



Infraestrutura Nacional de Computação Distribuída

Treino Openstack GUI

helpdesk@incd.pt

<http://www.incd.pt>



Dashboard - Entrar

<https://nimbus.ncg.ingrid.pt/dashboard>

Como entrar (fazer Login)

<https://nimbus.ncg.ingrid.pt/dashboard>

Username: <o seu e-mail>

Password: <peça-nos para ativar>

A screenshot of a web browser window showing the OpenStack Dashboard login page. The browser's address bar displays the URL 'https://aurora.ncg.ingrid.pt/dashboard/'. The page features the OpenStack logo at the top, followed by the text 'Log In'. Below this, a message states 'Session timed out.' The login form includes a 'User Name' field with the text 'david@lip.pt' and a 'Password' field with masked characters. A 'Sign In' button is located at the bottom right of the form. The browser's tab is labeled 'Login - OpenStack' and the window title is 'Login - OpenStack Dashboard - Google Chrome'. The browser's bookmark bar shows various folders like 'Apps', 'Vercel', 'IPGP', 'Bancos', 'Science-Journals', 'Python', 'Eclipse', 'SVN Manual', and 'Hotels-Planes'.



Dashboard – Visão global

<https://nimbus.ncg.ingrid.pt/dashboard>

O seu projeto
(tenant/project)

Settings
para mudar a
password

The screenshot shows the OpenStack Dashboard interface. The left sidebar contains navigation links for Project, Manage Compute, Manage Network, and various resource categories. The main content area is titled 'Overview' and includes a 'Limit Summary' section with five circular gauges showing usage for Instances, VCPUs, RAM, Floating IPs, and Security Groups. Below this is a 'Usage Summary' section with a table for active instances. The table is currently empty, displaying 'No items to display' and 'Displaying 0 items'. A red arrow points from the 'CURRENT PROJECT Inec' dropdown in the sidebar to the 'O seu projeto (tenant/project)' text. Another red arrow points from the 'Settings' link in the top right to the 'Settings para mudar a password' text. A third red arrow points from the 'No items to display' text to the 'Não há instâncias a correr (por enquanto)' text.

Instance Overview - OpenStack Dashboard - Google Chrome

Logged in as: david@lip.pt Settings Help Sign Out

Overview

Limit Summary

Resource	Used	Limit
Instances	0 of 10	10
VCPUs	0 of 20	20
RAM	0 of 50.0 GB	50.0 GB
Floating IPs	0 of 50	50
Security Groups	1 of 10	10

Select a period of time to query its usage:

From: 2014-11-0 To: 2014-11-1 Submit The date should be in YYYY-mm-dd format.

Active Instances: - Active RAM: - This Period's VCPU-Hours: 11.96 This Period's GB-Hours: 239.26

Usage Summary

Download CSV Summary

Instance Name	VCPUs	Disk	RAM	Uptime
No items to display.				
Displaying 0 items				

Não há instâncias a correr (por enquanto)



Dashboard – mudar a password

<https://nimbus.ncg.ingrid.pt/dashboard>

Para mudar a password

The screenshot shows a web browser window titled "Change Password - OpenStack Dashboard - Google Chrome". The address bar shows the URL <https://nimbus.ncg.ingrid.pt/dashboard/settings/password/>. The browser's bookmark bar contains various folders like "Apps", "Vercé", "IPGP", "Bancos", "Science-Journals", "Python", "Eclipse", "SVN Manual", "Hotels-Planes", "Franca", "EUDAT-PRACE", "SW", "coursera", "EGI", "LIP-Local", and "WLOG".

The OpenStack Dashboard interface is visible. On the left, the "openstack DASHBOARD" logo is at the top, followed by a sidebar menu with "Project" and "User Settings". The "Change Password" link is highlighted in the "User Settings" section, with a red arrow pointing to it from the text "Para mudar a password".

The main content area is titled "Change Password". It contains a form with three input fields: "Current password *", "New password *", and "Confirm new password *". To the right of these fields is a "Description:" section with the text: "From here you can change your password. We highly recommend you create a strong one..". At the bottom right of the form is a blue "Change" button.



