



**AfNOG 2011**

**Network Monitoring & Management  
Welcome**

# Instructors

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- United States/Chile

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KENET / NSRC  
- Kenya

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- Nigeria

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- USA / Tanzania

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- Denmark / France

# Schedule\*

<b>Session I</b>	09:00 – 10:45
<b>Break</b>	10:45 – 11:00
<b>Session II</b>	11:00 – 12:30
<b>Lunch</b>	12:30 – 14:00
<b>Session III</b>	14:00 – 15:30
<b>Break</b>	15:30 – 16:00
<b>Session IV</b>	16:00 – 18:00+

\*Subject to change...

# Agenda:

Monday	Topic	Lead
Session I	Class Introduction	HA
	Introduction to Classroom Lab	HA
	Intro UNIX for Editing and Networks	HA
Session II	Intro to Network Monitoring & Mgmt	PR
Session III	Definitions & Performance Measurement	PR
Session IV	Cisco/HP Configuration Elements	JK
<b>Tuesday</b>		
Session I	NOCs and Documentation	HA
	Network Documentation Tools	HA
	Netdot Demonstration	HA/PR
Session II	Version Control	PR
	RANCID and CVSWeb	JK
Session III	SNMP	JK
Session IV	MRTG and RRDTool Intro	PR
<b>Wednesday</b>		
Session I	The "Big Three"	
	Cacti (Performance)	JK
Session II	Cacti	JK
Session III	Nagios (Availability)	KC
Session IV	Nagios	KC

<b>Thursday</b>		
Session I	The Big Three cont.	
	Smokeping	KC
Session II	Smokeping	KC
Session III	Logging ((R)syslog, Swatch, Tenshi)	HA
Session IV	Ticketing Systems	HA
<b>Friday</b>		
Session I	Nagios, Cacti, Smokeping & Tickets	HA
	Wireless and Network Monitoring	Guest*
Session II	Netflow	PR
Session III	Netflow, Exam, Evaluations	PR
Social	Certificates	

# Administrative Items

- **Agenda**
  - <http://noc.ws.nsrc.org/wiki/wiki/Agenda>
- **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/wiki/>
  - Will be available permanently here:  
<http://nsrc.org/workshops/2011/>

