Network Monitoring and Management
Welcome

Network Startup Resource Center
www.nsrc.org

Workshop 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+

Workshop Instructors

INSTRUCTOR	COUNTRY	ORGANIZATION
First Last	Moldania	S.H.I.E.L.D.
First Last	Transylvania	S.H.I.E.L.D.

Student Introductions

Workshop Agenda

Show Briefing Slides
Show Wiki

Administrative Items

Agenda

- http://www.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://www.ws.nsrc.org/
- Will be available permanently here:
- http://nsrc.org/workshops/20NN/workshopname

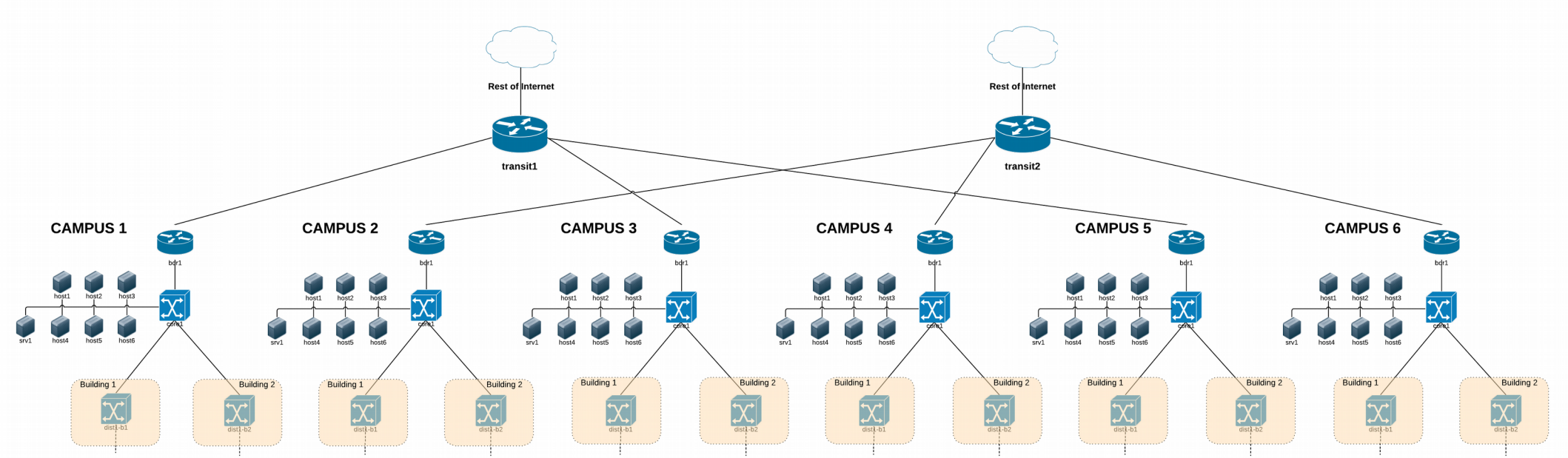
Virtual Machine Access

- There are 36 Virtual Machines:

