



NOC Meeting 2023

Network and Communication Services Unit
University of Peradeniya



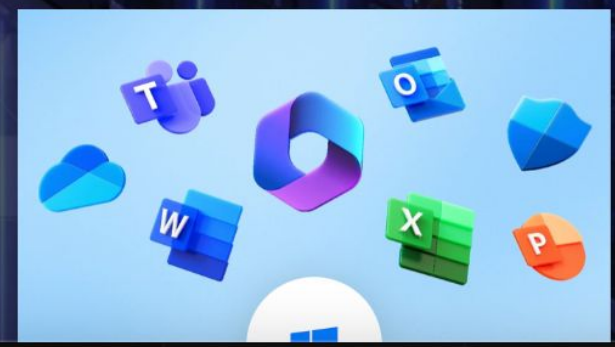
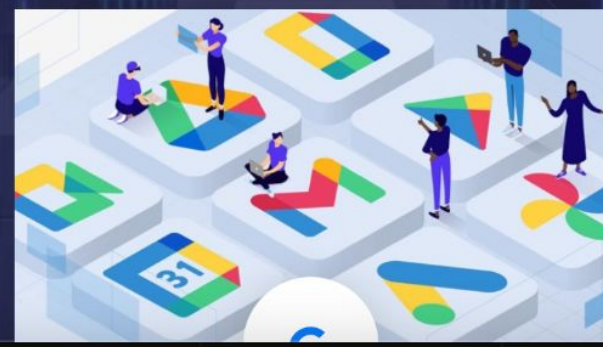
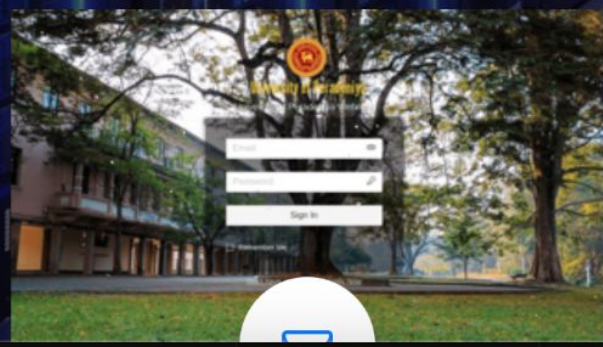
Getting the Better of all Technology

Welcome To NCSU

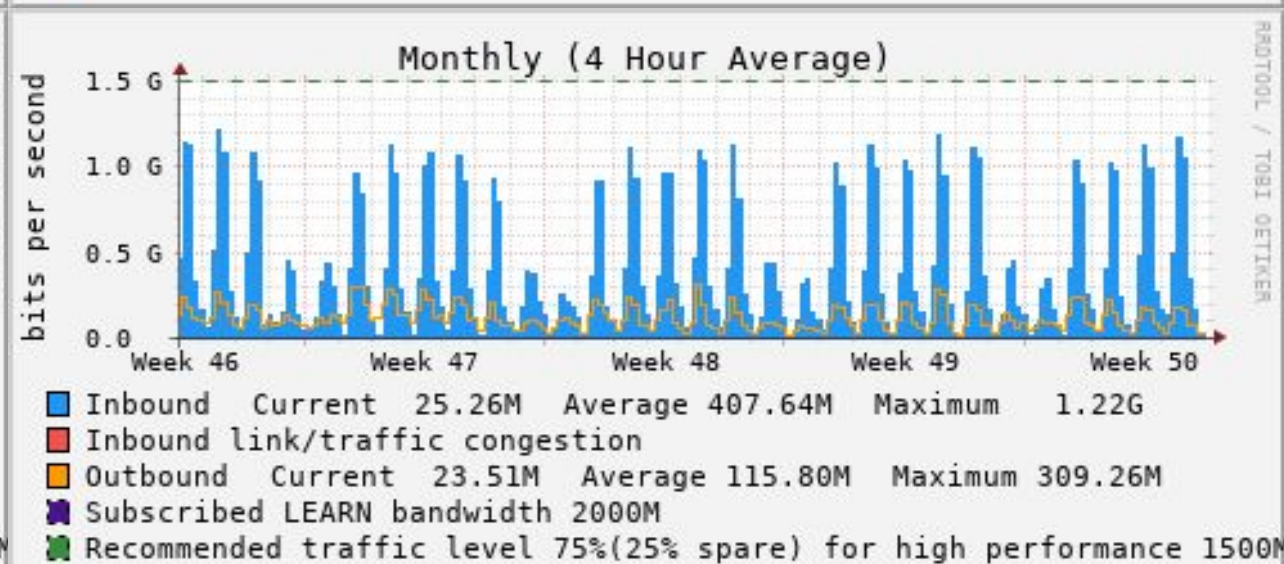
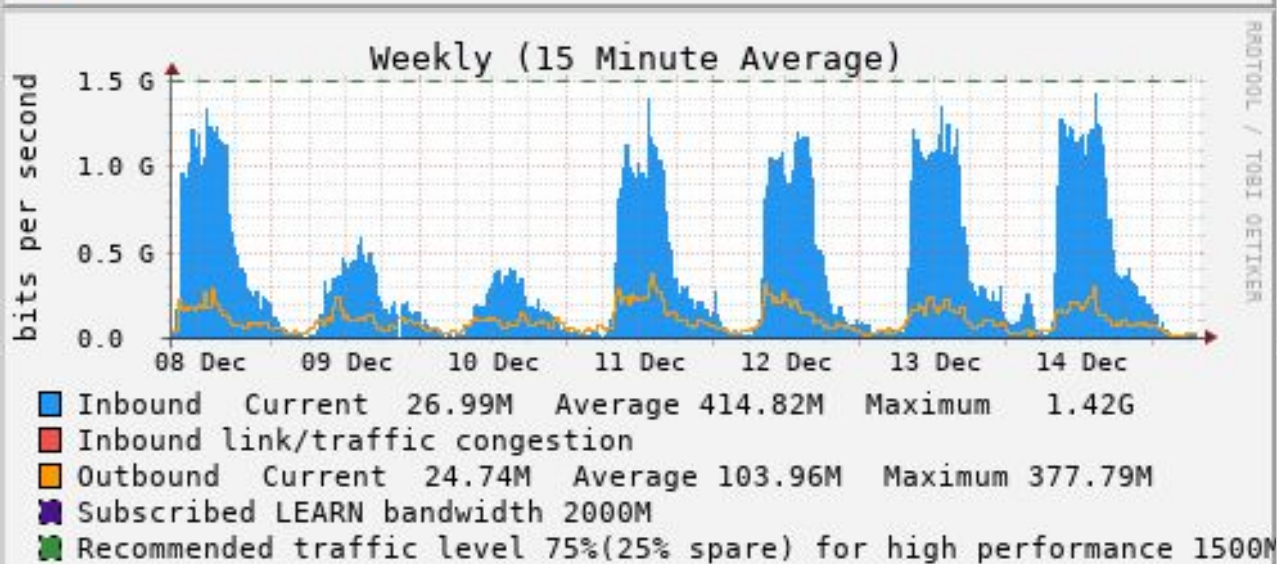
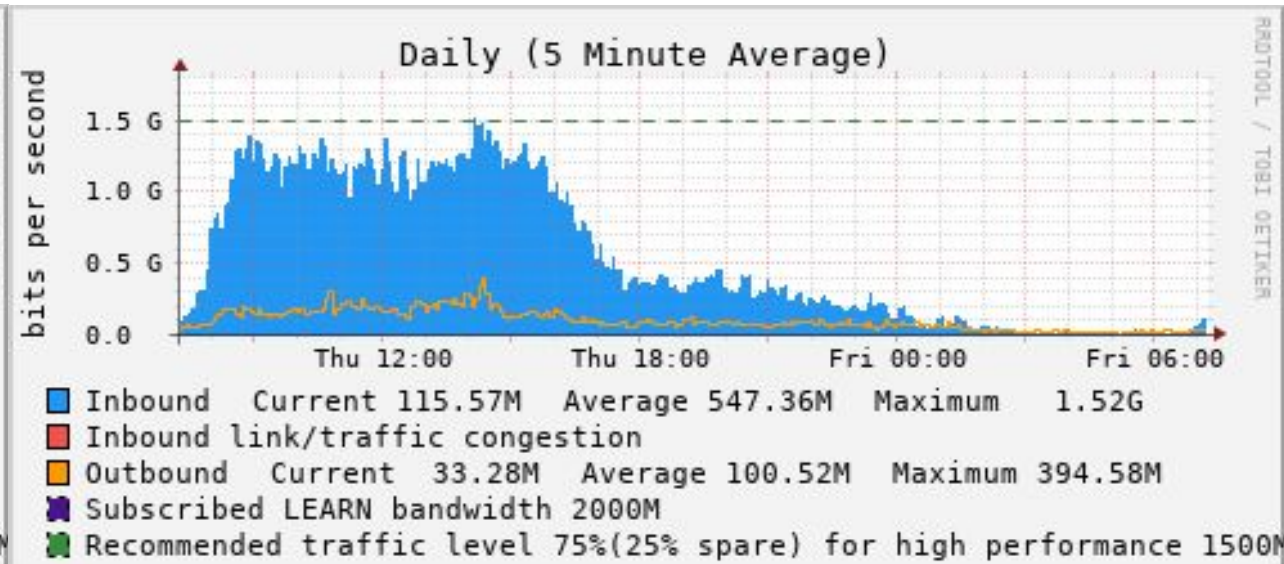
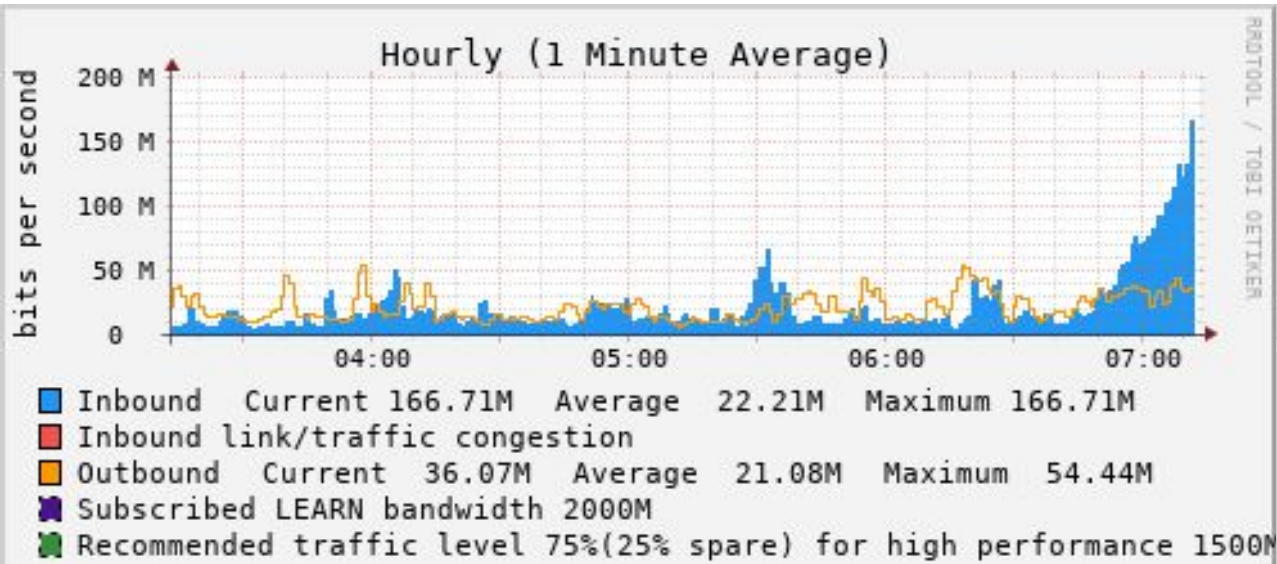
NCSU Manages And Maintains The University Network And Servers.

