

# Network Monitoring and Management Welcome

Network Startup Resource Center  
[www.nsrc.org](http://www.nsrc.org)



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# Workshop Schedule\*

<b>Session I</b>	09:00 – 11:00
<b>Break</b>	11:00 – 11:30
<b>Session II</b>	11:30 – 13:00
<b>Lunch</b>	13:00 – 14:00
<b>Session III</b>	14:00 – 16:00
<b>Break</b>	16:00 – 16:30
<b>Session IV</b>	16:30 – 18:30

Please come on time. If we start late, we will end late.

\* Could vary as required

# Workshop Instructors

Instructor	Country	Organisation
<b>– Brian Candler</b>	England	NSRC
<b>– Cleven Mmari</b>	United States / Tanzania	University of Oregon
<b>– Seun Ojedeji</b>	Nigeria	Federal University Oye-Ekiti

# Student Introductions

Briefly Introduce yourself; your name, organisation, expectation from the track and any other info on CC share alike license ;-)

# Workshop Agenda

We may adjust this during the Week; we can be flexible

<b>MONDAY</b>	<b>Topic</b>
Session 1	Welcome, Introductions, Workshop Details Questionnaire Introduction to Network Monitoring & Mgmt
Session 2	Cisco Configuration Basics Linux for VM Usage
Session 3	SNMP
Session 4	SNMP Continued Cacti Demo
<b>TUESDAY</b>	
Session 1	Cacti
Session 2	Cacti cont.
Session 3	SmokePing
Session 4	SmokePing cont. Perfsonar Demo Observium Demo
<b>WEDNESDAY</b>	
Session 1	Observium Lab
Session 2	Nagios
Session 3	Nagios Cont.
Session 4	Nagios cont. Log Management

<b>THURSDAY</b>	
Session 1	Log Management Cont
Session 2	Version control RANCID / WebSVN
Session 3	NetFlow / NfSen
Session 4	NetFlow / NfSen labs  NfSen cont.
<b>FRIDAY</b>	
Session 1	Documentation, NOCs and Netdot Netdot Demo
Session 2	Ticketing Systems (RT)
Session 3	Ticketing Systems (Nagios / Cacti w/RT)
Close	Exam, Evals, Certificates Workshop End - Certificate Ceremony

