



# CAMREN-NSRC-AIT

Network Monitoring & Management  
**Welcome**

# Instructors

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# Schedule

|                    |                |
|--------------------|----------------|
| <b>Session I</b>   | 09:00 – 10:30  |
| <b>Break</b>       | 10:30 – 11:00  |
| <b>Session II</b>  | 11:00 – 13:00  |
| <b>Lunch</b>       | 13:00 – 14:00  |
| <b>Session III</b> | 14:00 – 15:30  |
| <b>Break</b>       | 15:30 – 16:00  |
| <b>Session IV</b>  | 16:00 – 17:30+ |

# Agenda:

|              |                                           |       |     |          |
|--------------|-------------------------------------------|-------|-----|----------|
| <b>Day 5</b> |                                           |       |     |          |
| Session 1    | Welcome                                   | HA/PR | PDF |          |
|              | Linux in 15 Minutes or Less               | HA    | PDF | in preso |
|              | Introduction to Network Management        | PR    | PDF |          |
|              | Cisco Router Configuration for Monitoring | HA    | PDF | TXT      |
| Session 2    | SNMP                                      | PR    |     |          |
|              | Cacti                                     | HA    |     |          |
| Session 3    | Nagios                                    | PR    |     |          |
|              | Smokeping                                 | HA    |     |          |
| Session 4    | NetFlow / NfSen                           | PR/HA |     |          |
|              | Netdot Demo                               | PR/HA |     |          |

# Administrative Items

- **Agenda**
  - <https://nsrc.org/workshops/2012/camren-ait-nsrc/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:  
<https://nsrc.org/workshops/2012/camren-ait-nsrc>
  - Will be available permanently here:  
<https://nsrc.org/workshops/2012/camren-ait-nsrc/>

# Virtual machine access

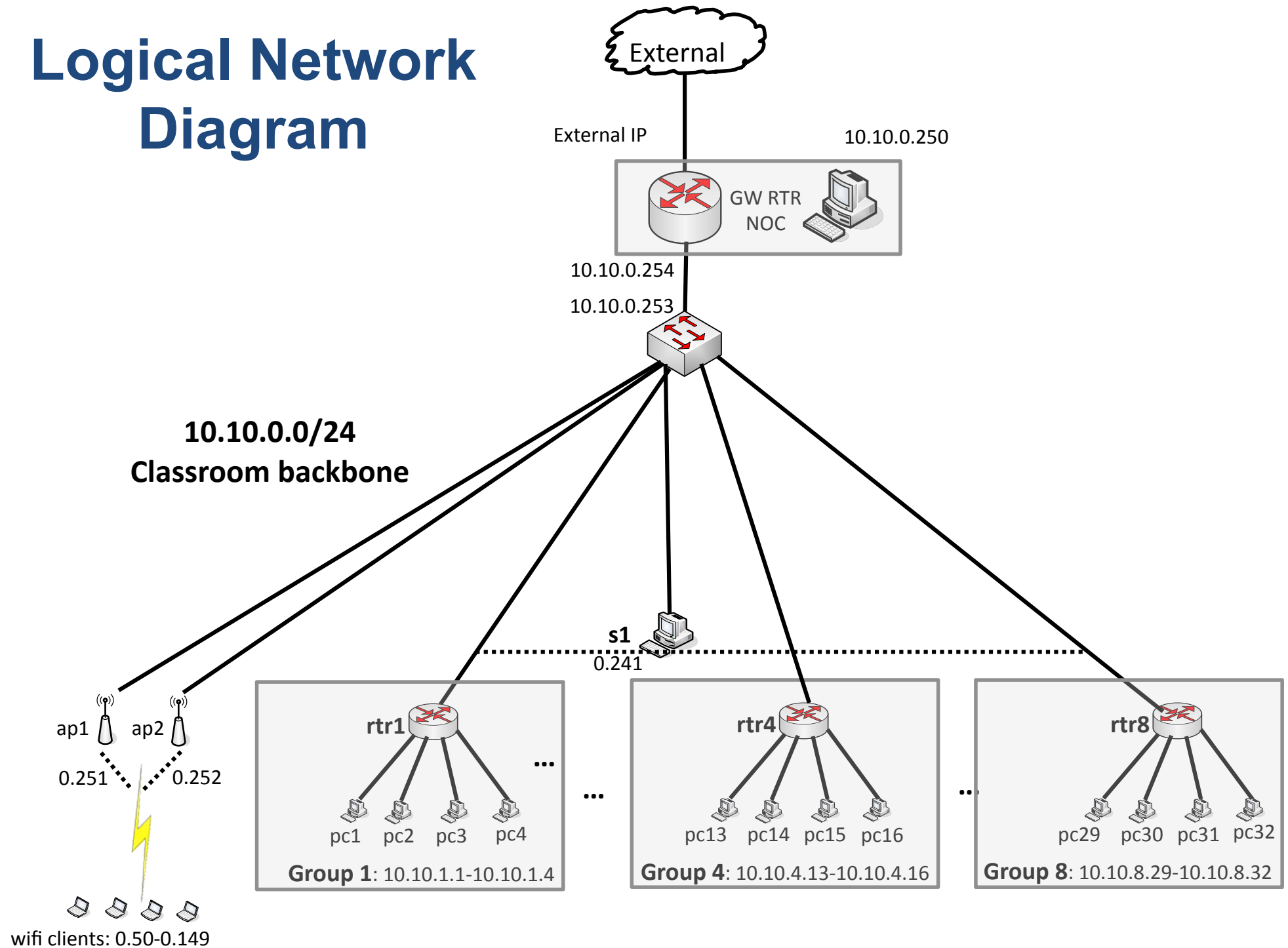
**There are two users on your virtual machines (pc1-pc32)**