CONTACT US

READ MORE



Internet Bandwidth



System and Services



We provide

- Internet
- Google email service
- Google applications
- Microsoft office 365
- PDN Email
- Moodle
- Web Sites
- Database
- Zoom
- vSession
- DNS
- IP Phones
- Other Apps

Staff strength

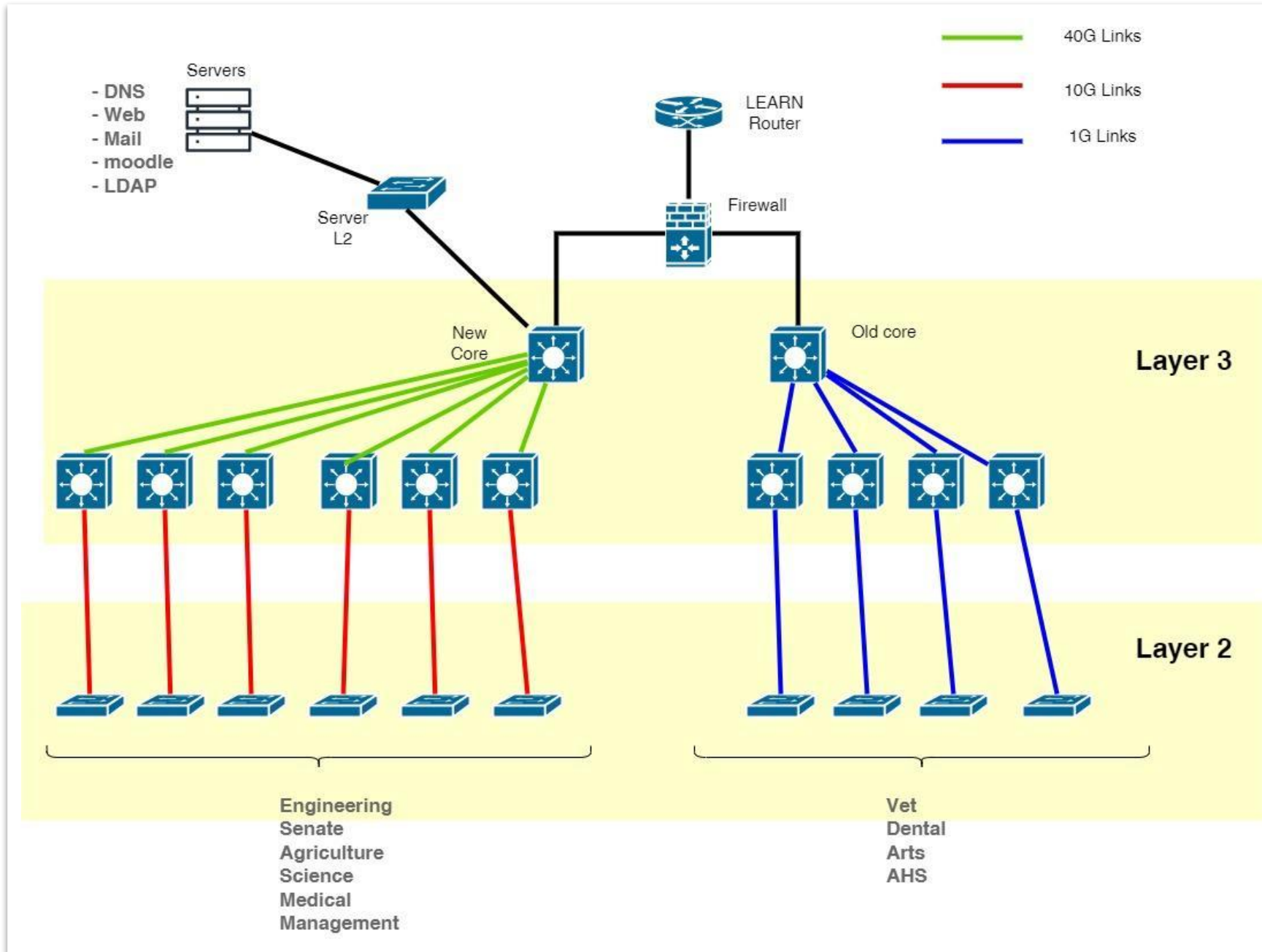
Director
1 Network Engineer
2 Technical officers
1 Labourer

