

ONCE UPON
A TIME

UN MUNDO SIN CLOUD



Consorci de
Serveis Universitaris
de Catalunya

Modelos de Cloud híbrido: Caso del CSUC y proveedores IaaS locales



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JT2016 Valencia, 17/11/2016

Agenda

✓ Introducción

✓ Modelo de Cloud Híbrido

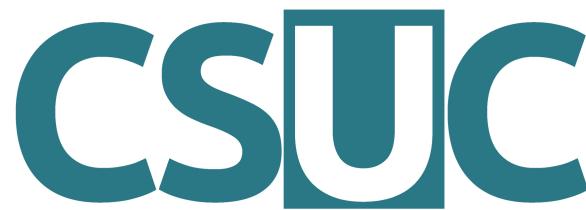
- ¿Por qué? ¿Para qué?
- Estrategia de la comunidad académica e investigación

✓ Cloud Bursting

- El “caso” -> CSUC
- Nuevo driver VCLOUD para OpenNebula

✓ Alguna conclusión

- Nuevos proyectos y servicios consorciados



Consorci de
Serveis Universitaris
de Catalunya



Universitat Oberta
de Catalunya



• Nuevos proyectos y servicios consorciados

Cloud Híbrido: La definición

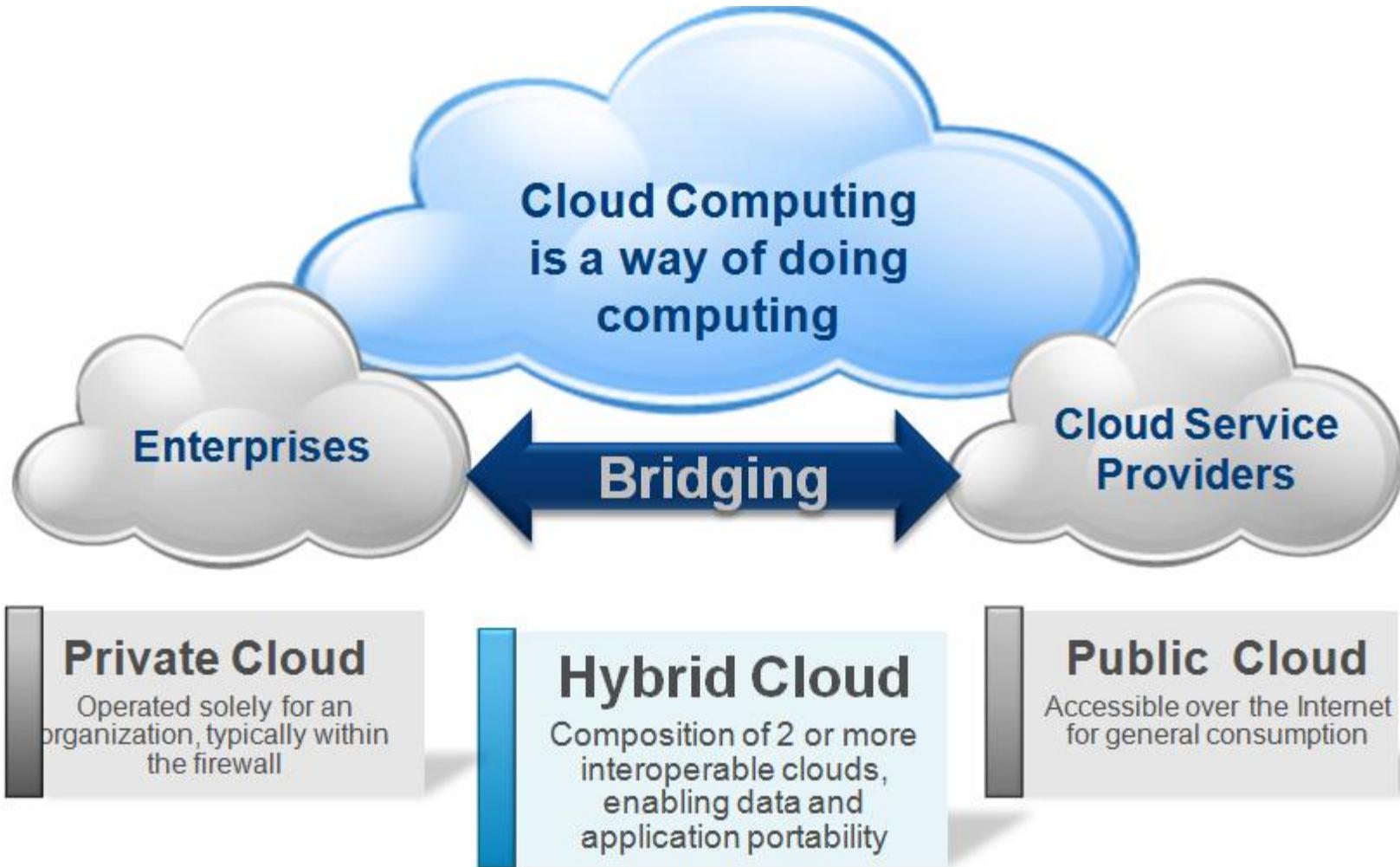
'True Hybrid Cloud consists of at least one or more private clouds **with most of public cloud features** and at least one or more public clouds'