General User  
*sysadm*

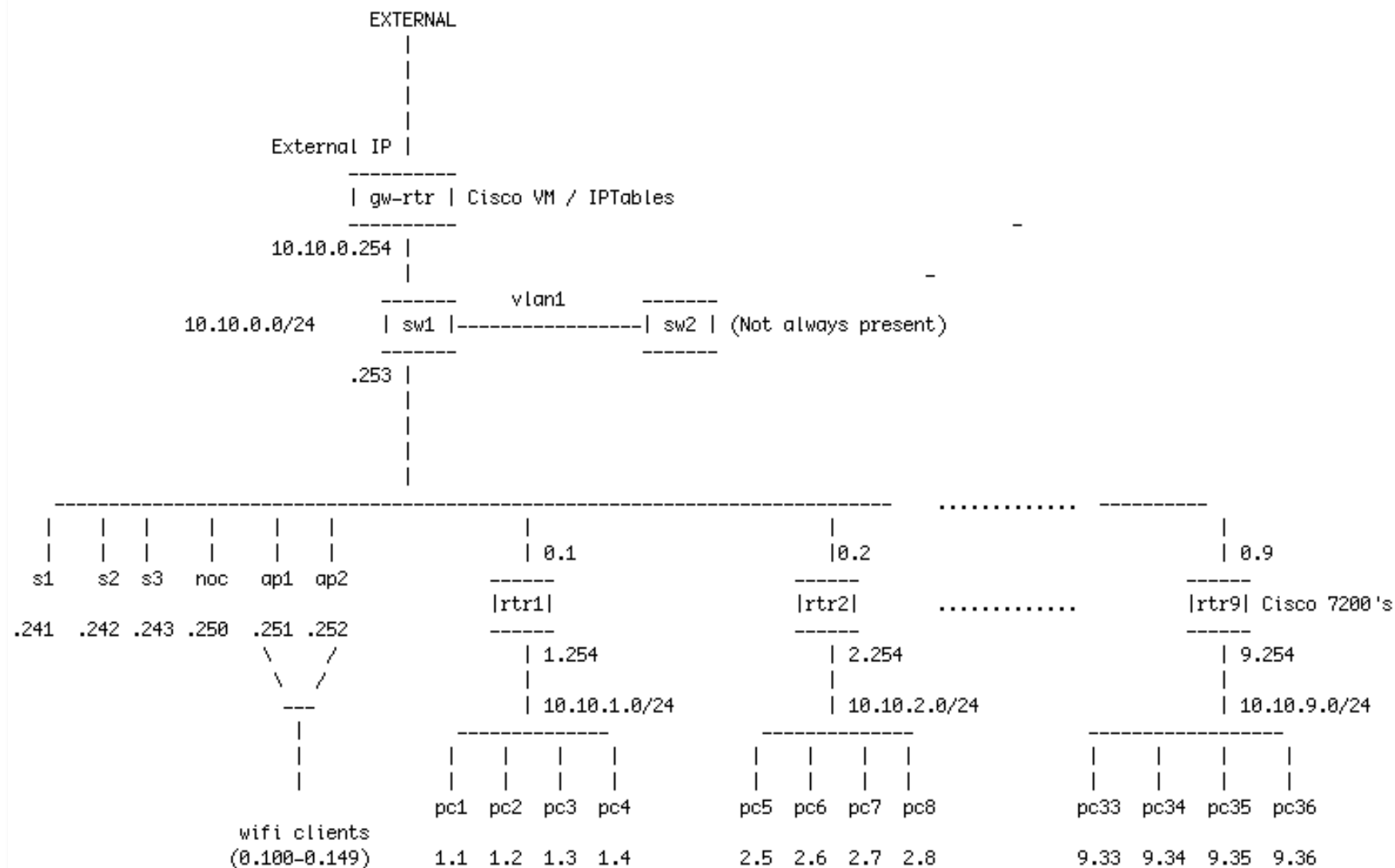
Administrative User  
*root*

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

# Logical Network Diagram



# Alternate Diagram



Available at <https://nsrc.org/workshops/2012/camren-ait-nsrc/wiki/NetDiagNMM>

# Virtual machine groups

| GROUP 1                     | GROUP 4                     | GROUP 7                     |
|-----------------------------|-----------------------------|-----------------------------|
| <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  |
| GROUP 2                     | GROUP 5                     | GROUP 8                     |
| <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  |
| GROUP 3                     | GROUP 6                     | GROUP 9                     |
| <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

- 8 total (virtual) routers
- 4 (virtual) Ubuntu Linux server images per router.
  - 32 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?**

