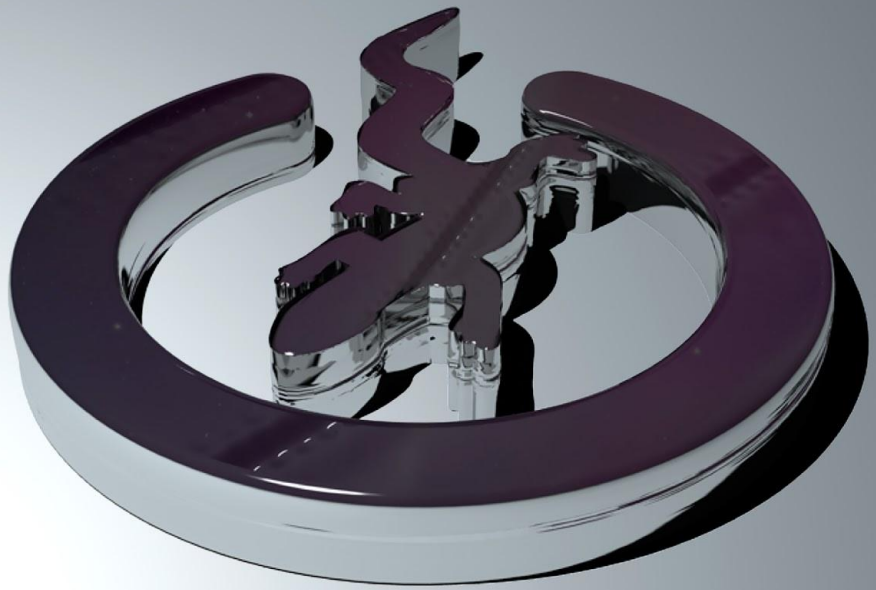


2020.05.28 - IG1 @Cloud Infra Cafe by StorPool - Public

Summary

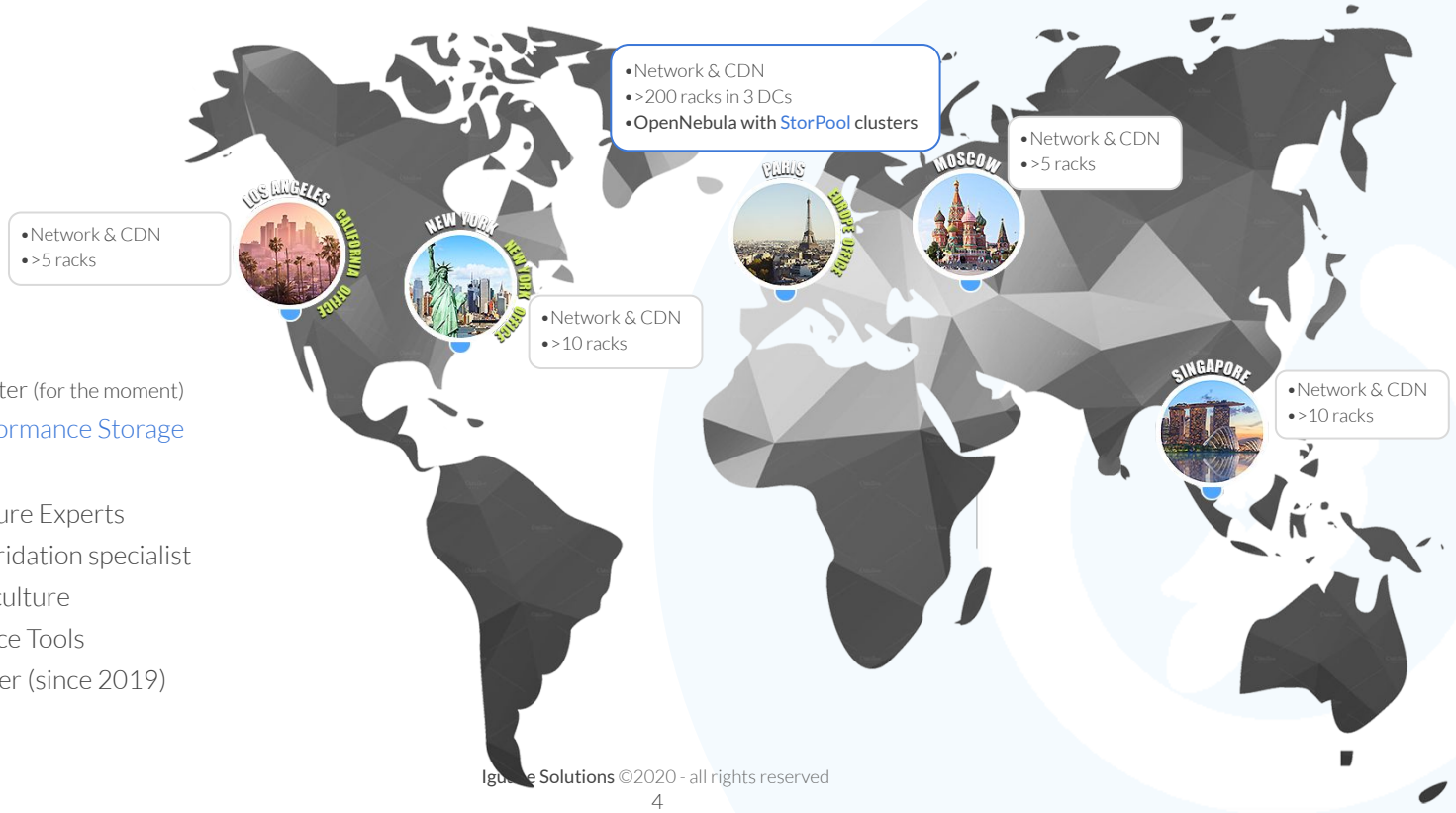
Topic: Which use-cases and XaaS services are growing?