My Fitbit has the potential to be paired to a public cloud, but that doesn't make it a private or hybrid cloud.



Challenges: networking, common mgmt and security layers.

Modelo de Cloud híbrido

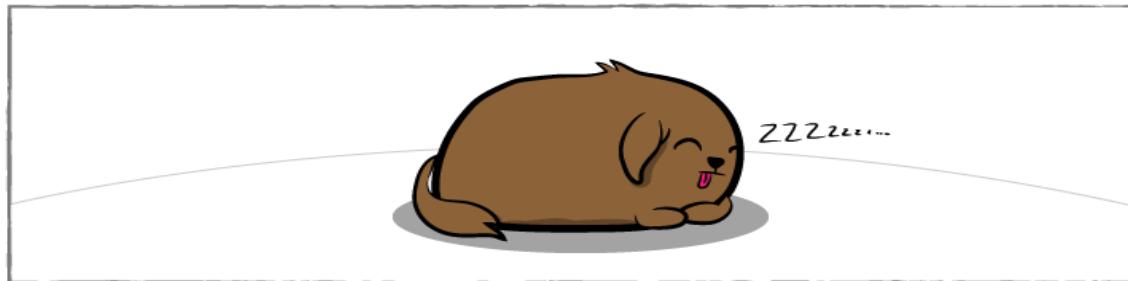


Common Platform, Security Model, & Management Model

ALL OR NOTHING

My dog has two speeds:

Zero miles-per-hour



and

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



The Oatmeal

A dynamic collage of Arizona Cardinals football players in red uniforms, captured in various stages of a game. One player in the foreground is shouting with his mouth open, wearing number 21. Another player's arm is raised behind him. In the background, other players are visible, one wearing a helmet and another with the number 22. The overall atmosphere is intense and energetic.

AN AMAZON ORIGINAL SERIES

ALL OR NOTHING

A SEASON WITH THE ARIZONA CARDINALS

“La vida te da sorpresas...”

The screenshot shows a web browser window with the following details:

- Address Bar:** https://blogs.vmware.com/vsphere/2016/10/vmware-aws-announce-strategic-partnership.html
- Toolbar:** Includes standard browser icons for back, forward, search, and refresh.
- Header:** "Aplicacions Per accedir ràpidament a una pàgina, arrossegueu-la a la barra d'adreses d'interès. Importa les adresses d'interès ara..."
- Page Header:** vmware.com | Communities | Search
- Page Title:** VMware vSphere Blog
- Page Content:** A blog post titled "VMware and Amazon Web Services Announce Strategic Partnership" by Charu Chauhan, posted on October 13, 2016. The post discusses the announcement of a strategic partnership between VMware and AWS to deliver a vSphere-based cloud service running on AWS.
- Post Footer:** "The Power of VMware on AWS" and a summary of the VMware Cloud on AWS service.
- Right Sidebar:** "SUBSCRIBE" section with links to Twitter, RSS Feed, and Facebook.
- Bottom Footer:** CSUC logo and "Confessions of an" text.

