

Annual NOC Meeting 2017

Lanka Education and Research Network



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Network Administrator

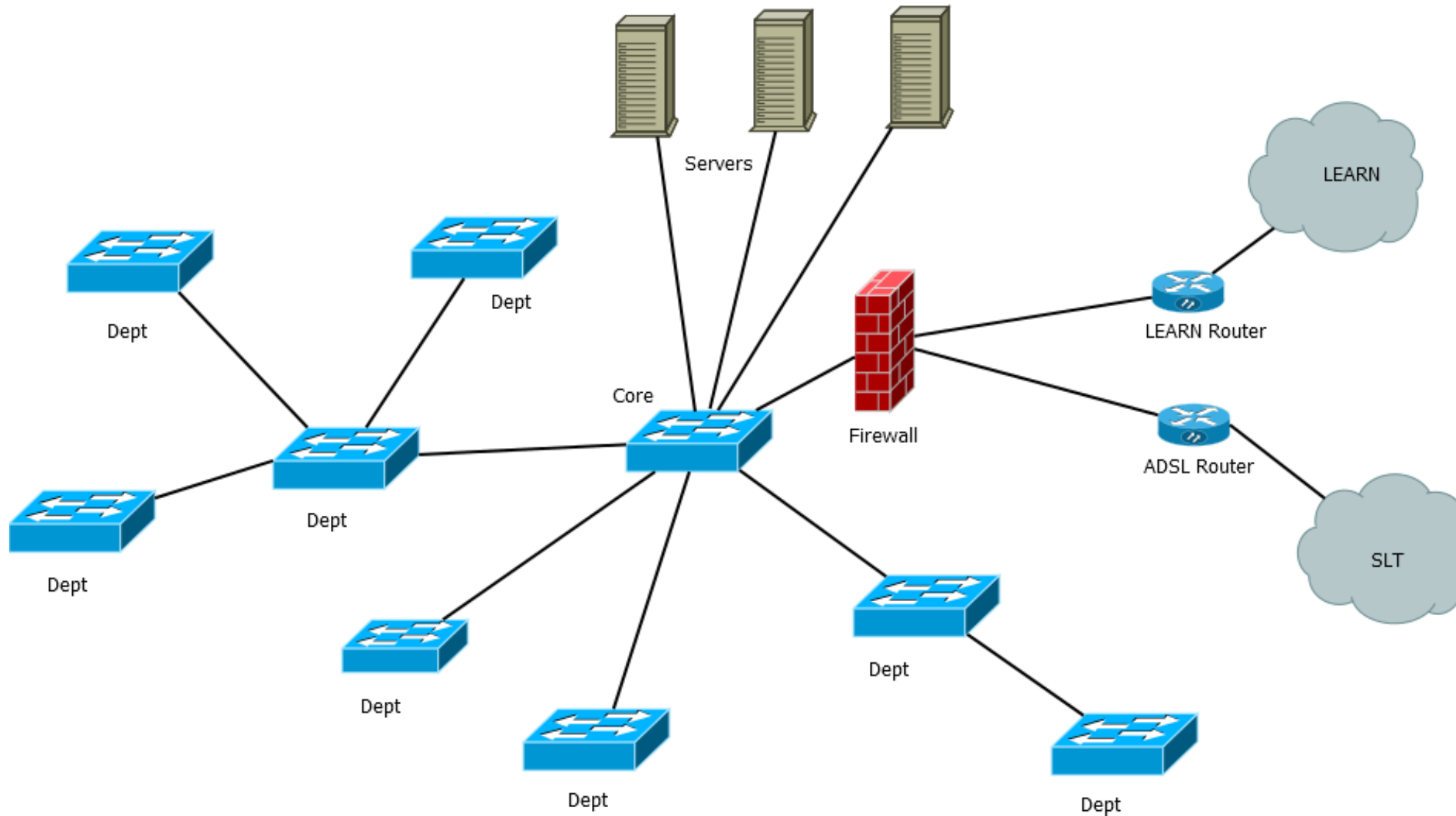
National Engineering Research and Development Centre

Network Status

- ▶ **Connections**
- ▶ LEARN link 15mbps
- ▶ SLT ADSL connection (Backup connection)

- ▶ Servers (WEB, File, Email, Accounting)
- ▶ Over 200 network users
- ▶ 8 + Wi-Fi areas
- ▶ All departments are connected via Fiber network

