



Network Monitoring & Management

Welcome

Instructors

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Schedule*

Session I	09:00 – 10:30
Break	10:30 – 11:00
Session II	11:00 – 13:00
Lunch	13:00 – 14:00
Session III	14:00 – 15:30
Break	15:30 – 16:00
Session IV	16:00 – 17:30+

Could finish around 18:00 if so requested

Agenda:

TUESDAY	Topic
Session 1	Welcome, Introductions, Workshop Details
	Questionnaire
	Introduction to Network Monitoring & Mgmt
Session 2	Linux for VM Usage
	Cisco Configuration Basics
Session 3	SNMP
Session 4	SNMP Continued
	Cacti Demo
WEDNESDAY	
Session 1	Cacti
Session 2	Cacti cont.
	Observium Demo
Session 3	SmokePing
Session 4	SmokePing cont.
	Nagios
THURSDAY	
Session 1	Nagios cont
Session 2	Nagios Continued
Session 3	Log Management
Session 4	Documentation, NOCs and Netdot

FRIDAY	
Session 1	Netdot demo and exercises
Session 2	Netdot cont.
Session 3	NetFlow / NfSen
Session 4	NetFlow / NfSen labs
SATURDAY	
Session 1	NfSen cont.
Session 2	Version control RANCID / WebSVN
Session 3	Ticketing Systems (RT)
Session 4	Ticketing Systems (Nagios / Cacti w/RT)
	Exam, Evals, Certificates
	Workshop End - Certificate Ceremony

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/apricot-nmm/>

Virtual machine access

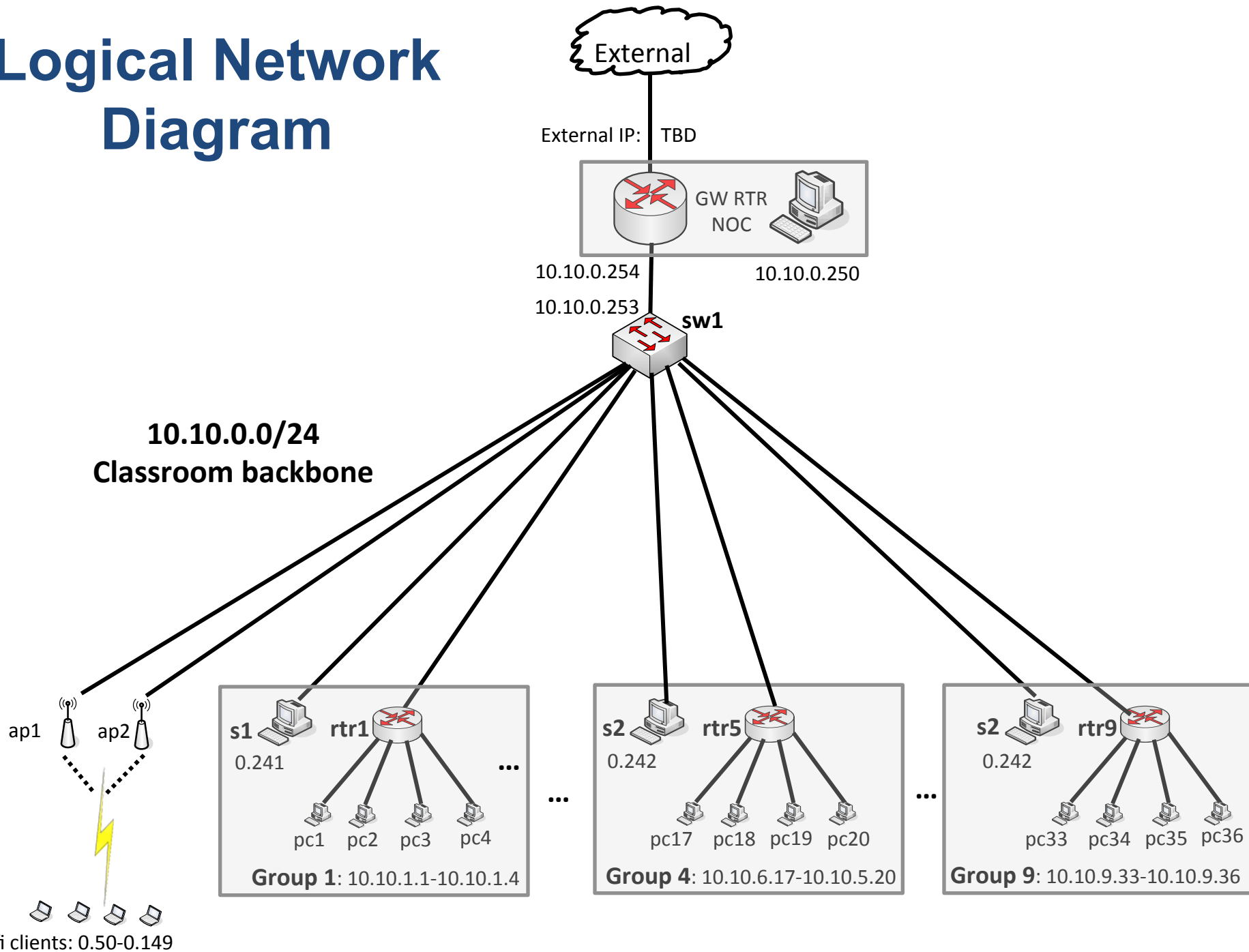
There are two users on your virtual machines (pc1-pc36)