VMware and Amazon Web Services Announce Strategic Partnership

Charu Chauhan posted October 13, 2016

3 Comments

[Tweet](#)

[Like 97](#)

[Comparteix 727](#)

SUBSCRIBE



VMWAREVSPHERE



RSS FEED



FACEBOOK

RELATED POSTS:



VMware Virtual SAN: The Technology And Its Future

Anita Kibunguchy
posted March 8, 2016

The Power of VMware on AWS

Currently in Technology Preview, **VMware Cloud on AWS**, will bring VMware's enterprise class Software-Defined Data Center software to the AWS cloud, and will enable customers to run any application across vSphere and VMware Cloud Foundation based private, public and hybrid cloud environments. It will be operated, managed and sold by VMware as an on-demand, elastically scalable service and customers will be able to leverage AWS services such as developer tools, analytics, databases, and more.

This jointly architected service represents a significant investment in engineering, operations, support and



THE POWER OF WORDS

SCRABBLE



T

Ch...
with in
veg tha





OPENAI









OVER
THERE



THERE

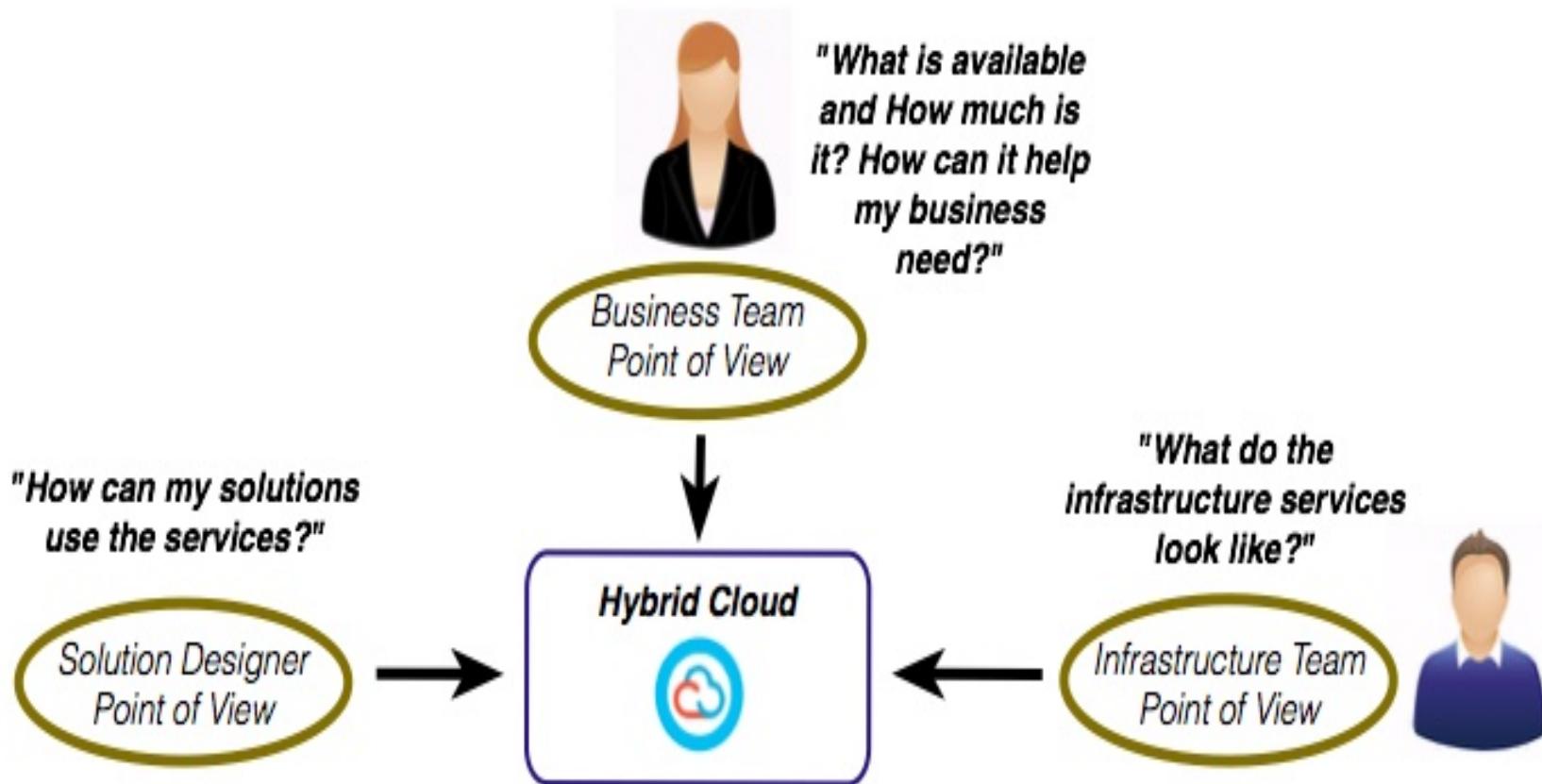


HERE



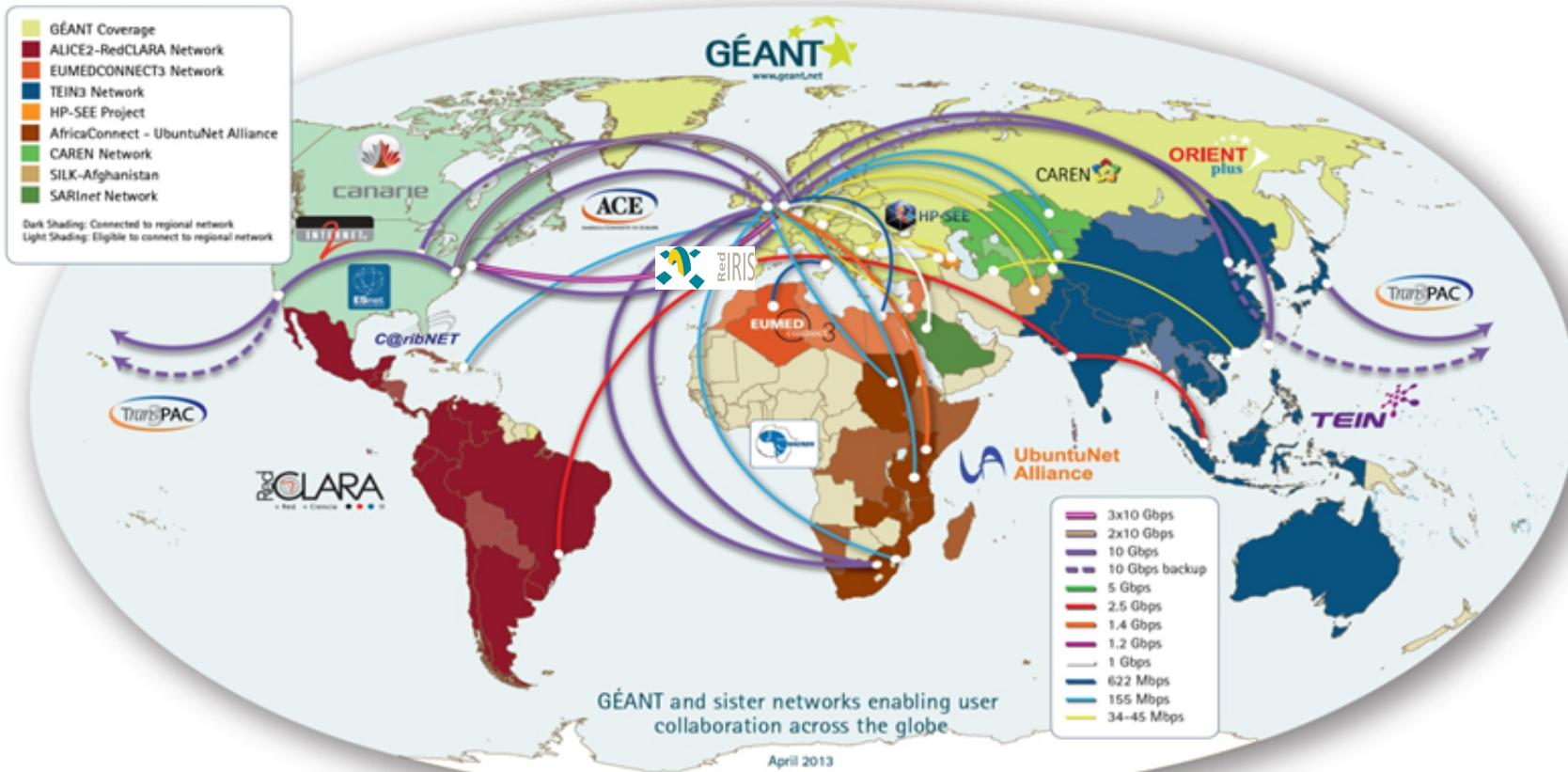
**RIGHT
HERE**

Diferentes puntos de vista



Estrategia IaaS en las redes académicas

GÉANT At the Heart of Global Research Networking



connect • communicate • collaborate

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Estrategia IaaS en las redes académicas



connect • communicate • collaborate

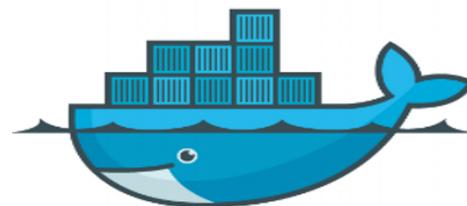
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El “caso” -> CSUC

- Autoservicio y servicios gestionados
- Arquitectura híbrida **MULTICLOUD**
- Ecosistema OpenNebula 5.x
- Alineado a la cultura

DevOps



- Entornos PaaS



El “caso” -> CSUC

- **Open Cloud Power**

- ✓ Interoperable
- ✓ 100% Software Libre
- ✓ Orientado a servicio
- ✓ WebUI & CLI



Acceso gratuito (cuota básica) para instituciones conectadas a la *Anella Científica*.

