



DNS Operations

Network Monitoring & Management

Welcome

Instructors

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Schedule*

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+

Could finish around 18:00 if so requested

Agenda:

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:
<https://nsrc.org/workshops/2014/caren-nsrc-dante>

Virtual machine access

There are two users on your virtual machines

General User
sysadm

Administrative User
root

Passwords are or will be written down in class

DNS - DNSSEC Workshop: NETWORK LAYOUT

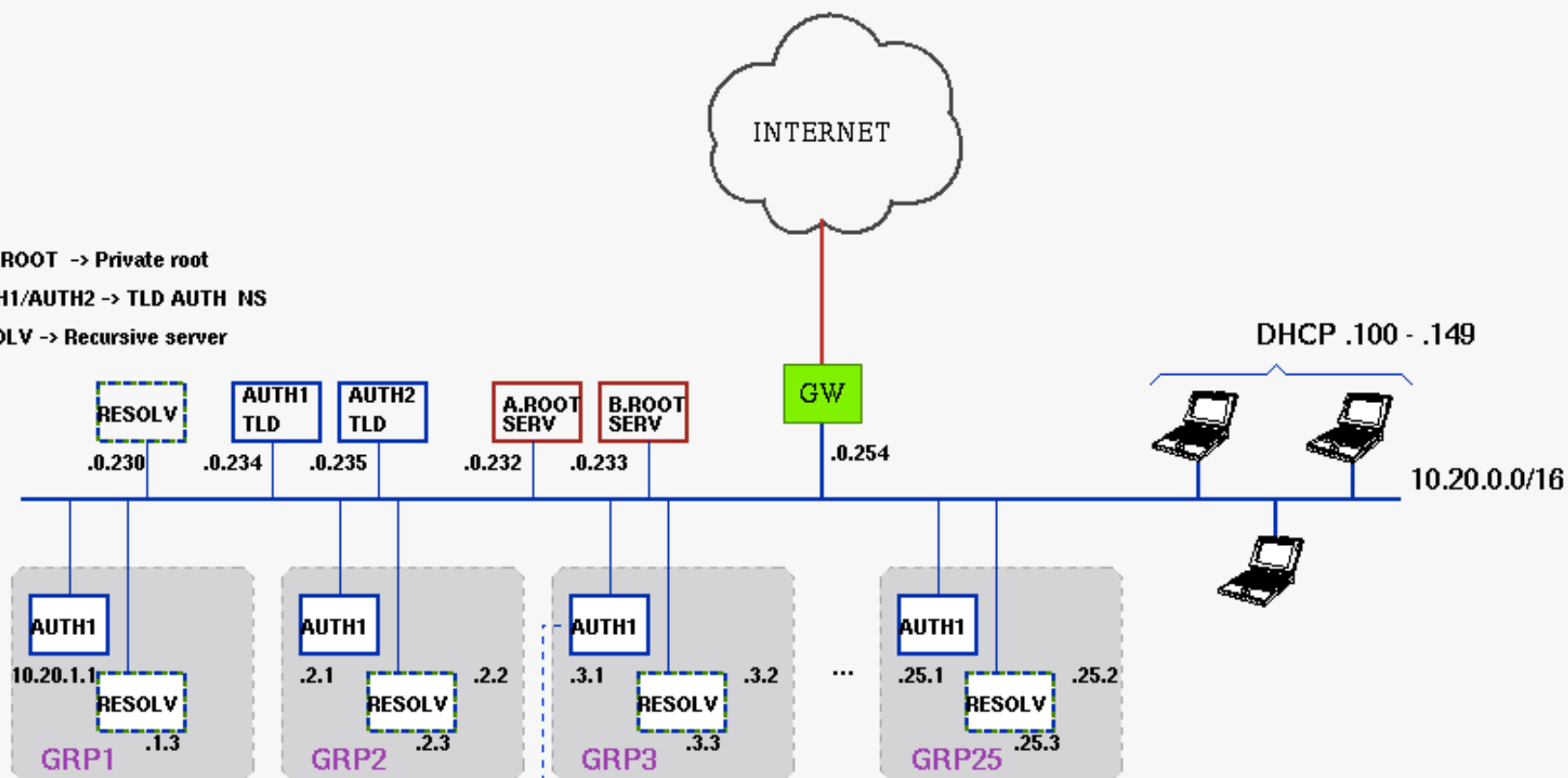
login: sysadm

pass: *given in class*

A./B.ROOT -> Private root

AUTH1/AUTH2 -> TLD AUTH NS

RESOLV -> Recursive server



DNS domain: WS.NSRC.ORG.

