

title: Journées MaDICS 2017 - MAESTRO -
Plateforme Galactica

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-> Who Am I <-

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-> Overview <-

Galactica introduction >What is it ? >How to apply How does it works

-> Galactica <-

Experiments oriented

Users can easily access :

Datasets Already configured machines Statistics Web access

-> OpenStack <-

Resource orchestrator : IaaS

Compute Storage (Ceph backend) Network

-> Key Figures <-

208 vCPU 2 TB RAM 190 TB raw storage 10G Network

-> How to use it ? <-

It's an Open platform

Send us an email >(gaudet@isima.fr or ftoumani@isima.fr) Write a
« fiche d'expérimentation » Use the resources Then stash them :)

Don't forget the last one ...

-> Fiche d'expérimentation <-

Project objectives Resources needed (CPU, RAM, software) Datasets
Expected results

<https://galactica.isima.fr/works>

-> Create a VM <-

Flavor Image >2 different ways >Use a vanilla image -> deploy,
install, >configure and run your software >Create an image -> deploy,
>configure and run your software Keypair Network

-> Load some data <-

From your servers >SCP, Rsync

-> Load some data <-

Attach an existing virtual disk

-> Load some data <-

From the Object Store

```
openstack --os-tenant-name petasky \  
--os-region-name RegionOne \  
--os-username fred \  
--os-password ***** \  
--os-auth-url \  
https://auth.oscloud.isima.fr/v2.0 \  
object save lsst ObjectSource_456.csv
```

-> Orchestration <-

Goal : create a bunch of servers

Stack Easy management

-> Create a stack <-

So far we've got several stack definition

Provided by OpenStack Plugin >Hadoop, Spark

Homemade >Cassandra, OpenMPI, Slurm

-> Get statistics <-

Many metrics available :

RAM usage CPU usage disk read/write network read/write

-> Perspective <-

User friendly frontend : move to SaaS

Better data visualisation and data requesting

-> Conclusion <-

Galactica : versatile toolbox

Used for experiences >Qserv, TriAnnot, emirge/reago, Spark ...

-> Thanks <-

All resources you've just seen are available there :

<https://gitlab.isima.fr/fgaudet/MaDICS2017>

Any questions ?