

# Workstation Configuration

## Main tasks

1. Network interface configuration
2. Internal routing configuration

## Network interface configuration

```
Interface name:  elx10
                 net01  192.168.1.1
                 net02  192.168.1.2
Ip addresses    :
                :
                 net1?  192.168.1.12
Netmask:       255.255.255.0
Command:      ifconfig
Goal:         To have interface elx10 properly configured
```

*Note: to check the configuration ping any host in the local network (e.g., ping 192.168.1.1)*

## ifconfig

```
ifconfig interface [-a]
                 [address ] [netmask netmask ]
                 [broadcast broadcast ]
                 [plumb] [unplumb] [up] [down]
```

For establishing new interface:  
ifconfig interface plumb

*Note: see the manual (man ifconfig)*

## Internal routing configuration

*Default gateway:* 192.168.1.254

*Commands:* route

netstat

*Goal:* To set up default gateway

*Note: to check the configuration ping any host outside the local network (e.g.: ping 194.29.160.2)*

## route

manually manipulate routing tables

route [add] [delete] [change]

[host | net] destination

[gateway]

for default gateway destination should be default

*Note: see the manual (man route)*

## netstat

show network status

netstat -r show routing tables

-n show addresses as numbers

*Note: see the manual (man netstat)*

## Creating configuration files

- Analyze file /etc/init.d/inetinit and combined for information how system establish network configuration.
- Create and fill appropriate files for interface and default gateway configuration.

Goal: Network is configured after reboot

*Note: to check the configuration the workstation has to be rebooted (sync; sync; reboot)*