

Your cluster in 4 steps

(and in 15 min.)

Steps:

- 1 - Access the cluster
- 2 - Choose some nodes
- 3 - Choose the image
- 4 - Deploy

1 - Access the cluster:

```
outside:~$ ssh user@XX.XX.XX.XX
```

2 - Choose some nodes:

```
user@r11:~$ quinta status -a
```

HOST	POWER	OWNER	IMAGE	SINCE	DEPLOY
r1	off	user1	ubuntu-base	May 23, 2012	deployed
r2	on	user2	ubuntu-base	May 23, 2012	deployed
r3	off	user1	ubuntu-java	May 04, 2012	deployed
r4	on	user5	ubuntu-java	May 04, 2012	deployed
r5	off	user5	ubuntu-java	May 04, 2012	deployed
r6	on	user5	ubuntu-java	May 04, 2012	deployed
r7	on	user1	debian-base	May 04, 2012	deployed
r8	off	user3	ubuntu-java	May 04, 2012	deployed
r9	on	user3	ubuntu-java	May 04, 2012	deployed
r10	on	user1	ubuntu-java	May 04, 2012	deployed
r12	on	user9	debian-xen	May 04, 2012	aborted
s1	on	user8	ubuntu-java	May 04, 2012	deployed
s2	on	user1	ubuntu-12.04	May 04, 2012	deployed
s3	on	user8	ubuntu-java	May 04, 2012	deployed
s4	on	user1	ubuntu-java	May 04, 2012	deployed
s5	on	user9	ubuntu-java	May 04, 2012	deployed
s6	on	user1	debian-xen	May 30, 2012	deploying
s7	off	user7	debian-xen	May 04, 2012	deployed
s8	off	user1	ubuntu-java	May 04, 2012	deployed
s9	off	user3	ubuntu-java	May 04, 2012	deployed
s10	off	user5	ubuntu-base	May 23, 2012	deployed
s11	on	user2	ubuntu-java	May 04, 2012	deployed

2 - Choose some nodes:

```
user@r11:~$ echo r5 > myNodes
```

```
user@r11:~$ echo r8 >> myNodes
```

```
user@r11:~$ echo s7 >> myNodes
```

```
user@r11:~$ cat myNodes
```

```
r5  
r8  
s7
```

3 - Choose the image:

```
user@r11:~$ kaenv3 -l
```

Name	Version	User	Description
####	#####	####	#####
debian-base	1	root	Basic Debian Lenny image.
debian-xen	1	root	Xen image based on Debian Lenny.
ubuntu-10.04	1	root	Ubuntu 10.04 (Lucid Lynx) image.
ubuntu-12.04	1	root	Ubuntu 12.04 (Precise Pangolin) image.
ubuntu-12.04-nfs	1	root	Ubuntu 12.04 LTS image with NFS home from R11.
ubuntu-java Essentials	1	root	Ubuntu Lucid Lynx image with Java and Build

4 - Deploy:

```
user@r11:~$ kadeploy3 -e ubuntu-12.04 -f myNodes
```

Launching a deployment ...

Performing a SetDeploymentEnvUntrusted step on the nodes.

Performing a BroadcastEnvChain step on the nodes.

Performing a BootNewEnvClassical step on the nodes.

Nodes correctly deployed on cluster r

r5

r8

Nodes correctly deployed on cluster s

s7

**Your cluster
is ready.**

r5, r8 and s7

5 - Using the cluster:

```
user@r11:~$ ssh root@r5
```

```
root@r5's password: *****
```

```
root@r5:~$ who
```

```
root pts/0 2010-09-27 17:32 (r11.wan)
```

```
root@r5:~$ df
```

Filesystem	1K-blocks	Used	Available	Use%	Mounted on
/dev/sda3	38456340	871032	35631804	3%	/
None	16498300	184	16498116	1%	/dev
Tmpfs	16502724	0	16502724	0%	/dev/shm
None	16502724	52	16502672	1%	/var/run
None	16502724	0	16502724	0%	/var/lock
None	16502724	0	16502724	0%	/lib/init/rw
None	38456340	871032	35631804	3%	/var/lib/ureadahead/debugfs

```
user@r11:~$ quinta off r5 r8 s7
```

6 - Creating your own image:

```
user@r11:~$ kadeploy3 -e ubuntu-12.04 -m r5
```

```
user@r11:~$ ssh root@r5
```

```
root@r5:~$ passwd root
```

```
root@r5:~$ export http_proxy="http://proxy:XX/"
```

```
root@r5:~$ apt-get install ...
```

```
root@r5:~$ echo "" > /etc/udev/rules.d/70-persistent-net.rules
```

```
root@r5:~$ tgz-g5k user@r11:~/my-new-img.tgz
```

```
root@r5:~$ exit
```

6 - Creating your own image:

```
user@r11:~$ vim myDescriptor
```

```
name : my-new-img  
version : 1  
description : Ubuntu 12.04 image with something.  
author : User (user@lasige.di.fc.ul.pt)  
tarball : /home/users/user/my-new-img.tgz|tgz  
postinstall : /home/deploy/postinstalls/post4all.tgz|tgz|traitement.ash  
kernel : /boot/vmlinuz-2.X.X  
initrd : /boot/initrd.img-2.X.X  
fdisktype : 83  
filesystem : ext3  
environment_kind : linux  
visibility : shared
```

```
user@r11:~$ kaenv3 -a myDescriptor
```

```
Computing the md5sum for /home/users/user/my-new-img.tgz  
Computing the md5sum for /home/deploy/postinstalls/post4all.tgz
```

```
user@r11:~$ quinta off r5
```