2 Hypervisor deployment

The KVM testbed is made by:

- server equipped with 1 AMD Opteron + 4GB RAM + 80GB SATA + 2 Ethernet (Gbit)
- network switch with VLANs capabilities
- two-nodes active/passive cluster for storage (iSCSI interface)

2.1 OS and KVM

We will use 1 Eth as management interface connected at reserved VLAN (eth1) and 1 Eth as Virtual machine network interface (eth0).

Begin installation of "Ubuntu server 12.04 x64" OS from CD ROM onto the server:

- at network interface setting configure eth1 with static IP
- at tasksel step select LVM, OpenSSH server and Virtualization host.

After installation complete restart the server and login using SSH into the server network management interface eth1, then verify KVM installation and CPU compatibility:

```
# kvm-ok

INFO: /dev/kvm exists
KVM acceleration can be used
```

Upgrade packages to last version and add myuser to libvirtd group:

```
# apt-get update
# apt-get upgrade
# adduser myuser libvirtd
# reboot
```

Verify KVM is up:

```
$ virsh -c qemu:///system list

 Id Name                 State
----------------------------------
```

2.2 OpenvSwitch

We chose OpenvSwitch as network infrastructure manager for virtual machine hosted on KVM.

We installed it from Ubuntu packages following this procedure:

```
# aptitude purge ebtables
# virsh net-destroy default
# virsh net-autostart --disable default
# service libvirt-bin stop
# service qemu-kvm stop
# aptitude install openvswitch-switch openvswitch-controller openvswitch-brcompat

# nano -w /etc/default/openvswitch-switch

    BRCOMPAT=yes

# service openvswitch-switch restart
# service openvswitch-controller restart
# reboot
```