

The background of the slide is a close-up photograph of network equipment, likely a patch panel or switch. It features several rows of ports with glowing green and red lights, indicating active connections. The overall color scheme is dark blue and black, with the lights providing a focal point. On the left side, there are faint, white, wavy lines that resemble a topographic map or a network diagram.

Network Systems Monitoring

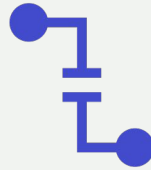
Lanka Education and Research Network

Overview



What is Monitoring:

Check the status of a network



What to Monitor:

Infrastructure – Routers,
Switches, Servers, Environment,
Physical Connections, etc

Services – DNS, HTTP, SMTP etc



Why to Monitor:

Check their Reachability,
Availability

Check their Utilization?

What's their Performance

Figure out their Faults and
Outages

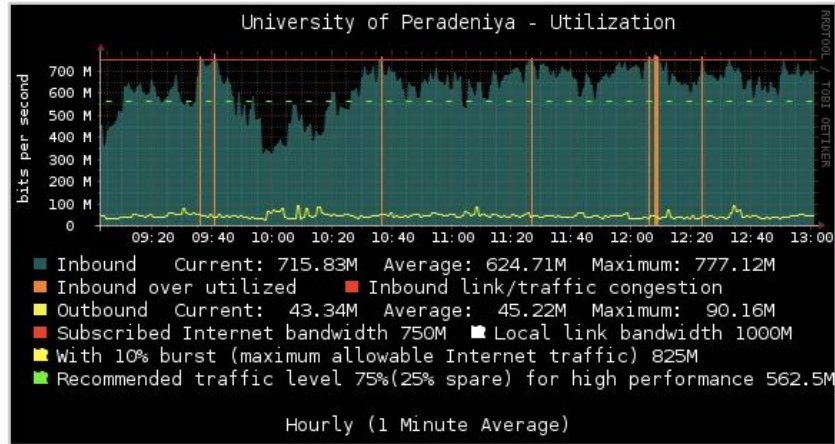
Monitoring

- + Tools we Use:
 - + Cacti
 - + Nagios
 - + Icinga2
 - + LibreNMS
 - + NFSens
 - + Nmon
 - + Htop
 - + Munin

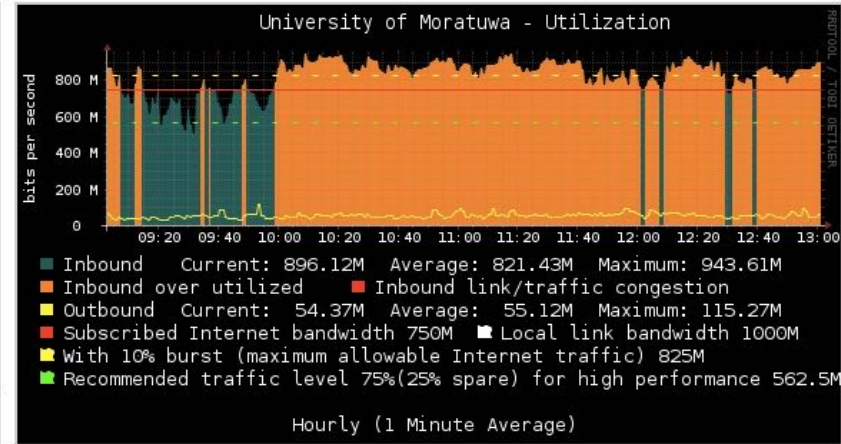


Monitoring

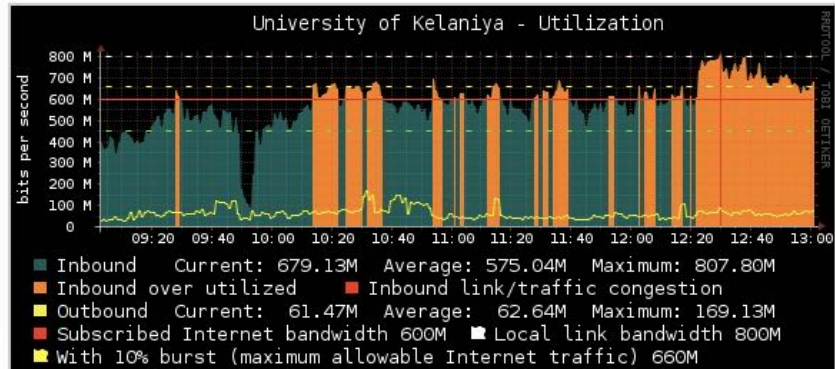
[University of Peradeniya \(D61429\)](#)