Network topology



Network Services

- ▶ Managing the Servers
- ▶ Maintaining and update the web site
- ▶ Email
- ▶ Design and manage the intranet call NERDNET
- ▶ Wi-Fi facility management
- ▶ CCTV camera monitoring & manage
- ▶ Monitoring the network

Successful operations

- ▶ Upgrade the LEARN link from 5mbps to 15 mbps
- ▶ Update the LAN network to gigabit network
- ▶ Provide IPV6 facility to some of the end users
- ▶ Upgrade the 10 years old mail server
- ▶ Upgrade the firewall with latest security features
(Watch Guard Firebox M200)

IPV6

- Provide ipv6 facilities to the end users

The screenshot displays the 'ipv6 test' website interface within a web browser. The browser's address bar shows 'ipv6-test.com' with a 90% zoom level. The website has a dark blue header with navigation links: File, Edit, View, History, Bookmarks, Tools, and Help. Below the header, there are three tabs: 'ipv6 test - Google Search', 'IPv6 test - IPv6/4 connectivity', and 'IPv6 test - IPv6 vs. IPv4 broadband'. The main content area is divided into several sections:

- General** (selected tab):
 - IPv4 connectivity**: Shows 'IPv4' as 'Supported' (green), 'Address' as '192.248.105.29', 'Hostname' as 'None' (orange), and 'ISP' as 'Learn' (with a small icon).
 - IPv6 connectivity**: Shows 'IPv6' as 'Supported' (green), 'Address' as '2401:dd00:40c:1::50', 'Type' as 'Native IPv6' (green), 'SLAAC' as 'No' (green), 'ICMP' as 'Not tested' (grey), 'Hostname' as 'None' (orange), and 'ISP' as 'Learn' (with a small icon).
- Score**: A progress bar showing 14 / 20.
- Browser**: Shows 'Default' as 'IPv6' (green) and 'Fallback' as 'No' (red).
- DNS**: Shows 'DNS4 + IP6' as 'Reachable' (green), 'DNS6 + IP4' as 'Reachable' (green), and 'DNS6 + IP6' as 'Reachable' (green).
- More**: Contains two buttons: 'Speed test »' and 'Ping test »'.

The Windows taskbar at the bottom shows the search bar 'Type here to search', several application icons (including Edge, File Explorer, Mail, and Photoshop), and the system clock indicating '2:25 PM 11/20/2017'.

Please select a test server

Sri Lanka - Colombo ▾



Colombo, University of Kelaniya (~ 82 km)

Test again

Do you want to help us by running a test server in your area ?
If you think you can, please [contact us](#) !

IPv4 speed

Address 192.248.105.29

ISP Learn

Speed **11.8 Mbit/s**

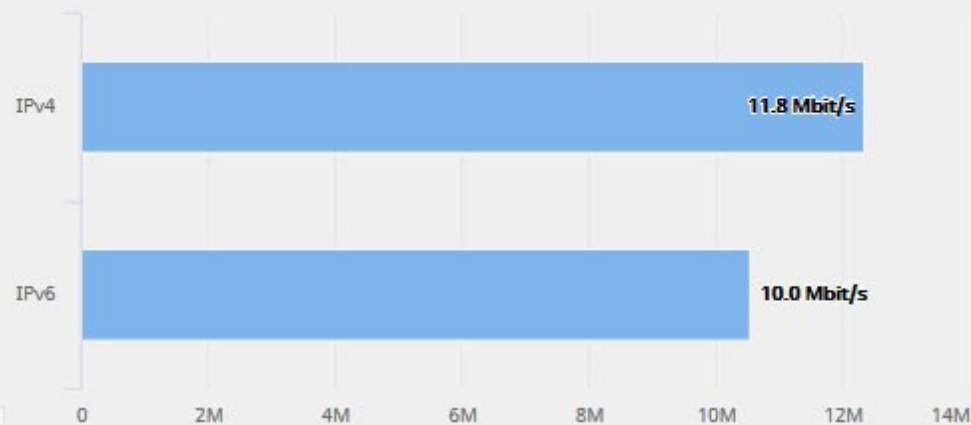
IPv6 speed

Address 2401:dd00:40c:1::50

ISP Learn

Speed **10.0 Mbit/s**

Your speed test results



Share your results

Future Plans

- ▶ Increase the no of WAPs to cover the whole NERDC premises.
- ▶ Increase the no of manageable switches to manage the network more efficiently.
- ▶ Provide IPv6 facility to everyone in the network.
- ▶ Deploy Eduroam facility in the premises.
- ▶ Upgrade the bandwidth to meet the future requirements.

THANK YOU