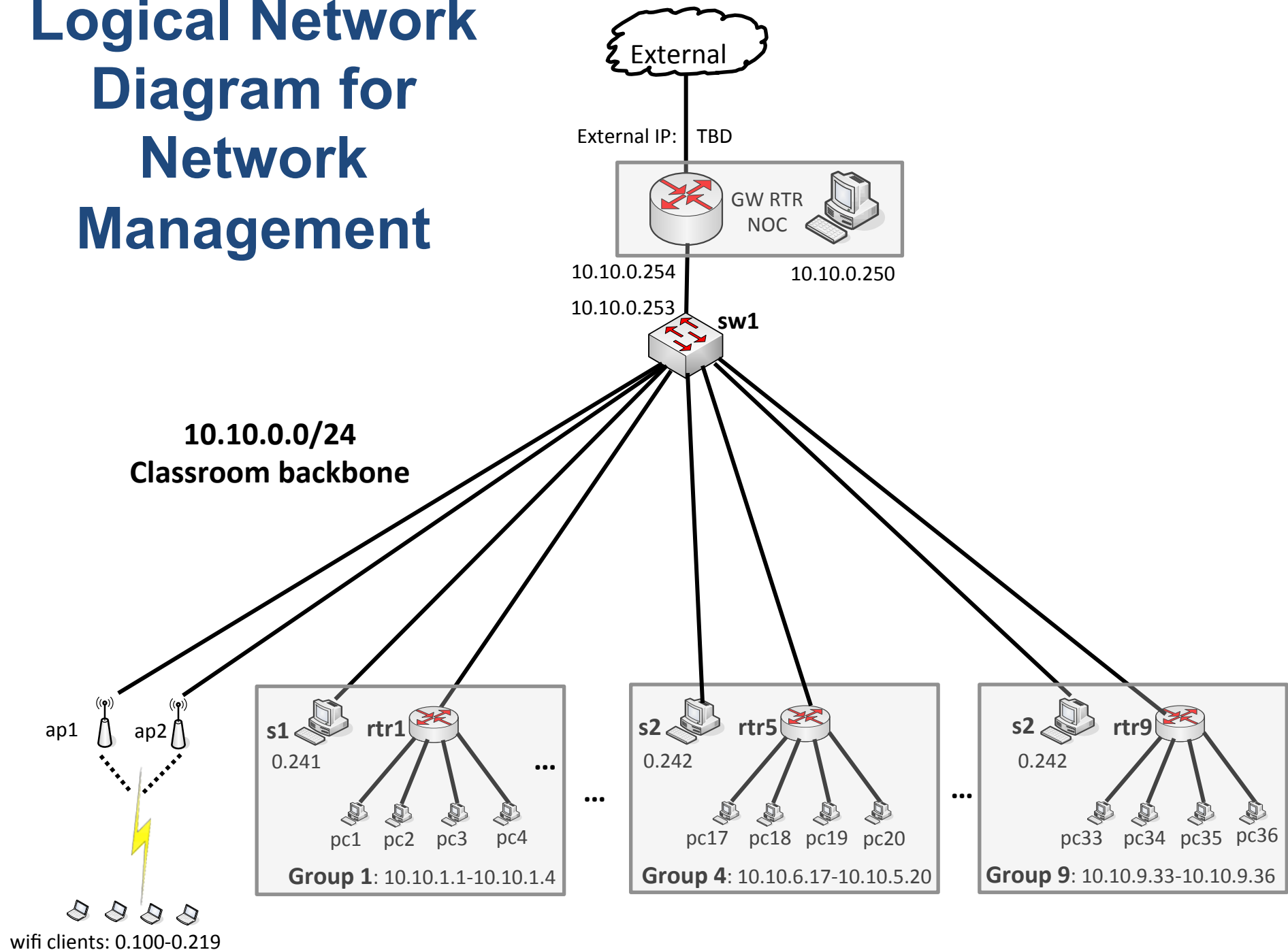
AUTH1 -> main host - runs BIND9.9, and all other tools for monitoring

