

# INASP: Effective Network Management Workshops

## Unit 8: Hands-on Practical Experience

### About these workshops

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### Objectives

On completion of this session, we hope you will be able to:

- Use common inbuilt network monitoring tools for simple network checks
- Install / use the Wireshark software packet probe on PC and Linux systems
- Install / use a typical more complex monitoring tool on a Linux system.
- Explore the facilities available on a Linux-based self-contained monitoring toolkit.

If you are the facilitator, please tell the group:

At the end of session I will ask if we have met the objectives – if not, we will discuss again.

### Linux networking primer

Try out the following commands on a Linux command line:

- `ip link list`
- `ip address show`
- `ip route show`
- `route -n`
- `ip neigh show`
- `ping anotherip -c 5`
- `ip neigh show`
- `ip neigh delete anotherip dev eth0`
- `ip neigh show`
- `ping 224.0.0.1 -c 5`
- `nmap -sO 127.0.0.1`
- `nmap -sS 127.0.0.1`
- `ping 224.0.0.1 -c 5`
- `traceroute www.bbc.co.uk`
- `netstat -I`
- `netstat -Mn`
- `netstat -an`

If in doubt, try the manuals!

# Install software packages on Linux

Installation (or watch installation) and usage of the following packages:

- **Webmin**
  - See handout for installation instructions, watch live demo
- **Ethereal**
  - You should try to install package then deinstall using WebMin during the course (only one person at a time !)
- **Nagios**
  - Watch demonstration
  - Try using it (see url on board)
  - Install yourself when you get back.
- MRTG
- Cacti
- Webalizer
- AWStats
- SawMill (if available)

TODO: complete instructions, walkthroughs and screenshots for these.