- Network planning
- Network Maintenance
- Network upgrades
- Preparation of BoQs
- Assisting Online teaching and Examination activities.
- Webcasting
- Providing technical inputs and solutions to all IT related problems
- TECs
- Technical assistance for users

**Seriously lack
the staff for
day-to-day
activities**

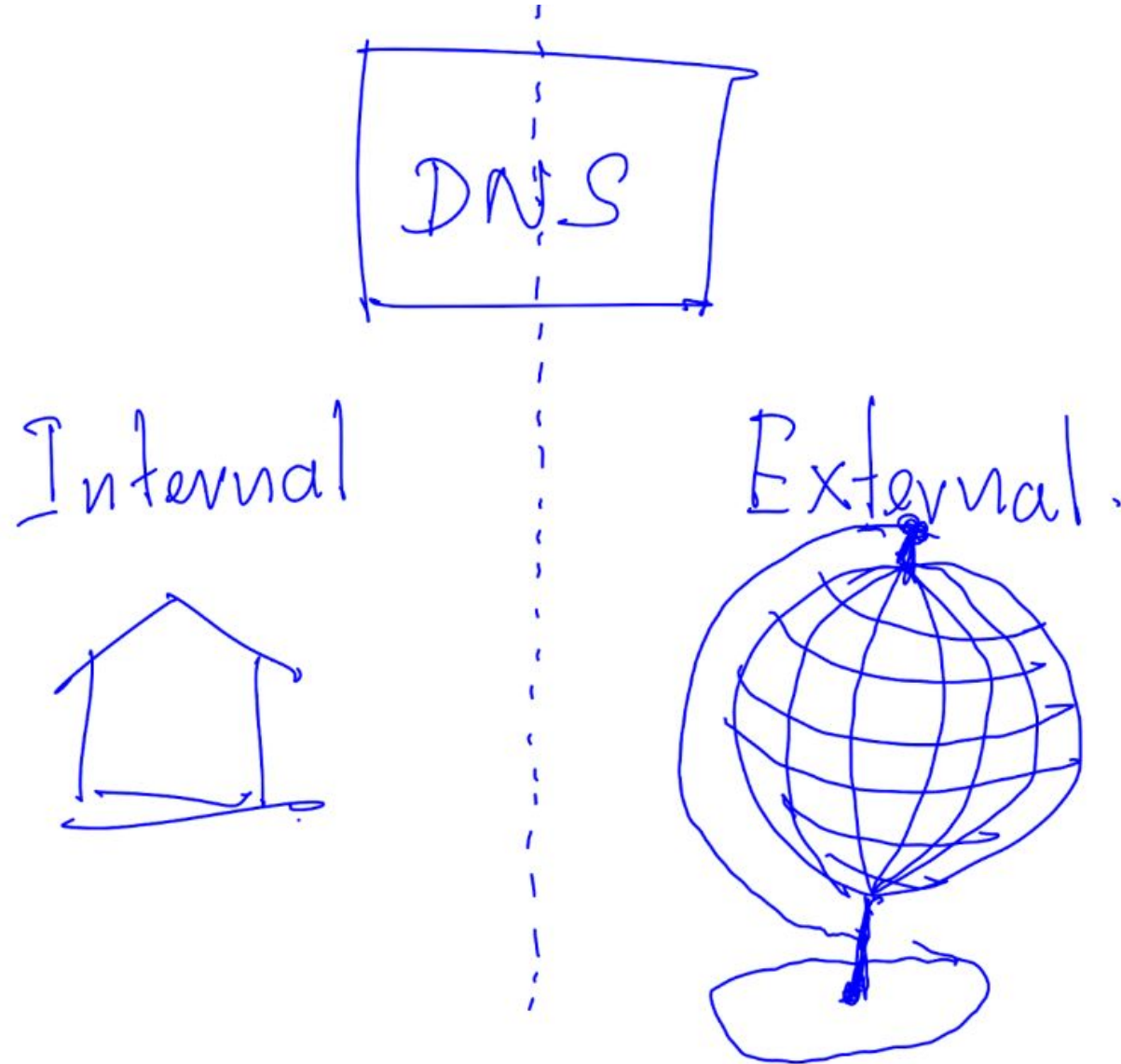
University Network

Network Design



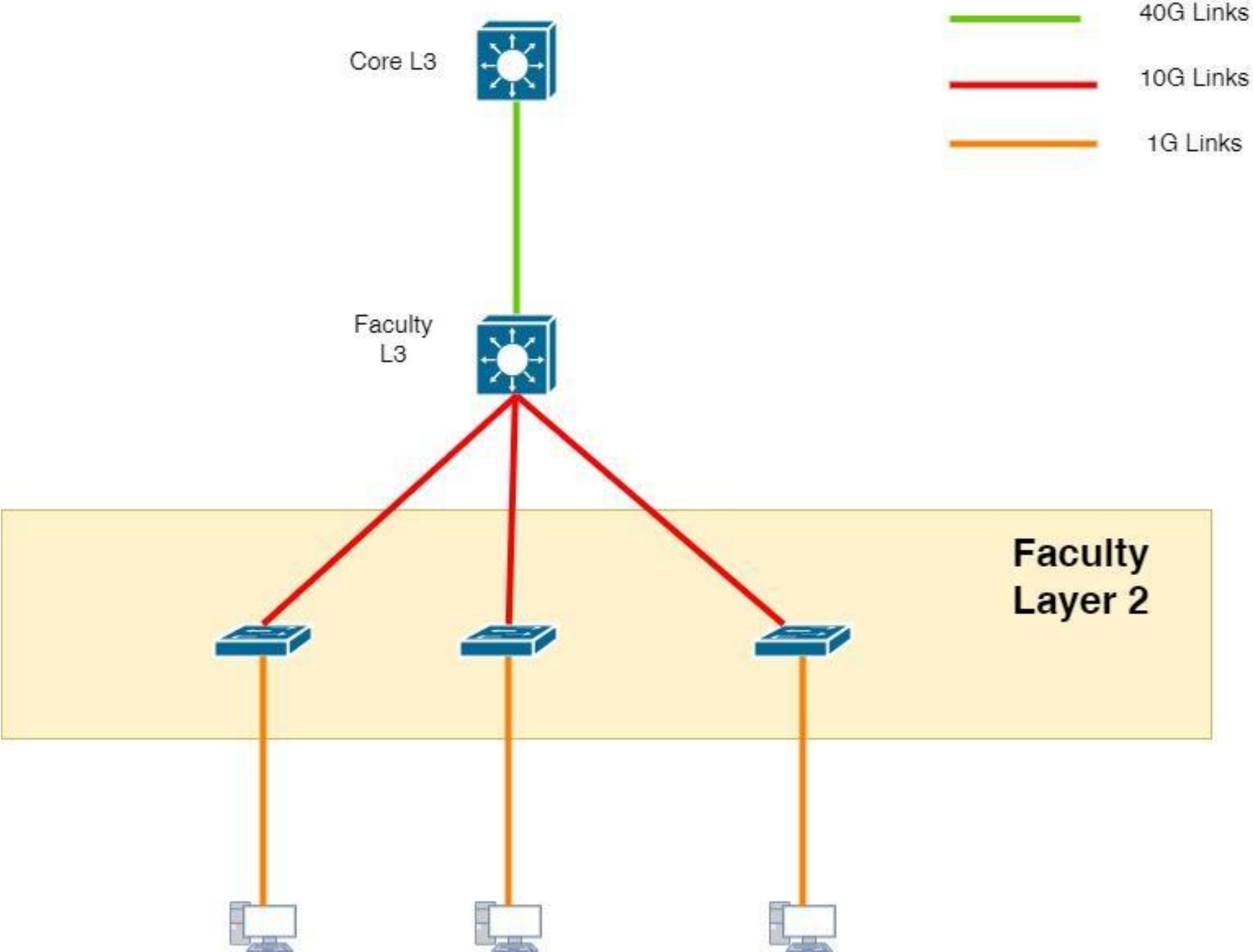
*.pdn.ac.lk

Internal Zone and External Zone

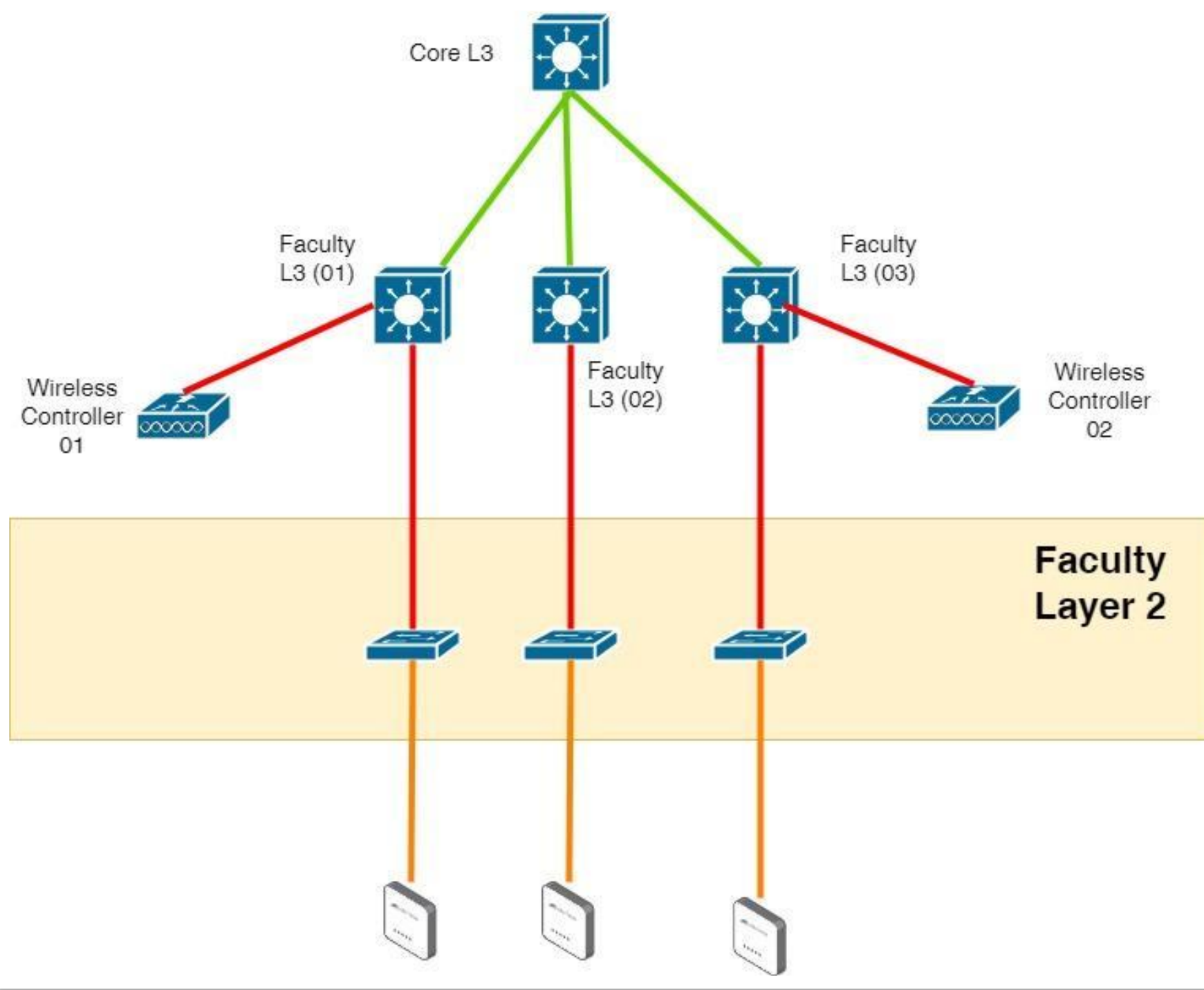


University Network

Faculty Level Diagram



University Network



Wireless infrastructure

AP View



SmartZone 100
6.1.1.0.959

Support expires in 3 days

[Show all messages](#)

PERA02
2023-12-14 22:03:08

default

namal



Monitor

Network

Security

Services

Administration



search menu

All New Analytics

Network > Wireless > Access Points

Access Points

170 156 7 7

VIEW MODE: List **Group** Mesh Map Zone