Dashboard – ver imagens disponíveis

<https://nimbus.ncg.ingrid.pt/dashboard>

Imagens (images &

Nomes das imagens

snapshots)

Images & Snapshots - OpenStack Dashboard - Google Chrome

https://aurora.ncg.ingrid.pt/dashboard/project/images_and_snapshots/

apps Vercé IPGP Bancos Science-Journals Python Eclipse SVN Manual Hotels-Planes Franca EUDAT-PRACE SW coursera EGI LIP-Local WLCG

openstack DASHBOARD

Project

CURRENT PROJECT nec

Manage Compute

Overview

Instances

Volumes

Images & Snapshots

Access & Security

Manage Network

Network Topology

Networks

Routers

Images & Snapshots

Logged in as: david@lip.pt Settings Help Sign Out

Images

Project (0) Shared with Me (0) Public (9) + Create Image Delete Images

<input type="checkbox"/>	Image Name	Type	Status	Public	Protected	Format	Actions
<input type="checkbox"/>	Image_for_Chipster_[Ubuntu_11.10_KVM]	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Image_for_CernVM_[Scientific_Linux_6.0_KVM]	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Image_for_CentOS_6_minimal_[CentOS_6_x_KVM]	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	ubuntu-14.04-mdavid	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Image_for_TinyCoreLinux_[Other_TinyCoreLinux_QEMU-KVM]	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	OS_Disk_Image	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Image_for_Ubuntu_Server_14.04_LTS_[Ubuntu_14.04_LTS_KVM]	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Basic_Ubuntu_Server_12.04_LTS_OS_Disk_Image	Image	Active	Yes	No	QCOW2	Launch More ▾
<input type="checkbox"/>	Fedora 19	Image	Active	Yes	No	QCOW2	Launch More ▾

Displaying 9 items

Volume Snapshots

Name	Description	Size	Status	Volume Name	Actions
No items to display.					

Displaying 0 items



Dashboard – Lançar uma instância

<https://nimbus.ncg.ingrid.pt/dashboard>

Lançar (instânciar) uma imagem

Images & Snapshots - OpenStack Dashboard - Google Chrome

Logged in as: david@lip.pt

Project (0) Shared with Me (0) Public (9) + Create Image Delete Images

Image Name	Type	Status	Public	Protected	Format	Actions
<input type="checkbox"/> Image_for_Chipster [Ubuntu_11.10_KVM]	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Image_for_CernVM [Scientific_Linux_6.0_KVM]	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Image_for_CentOS_6_minimal [CentOS_6.x_KVM]	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> ubuntu-14.04-mdavid	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Image_for_TinyCoreLinux [Other_TinyCoreLinux_QEMU-KVM]	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> OS_Disk_Image	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Image_for_Ubuntu_Server_14.04_LTS [Ubuntu_14.04_LTS_KVM]	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Basic_Ubuntu_Server_12.04_LTS_OS_Disk_Image	Image	Active	Yes	No	QCOW2	Launch More
<input type="checkbox"/> Fedora 19	Image	Active	Yes	No	QCOW2	Launch More

Displaying 9 items

Volume Snapshots

Name	Description	Size	Status	Volume Name	Actions
No items to display.					

Displaying 0 items



Lançar uma instância - Detalhes

<https://nimbus.ncg.ingrid.pt/dashboard>

Launch Instance

Details *

Access & Security *

Networking *

Post-Creation

Availability Zone

nova

Instance Name *

david-test

Flavor *

m1.small

Instance Count *

1

Instance Boot Source *

Boot from image

Image Name

ubuntu-14.04-mdavid (1.8 GB)

Specify the details for launching an instance.

The chart below shows the resources used by this project in relation to the project's quotas.

Flavor Details

Name	m1.small
VCPUs	1
Root Disk	20 GB
Ephemeral Disk	0 GB
Total Disk	20 GB
RAM	2,048 MB

Project Limits

Number of Instances 0 of 10 Used

Number of VCPUs 0 of 20 Used

Total RAM 0 of 51,200 MB Used

Inserir nome da
Instância (VM)

Escolher a
configuração
da instância
(VM)

Cancel

Launch



Lançar uma instância - Autenticação

<https://nimbus.ncg.ingrid.pt/dashboard>

Chave pública ssh
(para já é opcional)

Password da root
da instância

Launch Instance

Details * Access & Security * Networking * Post-Creation

Keypair

david

+

Admin Pass

.....

