

3 Back-end server

Java applications (tomcat container) are hosted by back-end server, i.e., repository, viewer, solr, image server and OAI-PMH provider.

3.1 Operating System

- **DNS records**

```
fc1.to.cnr.it  A  150.145.48.41
               A  2a00:1620::41
```

- **Virtual machine creation**

2CPU / 2GB RAM / 8GB HD / 2 eth (DMZ, VLAN2)

- **Ubuntu server 10.04 LTS installation**

from CDROM

default partitioning (root/swap)

- **Network interfaces configuration**

```
nano -w /etc/network/interfaces

auto lo
  iface lo inet loopback
auto eth0
  iface eth0 inet static
    address 150.145.48.41
    netmask 255.255.255.0
    network 150.145.48.0
    broadcast 150.145.48.255
    gateway 150.145.48.1
    dns-nameservers 150.145.48.8 150.145.48.9
    dns-search to.cnr.it
  iface eth0 inet6 static
    address 2a00:1620::41
    netmask 64
    gateway 2a00:1620::1
# Disable autoconf
post-up echo 0 > /proc/sys/net/ipv6/conf/default/accept_ra
post-up echo 0 > /proc/sys/net/ipv6/conf/all/accept_ra
post-up echo 0 > /proc/sys/net/ipv6/conf/$IFACE/accept_ra
post-up echo 0 > /proc/sys/net/ipv6/conf/default/autoconf
post-up echo 0 > /proc/sys/net/ipv6/conf/all/autoconf
post-up echo 0 > /proc/sys/net/ipv6/conf/$IFACE/autoconf

auto eth1
  iface eth1 inet static
    address 192.168.1.41
    netmask 255.255.255.0
    network 192.168.1.0
    broadcast 192.168.1.255
```

- **NTP Client and other packages**

```
apt-get install ntp
nano -w /etc/ntp.conf
server ntp1.inrim.it
server ntp2.inrim.it
/etc/init.d/ntp restart
apt-get install unzip
apt-get install git-core
apt-get install tofrodos
apt-get install libtiff-tools
```

- **OS update**

```
apt-get update
apt-get upgrade
reboot
```