

Welcome

Network Monitoring, Management and Automation

npNOG 5

Dec 8 - 12, 2019



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Workshop Schedule

Schedule	Time
Session 1	09:30 - 11:00
Break	11:00 - 11:30
Session 2	11:30 - 13:00
Lunch	13:00 - 14:00
Session 3	14:00 - 15:30
Break	15:30 - 16:00
Session 4	16:00 - 17:30

Workshop Instructors

Name	Organization	Country
Chatur Ratna Shakya	PCH	Nepal
Dibya Khatiwada	PCH	Nepal
Srijan Bhuju	Worldlink	Nepal
Ritesh Adhikari	Workalaya	Nepal

Workshop Participants Introduction

- Name
- Organization
- Position / Field of work
- Brief work overview
- Reason for joining workshop
- Expected outcome from the event

Workshop Agenda

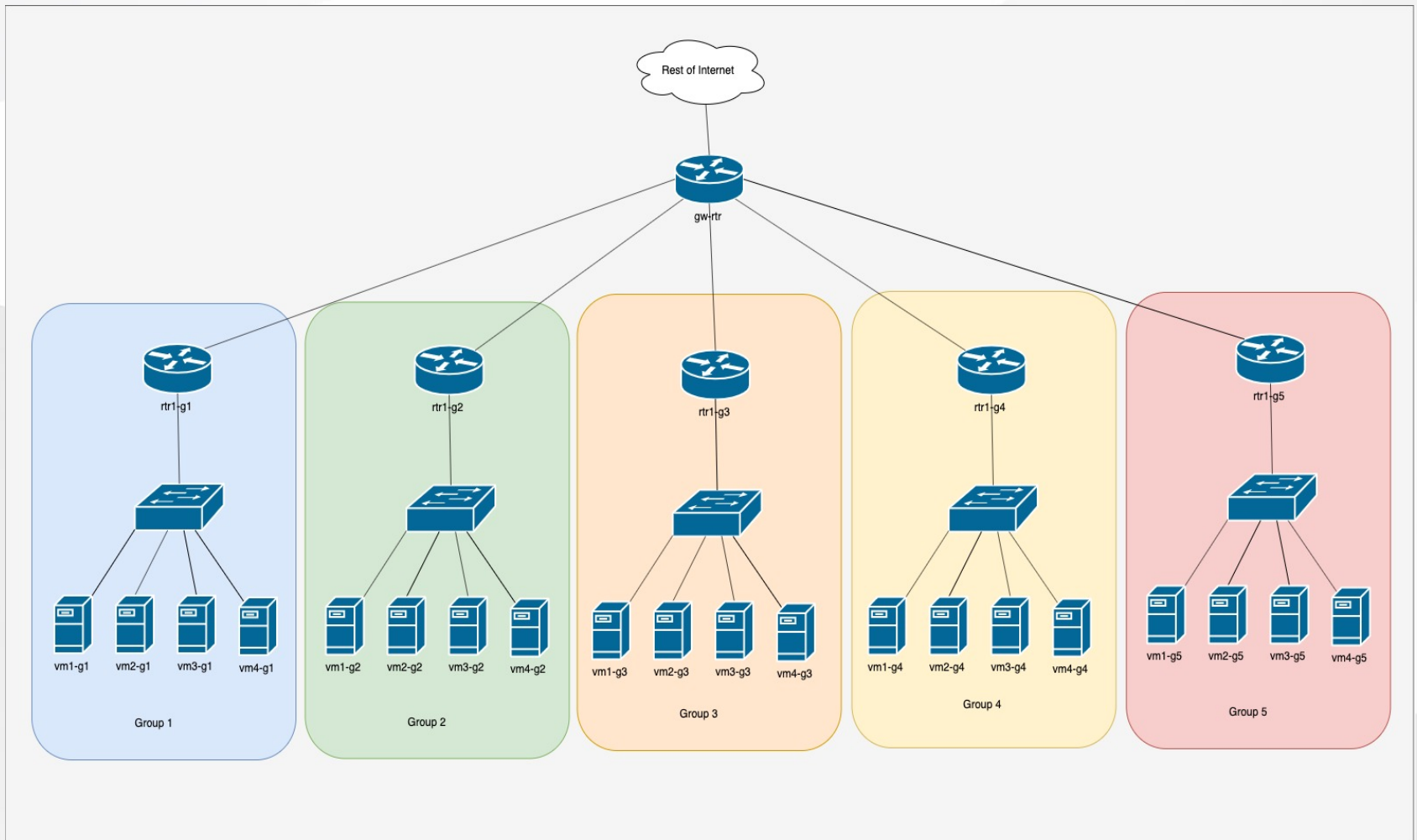
Agenda / Course Materials

- <http://www.lab.workalaya.net/>

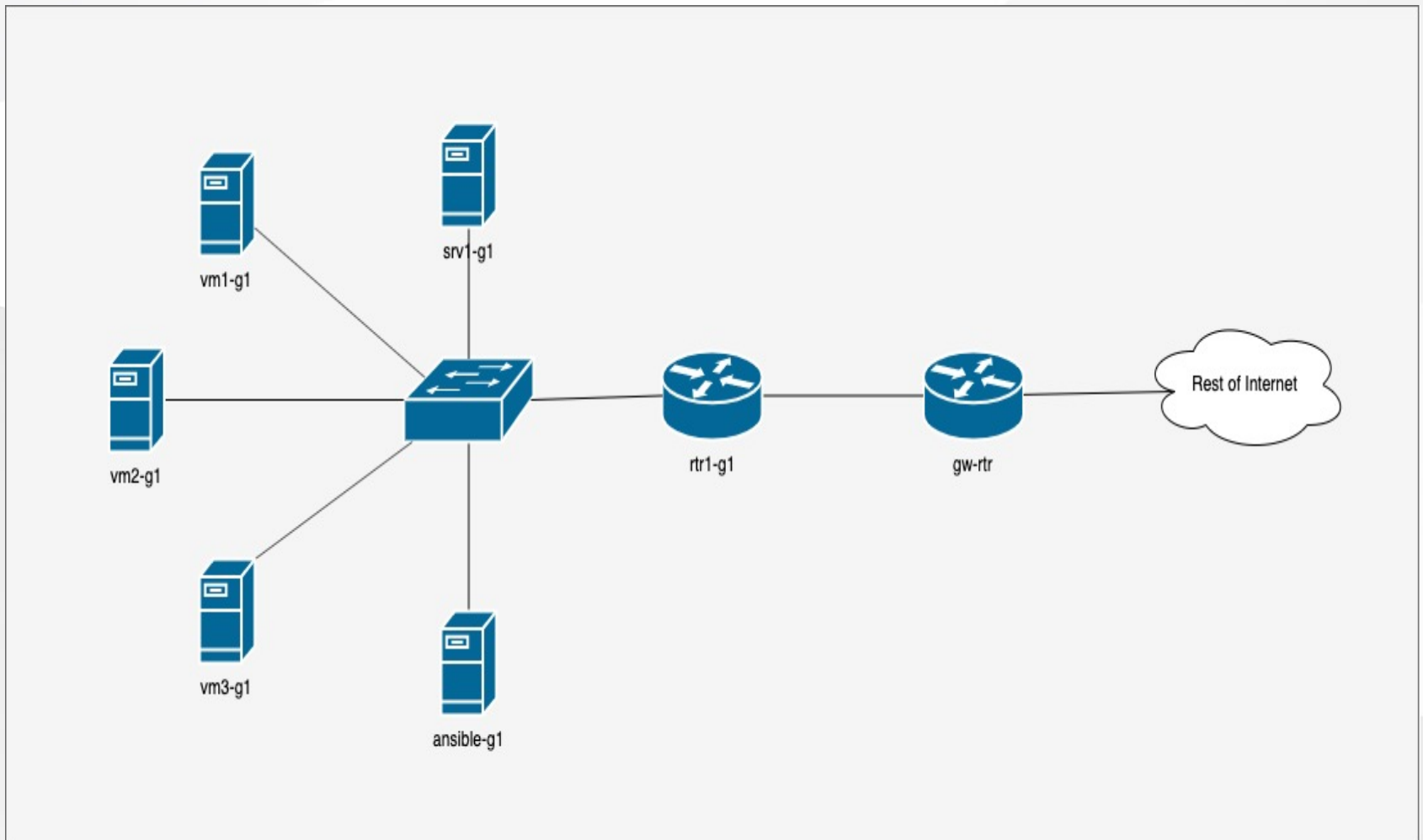
During the workshop

- Show Briefing Slides
- Please ask questions as you have them.
- Your experiences are valuable. Please share them.
- The schedule is somewhat flexible.