Confirm Admin Pass

.....|

Security Groups *

☒ default

Control access to your instance via keypairs, security groups, and other mechanisms.

Cancel

Launch

Para poder entrar na instância (VM) usando “ssh” é necessário adicionar uma chave “ssh” pública.




Lançar uma instância – Rede privada

<https://nimbus.ncg.ingrid.pt/dashboard>

Launch Instance ×


Details * Access & Security * **Networking *** Post-Creation

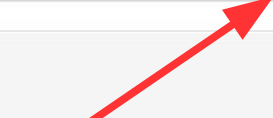
Selected Networks

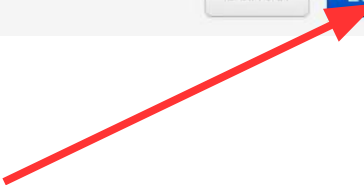
nic:1 ▾ lnec_private_net (7b4ae489-a799-4eed-a992-9b6b9d6da1c8) 

Available networks

Choose network from Available networks to Selected Networks by push button or drag and drop, you may change nic order by drag and drop as well.







Cancel Launch

Selecionar uma rede,
para já vamos usar apenas
endereços IP privados

Lançar a instância



Dashboard - Instâncias

<https://nimbus.ncg.ingrid.pt/dashboard>

Instância em preparação

- spawning

The screenshot shows the OpenStack Dashboard interface. On the left, there's a sidebar with the OpenStack logo and navigation links for Project, Manage Compute, Overview, Instances, and Volumes. The main area is titled 'Instances' and shows a table with one instance named 'david-test'. The instance is in the 'Build' status, and the 'Task' column shows 'Spawning'. A red arrow points to the 'Spawning' text. Above the table, there are buttons for '+ Launch Instance', 'Soft Reboot Instances', and 'Terminate Instances'. A success message 'Success: Launched instance named david-test' is visible in the top right corner.

Instance Name	Image Name	IP Address	Size	Keypair	Status	Task	Power State	Uptime	Actions
david-test	ubuntu-14.04-mdavid		m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Build	Spawning	No State	0 minutes	Associate Floating IP More



Dashboard - Instâncias

<https://nimbus.ncg.ingrid.pt/dashboard>

Instância ativa -
running

The screenshot shows the OpenStack dashboard interface. On the left is a sidebar with the OpenStack logo and navigation links: Project, Manage Compute (with sub-links for Overview, Instances, Volumes, and Images & Snapshots), and a current project dropdown set to 'Inec'. The main content area is titled 'Instances' and includes a search filter, a '+ Launch Instance' button, and buttons for 'Soft Reboot Instances' and 'Terminate Instances'. A table lists the instances, showing one instance named 'david-test' with status 'Active' and power state 'Running'. A red arrow points from the text 'Instância ativa - running' to the 'Running' status in the table. The table has columns for Instance Name, Image Name, IP Address, Size, Keypair, Status, Task, Power State, Uptime, and Actions. The 'Actions' column for 'david-test' includes 'Create Snapshot' and 'More' options. At the bottom of the table, it says 'Displaying 1 item'.

	Instance Name	Image Name	IP Address	Size	Keypair	Status	Task	Power State	Uptime	Actions
<input type="checkbox"/>	david-test	ubuntu-14.04-mdavid	192.168.100.2	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Active	None	Running	10 minutes	Create Snapshot More

Displaying 1 item



Dashboard – Topologia da rede

<https://nimbus.ncg.ingrid.pt/dashboard>

Network Topology - OpenStack Dashboard - Google Chrome

Network Topology

Logged in as: david@lip.pt Settings Help Sign Out

Launch Instance Create Network Create Router

Small Normal

The diagram illustrates a network topology within an OpenStack environment. On the left, a vertical blue line represents the 'public_net'. This network is connected to a central node labeled 'lhec_rout..' Router. From the router, an orange line represents the 'lhec_private_net', which is connected to a node labeled 'david-tes..' Instance. The instance is associated with the IP address 192.168.100.2. The router's interface on the public network is labeled 192.168.100.1. The private network is labeled with the address range 192.168.100.0/24.