1. IG1 Cloud
2. Our Typical use cases
3. What's next ?

1. IG1 Cloud

1.1. Who are we ?

Founded in 2000, HQ in Paris, France



1 OpenNebula cluster (for the moment)

StorPool for performance Storage

- ✓ Infrastructure Experts
- ✓ Cloud Hybridation specialist
- ✓ "DevOps" culture
- ✓ Open Source Tools
- ✓ AWS Partner (since 2019)

1.2. IG1 Cloud

How we built a Home made IaaS with OpenNebula and StorPool ?

2018: DESIGN	
Select Virtualization Provider	**KVM** is free, reliable, light compare to others
Find a way to manage virtualized resources	**OpenNebula** is open-source, reliable, manageable via API, platform agnostic
Select Storage Solution	**StorPool** for performance and for integration with ONE, **Netapp** for "slow" store

EARLY 2019: DEPLOYMENT	
OpenNebula and StorPool deployment	Easy
Test and first VMs deployment: acceptance for several weeks	Resources deployed "manually": **Not a real IAAS**

SOLUTION

OpenNebula Go API "**Goca**" improvements to make it usable to develop tools around it

Development of the **OpenNebula Terraform provider**
Allow user to deploy infrastructure directly on OpenNebula

2. Our typical Use cases

2.1. Cloud Hybridation

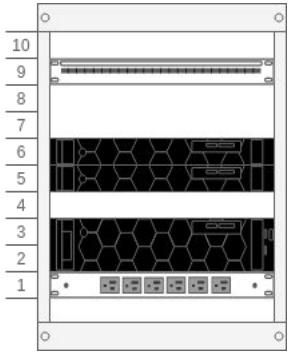
The best of our expertise: Hardware, Network and Cloud

NEED

Bare metal Hardware for specific usages: Big Data bases, GPU computing, Data science computing on lots of CPUs…

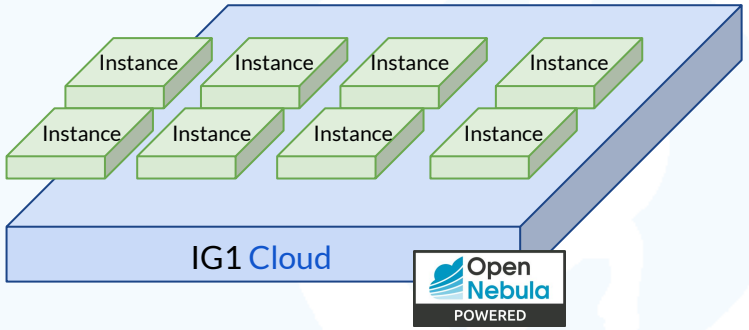
Virtual Instances on **IG1** Cloud for general purpose usage