# Virtual machine access

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

General User

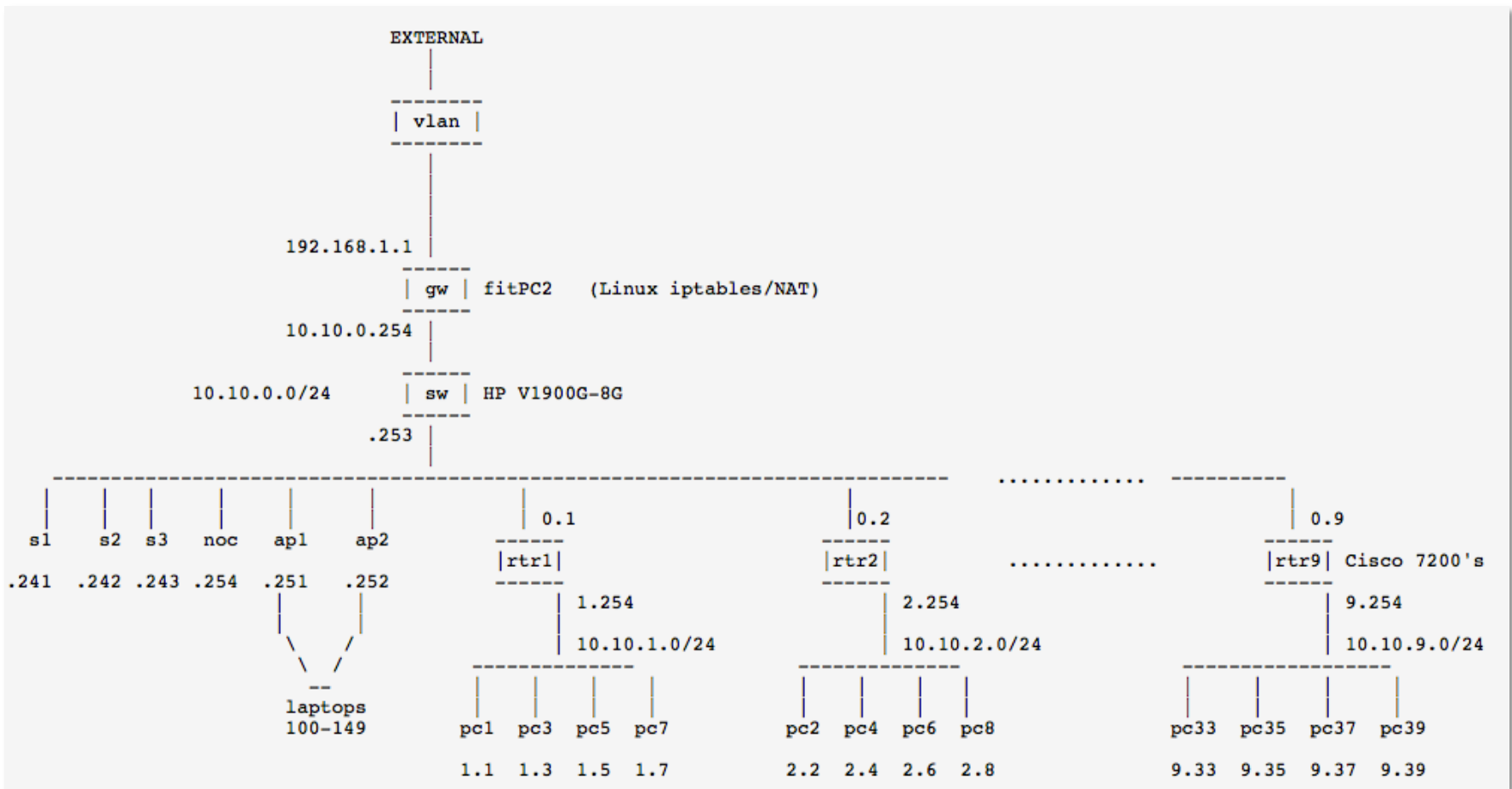
*sysadm*

Administrative User

*root*

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

# Our classroom network



Available at <http://noc.ws.nsrc.org/wiki/Diagram>

# Virtual machine groups

<b>GROUP 1</b>	<b>Group 4</b>	<b>Group 7</b>
<b>rtr1 ==&gt; 10.10.1.254</b>	<b>rtr4 ==&gt; 10.10.4.254</b>	<b>rtr7 ==&gt; 10.10.7.254</b>
<b>pc1 ==&gt; 10.10.1.1</b>	<b>pc10 ==&gt; 10.10.4.10</b>	<b>pc25 ==&gt; 10.10.7.25</b>
<b>pc3 ==&gt; 10.10.1.3</b>	<b>pc12 ==&gt; 10.10.4.12</b>	<b>pc27 ==&gt; 10.10.7.27</b>
<b>pc5 ==&gt; 10.10.1.5</b>	<b>pc14 ==&gt; 10.10.4.14</b>	<b>pc29 ==&gt; 10.10.7.29</b>
<b>pc7 ==&gt; 10.10.1.7</b>	<b>pc16 ==&gt; 10.10.4.15</b>	<b>pc31 ==&gt; 10.10.7.31</b>
<b>GROUP 2</b>	<b>Group 5</b>	<b>Group 8</b>
<b>rtr2 ==&gt; 10.10.2.254</b>	<b>rtr5 ==&gt; 10.10.5.254</b>	<b>rtr8 ==&gt; 10.10.8.254</b>
<b>pc2 ==&gt; 10.10.2.2</b>	<b>pc17 ==&gt; 10.10.5.17</b>	<b>pc26 ==&gt; 10.10.8.26</b>
<b>pc4 ==&gt; 10.10.2.4</b>	<b>pc19 ==&gt; 10.10.5.19</b>	<b>pc28 ==&gt; 10.10.8.28</b>
<b>pc6 ==&gt; 10.10.2.6</b>	<b>pc21 ==&gt; 10.10.5.21</b>	<b>pc30 ==&gt; 10.10.8.30</b>
<b>pc8 ==&gt; 10.10.2.8</b>	<b>pc23 ==&gt; 10.10.5.23</b>	<b>pc32 ==&gt; 10.10.8.32</b>
<b>GROUP 3</b>	<b>Group 6</b>	<b>Group 9</b>
<b>rtr3 ==&gt; 10.10.3.254</b>	<b>rtr6 ==&gt; 10.10.6.254</b>	<b>rtr9 ==&gt; 10.10.9.254</b>
<b>pc9 ==&gt; 10.10.3.9</b>	<b>pc18 ==&gt; 10.10.6.18</b>	<b>pc33 ==&gt; 10.10.9.33</b>
<b>pc11 ==&gt; 10.10.3.11</b>	<b>pc20 ==&gt; 10.10.6.20</b>	<b>pc35 ==&gt; 10.10.9.35</b>
<b>pc13 ==&gt; 10.10.3.13</b>	<b>pc22 ==&gt; 10.10.6.22</b>	<b>pc37 ==&gt; 10.10.9.37</b>
<b>pc15 ==&gt; 10.10.3.15</b>	<b>pc24 ==&gt; 10.10.6.24</b>	<b>pc39 ==&gt; 10.10.9.39</b>



# 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?**

