

Free Academic Cloud Ressource for Bioinformatics

Why use Genostack?

- Free access to a private cloud instance for research experiments (NOT production systems)
- · Access to an easy-to-use web interface for simplicity
- · Root access to your instances using SSH authentification

Genostack's features

- HTTP & HTTPS access to your instance
- · One private project for each user
- CentOS, Debian, Ubuntu and Fedora images ready for use
- Volume storage available
- · Complete freedom to modify, save and share your own images

http://www.genouest.org/outils/genostack/getting-started.html





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Account Manager		. .II Usage →	TP reservations	L My profile	🚔 My projects	ළු Logout
https://my.genouest.org/ma	nager/#/login	h	ttps://my	.genoue	est.org/n	nanager/#/user,
GenOuest Sign in to access your account User id	djacob X - Expires: Support available at support@genouest.c	rg		Extend validity		
Password	Information		AL	Ithentication		
			Но	ome directory		
Sign in			SS	H keys		
Lost your password? RESET			Up	odate password		
	History		Ad	d public SSH key	,	
				tabases		

IMPORTANT: if you don't add your public key in the OpenStack interface, you won't be able to access to your instance with the SSH protocol.

To access your instance, you first need to connect to the Genouest frontend at openstack.genouest.org. From there, you can access your instance.

http://www.genouest.org/outils/genostack/ssh-config.html



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🚛 Usage 🗸 💼 TP reservations 💄 My profile 🚔 My projects 🕐 Logout

https://my.genouest.org/manager/#/user/

Update password		
Password updated		
New password	Confirm password	
Change password		



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Genostack web interface https://genostack.genouest.org/dashboard/auth/login/?next=/dashboard/





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Instances

Images

Key Pairs

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Key Pairs

Project						
		Filter	٩	+ CREATE KEY PAIR	1 IMPORT KEY PAIR	DELETE KEY PAIRS
ALLACCESS	Displaying 1 item					
Compute	Key Pair Name	Fingerprint				Actions
Overview	npflow	6c:bf:89:56:fd:25:40:05:f4:7b:ba:af:9c:a6:f6:b9				DELETE KEY PAIR

Key Pair Details

npflow Name 6c:bf:89:56:fd:25:40:05:f4:7b:ba:af:9c:a6:f6:b9 Fingerprint Created Aug. 7, 2018, 9:31 a.m. dc8e832181f47fb1208871074b20d25c2d1fa327400d93dc57287a90860df6a7 User ID Public Key ssh-rsa AAAAB3NzaC1vc2EAAAABIwAAAaEAn7S0IPKGdcpO9aoRYVrZp8XCJ+WtxG8PIYNB5c86zlXctBzUl/idav5us+RlPzaeCpOmG6phaVrXln1POa5/nkiMedGCCNDUYVeaE70c7a47SihYt7+ nrl4vu IWS/1+T9 hxAb2 VtNKkyKE V8nSh E6glYdBY .ssh/id_rsa.pub K5XICokmixacuvackeyzuugaohq4maryPebbue+oxseucteashehetzyiokk7kuomikbuuywximopqsukqqjppsweugakiqhzu/obz/niv+oss+pak+iwcxwgwmyo/ceruea+rqz5FwrjYmEOs=



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Project

Security Groups

API Access	Name	Security Group ID			Description	Actions
Compute	default	d3a0e014-2663-4c5b-887c-bb06	5d6bc9fcd		Default security group	MANAGE RULES
Volumes	Direction	Ether Type	IP Protocol	Port Range	Remote IP Prefix	Remote Security Group
Network	Ingress	IPv4	Any	Any	-	default
incluoix	Egress	IPv4	Any	Any	0.0.0.0/0	-
Network Topology	Egress	IPv6	Any	Any	::/0	-
Networks	Ingress	IPv6	Any	Any	-	default
Security Groups	Ingress	IPv4	ТСР	22 (SSH)	0.0.0.0/0	-
	Ingress	IPv4	ТСР	80 (HTTP)	0.0.0.0/0	-
	Ingress	IPv4	TCP	443 (HTTPS)	0.0.0/0	-



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Project		
API Access		
Compute	(Creating an instance
Overview		U
Instances		Method 1 :
Images	from	
Key Pairs	ITOM	a INIVIRPLOCFIOW IMag
		in VDI format







Flavor

Key Pair

Status

Availability Zone

Task

Power State

IP Address

1000	10	100	\sim	0	-
1112	510			e	-
			-	~	~

Instance Name

Image Name

Images

Key Pairs



Time since created

Actions

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(1)

Launch Instance



npflow2	
Availability Zone	
nova	
Count *	
1	

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Total Instances

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Launch Instance

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Project

API Access	Flavor	Allocated										
		Name	VCPUS	RAM	Total Disk	Root Disk	Ephemeral Disk	Public				
Compute		> m1.large	4	8 GB	20 GB	20 GB	0 GB	Yes	4			
Overview												
Instances	Security Groups	 Allocated 1 Name Description 										
Images		> default		Def	ault security gr	oup			+			
Key Pairs												
	Key Pair	Allocated										
		Displaying 1 ite	m									
		Name	Fing	erprint								
		> npflow	6c:bt	:89:56:fd:2	25:40:05:f4:7b:b	a:af:9c:a6:f6:b9			4			