openstack DASHBOARD

Project

CURRENT PROJECT lhec

Manage Compute

- Overview
- Instances
- Volumes
- Images & Snapshots
- Access & Security

Manage Network

- Network Topology
- Networks
- Routers



Dashboard – Estado da instância

<https://nimbus.ncg.ingrid.pt/dashboard>

The screenshot displays the OpenStack Dashboard interface in a Google Chrome browser. The page title is "Instance Detail: david-test". The left sidebar contains the OpenStack logo and a navigation menu with sections: "Project" (with a dropdown for "CURRENT PROJECT lnec"), "Manage Compute" (with links for Overview, Instances, Volumes, Images & Snapshots, and Access & Security), "Manage Network" (with links for Network Topology, Networks, and Routers), and "Manage Storage" (with links for Volumes, Images & Snapshots, and Access & Security). The main content area shows the "Instance Overview" tab selected. It includes a "Log" and "Console" link. The "Instance Overview" section contains an "Info" block with the following details: Name (david-test), ID (e47b7fa4-5630-4192-8039-d1837a52ddad), Status (Active), Created (Nov. 10, 2014, 2 p.m.), and Uptime (31 minutes). Below this is a "Specs" block showing the Flavor (m1.small), RAM (2GB), VCPUs (1 VCPU), and Disk (20GB). The "IP Addresses" block shows the Lne Private Net (192.168.100.2). The "Security Groups" section is partially visible at the bottom.

Instance Detail - OpenStack Dashboard - Google Chrome

Instance Detail: david-test

Logged in as: david@lip.pt Settings Help Sign Out

Overview Log Console

Instance Overview

Info

Name
david-test

ID
e47b7fa4-5630-4192-8039-d1837a52ddad

Status
Active

Created
Nov. 10, 2014, 2 p.m.

Uptime
31 minutes

Specs

Flavor
m1.small

RAM
2GB

VCPUs
1 VCPU

Disk
20GB

IP Addresses

Lne Private Net
192.168.100.2

Security Groups



Dashboard – Consola da instância

<https://nimbus.ncg.ingrid.pt/dashboard>

Acesso à consola da VM

Clicar na barra

para ativar a consola

Instance Detail - OpenStack Dashboard - Google Chrome

https://aurora.ncg.ingrid.pt/dashboard/project/instances/e47b7fe4-5630-4192-8039-d183a52ddad/

Apps Verce IPGP Bancos Science-Journals Python Eclipse SW Manual Notes-Plane Franca EUDAT-PRACE SW coursera EGI LIP-Local WLCG

openstack DASHBOARD

Project

CURRENT PROJECT **incc**

Manage Compute

Overview

Instances

Volumes

Images & Snapshots

Access & Security

Manage Network

Network Topology

Networks

Routers

Overview Log **Console**

Instance Console

If console is not responding to keyboard input: click the grey status bar below. [Click here to show only console](#)

```
david-test login: Cloud-init v. 0.7.5 running 'modules:final' at Mon, 10 Nov 2014 14:01:36 +0000. Up 20.03 seconds.
ci-info: *****authorized keys from /home/ubuntu/.ssh/authorized_keys for user ubuntu*****
ci-info: | Keytype | Fingerprint (md5) | Options | Comment |
ci-info: | ssh-rsa | a4:d6:cc:ec:0c:91:cd:df:fb:19:72:97:11:d6:c4:b3 | - | david@pcdavid.lip.pt |
ci-info: -----
ec2: #####
ec2: -----BEGIN SSH HOST KEY FINGERPRINTS-----
ec2: 1024 ee:00:3f:96:4d:3a:f2:c4:6d:f3:5a:a8:36:b3:06:38 root@david-test (DSA)
ec2: 256 3f:fb:a0:2e:d6:0c:11:f4:3f:69:39:73:54:06:89:10 root@david-test (ECDSA)
ec2: 2048 18:2c:71:ae:00:04:64:56:06:f4:05:0e:1c:7a:d6:23 root@david-test (RSA)
ec2: -----END SSH HOST KEY FINGERPRINTS-----
ec2: #####
ec2: -----BEGIN SSH HOST KEY KEYS-----
ecdsa-sha2-nistp256 AAAAEZUQZHNLXNoYTI1bmIzdHMuNTYAAAAIbmIzdHMuNTYAAABBDTUX93gQ4uQcDUeC607ePNFA1Q1L11hqI+aUTp4XcrKBCewXfC+50/T
tF15h8B0kFehNDeHUHavB2PvUy188k= root@david-test
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQDEtSduDUsw1DM313bX0v3f3g89f9afeg11tpME11401F6eUp8ABUCmMR/aKpLdxUmREX7u+Gm/dufV01dC3eFRTO
xU02rZNEguPBX0u+/mbMe638axUCn7x/z/EKRFiNOXsCCIfjyul9pf16Qh/4nd3MXRAVNmDy2K96nt9b3UDgB2P1ZswF5uSF8clzGI/unPAW7hhQ1zr-IgSy7DENC
ZZzhozy00fRMD+zFSfJrFw/8h9b11GBUpJfyIgcRNRapf111TwUceKusnx7TeaeGce0N70ez35yvrJQucs1Joh/jaVQ9T7Qyc1RA3feZhaeq1Q1589uYEF8u1 roo
t@david-test
-----END SSH HOST KEY KEYS-----
Cloud-init v. 0.7.5 finished at Mon, 10 Nov 2014 14:01:36 +0000. DataSource DataSourceEc2. Up 20.26 seconds

Ubuntu 14.04.1 LTS david-test tty1
david-test login: _
```