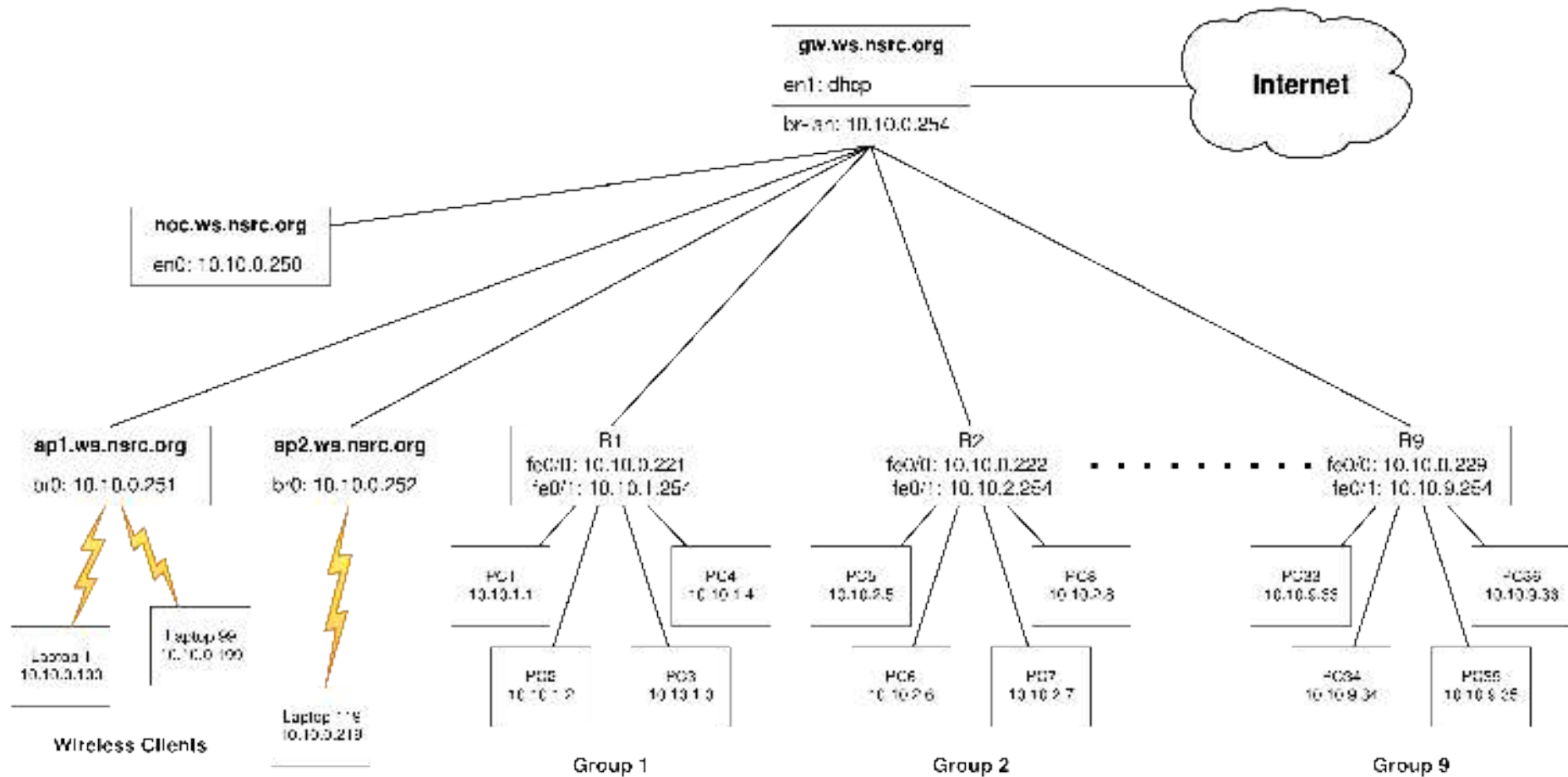
# Administrative Items

- 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
  - <http://noc.ws.nsrc.org/>
  - Will be available permanently here:  
  
<http://nsrc.org/workshops/2015/afnog-nme>

# Virtual Machine Access

- There are 36 Virtual Machines: pc1-pc36
- Each has two users:
  - General User: sysadm ← “s y s a d m”
  - Administrative User: root
- Password for sysadm is written on the board.

# Network Diagram





# Virtual Machine Groups

GROUP 1	GROUP 2	GROUP 3	GROUP 4
rtr1 → 10.10.1.254	rtr1 → 10.10.2.254	rtr1 → 10.10.3.254	rtr4 → 10.10.4.254
pc1 → 10.10.1.1	pc5 → 10.10.2.5	pc9 → 10.10.3.9	pc13 → 10.10.4.13
pc2 → 10.10.1.2	pc6 → 10.10.2.6	pc10 → 10.10.3.10	pc14 → 10.10.4.14
pc3 → 10.10.1.3	pc7 → 10.10.2.7	pc11 → 10.10.3.11	pc15 → 10.10.4.15
pc4 → 10.10.1.4	pc8 → 10.10.2.8	pc12 → 10.10.3.12	pc16 → 10.10.4.16

GROUP 5	GROUP 6	GROUP 7	GROUP 8	GROUP 9
rtr5 → 10.10.5.254	rtr6 → 10.10.6.254	rtr7 → 10.10.7.254	rtr8 → 10.10.8.254	rtr9 → 10.10.9.254
pc17 → 10.10.5.17	pc21 → 10.10.6.21	pc25 → 10.10.7.25	pc29 → 10.10.8.29	pc33 → 10.10.9.33
pc18 → 10.10.5.18	pc22 → 10.10.6.22	pc26 → 10.10.7.26	pc30 → 10.10.8.30	pc34 → 10.10.9.34
pc19 → 10.10.5.19	pc23 → 10.10.6.23	pc27 → 10.10.7.27	pc31 → 10.10.8.31	pc35 → 10.10.9.35
pc20 → 10.10.5.20	pc24 → 10.10.6.24	pc28 → 10.10.7.28	pc32 → 10.10.8.32	pc36 → 10.10.9.36

# We will assign PCs & Groups Now

- 9 total (virtual) routers
- 4 (virtual) 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 all week

# Questions

**Please Ask Questions At Any Time!**

**Like you may start now....**

**?**