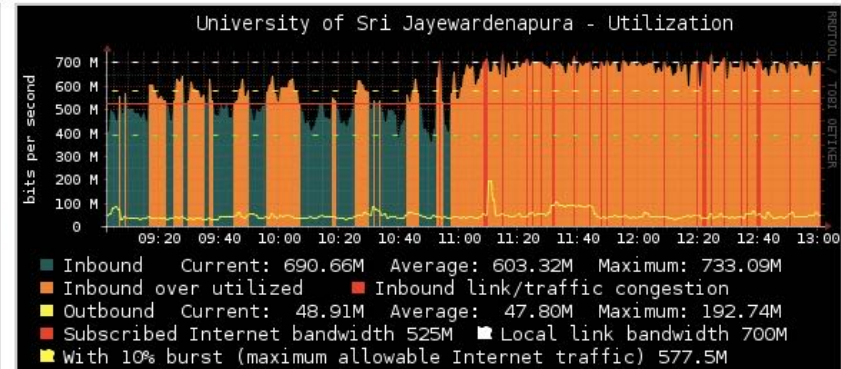
[University of Moratuwa \(D61427\)](#)



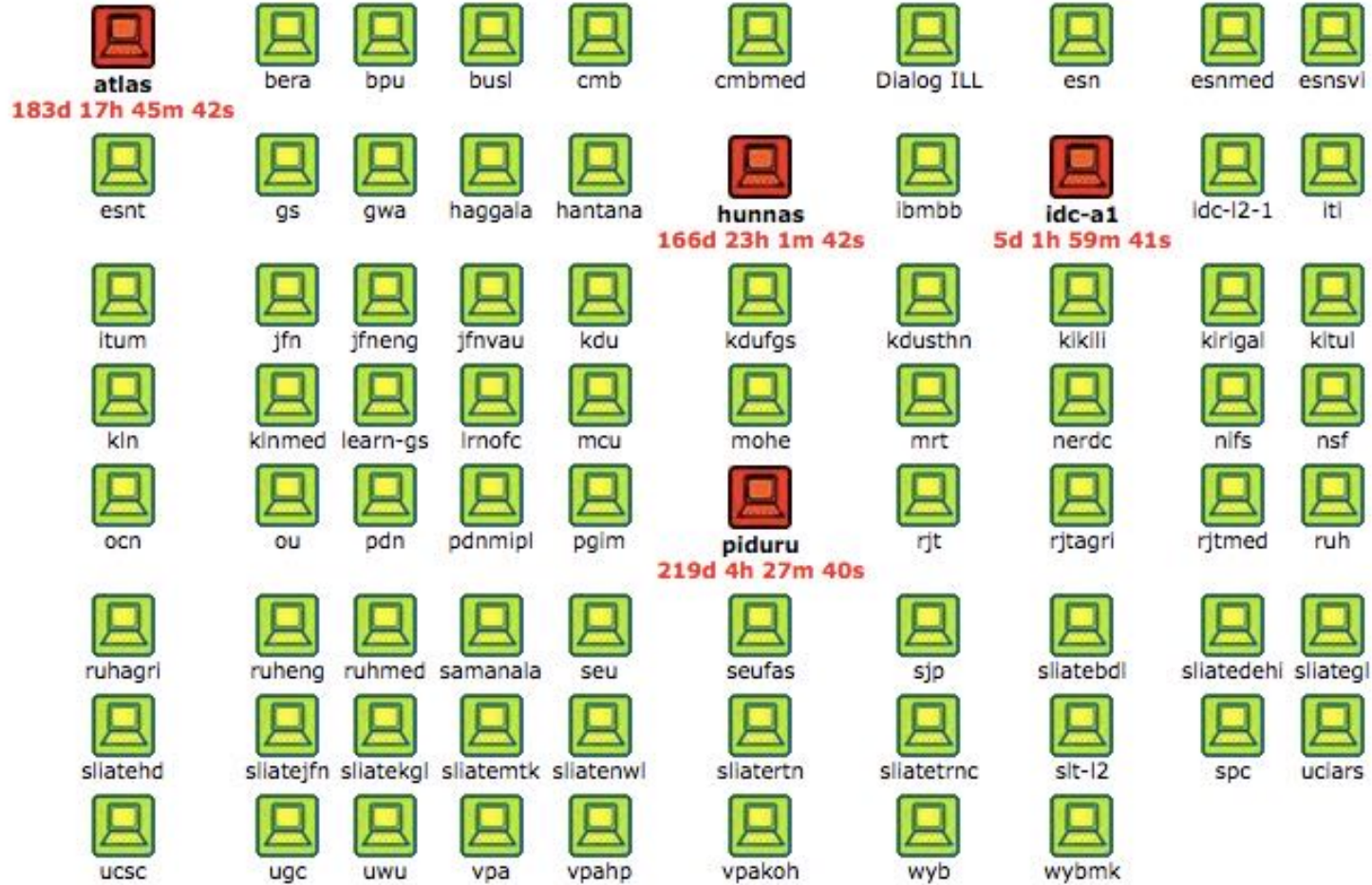
[University of Kelaniya \(D61428\)](#)