+ [edit] [copy] [close] More > [refresh] [back] [Configure] [Move] [Delete] [More >]

search table [search] [refresh] [download] [settings]

ORGANIZATION

- D System 7 7
 - + Z 5.2 Firmware Zone 1
 - + Z 6.1 Firmware Zone 6
 - + Z Default Zone

MAC Address	AP Name	Status	Alarm	IP Address	Total Traffic (1hr)	Clients	Latency (2.4G)	Latency (5G)	Latency (6G/5G)	Connection Failures
[REDACTED]	D_New_5thFLR_AP2	Online	0	[REDACTED]	14.5MB	2	0ms	0ms	N/A	0
[REDACTED]	D_Hospital_Grnd...	Online	7	[REDACTED]	0	1	0ms	0ms	N/A	0
[REDACTED]	D_Hospital_3rdFL...	Online	0	[REDACTED]	1.1MB	1	0ms	0ms	N/A	0
[REDACTED]	D_Hospital_1stFL...	Online	0	[REDACTED]	225.7MB	0	47.6ms	0ms	N/A	0
[REDACTED]	D_Admin_2ndFLR...	Online	0	[REDACTED]	0	0	0ms	0ms	N/A	0
[REDACTED]	D_Admin_3rdFLR...	Online	0	[REDACTED]	0	0	0ms	0ms	N/A	0
[REDACTED]	D_Admin_2ndFLR...	Online	0	[REDACTED]	0	0	0ms	0ms	N/A	0
[REDACTED]	D_Admin_2ndFLR...	Online	0	[REDACTED]	0	0	0ms	0ms	N/A	0

