



AfNOG / AIS 2013

Network Monitoring & Management
Welcome

Instructors

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- United States / Chile

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- England

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Interent Society
- Kenya

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- United States / Tanzania

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- Nigeria

Schedule*

Original Plan. Final schedule TBD Monday

| | |
|--------------------|----------------|
| 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+ |

Potential evening sessions. See Agenda for further details

Agenda:

| MONDAY | Topic |
|------------------|--|
| Session 1 | Welcome, Introductions, Workshop Details |
| | Questionnaire |
| Session 2 | Introduction to Network Monitoring & Mgmt |
| Session 3 | Linux for VM Usage |
| | Cisco Configuration Basics |
| Session 4 | SNMP |
| TUESDAY | |
| Session 1 | SNMP Continued |
| Session 2 | Cacti |
| Session 3 | Cacti and Q&A |
| | Observium Demo (possible) |
| Session 4 | SmokePing |
| WEDNESDAY | |
| Session 1 | Nagios |
| Session 2 | Nagios Continued |
| Session 3 | Documentation, NOCs and Netdot |
| Session 4 | Netdot continued |

| THURSDAY | |
|-----------------|--|
| Session 1 | Version control RANCID / WebSVN |
| Session 2 | Log Management |
| Session 3 | NetFlow / NfSen |
| Session 4 | NetFlow / NfSen labs |
| FRIDAY | |
| Session 1 | Ticketing Systems (RT) |
| Session 2 | Ticketing Systems (Nagios / Cacti w/RT) |
| Session 3 | Exam, Evals, Certificates |

