SDN/OpenFlow Installation

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Agenda

• Environment & housekeeping
• What is SDN and Openflow?
• Understanding Open vSwitch and RouteFlow
• Understanding RYU and SDN applications
• Simple SDN programming
  – python vs IOS or Junos!
• Building a (distributed) switch
• Building a (distributed) router
## Original Plan

<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Session I</td>
<td>09:00 – 10:30</td>
</tr>
<tr>
<td>Break</td>
<td>10:30 – 11:00</td>
</tr>
<tr>
<td>Session II</td>
<td>11:00 – 13:00</td>
</tr>
<tr>
<td>Lunch</td>
<td>13:00 – 14:00</td>
</tr>
<tr>
<td>Session III</td>
<td>14:00 – 15:30</td>
</tr>
<tr>
<td>Break</td>
<td>15:30 – 16:00</td>
</tr>
<tr>
<td>Session IV</td>
<td>16:00 – 17:30+</td>
</tr>
</tbody>
</table>
Administrative Items

• **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**
  – Will be available permanently here:
Virtual machine access

There are two users on your virtual machines (vm1-vm20)

General User
sysadm

Administrative User
root

Passwords are or will be written down in class
Environment & housekeeping

• WIFI details:
  – SSID: nsrc
  – Password: see the whiteboard
  – Security: WPA2

• Pointer to local wiki:

• When in Nelson, the instructors like to drink at the Free House, Collingwood Street
RouterBoard 532
Logical Network Diagram

- vm1: 10.10.0.1
- vm2: 10.10.0.2
- vm3: 10.10.0.3
- vm4: 10.10.0.4
- vmn: 10.10.0.n

- SDN1: 10.10.0.101
- SDN2: 10.10.0.102
- SDN3: 10.10.0.103
- SDN4: 10.10.0.104
- SDNnn: 10.10.0.1nn
Questions

Do you have any questions?