Chat now

170 records << 1 2 3 4 5 6 7 8 9 ... 22 >>

DETAILS

Traffic Health General Configuration Alarm Event Clients Wired Clients WLANs Services Administrators

Historical Traffic Last 1 hour All WLANs

Refresh

Traffic [refresh] [settings] [dropdown]

Total Bytes Total (Uplink + Downlink)

Client view



SmartZone 100
6.1.1.0.959

Support expires in 3 days

Show all messages

PERA02
2023-12-14 22:09:45

default



Monitor

Network

Security

Services

Administration



search menu



All New Analytics

Monitor > Clients > Wireless Clients

Wireless Clients 370

Deauthorize Block Disconnect More

search table



ORGANIZATION

System

- 5.2 Firmware Zone
- 6.1 Firmware Zone
- Default Zone

Hostname	Model Name	IP Address	MAC Address	WLAN	AP Name	AP MAC	Traffic (Session)	RSSI	SNR	Radio Type
DESKTOP-P05...	Microsoft ...			Eng-Stu...	E_DO2_1stFLR...	D8:38:FC:23:97:B0	257.2MB	-35 dBm	61 dB	b/g/n
DESKTOP-09IL...	Microsoft ...			Eng-Stu...	E_EngLibrary_...	FC:5C:45:16:54:00	265.9MB	-37 dBm	59 dB	a/n/ac
LAPTOP-325D...	Microsoft ...			Eng-Stu...	E_EngLibrary_...	FC:5C:45:17:B4:20	N/A	N/A	N/A	N/A
Nantha	Microsoft ...			Eng-Stu...	E_EngLibrary_...	FC:5C:45:17:B4:20	1.2GB	-35 dBm	61 dB	b/g/n
LAPTOP-74QU...	Trendnet P...			Eng-Stu...	E_DO2_1stFLR...	D8:38:FC:23:97:B0	79.3MB	-45 dBm	51 dB	a/n/ac
Nokia-C32	Android			Dent_Wifi	D_Hospital_Gr...	0C:F4:D5:23:FC:F0	4.7MB	-75 dBm	21 dB	b/g/n
Galaxy-Tab-A7	Android			Dent_Wifi	D_Hospital_1s...	0C:F4:D5:23:DD:F0	82.2MB	-61 dBm	35 dB	b/g/n
Adithya	Microsoft ...			Eng-Stu...	E_EngLibrary_...	FC:5C:45:17:B4:20	387.0MB	-50 dBm	46 dB	a/n/ac

368 records « 1 2 3 4 5 6 7 8 9 ... 46 »

DETAILS

Traffic Health General Configuration Alarm Event WLANs Services Administrators APs

Historical Traffic

Last 1 hour

All WLANs

Refresh

Traffic



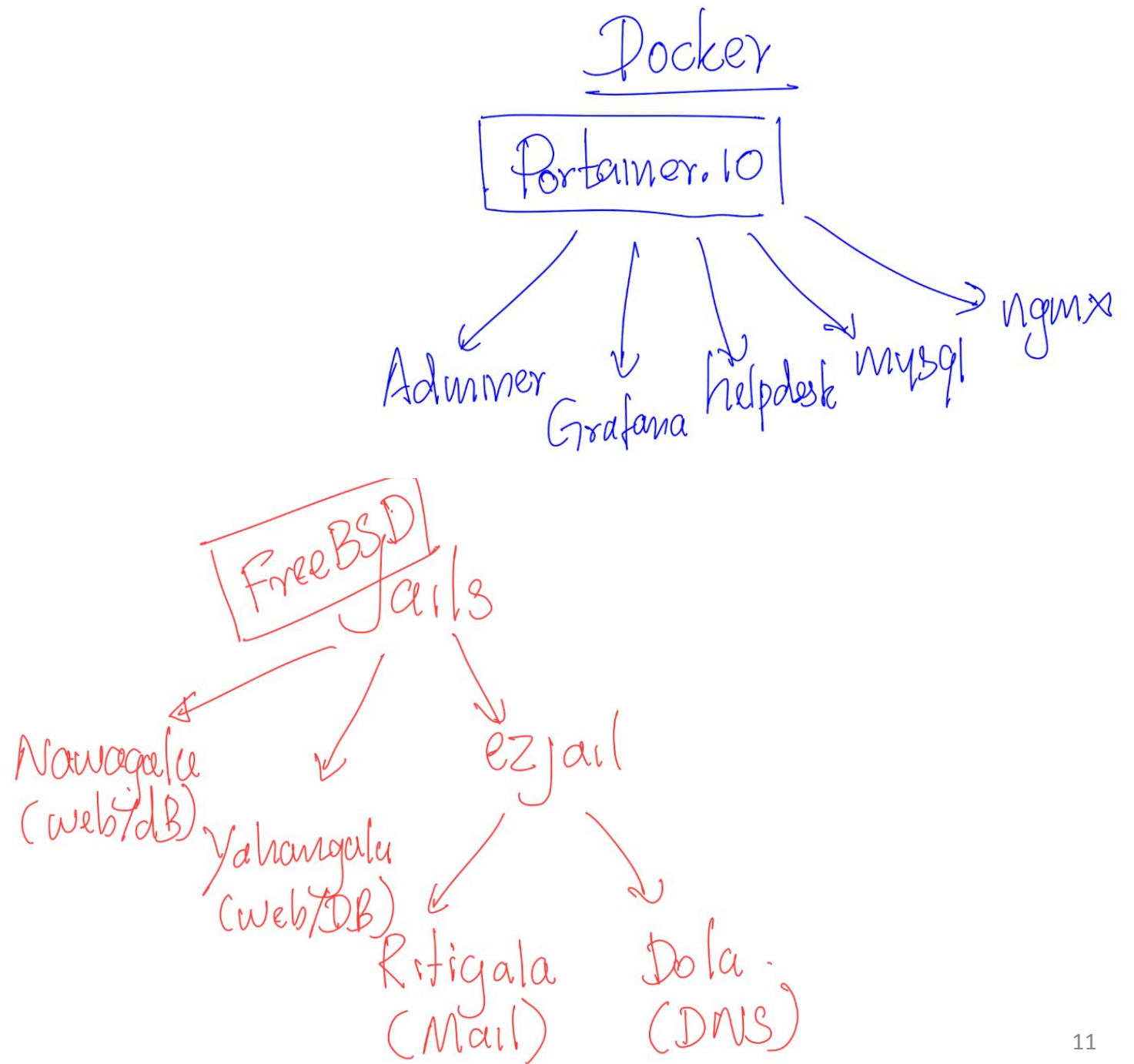
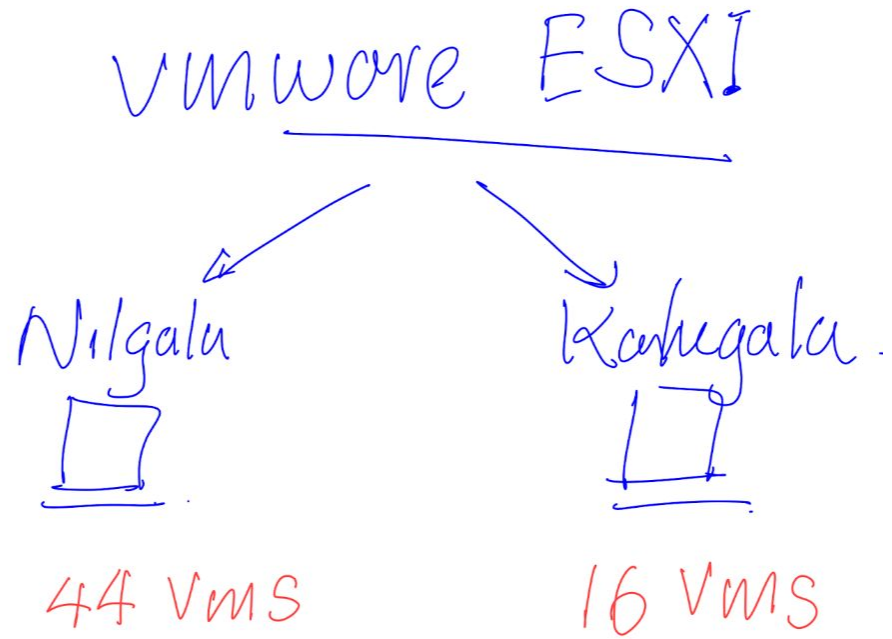
Total