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/2013/afnog-nme/>

Virtual machine access

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

General User

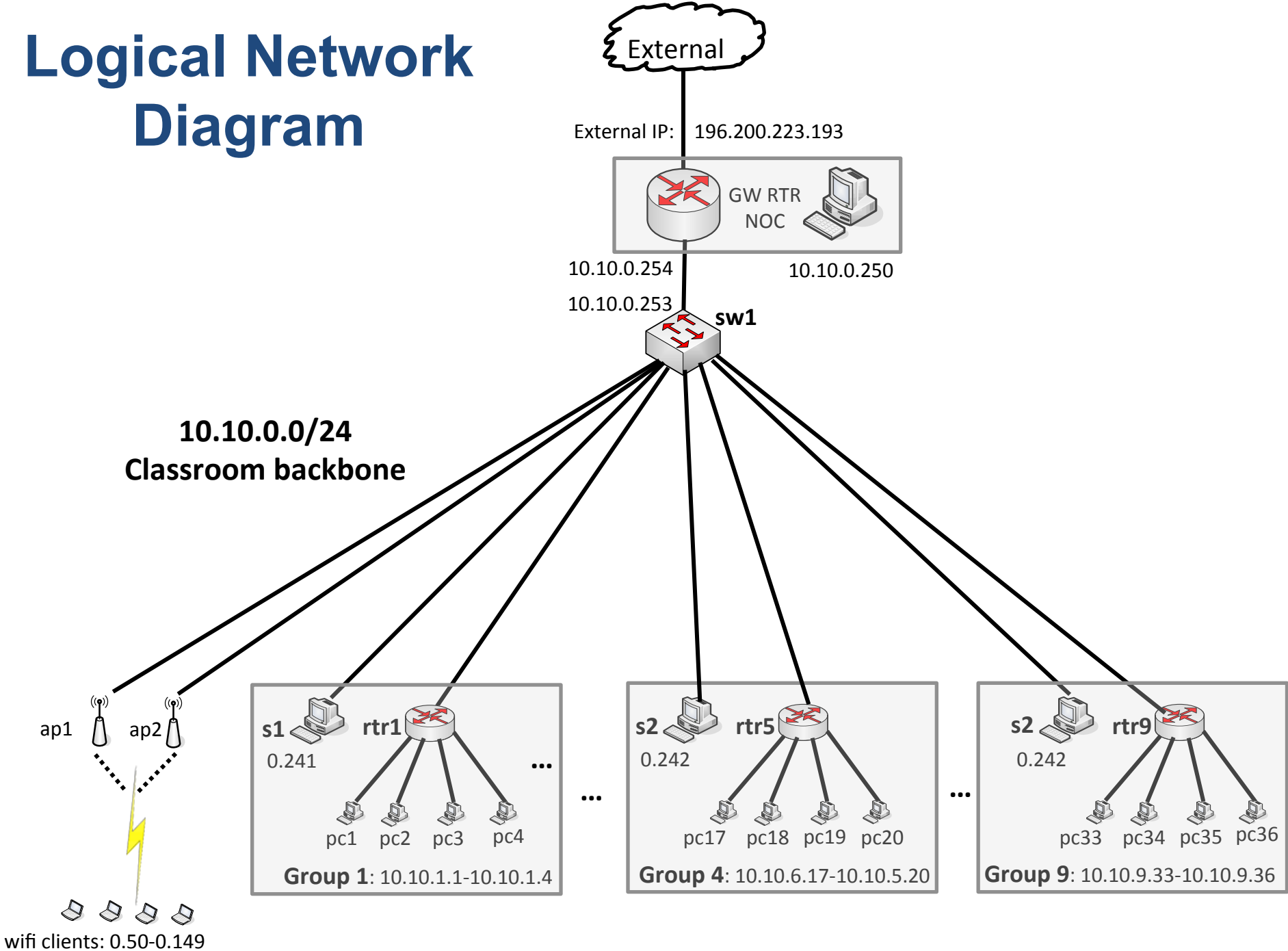
sysadm

Administrative User

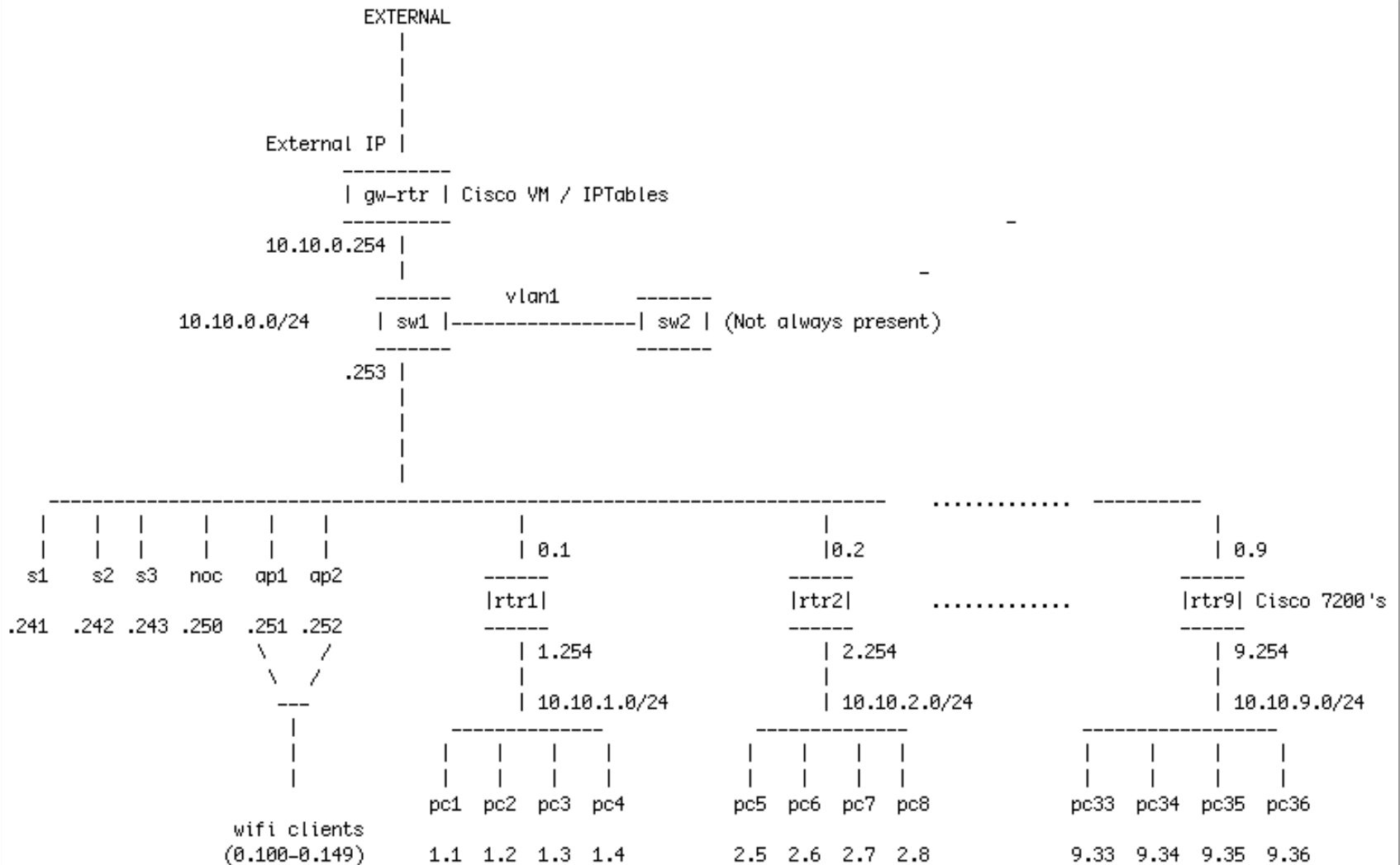
root

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?