Solution



Bare Metal
Infra

Same Network

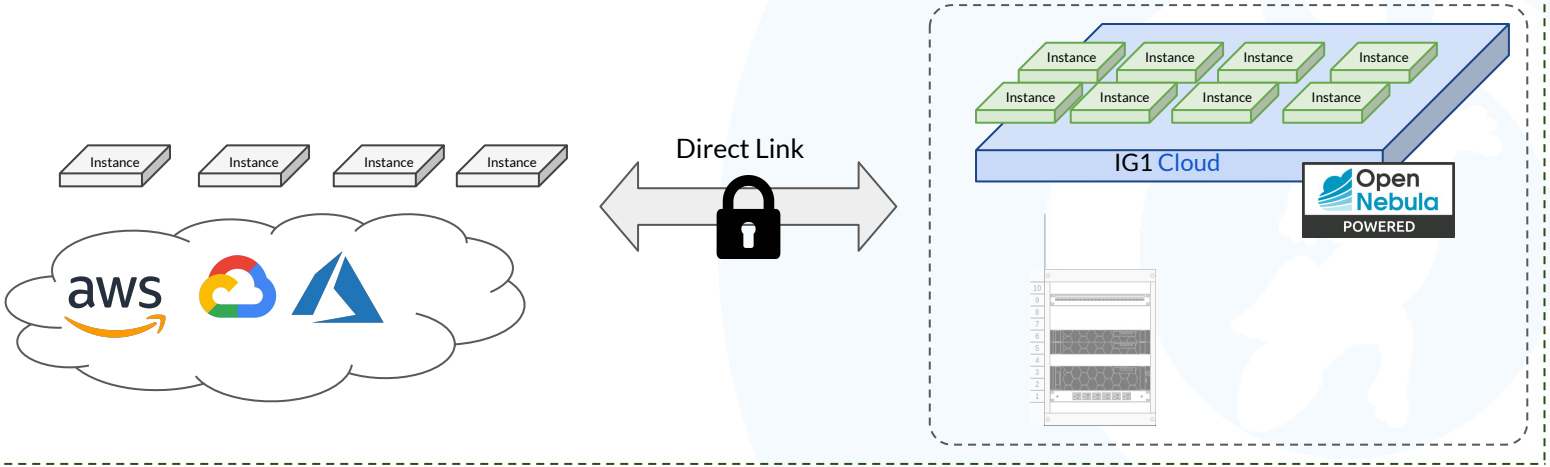


2.2. Cloud Hybridation

The best of our expertise: Network, Cloud and DevOps

NEED
Several providers for : High Availability, specific services, GPDR / Security rules **At least 2 providers: Public cloud and IG1 Cloud** for European based infrastructure and/or extreme hybridation (including Hardware as seen previously)

Solution



3. What’s next ?

3.1. Infrastructure trends

Our vision

INFRASTRUCTURE	MARKET company type or size	USAGE	TRENDS (in coming years) BUDGET growth	 MARKET growth
BARE METAL 	Medium to Large with stable hardware baseline *Companies are looking for reliable partner to externalize their "on prem" infra: cost optimization*	All kind of applications	=	↗
VIRTUALIZATION 	Small to Medium sized: VM rental Large companies: private cloud *Private cloud allow companies to move slowly to the "Cloud" with governance on their side*	Private clouds, VM rental (e-commerce, web, development testing, …)	→	=
IAAS only 	Startups, companies looking for autonomy in Infra management *companies looking for manage services and scalability*	e-commerce, web, app development, IoT, IA, compute…	↗	↗
HYBRID: IAAS + HW 	Startups, companies looking for autonomy, cost optimisation and governance: *GPDR, European based*	e-commerce, web, app development, IoT, IA, compute…	↗	↗
CAAS (Container as a Service) Example: 	Startups, companies looking for cloud agnostic managed services Managed Kubernetes is one of the key	all kind of microservices applications	↗	↗

Service represents major part of the growth

3.2. More Words on Kubernetes

Our thoughts

KUBERNETES

We heard a lot about Kubernetes for 3 years now and *like for the Cloud*, everyone wants to have a Kubernetes cluster for its purpose.

However, *like for the Cloud* few years ago, the gap between **I want** and **I have** is very large and there is a lot of obstacles:
Deploying and **maintaining** a **Kubernetes cluster for production** is really **complicated**, **applications** must be **designed** to run on containers, …

Integration into our environment

Current situation

Very limited number of cluster all managed "manually"

Roadmap

Providing a ***KaaS***
"**Kubernetes as a service**"
(part of our IG1 Cloud solution)

How ?

We already start the discussion with **StorPool** and **OpenNebula** guys about the best way to achieve this

Questions