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Project API Access	lr	nstar	nces													
Compute				INSTANC	EID = +					FILTER	▲ LAUNG	CH INSTANCE	DELETE INST	ANCES	MORE ACTIONS	-
Overview	Disp	laying 1 item														
Instances		Instance Name	Image Name	IP Address	Flavor	Key Pair	Status		Availabili	ity Zone	Task	Power State	Time since creat	ed Acti	ions	
Images		npflow2	NMRProcFlow	192.168.100.101	m1.large	npflow	Build	٥	nova		Spawning	No State	0 minutes	ED	DIT INSTANCE +	
Key Pairs							Y									
		npflow2	NMRProcFlow	192.168.100.101	m1.large	npflow	Active		nova		None	Running	3 minutes	С	REATE SNAPSHOT	•





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NMRProcFlow -(C) INRA UMR 1332 BFP, Metabolomics Facility - 2016-2018





API Access

Compute

Overview

Instances

Images

Key Pairs



Creating an instance

Method 2 : from an image within the catalogue





IP Address

INSTANCE ID = -

Key Pair

Status

Flavor

FILTER

Power State

Task

Availability Zone

A LAUNCH INSTANCE

Time since created

Actions

Compute

Overview

Instances

Instance Name

Image Name

Images

Key Pairs

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API Access	Details	Instance Name *					
Compute		Availability Zone		Ŧ			
Overview		Count *					
Instances							
Images	Source	Select Boot Source		Create New Vo	olume		
Key Pairs		Allocated					
		Name	Updated	Size	Туре	Visibility	Debian 8.6 with:
		> Debian8.6+Docker	2/26/18 3:27 PM	2.76 GB	qcow2	Public	Docker CE 17.05Docker-compose 1.19
	Flavor	Allocated					
		Name VCPUS 🖨	RAM Total Disk	Root Disk Ephe	meral Disk	Public	
		> m1.xlarge 8	16 GB 20 GB	20 GB 0 GB		Yes	

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Launch Instance

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Project Select networks from those listed below. ✓ Allocated 1 Networks API Access Network Subnets Associated Shared Admin State Status > provider Up ≁ provider Yes Active **\$**1 Compute Overview Select ports from those listed below. Allocated Network Ports IP Admin State Name Status Instances Select an item from Available items below Images ✓ Allocated Key Pairs Security Groups Name Description > default Default security group $\mathbf{\Psi}$ Allocated Key Pair Displaying 1 item Name Fingerprint > npflow 6c:bf:89:56:fd:25:40:05:f4:7b:ba:af:9c:a6:f6:b9 ≁ × Cancel < Back Next > Launch Instance



Instances

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Project

API Access

			Instan	ce ID = 🔻				Filter	Launch Inst	ance	Delete Instance	s More Actions
w	Affic	hage de 1 élément										
:		Instance Name	lmage Name	IP Address	Flavor	Key Pair	Status	Availability Zone	Task St	ower tate	Time since created	Actions
		npflow	Debian8.6+Docker	192.168.100.57	m1.xlarge	npflow	Construction	🗆 nova	Génération	Pas d'état	0 minute	ÉDITER L'INSTANCE
	15211	n w varen										





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ALLOW IPv4 443/tcp from 0.0.0.0/0

ALLOW IPv4 22/tcp from 0.0.0.0/0 ALLOW IPv4 80/tcp from 0.0.0.0/0

ALLOW IPv4 from default ALLOW IPv4 to 0.0.0.0/0

ALLOW IPv6 to ::/0 ALLOW IPv6 from default

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API Access	nptiow		
Compute	Overview Log	Console Action Log	Security Groups
Overview	Name	npflow	d
Instances	Status Locked	2502C543-53ai-4928-9fC3-3C57749960e6 Active False	
Images	Availability Zone Created	nova 7 août 2018 13:50	
Key Pairs	Time Since Created	4 minutes	
	Specs		Metadata
	Flavor Name	m1.xlarge	Key N

RAM

Provider

IP Addresses

VCPUs 8 VCPU

Disk 20Go

16Go

192.168.100.57

Flavor ID c781b97e-f891-4ddf-9a6b-0e5ae4ef3eb1



default

Install NMRProcFlow on the Virtual Machine

Within the shell terminal (Cygwin/xterm, PuTTY, ...):

Login to the VM via openstack.genouest.org
\$ ssh djacob@openstack.genouest.org
-bash-4.2\$
-bash-4.2\$ ssh root@192.168.100.57
root@npflow:~#
root@npflow:~#
coot@npflow:~# docker -v
Docker version 17.05.0-ce, build 89658be

Get the install script
root@npflow:~# cd /home
root@npflow:~# wget http://www.nmrprocflow.org/themes/scripts/install_npflow_VMcloud.sh

Execute the script
root@npflow:~# sh ./install_npflow_VMcloud.sh

Launch the application
root@npflow:~# cd /opt/npflow
root@npflow:~# ./npflow start
root@npflow:/opt/npflow# docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
408ed752c698 mrprocflow/nmrprocflow:latest "/usr/bin/launch-s..." 9 seconds ago Up 8 seconds 0.0.0.0:80->80/tcp npflow













Input / Output

information type

Supplementary Importing files

(optional)

Module

processing

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Project



By default, you are limited to:

- 10 instances
- 50 Go of RAM
- 20 CPUs
- 10 volumes
- A total of 100 Go of volume space