Consola – Fazer login

<https://nimbus.ncg.ingrid.pt/dashboard>

```
Connected (encrypted) to: QEMU (instance-0000034d)
root 387 0.0 0.0 0 0 ? S< 14:01 0:00 [ttm_swapi]
root 551 0.0 0.0 15524 724 ? S 14:01 0:00 upstart-socket-bridge --daemon
root 554 0.0 0.1 10232 2920 ? Ss 14:01 0:00 dhclient -1 -v -pf /run/dhclient.eth0.pid -lf /var/lib/dhcp/dhc
lien
message+ 723 0.0 0.0 39116 1024 ? Ss 14:01 0:00 dbus-daemon --system --fork
root 766 0.0 0.0 15276 624 ? S 14:01 0:00 upstart-file-bridge --daemon
root 768 0.0 0.0 43452 1796 ? Ss 14:01 0:00 /lib/systemd/systemd-logind
syslog 810 0.0 0.0 260076 1188 ? Ssl 14:01 0:00 rsyslogd
root 841 0.0 0.0 15820 956 tty4 Ss+ 14:01 0:00 /sbin/getty -8 38400 tty4
root 844 0.0 0.0 15820 948 tty5 Ss+ 14:01 0:00 /sbin/getty -8 38400 tty5
root 849 0.0 0.0 15820 952 tty2 Ss+ 14:01 0:00 /sbin/getty -8 38400 tty2
root 850 0.0 0.0 15820 956 tty3 Ss+ 14:01 0:00 /sbin/getty -8 38400 tty3
root 852 0.0 0.0 15820 944 tty6 Ss+ 14:01 0:00 /sbin/getty -8 38400 tty6
root 870 0.0 0.1 61364 3060 ? Ss 14:01 0:00 /usr/sbin/sshd -D
root 874 0.0 0.0 23656 756 ? Ss 14:01 0:00 cron
root 908 0.0 0.0 4368 660 ? Ss 14:01 0:00 acpid -c /etc/acpi/events -s /var/run/acpid.socket
root 956 0.0 0.1 78184 2164 tty1 Ss 14:01 0:00 /bin/login --
root 1262 0.0 0.0 0 0 ? S 14:17 0:00 [kauditd]
root 1549 0.5 0.1 22404 3568 tty1 S 14:34 0:00 -bash
root 1575 0.0 0.0 18448 1284 tty1 R+ 14:34 0:00 ps auxw
root@david-test:~# ll
total 24
drwxr-xr-x 4 root root 4096 Nov 10 14:34 ./
drwxr-xr-x 22 root root 4096 Nov 10 14:01 ../
-rw-r--r-- 1 root root 3106 Feb 20 2014 .bashrc
drwxr-xr-x 2 root root 4096 Nov 10 14:34 .cache/
-rw-r--r-- 1 root root 140 Feb 20 2014 .profile
drwxr-xr-x 2 root root 4096 Nov 10 14:01 .ssh/
root@david-test:~# ifconfig
eth0 Link encap:Ethernet HWaddr fa:16:3e:78:54:2e
inet addr:192.168.100.2 Bcast:192.168.100.255 Mask:255.255.255.0
inet6 addr: fe80::f816:3eff:fe78:542e/64 Scope:Link
UP BROADCAST RUNNING MULTICAST MTU:1500 Metric:1
RX packets:225 errors:0 dropped:0 overruns:0 frame:0
TX packets:292 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:1000
RX bytes:34181 (34.1 KB) TX bytes:35386 (35.3 KB)

lo Link encap:Local Loopback
inet addr:127.0.0.1 Mask:255.0.0.0
inet6 addr: ::1/128 Scope:Host
UP LOOPBACK RUNNING MTU:65536 Metric:1
RX packets:0 errors:0 dropped:0 overruns:0 frame:0
TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
collisions:0 txqueuelen:0
RX bytes:0 (0.0 B) TX bytes:0 (0.0 B)

root@david-test:~#
```