General User
sysadm

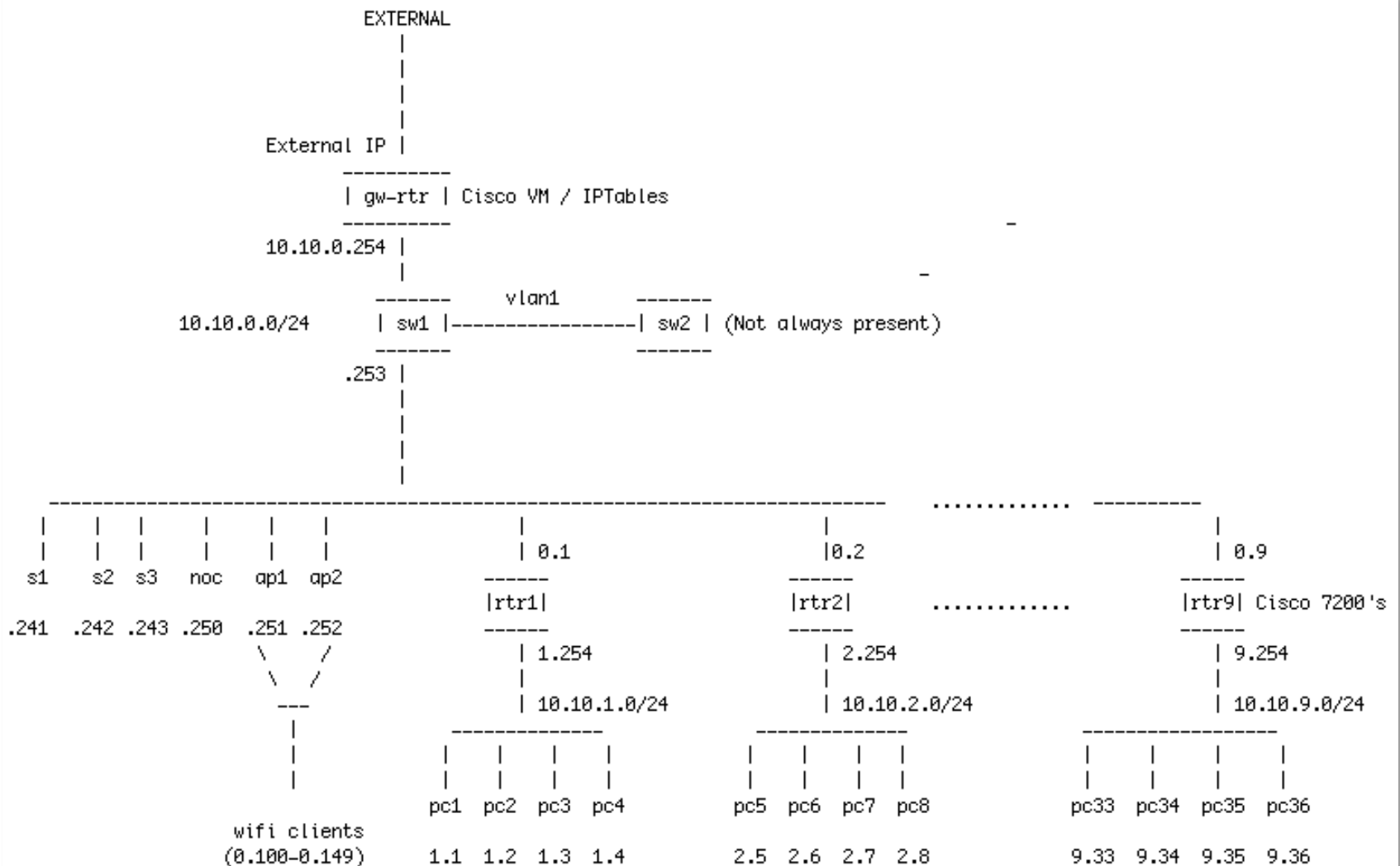
Administrative User
root

Passwords are or will be written down in class

Logical Network Diagram



Alternate 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 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?

