to be connected to traditional systems or applications with some criticality and are usually located in their own premises. This type of architecture is the most common where the keys to their success pass take into account aspects such as integration capabilities, hyper-converged management, etc.

Cloud bursting is always welcome!

Today we are sharing exciting news about the expansion of the number of public clouds supported by OpenNebula to build hybrid cloud deployments. As a result of the collaboration between OpenNebula and CSUC, a new addon to support VCLOUD providers has been added to OpenNebula catalogue.

"With this addon, real hybrid architectures can use OpenNebula's rich set of infrastructure management tools to manage cloud deployments across VCLOUD private, public and hosted cloud platforms."
This addon gives Opennebula the possibility to manage resources in Vmware vCloud Infrastructures.

It includes virtualization and monitoring drivers.
Deploy, stop, shutdown, reboot, save, suspend, resume and delete VM’s in the Virtual Data Centers hosted in the vCloud CSP.

Create, delete and revert snapshots of VM’s.

Change RAM and CPU values of VM.

It’s able to hot-attach and detach NICs to VM’s.

Automatized customization of the VMs instanciated.

Obtain monitoring information from the VDC, Datastore and VM’s.

https://github.com/OpenNebula/addon-vcloud-driver
1 Vapp = 1 MV
1 VDC = a Host in OpenNebula.
Import networks, hosts, templates and datastores hosted in vCloud using onevcloud script.

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Demo

https://youtu.be/TMKmMubm6W0
Conclusions

It is important to consider:

- Define your org. common point of view.
- Orchestrate, innovate!
- Think globally, act locally.
- Service oriented by design. (In & Out)
- Manage well the “Messy”.

And DANCE with VM’s,...
Cloudification process

BE HYBRID
Please!!!
Dank!
Hvala!
Köszönöm!
Thanks!
Gràcies!

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