



Network Monitoring & Management

Welcome

Schedule

Session I	09:00 – 10:30
Break	10:30 – 11:00
Session II	11:00 – 12:30
Lunch	12:30 – 13:30
Session III	13:30 – 15:00
Break	15:00 – 15:30
Session IV	15:30 – 17:00+

Agenda:

Monday	
Session 1	Welcome and Details
	Introduction to Network Management
	Linux for VM Usage
Session 2	Cisco Configuration Basics
Session 3	Simple Network Management Protocol (SNMP)
Session 4	SNMP Labs
Tuesday	
Session 1	Cacti
Session 2	Observium demo
Session 3	Nagios
Session 4	Nagios cont.
Additional	Smokeping
Wednesday	
Session 1	Log management: Syslog & Tenshi
	Log management Labs
Session 2	RANCID Demonstration
Session 3	Netflow / NfSen
Session 4	NetFlow / NfSen labs
	Netdot
	Wrap up, closing comments

Administrative Items

Agenda

- <http://noc.ws.nsrc.org/>

During the course

- Please ask questions as you have them.
- Your experiences are valuable. Please share them.
- The schedule is somewhat flexible.

Course Materials

- Available in electronic format during the week:

<http://noc.ws.nsrc.org/>

- Will be available permanently here:

<http://nsrc.org/workshops/2014/caren-nsrc-dante/>

Virtual machine access

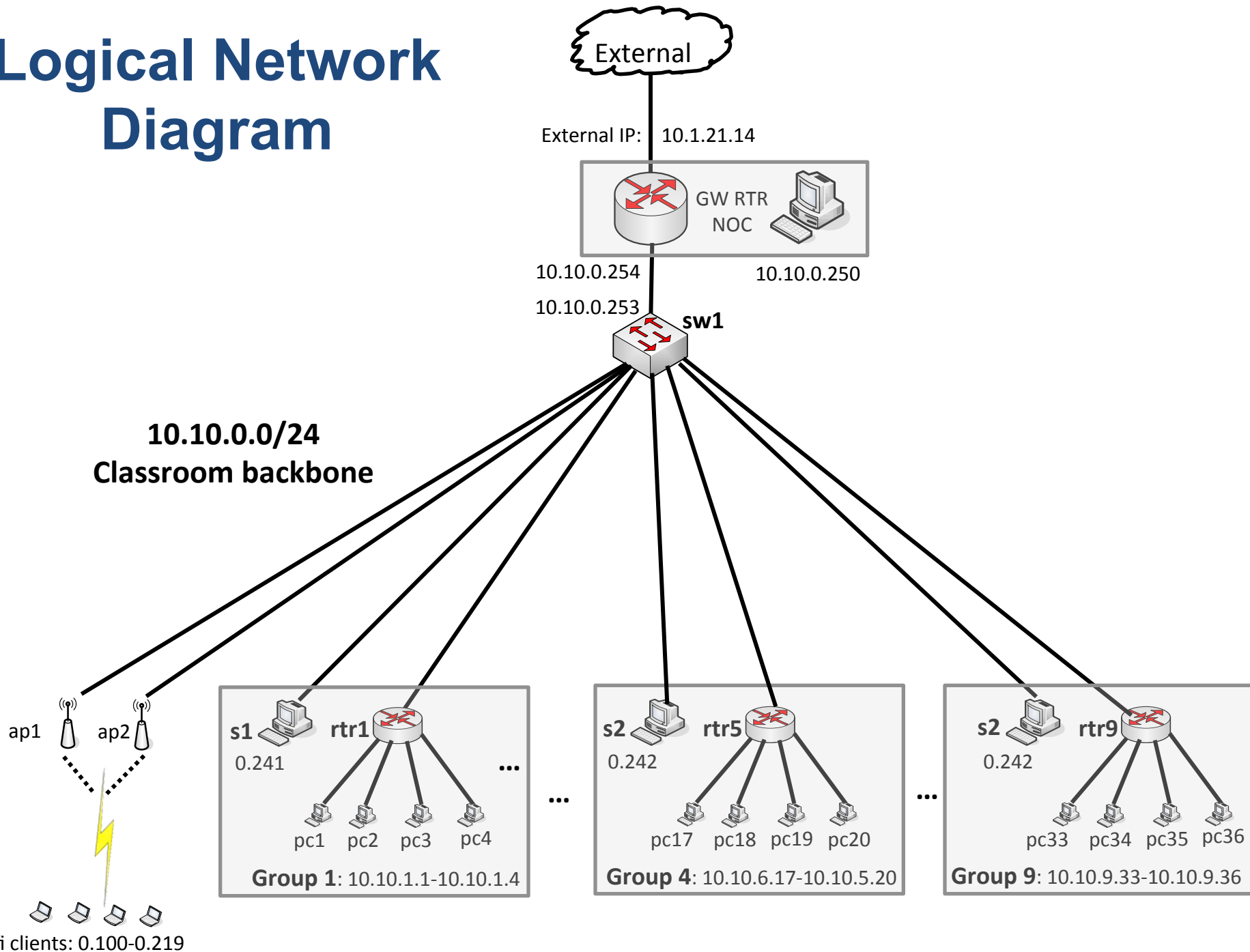
There are two users on your virtual machines (pc1-pc36)

General User
sysadm

Administrative User
root

Passwords are or will be written down in class

Logical Network Diagram



Virtual machine groups

GROUP 1	GROUP 4	GROUP 7
rtr1 ==> 10.10.1.254	rtr4 ==> 10.10.4.254	rtr7 ==> 10.10.7.254
pc1 ==> 10.10.1.1	pc13 ==> 10.10.4.13	pc25 ==> 10.10.7.25
pc2 ==> 10.10.1.2	pc14 ==> 10.10.4.14	pc26 ==> 10.10.7.26
pc3 ==> 10.10.1.3	pc15 ==> 10.10.4.15	pc27 ==> 10.10.7.27
pc4 ==> 10.10.1.4	pc16 ==> 10.10.4.16	pc28 ==> 10.10.7.28
GROUP 2	GROUP 5	GROUP 8
rtr2 ==> 10.10.2.254	rtr5 ==> 10.10.5.254	rtr8 ==> 10.10.8.254
pc5 ==> 10.10.2.5	pc17 ==> 10.10.5.17	pc29 ==> 10.10.8.29
pc6 ==> 10.10.2.6	pc18 ==> 10.10.5.18	pc30 ==> 10.10.8.30
pc7 ==> 10.10.2.7	pc19 ==> 10.10.5.19	pc31 ==> 10.10.8.31
pc8 ==> 10.10.2.8	pc20 ==> 10.10.5.20	pc32 ==> 10.10.8.32
GROUP 3	GROUP 6	GROUP 9
rtr3 ==> 10.10.3.254	rtr6 ==> 10.10.6.254	rtr9 ==> 10.10.9.254
pc9 ==> 10.10.3.9	pc21 ==> 10.10.6.21	pc33 ==> 10.10.9.33
pc10 ==> 10.10.3.10	pc22 ==> 10.10.6.22	pc34 ==> 10.10.9.34
pc11 ==> 10.10.3.11	pc23 ==> 10.10.6.23	pc35 ==> 10.10.9.35
pc12 ==> 10.10.3.12	pc24 ==> 10.10.6.24	pc36 ==> 10.10.9.36

Select your group now

- 9 total (virtual) routers
- 4 (virtual) Ubuntu Linux server images per router.
 - 36 total virtual machine images

You will work in groups of 2 to 4 on some exercises. Please choose your location now. You will use your virtual machine during the whole week.

Questions

Do you have any questions?