Login user: root + passwd: <a password que foi dada na instância>



Dashboard – Volumes

<https://nimbus.ncg.ingrid.pt/dashboard>

Criar volume

Volumes - OpenStack Dashboard - Google Chrome

Logged in as: david@lip.pt [Settings](#) [Help](#) [Sign Out](#)

Volumes

Filter Filter [+ Create Volume](#)

Name	Description	Size	Status	Type	Attached To	Actions
No items to display.						
Displaying 0 items						

Volumes

A criação de volumes permite adicionar espaço de armazenamento a uma instância.



Dashboard – Criar um volume

<https://nimbus.ncg.ingrid.pt/dashboard>

Nome do volume

Tamanho do volume em GB (mínimo 1)

Create Volume

Volume Name *

david-volume

Description

Additional information here...

Type

Size (GB) *

20

Volume Source

No source, empty volume.

Description:

Volumes are block devices that can be attached to instances.

Volume Limits

Total Gigabytes (0 GB)

1,000 GB Available

Number of Volumes (0)

10 Available

Cancel

Create Volume

Criar volume



Dashboard – Volumes

<https://nimbus.ncg.ingrid.pt/dashboard>

Associar volume à
instância

The screenshot shows the OpenStack Volumes dashboard in a Google Chrome browser. The URL bar shows <https://aurora.ncg.ingrid.pt/dashboard/project/volumes/>. The page title is "Volumes - OpenStack Dashboard - Google Chrome". The dashboard includes a sidebar with the OpenStack logo and navigation links: Project, Manage Compute, Overview, Instances, Volumes (selected), and Images & Snapshots. The main content area is titled "Volumes" and contains a table with the following data:

	Name	Description	Size	Status	Type	Attached To	Action
<input type="checkbox"/>	david-volume		20GB	Available	-		<button>Edit Attachments</button> <button>More</button>

Below the table, it says "Displaying 1 item". A red arrow points from the "Volumes" link in the sidebar to the "david-volume" entry in the table. Another red arrow points from the "Edit Attachments" button in the "Action" column to the text "Associar volume à instância". A blue notification box at the top right says "Info: Creating volume 'david-volume'".

Volume acabado de
criar



Dashboard – Associar um Volume

<https://nimbus.ncg.ingrid.pt/dashboard>

Manage Volume Attachments ×

Attachments

Instance	Device	Actions
No items to display.		
Displaying 0 items		

Attach To Instance
Attach to Instance *
 ▼

Cancel Attach Volume

Selecionar a instância
à qual se pretende
associar o volume
(attach)

Associar o volume



Consola – Ver volumes associados

<https://nimbus.ncg.ingrid.pt/dashboard>

Antes de associar o volume

```
root@david-test:~# cat /proc/partitions
major minor  #blocks  name

253        0   20971520 vda
253        1    9436160 vda1
253        2           1 vda2
253        5   1046528 vda5
root@david-test:~# _
```

Depois de associar o volume
Novo dispositivo /dev/vdb

```
root@david-test:~# cat /proc/partitions
major minor  #blocks  name

253        0   20971520 vda
253        1    9436160 vda1
253        2           1 vda2
253        5   1046528 vda5
253       16   20971520 vdb
root@david-test:~# _
```



