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.