Network Diagram Overview



Group 1 Network Diagram



Single Group Detail

Services

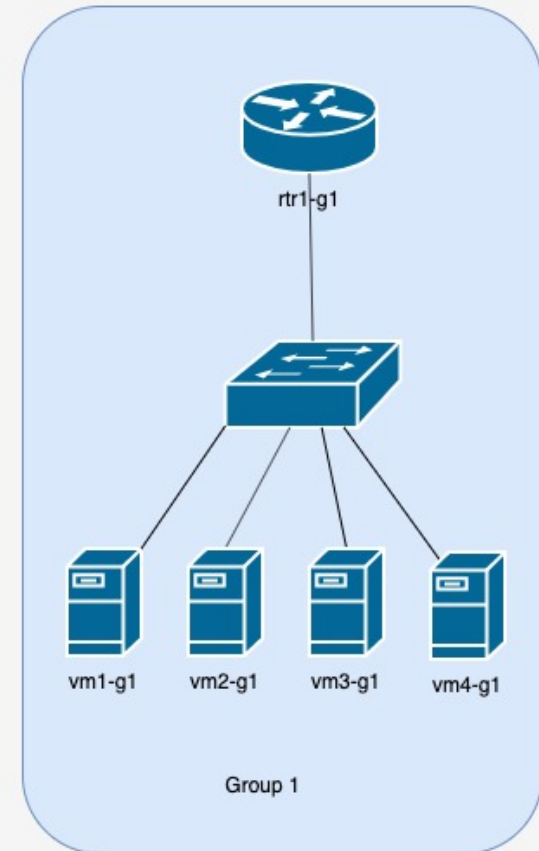
DNS: 100.68.100.244 100.68.100.245
apt-cacher: 100.68.100.254

Network Devices

gw-rtr.lab.workalaya.net: 100.68.100.254
rtr1.lab.workalaya.net: 100.68.100.1

Group Servers

srv1-g1.lab.workalaya.net: 100.68.1.254
vm[1..6]-g1.lab.workalaya.net: 100.68.1.2[1..6]
ansible-g1.lab.workalaya.net: 100.68.1.253