HuionTablet

Bytes

Total (Uplink + Downlink)

Virtual Machines



Navigator

- Host
 - Manage
 - Monitor
- Virtual Machines** 44
 - [Redacted]
 - Monitor
 - ActionPlan_UOP
 - Nakivo_transporter
 - More VMs...
- Storage 2
- Networking 3

nilgala.pdn.ac.lk - Virtual Machines

Create / Register VM | Console | Power on | Power off | Suspend | Refresh | Actions

Search

Virtual machine	Status	Used space	Guest OS	Host name	Host CPU	Host memory
[Redacted]	✓ Normal	108.11 GB	CentOS 7 (64-bit)	Unknown	12 MHz	2.52 GB
[Redacted]	✓ Normal	99.72 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	19.61 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	14.33 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	41.98 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	43.79 GB	Microsoft Windows Server...	Unknown	119 MHz	8.06 GB
[Redacted]	✓ Normal	6.23 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	50 GB	Ubuntu Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	3.57 GB	Microsoft Windows Server...	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	14.1 GB	CentOS 8 (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	13.02 GB	Ubuntu Linux (64-bit)	dentalpms	42 MHz	2.03 GB
[Redacted]	✓ Normal	36.32 GB	FreeBSD Pre-11 versions (...)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	4.11 GB	Ubuntu Linux (64-bit)	eeu-website	44 MHz	4.03 GB
[Redacted]	✓ Normal	2.33 GB	CoreOS Linux (64-bit)	Unknown	0 MHz	0 MB
[Redacted]	✓ Normal	1.02 TB	CentOS 7 (64-bit)	master-node	287 MHz	13.91 GB
[Redacted]	✓ Normal	66.11 GB	CentOS 7 (64-bit)	w-node1	19 MHz	5.23 GB

Recent tasks

Task | Target | Initiator | Queued | Started | Result | Completed


```
$ ezjail-admin list
STA JID IP Hostname Root Directory
-----
ZR 5 ::2 /jail/
5 lo0|127.0.0.1
ZR 3 /jail/
3 bxe0|
3 bxe1|10.40.2.8
3 lo0|::8
ZR 4 /jail/
4 b|
ZR 2 10.40.2.29 /jail/
ZS N/A 10.40.2.33 /jail/
$
```

```
Edit /etc/motd to change this login announcement.
$ iocage list
+-----+-----+-----+-----+-----+
| JID | NAME | STATE | RELEASE | IP4 |
+-----+-----+-----+-----+-----+
| 1 | eplt-prd | up | 12.1-RELEASE | 10.40.2.27 |
+-----+-----+-----+-----+-----+
| - | eplt-stg | down | 12.1-RELEASE | 10.40.2.28 |
+-----+-----+-----+-----+-----+
| - | faurs | down | 12.1-RELEASE | 10.40.2.44 |
+-----+-----+-----+-----+-----+
| - | inrosvr | down | 12.1-RELEASE | 10.40.2.45 |
+-----+-----+-----+-----+-----+
| - | mis | down | 12.1-RELEASE | 10.40.2.48 |
+-----+-----+-----+-----+-----+
| 3 | moodle3 | down | 11.3-RELEASE | 10.40.2.153 |
+-----+-----+-----+-----+-----+
```

```
$ ezjail-admin list
STA JID IP Hostname Root Directory
-----
ZSN N/A 10.40.2.34 /
N/A b|
ZR 1 /j
1 bxe0|10.40.2.45
ZR 2 /jail
ZR 3 10.40.2.35 /
k
ZSN N/A 10.40.2.31 /
ZR 4 10.40.2.36 /
4 bce1|
4 bce1|
$
```

```
TY
+-----+-----+-----+-----+-----+
| - | CERPS | down | 12.2-RELEASE | 10.40.2.156 |
+-----+-----+-----+-----+-----+
| 5 | aaup | up | 12.2-RELEASE | 10.40.2.154 |
+-----+-----+-----+-----+-----+
| - | dcs | down | 12.2-RELEASE | 10.40.2.157 |
+-----+-----+-----+-----+-----+
| - | faurs | down | 12.1-RELEASE | 10.40.2.44 |
+-----+-----+-----+-----+-----+
| - | inrosvr | down | 12.1-RELEASE | 10.40.2.45 |
+-----+-----+-----+-----+-----+
| 4 | mis | up | 12.1-RELEASE | 10.40.2.48 |
+-----+-----+-----+-----+-----+
| 2 | moodle1 | up | 12.2-RELEASE | 10.40.2.41 |
+-----+-----+-----+-----+-----+
| - | moodle3 | down | 11.3-RELEASE | 10.40.2.153 |
+-----+-----+-----+-----+-----+
| 3 | tmux | up | 12.2-RELEASE | 10.40.2.158 |
+-----+-----+-----+-----+-----+
| - | trauma | down | 12.2-RELEASE | 10.40.2.155 |
+-----+-----+-----+-----+-----+
| 1 | websvr2 | up | 12.2-RELEASE | 10.40.2.151 |
+-----+-----+-----+-----+-----+
$
```


sunethnamal — ssh namal@tmux.pdn.ac.lk -p 22454 — 124x36

```

0.0.0:1812->1812/udp, :::1812->1812/udp, 1813/udp      EngRadius
d5b729255c2a      cturra/ntp:latest      "/bin/sh /opt/startu..." 8 months ago      Up 34 hours (healthy) 0.
0.0.0:123->123/udp, :::123->123/udp                    ntp
00d15ed2eab6      8cfcb66f4364          "/bin/prometheus --c..." 9 months ago      Up 34 hours          90
90/tcp            prometheus
fc6bdd931bc3      quay.io/prometheus/node-exporter:latest  "/bin/node_exporter ..." 9 months ago      Up 34 hours          91
00/tcp            node_exporter
22ac77db3c67      grafana/grafana:latest  "/run.sh"              9 months ago      Up 34 hours          0.
0.0.0:3000->3000/tcp, :::3000->3000/tcp                grafana
d078fdd66cfd      gcr.io/cadvisor/cadvisor:v0.45.0        "/usr/bin/cadvisor -..." 9 months ago      Up 34 hours (healthy) 80
80/tcp            cadvisor
b6ed56a33f06      wordpress:latest       "docker-entrypoint.s..." 9 months ago      Up 34 hours          80
/tcp              neweng
837fe4ebdae6      php:7-apache           "docker-php-entrypoi..." 10 months ago     Up 34 hours          80
/tcp              livehelperchat
c7159ac079a7      osixia/phpldapadmin:latest  "/container/tool/run"    10 months ago     Up 34 hours          80
/tcp, 443/tcp     phpldapadmin
2f682f4f0533      osixia/openldap:latest  "/container/tool/run"    10 months ago     Up 34 hours          0.
0.0.0:389->389/tcp, :::389->389/tcp, 0.0.0.0:636->636/tcp, :::636->636/tcp  ldap
3a52a3fb11dd      linuxserver/wireguard:latest  "/init"                 10 months ago     Up 34 hours          0.
0.0.0:51820->51820/udp, :::51820->51820/udp            vpn
6b48de211e8c      scirad:latest          "/docker-entrypoint...." 11 months ago     Up 34 hours          18
13/udp, 0.0.0.0:1814->1812/udp, :::1814->1812/udp     SciRadius
bbb3b59fcae       php:7-apache           "docker-php-entrypoi..." 11 months ago     Up 34 hours          80
/tcp              helpdesk
adb9fd79964c      adminer:latest         "entrypoint.sh php -..." 11 months ago     Up 34 hours          80
80/tcp            adminer
377b4d581cab      mysql:latest           "docker-entrypoint.s..." 11 months ago     Up 34 hours          33
06/tcp, 33060/tcp mysql
33936ae63d14      portainer/portainer-ce:latest  "/portainer"            12 months ago     Up 34 hours          90
00/tcp, 0.0.0.0:8000->8000/tcp, :::8000->8000/tcp, 9443/tcp  portainer
25a6cd54f638      jc21/nginx-proxy-manager:latest  "/init"                 12 months ago     Up 34 hours          0.
0.0.0:80-81->80-81/tcp, :::80-81->80-81/tcp, 0.0.0.0:443->443/tcp  nginx_proxy_manager-app-1
0b3f3a8a9a87      jc21/mariadb-aria:latest  "/scripts/run.sh"       12 months ago     Up 34 hours          33
06/tcp            nginx_proxy_manager-db-1
root@kinihira:/home/namal#