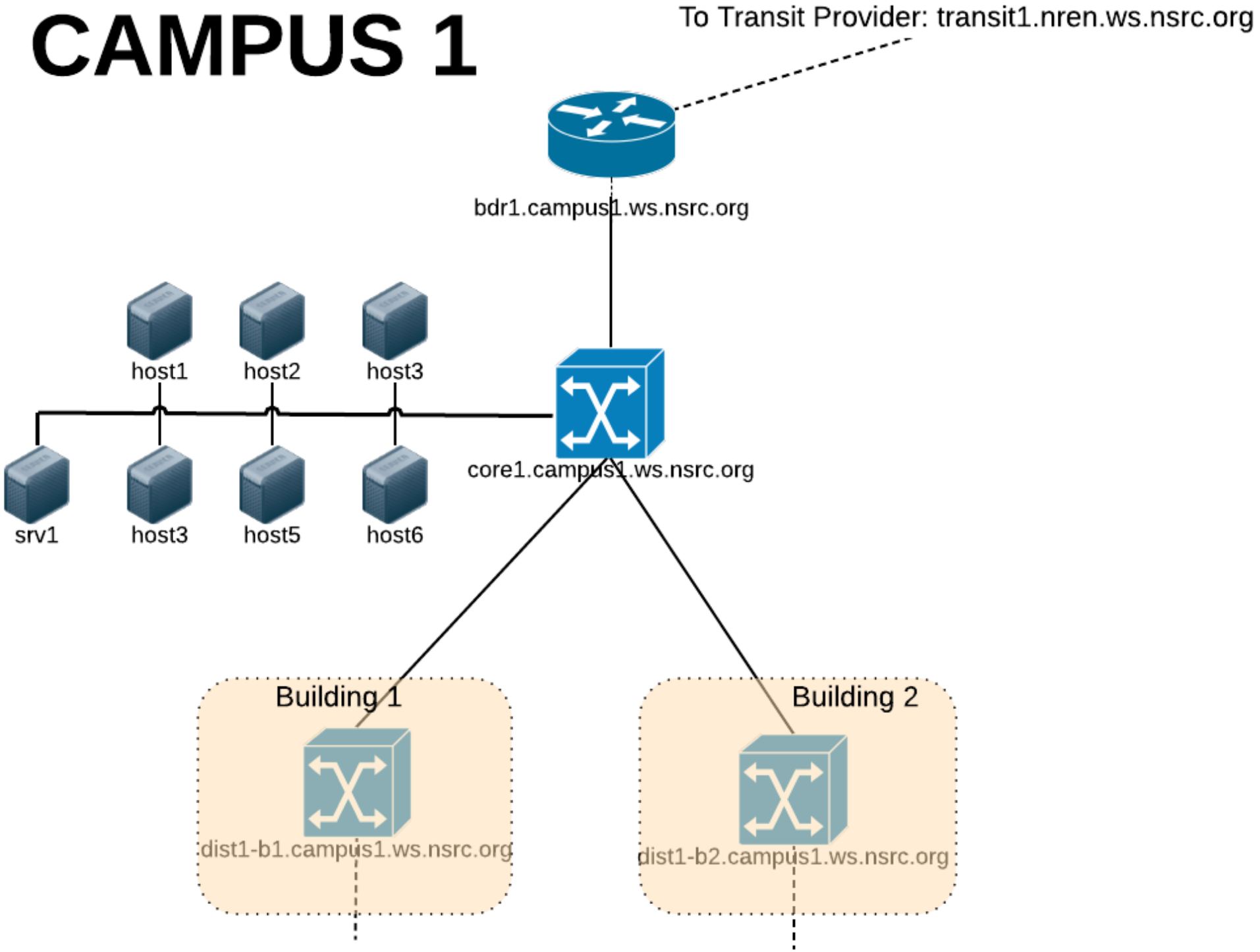
  `host`**`X`**`.campus`**`Y`**`.ws.nsrc.org`

- Each virtual machine has two users:
  - General user: *sysadm* ϟ "s y s a d m"
  - Administrative user: *root*
- Password for *sysadm* is written on the board

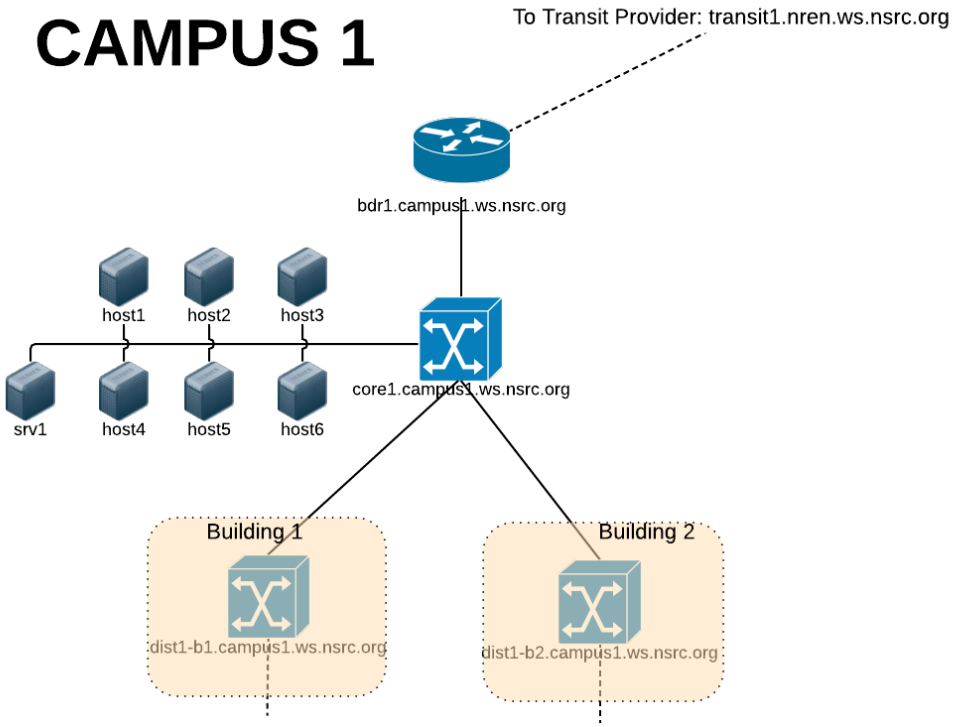
Network Diagram Overview



CAMPUS 1


To Transit Provider: transit1.nren.ws.nsrc.org
bdr1.campus1.ws.nsrc.org
host1
host2
host3
core1.campus1.ws.nsrc.org
srv1
host3
host5
host6
Building 1
dist1-b1.campus1.ws.nsrc.org
Building 2
dist1-b2.campus1.ws.nsrc.org