Dashboard – Criar um snapshot

<https://nimbus.ncg.ingrid.pt/dashboard>

Primeiro parar a instância com Shutoff

- Instances -> Actions -> More -> Shut Off Instance

Criar snapshot

Instances

Filter Filter [+ Launch Instance](#) [Soft Reboot Instances](#) [Terminate Instances](#)

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Size	Keypair	Status	Task	Power State	Uptime	Actions
<input type="checkbox"/>	david-lhec	centos7-lhec	192.168.100.2 192.92.149.136	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Shutoff	None	Shutdown	4 hours, 11 minutes	Start Instance More
<input type="checkbox"/>	david	centos7-kbd-pt	192.168.100.4	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Shutoff	None	Shutdown	21 hours, 35 minutes	Start Instance More

Displaying 2 items

[Create Snapshot](#)
[Associate Floating IP](#)
[Disassociate Floating IP](#)
[Edit Instance](#)
[Resize Instance](#)
[Soft Reboot Instance](#)
[Hard Reboot Instance](#)
[Rebuild Instance](#)
[Terminate Instance](#)



Dashboard – Criar um snapshot

<https://nimbus.ncg.ingrid.pt/dashboard>

Nome do
Snapshot



Create Snapshot

Snapshot Name *

centos7-LNECUseCases

Description:

Snapshots preserve the disk state of a running instance.

Cancel

Create Snapshot



Criar o Snapshot



Dashboard – Associar IP público

<https://nimbus.ncg.ingrid.pt/dashboard>

Necessário para poder aceder à VM remotamente (ex. Através de “ssh”)
ou para expor outros serviços ao exterior

Instances

[+ Launch Instance](#)[Soft Reboot Instances](#)[Terminate Instances](#)

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Size	Keypair	Status	Task	Power State	Uptime	Actions
<input type="checkbox"/>	LNECUseCases	centos7-LNECUseCases		m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Build	Spawning	No State	0 minutes	Associate Floating IP More
<input type="checkbox"/>	david-lhec	centos7-lhec	192.168.100.2 192.92.149.136	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Shutoff	None	Shutdown	4 hours, 16 minutes	Start Instance More
<input type="checkbox"/>	david	centos7-kbd-pt	192.168.100.4	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Shutoff	None	Shutdown	21 hours, 41 minutes	Start Instance More

Displaying 3 items

Associar IP flutuante
(floating IP)
Um IP flutuante é um
IP público



Dashboard – Associar IP público

<https://nimbus.ncg.ingrid.pt/dashboard>

Adicionar IP
flutuante

Manage Floating IP Associations

IP Address *

IP Address *

No IP addresses available

+

Port to be associated *

LNECUseCases: 192.168.100.5

Select the IP address you wish to associate with the selected instance.

Cancel

Associate

Alocar
novo
endereço
IP

Allocate Floating IP

Pool *

public_net

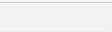
Description:

Allocate a floating IP from a given floating IP pool.

Project Quotas

Floating IP (1)

49 Available



Allocate IP



Dashboard – Associar IP público

<https://nimbus.ncg.ingrid.pt/dashboard>

Endereço IP privado alocado
na instância (private IP)

Instances

Filter Filter

<input type="checkbox"/>	Instance Name	Image Name	IP Address	Size	Keypair	Status	Task	Power State	Uptime	Actions
<input type="checkbox"/>	LNECUseCases	centos7-LNECUseCases	192.168.100.5 192.92.149.137	m1.small 2GB RAM 1 VCPU 20.0GB Disk	david	Active	None	Running	2 minutes	Create Snapshot More ▾

Endereço IP público agora
associado (floating IP)
O mapeamento do endereço
público no endereço privado é
feito via NAT

```
$ ssh root@192.92.149.137
```

```
Please login as the user "centos" rather than the user "root".
```

```
Fazer    $ ssh centos@192.92.149.137
...      [centos@lneusecases ~]$ _
```



Dashboard – Parar vs destruir

<https://nimbus.ncg.ingrid.pt/dashboard>

Shutoff instance == shutdown -h
now

Terminate instance == deletes
the instance



Infraestrutura Nacional de Computação Distribuída

Obrigado !

helpdesk@incd.pt

<http://www.incd.pt>