



# Network Monitoring & Management

**Welcome**

# Instructors

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- Canada

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# Schedule\*

<b>Session I</b>	09:00 – 11:00
<b>Break</b>	11:00 – 11:30
<b>Session II</b>	11:30 – 14:00
<b>Lunch</b>	14:00 – 15:00
<b>Session III</b>	15:00 – 16:30
<b>Break</b>	16:30 – 17:00
<b>Session IV</b>	17:00 – 18:30
<b>Dinner</b>	18:30 – 20:15 (buses to hotel)

\*Could vary or change

# Agenda:

<b>MONDAY</b>	<b>Topic</b>
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
<b>TUESDAY</b>	
Session 1	Cacti
Session 2	Cacti cont.
	Observium Demo
Session 3	Observium Lab
	SmokePing
Session 4	SmokePing cont.
<b>WEDNESDAY</b>	
Session 1	Nagios
Session 2	Nagios Continued
Session 3	Documentation, NOCs and Netdot
Session 4	Netdot exercises

Likely to adjust somewhat during the week...

<b>THURSDAY</b>	
Session 1	Log Management
Session 2	Log Management cont.
Session 3	NetFlow / NfSen
Session 4	NetFlow / NfSen labs
	NfSen cont.
<b>FRIDAY</b>	
Session 1	Version control RANCID / WebSVN
Session 2	Ticketing Systems (RT)
Session 3	Ticketing Systems (Nagios / Cacti w/RT)
Close	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/afnog-nme/>

# Virtual machine access

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

General User

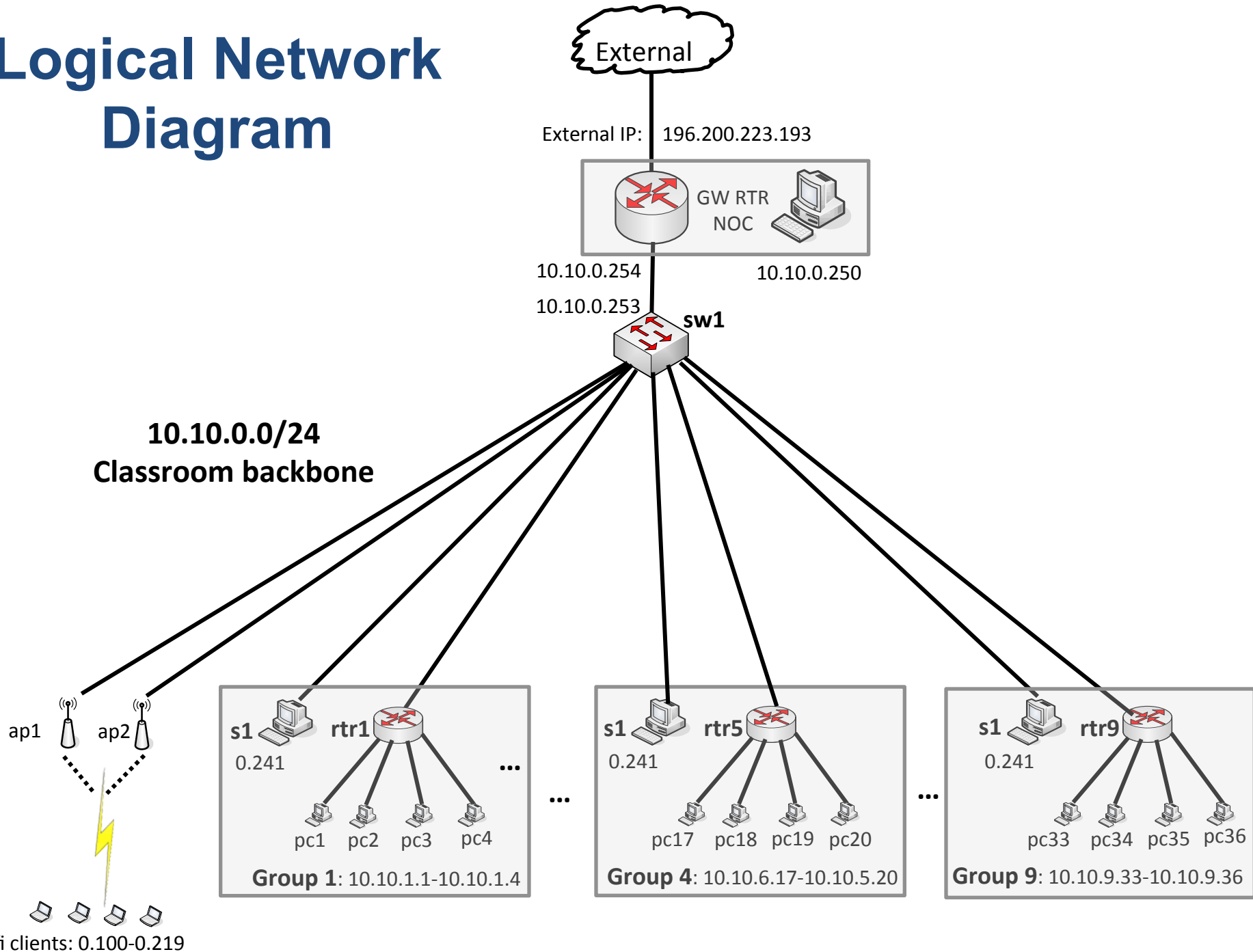
*sysadm*

Administrative User

*root*

***Passwords are or will be written down in class***

# Logical Network Diagram



# Virtual machine groups

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