Network Diagram
Single Campus Detail



Services	IPv4	IPv6
dns:	100.68.100.254	2001:db8:100::1
apt-cacher:	100.68.100.254	2001:db8:100::1

Network Devices		
transit1.nren.ws.nsrc.org:	100.68.100.235	2001:db8:100::235
bdr1.campus1.ws.nsrc.org:	100.68.1.1	2001:DB8:1:0::1
core1.campus1.ws.nsrc.org:	100.68.1.2	2001:DB8:1:0::2
dist1-b1.campus1.ws.nsrc.org:	172.21.10.2	
dist1-b2.campus1.ws.nsrc.org:	172.21.20.2	

Campus Servers		
srv1.campus1.ws.nsrc.org:	100.68.1.130	2001:db8:[1..6]:1::130
host[1..6].campus1.ws.nsrc.org:	100.68.1.[131..136]	2001:db8:[1..6]:1::131

campus1.ws.nsrc.org		campus2.ws.nsrc.org		campus3.ws.nsrc.org	
srv1	→ 100.68.1.130	srv1	→ 100.68.2.130	srv1	→ 100.68.3.130
host1	→ 100.68.1.131	host1	→ 100.68.2.131	host1	→ 100.68.3.131
host2	→ 100.68.1.132	host2	→ 100.68.2.132	host2	→ 100.68.3.132
host3	→ 100.68.1.133	host3	→ 100.68.2.133	host3	→ 100.68.3.133
host4	→ 100.68.1.134	host4	→ 100.68.2.134	host4	→ 100.68.3.134
host5	→ 100.68.1.135	host5	→ 100.68.2.135	host5	→ 100.68.3.135
host6	→ 100.68.1.136	host6	→ 100.68.2.136	host6	→ 100.68.3.136
bdr1	→ 100.68.1.1	bdr1	→ 100.68.2.1	bdr1	→ 100.68.3.1
core1	→ 100.68.1.2	core1	→ 100.68.2.2	core1	→ 100.68.3.2
dist1-b1	→ 172.21.10.2	dist1-b1	→ 172.22.10.2	dist1-b1	→ 172.23.10.2
dist1-b2	→ 172.21.20.2	dist1-b2	→ 172.22.20.2	dist1-b2	→ 172.23.20.2

campus4.ws.nsrc.org		campus5.ws.nsrc.org		campus6.ws.nsrc.org	
srv1	→ 100.68.4.130	srv1	→ 100.68.5.130	srv1	→ 100.68.6.130
host1	→ 100.68.4.131	host1	→ 100.68.5.131	host1	→ 100.68.6.131
host2	→ 100.68.4.132	host2	→ 100.68.5.132	host2	→ 100.68.6.132
host3	→ 100.68.4.133	host3	→ 100.68.5.133	host3	→ 100.68.6.133
host4	→ 100.68.4.134	host4	→ 100.68.5.134	host4	→ 100.68.6.134
host5	→ 100.68.4.135	host5	→ 100.68.5.135	host5	→ 100.68.6.135
host6	→ 100.68.4.136	host6	→ 100.68.5.136	host6	→ 100.68.6.136
bdr1	→ 100.68.4.1	bdr1	→ 100.68.5.1	bdr1	→ 100.68.6.1
core1	→ 100.68.4.2	core1	→ 100.68.5.2	core1	→ 100.68.6.2
dist1-b1	→ 172.24.10.2	dist1-b1	→ 172.25.10.2	dist1-b1	→ 172.26.10.2
dist1-b2	→ 172.24.20.2	dist1-b2	→ 172.25.20.2	dist1-b2	→ 172.26.20.2

We will assign PCs & Groups Now

- 2 transit routers that serve odd and even groups
- 6 border routers (`bdr`**`X`**`.campus`**`Y`**)
- 6 core layer 3 switches (`core`**`X`**`.campus`**`Y`**)
- 12 building switches (2 buildings per campus)
  - No edge switches
- 42 virtual servers
  - 1 server per user (`host`**`X`**`.campus`**`Y`**)
  - 1 shared server per group (`srv1.campusY`)

1. *You will work in groups of 4-6 on some exercises*
2. *Please choose your location for the week now*
3. *You will use your group's virtual machines all week*

Questions

Please Ask Questions At Any Time!