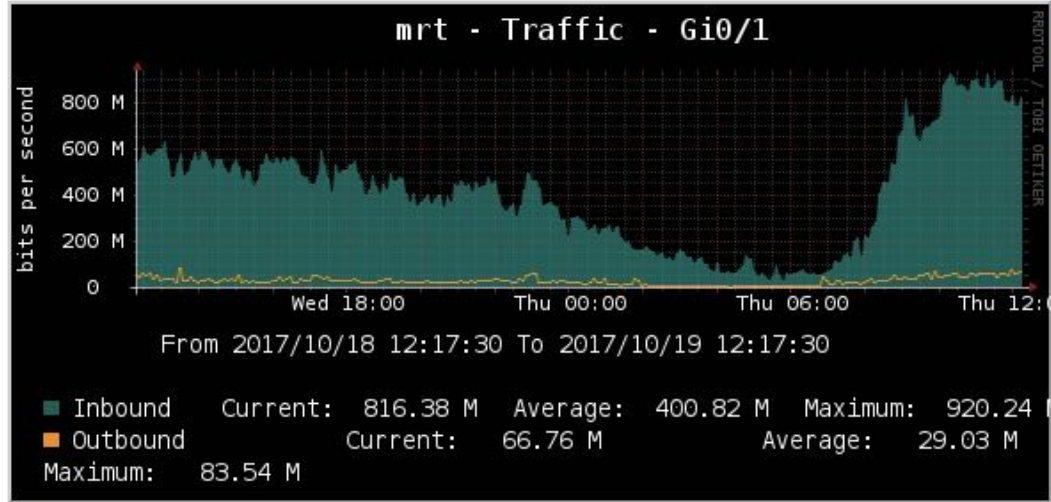
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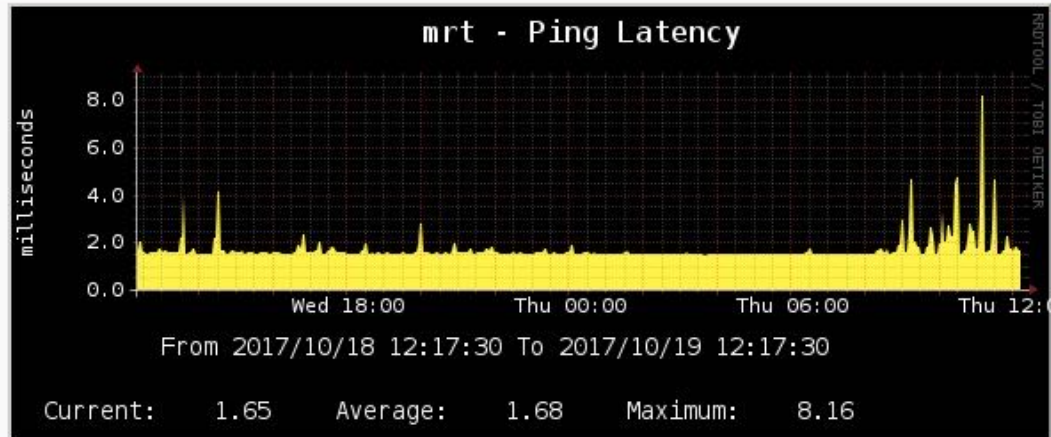
Monitoring