<https://iaas.anella.csuc.cat>



El “caso” -> CSUC

NUEVO PROVEEDOR COMERCIAL DE SERVICIOS DE CPD



Customer Zone



Canal Ayuda



Support 24x7

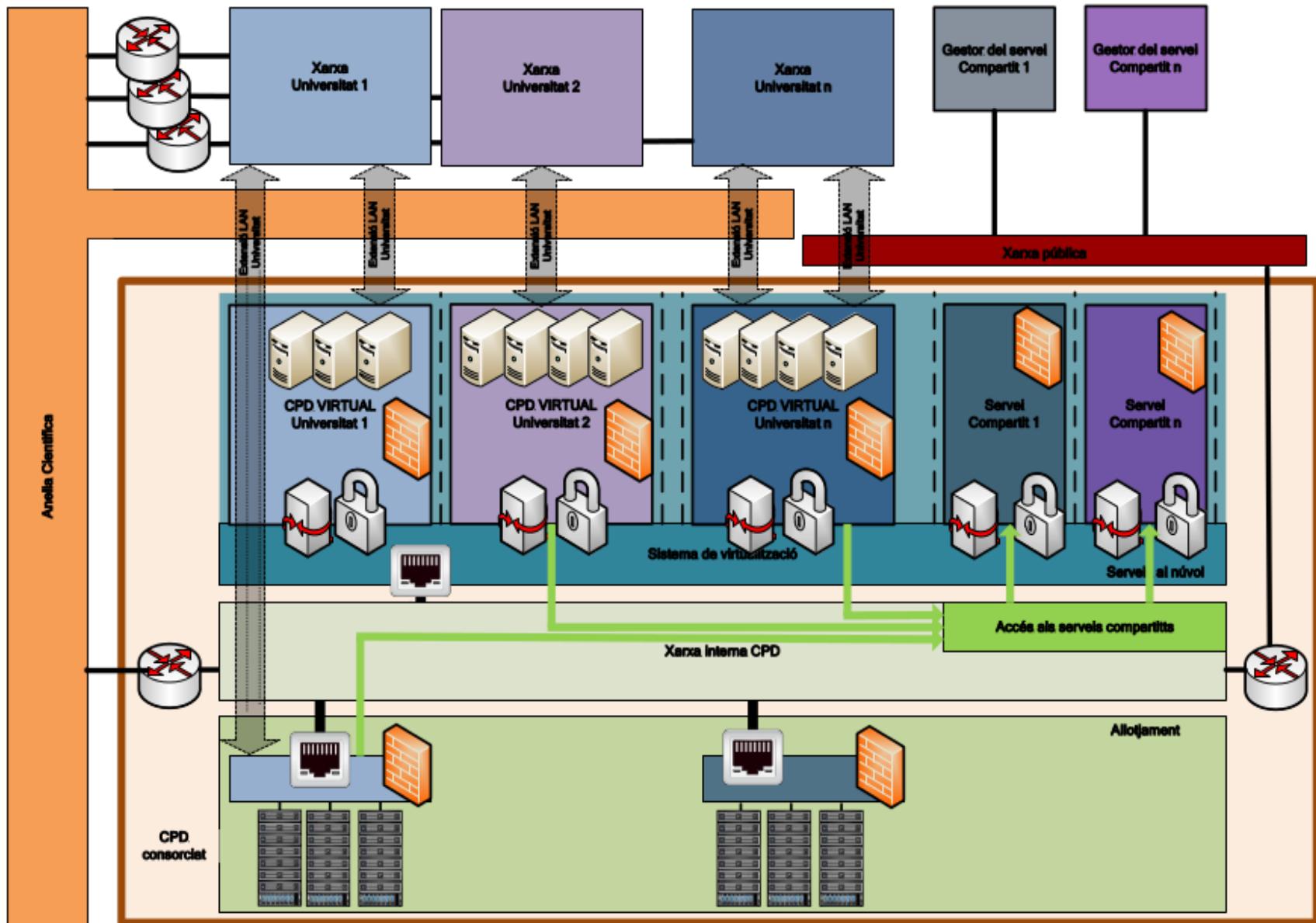
Search

CLOUD

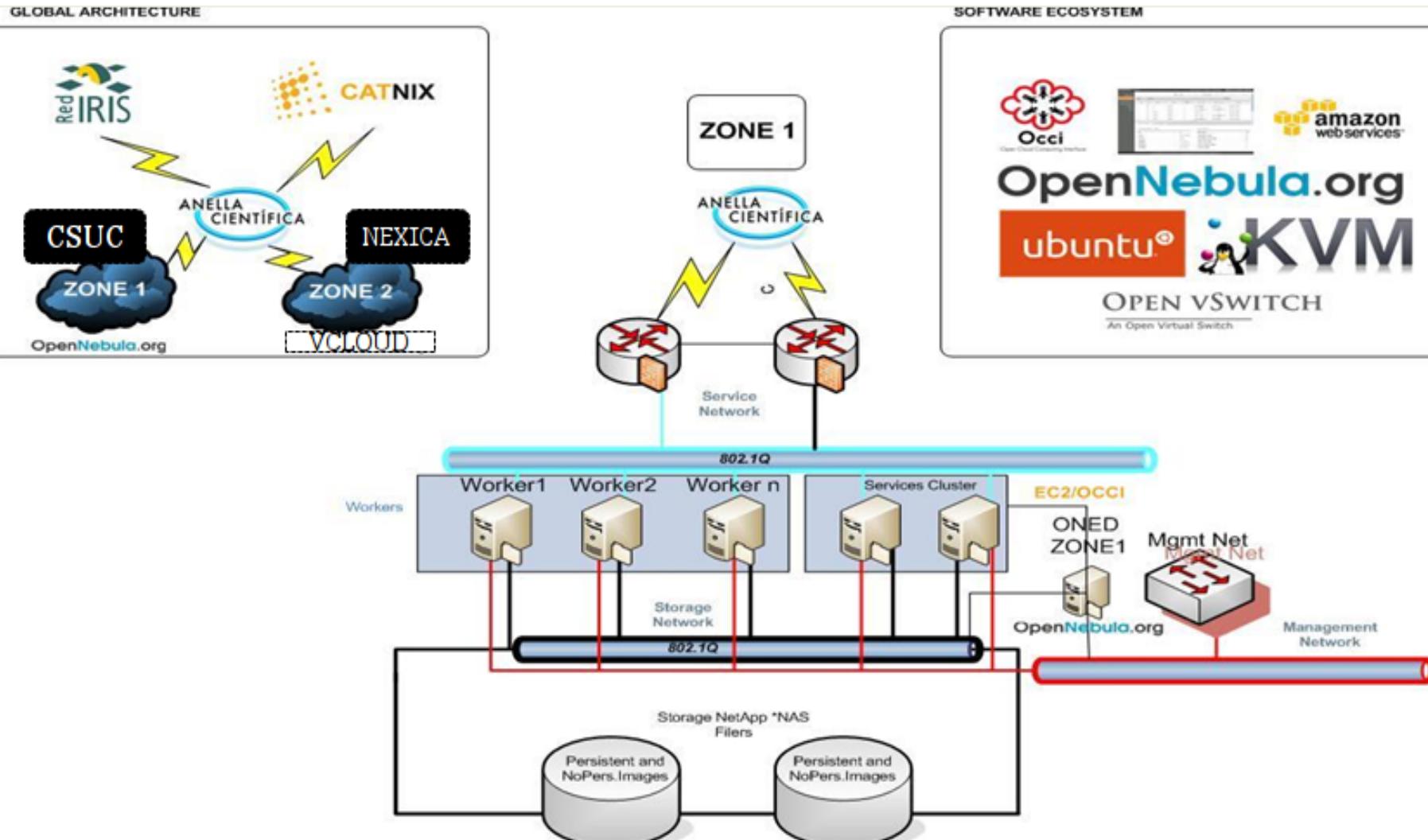
PRODUCTS AND SERVICES

SOLUTIONS AND INDUSTRIES

El “caso” -> CSUC



El “caso” -> CSUC





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!



management tools to manage cloud deployments across VCLOUD private, public and hosted cloud platforms.”

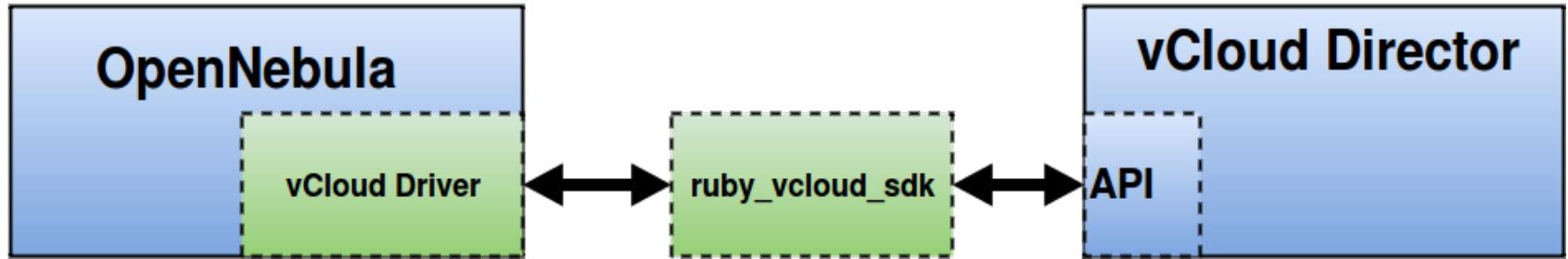