Group Details

Group 1		Group 2		Group 3	
rtr1-g1.lab.workalaya.net	100.68.100.1	rtr1-g2.lab.workalaya.net	100.68.100.2	rtr1-g3.lab.workalaya.net	100.68.100.3
vm1-g1.lab.workalaya.net	100.68.1.21	vm1-g2.lab.workalaya.net	100.68.2.21	vm1-g3.lab.workalaya.net	100.68.3.21
vm2-g1.lab.workalaya.net	100.68.1.22	vm2-g2.lab.workalaya.net	100.68.2.22	vm2-g3.lab.workalaya.net	100.68.3.22
vm3-g1.lab.workalaya.net	100.68.1.23	vm3-g2.lab.workalaya.net	100.68.2.23	vm3-g3.lab.workalaya.net	100.68.3.23
srv1-g1.lab.workalaya.net	100.68.1.254	srv1-g2.lab.workalaya.net	100.68.2.254	srv1-g3.lab.workalaya.net	100.68.3.254
ansible-g1.lab.workalaya.net	100.68.1.253	ansible-g2.lab.workalaya.net	100.68.2.253	ansible-g3.lab.workalaya.net	100.68.3.253
Group 4		Group 5		Group 6	
rtr1-g4.lab.workalaya.net	100.68.100.4	rtr1-g5.lab.workalaya.net	100.68.100.5	rtr1-g6.lab.workalaya.net	100.68.100.6
vm1-g4.lab.workalaya.net	100.68.4.21	vm1-g5.lab.workalaya.net	100.68.5.21	vm1-g6.lab.workalaya.net	100.68.6.21
vm2-g4.lab.workalaya.net	100.68.4.22	vm2-g5.lab.workalaya.net	100.68.5.22	vm2-g6.lab.workalaya.net	100.68.6.22
vm3-g4.lab.workalaya.net	100.68.4.23	vm3-g5.lab.workalaya.net	100.68.5.23	vm3-g6.lab.workalaya.net	100.68.6.23
srv1-g4.lab.workalaya.net	100.68.4.254	srv1-g5.lab.workalaya.net	100.68.5.254	srv1-g6.lab.workalaya.net	100.68.6.254
ansible-g4.lab.workalaya.net	100.68.4.253	ansible-g5.lab.workalaya.net	100.68.5.253	ansible-g6.lab.workalaya.net	100.68.6.253
Group 7		Group 8		Group 9	
rtr1-g7.lab.workalaya.net	100.68.100.7	rtr1-g8.lab.workalaya.net	100.68.100.8	rtr1-g9.lab.workalaya.net	100.68.100.9
vm1-g7.lab.workalaya.net	100.68.7.21	vm1-g8.lab.workalaya.net	100.68.8.21	vm1-g9.lab.workalaya.net	100.68.9.21
vm2-g7.lab.workalaya.net	100.68.7.22	vm2-g8.lab.workalaya.net	100.68.8.22	vm2-g9.lab.workalaya.net	100.68.9.22
vm3-g7.lab.workalaya.net	100.68.7.23	vm3-g8.lab.workalaya.net	100.68.8.23	vm3-g9.lab.workalaya.net	100.68.9.23
srv1-g7.lab.workalaya.net	100.68.7.254	srv1-g8.lab.workalaya.net	100.68.8.254	srv1-g9.lab.workalaya.net	100.68.9.254
ansible-g7.lab.workalaya.net	100.68.7.253	ansible-g8.lab.workalaya.net	100.68.8.253	ansible-g9.lab.workalaya.net	100.68.9.253
Group 10		Group 11		Group 12	
rtr1-g10.lab.workalaya.net	100.611.100.10	rtr1-g11.lab.workalaya.net	100.611.100.11	rtr1-g12.lab.workalaya.net	100.611.100.12
vm1-g10.lab.workalaya.net	100.611.10.21	vm1-g11.lab.workalaya.net	100.611.11.21	vm1-g12.lab.workalaya.net	100.611.12.21
vm2-g10.lab.workalaya.net	100.611.10.22	vm2-g11.lab.workalaya.net	100.611.11.22	vm2-g12.lab.workalaya.net	100.611.12.22
vm3-g10.lab.workalaya.net	100.611.10.23	vm3-g11.lab.workalaya.net	100.611.11.23	vm3-g12.lab.workalaya.net	100.611.12.23
srv1-g10.lab.workalaya.net	100.611.10.254	srv1-g11.lab.workalaya.net	100.611.11.254	srv1-g12.lab.workalaya.net	100.611.12.254
ansible-g10.lab.workalaya.net	100.611.10.253	ansible-g11.lab.workalaya.net	100.611.11.253	ansible-g12.lab.workalaya.net	100.611.12.253

We will assign VMs & Groups Now

- 1 transit routers (gw-rtr)
- 12 border routers (rtr1-gY)
- 60 virtual servers
 - 1 server per user (vmX-gY)
 - 1 shared server per group (srv1-gY)
 - 1 shared ansible controller server per group (ansible-gY)

1. You will work in groups of 3-6 on some exercises
2. Please choose your location for the week now
3. You will use your group's virtual machines all week

Virtual Machine Access

- There are 60 Virtual Machines:
 - `vmX-gY.lab.workalaya.net`
 - `srv1-gY.lab.workalaya.net`
 - `ansible-gY.lab.workalaya.net`
- Each virtual machine has two users:
 - General user: `lab`
 - Administrative user: `root`
- Password for `lab` is written on the board
- Ansible Controller VM has different set of users:
 - General users: `vmX-gY`
 - eg: if participant is assigned `vm1-g1.lab.workalaya.net` then his/her login to ansible vm will be `vm1-g1`
 - Password will be same as `lab` user

Router Access

- There are 12 routers:
 - `rtr1-gY.lab.workalaya.net`
- Each router has one users:
 - General user: `lab`
- Password for `lab` and Secret for `enable` comand are written on the board

Questions

Please Ask Questions At Any Time

Feel free to ask questions at any time !