RESOLV -> validating resolver - BIND9.9 or unbound

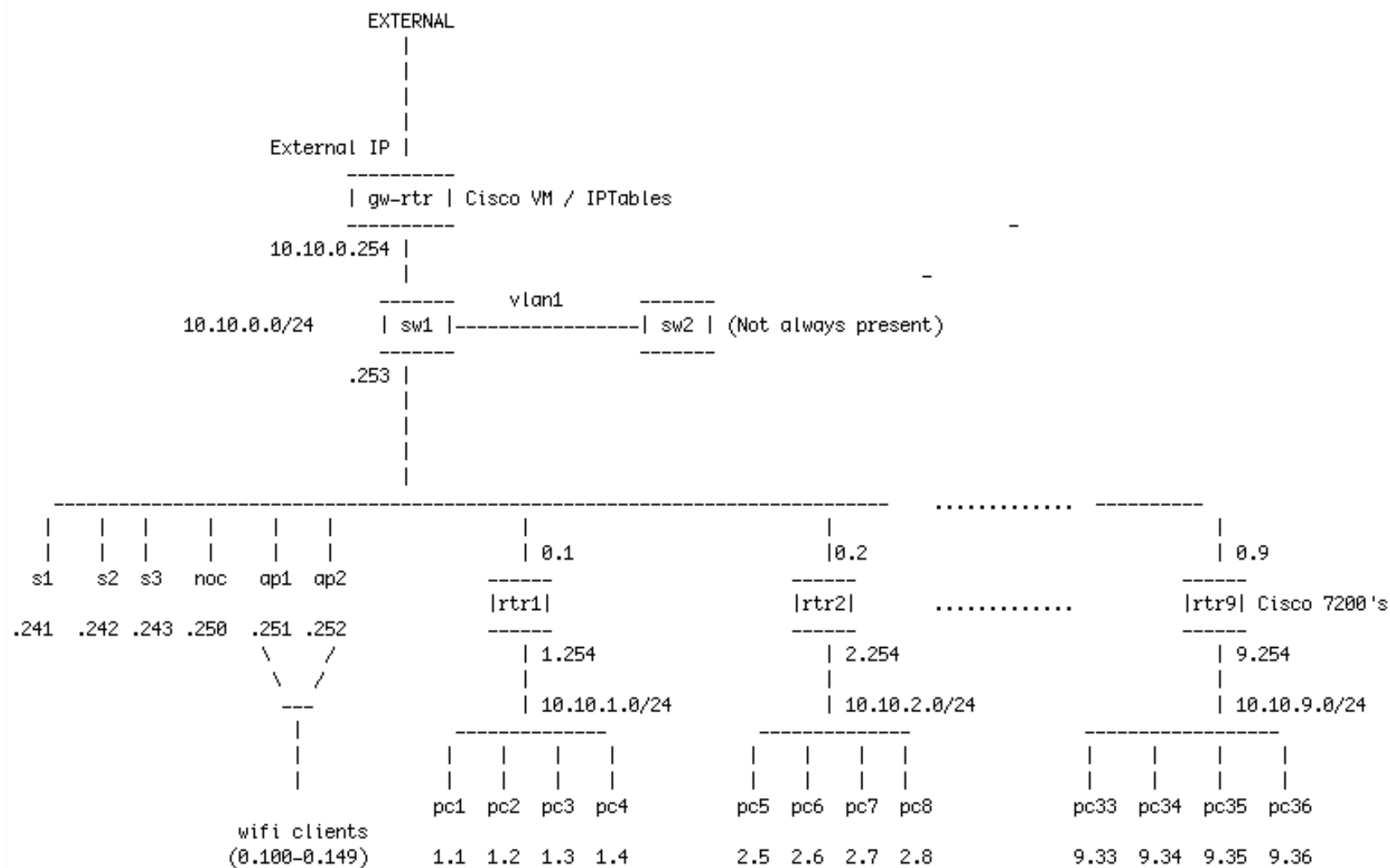
AUTH1 .GRP3.WS.NSRC.ORG.

10.20.3.1

Logical Network Diagram for Network Management



Alternate Diagram



Available at <http://noc.ws.nsrc.org/> as well

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

We will work in groups

DNS Operations:

- 2 virtual DNS servers per participant

Network Management:

- 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?