Today we are sharing exciting news about the expansion of the number of public clouds supported by OpenNebula to build hybrid cloud deployments. As a result of the collaboration between OpenNebula and [CSUC](#), a new addon to support VCLOUD providers has been added to OpenNebula catalogue.

“With this addon, real hybrid architectures can use OpenNebula’s rich set of infrastructure

OPENNEBULA VCLOUD DRIVER

This addon gives Opennebula the possibility to manage resources in Vmware vCloud Infraestructures.

It includes virtualization and monitoring drivers.



VCLOUD DRIVER FEATURES

- Deploy, stop, shutdown, reboot, save, suspend,
- resume and delete VM's in the Virtual Data Centers
- hosted in vCloud.
- 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>

VCLOUD DRIVER FEATURES II

- 1 Vapp = 1 MV
- 1 VDC = a Host in OpenNebula.
- Import networks, hosts, templates and datastores hosted in vCloud using onevcloud script.

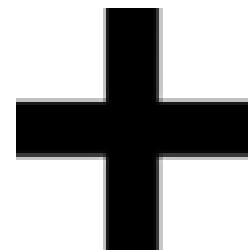
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Xavier Peralta (xavier.peralta@csuc.cat),

Demo



<https://youtu.be/TMKmMubm6W0>



Getting Started with InnerSource

¿PREGUNTAS?

Gracias!



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