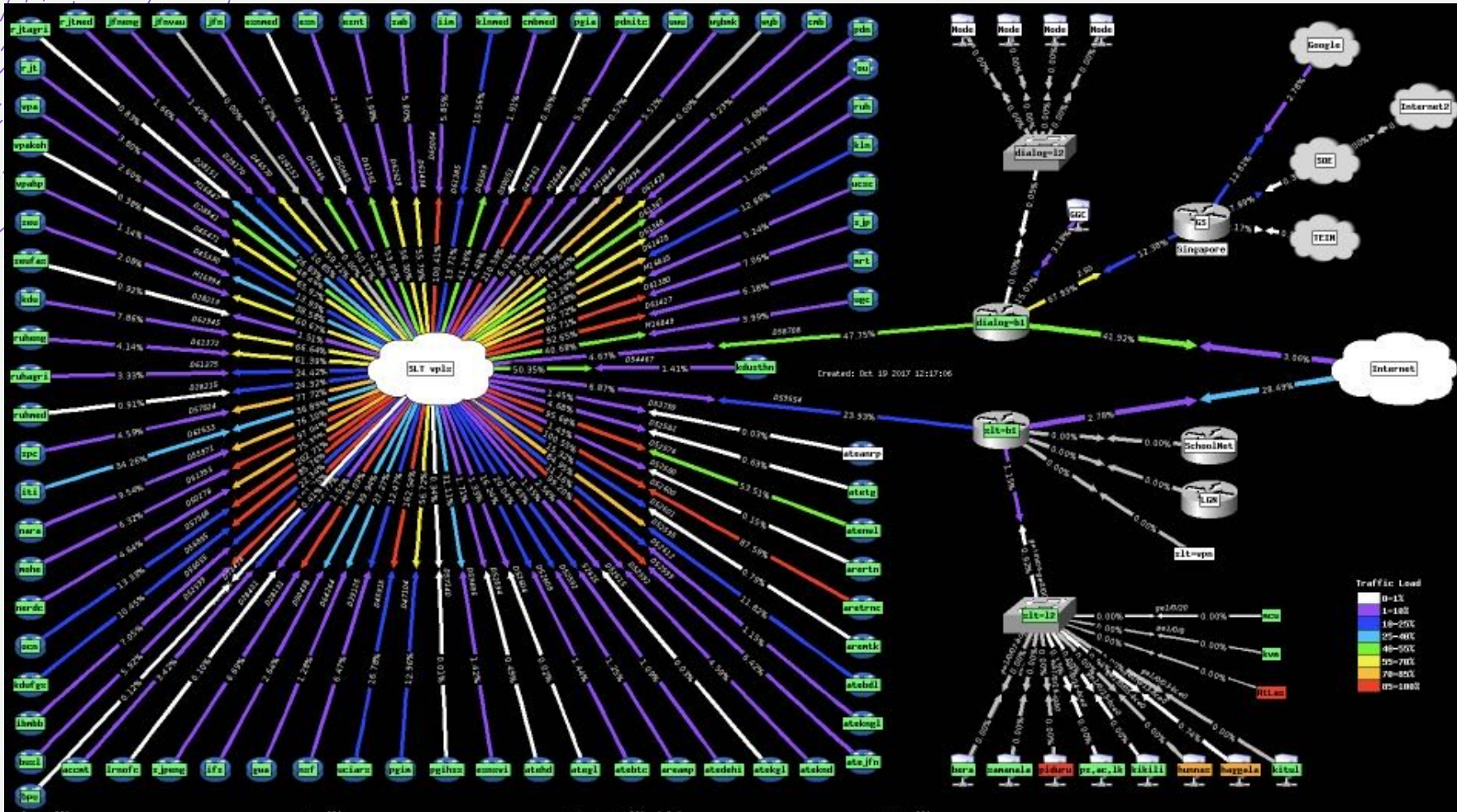
Monitoring



Graph Template: Unix - Ping Latency



Monitoring



Monitoring



Overview Devices Ports Health Apps Routing Plugins

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Global Search

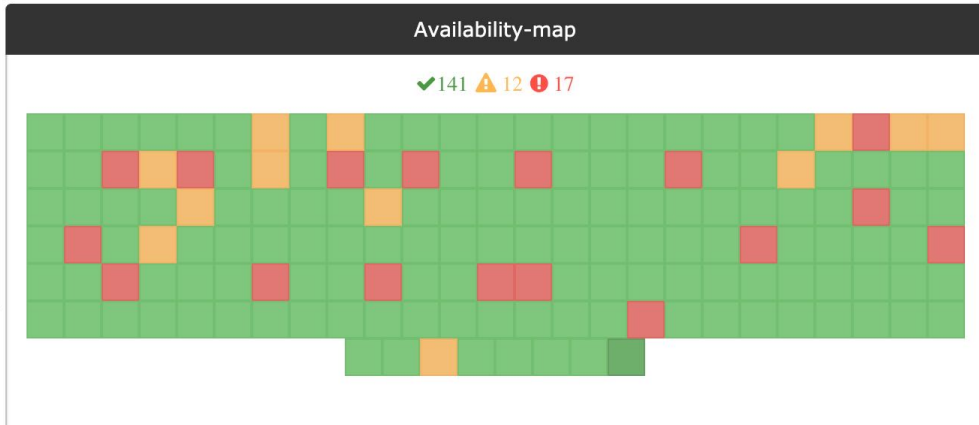
Top-interfaces

Top 5 interfaces polled within 15 minutes

Device	Interface	Total traffic
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Device-summary-horiz

	Total	Up	Down	Ignored	Disabled
Devices	158	141	17	0	0
Ports	1266	909	236	0	121



Top-devices

Top 5 devices (last 15 minutes)

Device	Total traffic
192.248.1.126	
192.248.0.123	
192.248.1.125	
kdu.learn	
192.248.1.104	

NOC

(Network Operations Center)





Objectives

- + Learn Network monitoring protocols
- + SNMP in details
- + How to Config SNMP
- + Configure LibreNMS
- + Configure Icinga
- + Configuring Alerts
 - + Email
 - + Telegram
 - + Slack