```





Webs and Moodle

```

root@nawagala:/iocage/jails/websvr1/root/usr/local/www# ls -l
total 1513
-rw-r--r--  1 root      wheel      1274 Jun 12  2022 00README
drwxr-xr-x  2 webmaster wheel         3 Jun 14  2023
drwxr-xr-x  2 actionplan 1034       2 Oct  4 13:02
drwxr-xr-x 58 root      wheel      95 Jun  6  2022
drwxr-xr-x  6 root      wheel         6 Jun 15  2020
drwxr-xr-x 23 root      wheel        26 Jun  7  2023
drwxr-xr-x 40 webmaster wheel       64 Jun 28 14:39
drwxr-xr-x 59 tharindu  www       95 Jan 17  2022
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x 49 root      wheel       75 Aug 22  2022
drwxr-xr-x 57 cdceweb  www       96 Nov 13  2020
drwxrwxrwx 57 cdceweb  www       96 Mar 23  2021
drwxr-xr-x 58 cdceweb  wheel       94 Jun  8  2022
drwxrwxr-x 47 webmaster webmaster 104 Aug 18 09:34
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxrwxr-x  4 webmaster webmaster  11 Aug  3 19:53
drwxr-xr-x 58 root      wheel       94 Jun  8  2022
drwxr-xr-x 55 root      wheel       93 Jun 21  2022
drwxr-xr-x 22 engweb   wheel       43 Nov 15 08:51
drwxr-xr-x 58 root      www       94 Nov  3  2022
drwxr-xr-x 58 root      wheel       94 Dec  2  2022
drwxr-xr-x 57 feelsweb www       96 Jan  9  2022
drwxr-xr-x 58 root      wheel       94 Jun  9  2022
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x  2 webmaster wheel         3 Jul 24 16:56
drwxr-xr-x 58 root      wheel       94 Jun  7  2022
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x  6 root      wheel       10 May 30  2021
drwxr-xr-x 95 engweb   wheel      145 Sep 13 12:05
drwxrwxr-x  4 pgimsweb  wheel       22 Mar  1  2023
drwxr-xr-x 10 rgmsweb   www        69 Dec 16  2022
drwxr-xr-x 41 sciweb   wheel      134 Oct 16 00:03
drwxr-xr-x 10 webmaster wheel       29 Nov 25 13:39
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxrwxr-x  6 webmaster webmaster  17 Aug  1 11:53
drwxr-xr-x 17 sricat   www       35 Feb 24  2022
drwxr-xr-x 18 sricat   www       36 Nov  6 12:01
drwxr-xr-x  2 root      wheel         3 Jun 20  2022
-rw-r--r--  1 root      wheel         9 Nov  5 14:46
drwxr-xr-x  2 webmaster wheel         3 Jun 15  2023
drwxr-xr-x 11 webmaster wheel       31 Jun 16 15:15
drwxr-xr-x  2 root      wheel         3 Jun  8  2023

```

```

root@yahangala:/iocage/jails/moodle1/root/usr/local/www # ls -l
total 76551
drwxrwxrwx  5 www      wheel      54 Oct 30 09:43
drwxrwxr-x 27 agriweb  www       34 May 18  2023
drwxrwxr-x 55 root      wheel     93 Jun 23  2022
drwxrwxr-x 51 ahsweb   www      177 Nov 22 13:00
drwxr-xr-x 55 root      wheel     93 Jun 22  2022
drwxr-xr-x  8 root      wheel         9 May 23  2022
drwxr-xr-x 14 root      wheel     17 Oct 31  2022
drwxrwxr-x 96 artsweb  www     149 Dec 12 12:25
drwxr-xr-x 59 root      wheel     97 Jan 12  2023
drwxrwxr-x 55 root      wheel     93 Jun 22  2022
drwxrwxr-x 39 cdceweb  www     197 Dec  2  2022
drwxr-xr-x 13 cesbiomeuser wheel     33 Aug  2  2022
drwxr-xr-x 14 www      wheel     30 May  9  2023
drwxr-xr-x 36 dentweb  www     250 Dec  5 12:28
drwxr-xr-x 55 root      wheel     93 Jun 22  2022
drwxr-xr-x 56 root      wheel     94 Aug  5  2022
drwxr-xr-x 60 feelsuser  feelsuser 105 Nov  6 10:21
drwxr-xr-x 23 inroweb  inroweb   85 Nov  3 16:01
drwxrwxr-x 66 medweb   www     348 Sep 27 10:54
drwxrwxr-x 13 root      wheel     42 Oct 19  2016
drwxr-xr-x 59 root      wheel     97 Oct 31  2022
drwxr-xr-x 59 root      wheel     97 Nov 22  2022
drwxr-xr-x 55 root      wheel     93 Jun 23  2022
drwxr-xr-x 28 pdnweb  wheel     62 Sep 18 10:54
-rw-r--r--  1 root      wheel    81557328 Jan 12  2023
-rw-r--r--  1 root      wheel    329616 Nov 13  2019
-rw-r--r--  1 root      wheel    299991 Nov 19  2019
drwxr-xr-x  7 ncsuweb  wheel     19 Oct 23 08:54
drwxr-xr-x  2 root      wheel         3 Sep 22  2022
drwxr-xr-x 58 www      wheel     88 May  9  2023
drwxrwxrwx 56 root      wheel     95 Jun 27  2022
drwxr-xr-x 16 pdnweb  wheel     69 Oct 25 10:14
drwxrwxrwx  7 root      namal     24 Oct  3 14:40
drwxr-xr-x 10 studweb  www     160 Nov 14 10:56
drwxrwxrwx  4 root      wheel     15 May  9  2023
-rw-r--r--  1 root      wheel     5 Nov  6 07:46
drwxr-xr-x 36 vetweb  wheel     89 Nov 17 12:57
drwxr-xr-x  4 root      wheel     14 Aug 14  2020
drwxrwxrwx  2 www      wheel         3 Jan 31  2020
drwxrwxr-x 153 pdnweb  wheel    257 Oct 26 14:14

```


Back up

Scripting/cron jobs

```
#!/bin/sh
DATADIR=/iocage/jails/websvr1/root/webdata/moodle
DBDIRMYDB8P=/iocage/jails/mydb8p/root/data/backups/mysql/
DBDIRMYSQL57=/iocage/jails/mysql57/root/data/backups/mysql/
WEBBACKUPDIR=root@yahangala:/backup/nawagala/www/
DATABACKUPDIR=root@yahangala:/backup/nawagala/moodledata
BACKUPMYDB8P=root@yahangala:/backup/nawagala/database/mydb8p/
BACKUPMYSQL57=root@yahangala:/backup/nawagala/database/mysql57/

LOGDIR=/var/log/backup
MYGZIP=/usr/bin/gzip
MYFIND=/usr/bin/find

echo "===== Backup started at===== " `date '+%Y%m%d-%H:%M:%S'`>> $LOGDIR/run.log

#backup all SITES
#echo "Webdata backup started at " `date '+%Y%m%d-%H:%M:%S'`>> $LOGDIR/site.log
#rsync -aPv /iocage/jails/websvr1/root/usr/local/www/ $WEBBACKUPDIR --delete >> $LOGDIR/site.log 2>&1
#echo "Webdata backup completed at " `date '+%Y%m%d-%H:%M:%S'`>> $LOGDIR/run.log

i=0;for file in $DATADIR/*; do
    i=$((i+1))
    echo "$(basename "$file")"
    echo "$i. Backup working on $(basename "$file")" `date '+%Y%m%d-%H:%M:%S'`>> $LOGDIR/run.log
    rsync -aPv $DATADIR/$(basename "$file")/ $DATABACKUPDIR/$(basename "$file")/ --delete >> $LOGDIR/$(basename "$file")
).log
    echo "$i. Backup completed for $(basename "$file") on " `date '+%Y%m%d-%H:%M:%S'`>> $LOGDIR/run.log
    set -- $file
done

#backup all moodle DATABASES
```

Monitoring

Monitoring/Grafana

12/8/2023



Monitoring/Kuma

12/8/2023

Uptime Kuma New Update Status Pages Dashboard

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Search...

100% NCSU WebSite

100% PDN DNS

100% PDN Website

Quick Stats

Up	Down	Maintenance	Unknown	Pause
3	0	0	0	0

Name	Status	DateTime	Message
PDN DNS	Up	2023-12-08 09:15:07	Records: 10.40.2.2 10.40.2.1
NCSU WebSite	Up	2023-12-08 09:14:52	200 - OK
NCSU WebSite	Down	2023-12-07 22:09:55	getaddrinfo EAI_AGAIN ncsu.pdn.ac.lk
PDN DNS	Down	2023-12-07 21:59:54	query [REDACTED]
NCSU WebSite	Up	2023-11-17 20:09:05	200 - OK
PDN DNS	Up	2023-11-17 19:58:33	Records: 10.40.2.2 10.40.2.1
NCSU WebSite	Down	2023-11-17 19:07:29	getaddrinfo EAI_AGAIN ncsu.pdn.ac.lk
PDN DNS	Down	2023-11-17 18:56:01	queryA ETIMEOUT [REDACTED]
NCSU WebSite	Up	2023-10-31 12:06:48	200 - OK
NCSU WebSite	Down	2023-10-31 07:06:48	certificate has expired
NCSU WebSite	Up	2023-09-20 22:05:07	200 - OK

Monitoring/nginx proxy manager

12/8/2023

The screenshot shows the Nginx Proxy Manager web interface in a Safari browser. The browser's address bar is redacted with a black box. The page title is "Nginx Proxy Manager" and the user is logged in as "Admin Administrator". The navigation menu includes "Dashboard", "Hosts", "Access Lists", "SSL Certificates", "Users", "Audit Log", and "Settings". The main content area is titled "Proxy Hosts" and features a search bar and an "Add Proxy Host" button. Below this is a table listing several proxy hosts, each with a user icon, creation date, destination URL, SSL type, access level, and status (all are "Online").

SOURCE	DESTINATION	SSL	ACCESS	STATUS
[Redacted] Created: 10th April 2023	http://cac [Redacted]	HTTP only	Public	● Online
[Redacted] Created: 29th December 2022	http://admin [Redacted]	HTTP only	Public	● Online
[Redacted] Created: 29th December 2022	http://nginx_proxy_manager-app-1:81	HTTP only	Public	● Online
[Redacted] Created: 25th January 2023	https://phpdap [Redacted]	HTTP only	Public	● Online
[Redacted] Created: 20th December 2022	http://help [Redacted]	Let's Encrypt	Public	● Online
[Redacted] Created: 13th December 2022	https://porta [Redacted]	Let's Encrypt	Public	● Online
[Redacted] Created: 13th February 2023	http://livehelpe [Redacted]	Let's Encrypt	Public	● Online

Monitoring/portainer.io

12/8/2023

The screenshot displays the Portainer.io web interface in a Safari browser window. The interface is divided into a left sidebar and a main content area. The sidebar contains navigation options: Home, local (selected), Dashboard, App Templates, Stacks, Containers (highlighted), Images, Networks, Volumes, Events, and Host. A notification at the bottom of the sidebar states "New version available 2.19.4". The main content area is titled "Containers" and "Container list". It features a search bar, a toolbar with actions like Start, Stop, Kill, Restart, Pause, Resume, Remove, and Add container, and a table of running containers.

Name ↓↑	State ↓↑ Filter	Quick Actions	Stack ↓↑	Image ↓↑	Created ↓↑	IP Address ↓↑
<input type="checkbox"/> adminer	running		-	adminer:latest	2022-12-29 11:51:17	172.19.0.10
<input type="checkbox"/> cadvisor	healthy		monitoring	gcr.io/cadvisor/cadvisor:v0.45.0	2023-03-16 11:12:49	172.19.0.4
<input type="checkbox"/> EngRadius	running		-	engrad:latest	2023-05-09 16:07:56	172.17.0.2
<input type="checkbox"/> grafana	running		monitoring	grafana/grafana:latest	2023-03-16 11:12:49	172.19.0.9
<input type="checkbox"/> helpdesk	running		-	php:7-apache	2022-12-29 14:44:33	172.19.0.6
<input type="checkbox"/> ldap	running		-	osixia/openldap:latest	2023-02-08 11:47:47	172.19.0.16
<input type="checkbox"/> livehelperchat	running		-	php:7-apache	2023-02-13 14:09:08	172.19.0.12
<input type="checkbox"/> mysql	running		-	mysql:latest	2022-12-29 11:47:55	172.19.0.3
<input type="checkbox"/> neweng	running		-	wordpress:latest	2023-03-01 10:31:35	172.19.0.15
<input type="checkbox"/> nginx_proxy_manager-app-1	running		nginx_proxy_manager	jc21/nginx-proxy-manager:latest	2022-12-13 14:11:49	172.19.0.14
<input type="checkbox"/> nginx_proxy_manager-db-1	running		nginx_proxy_manager	jc21/mariadb-aria:latest	2022-12-13 14:11:49	172.19.0.11



Challenges and requirements

Problems

- Outdated network infrastructure
- Insufficient data storage
- Buildings, hostels and areas without/insufficient network coverage
- No sufficient infrastructure and human resources for management, maintenance and upgrades of university network and services
- Running at a brink of failure (No backups for Moodles or emails)
- Power issues

Needs

- Network expansion and upgrades
- More cadre



Discussion