
BdREN fDLuDCf Project

DigiNar – II

Eduroam and LEARN Identity Access Federation

Virtual Session

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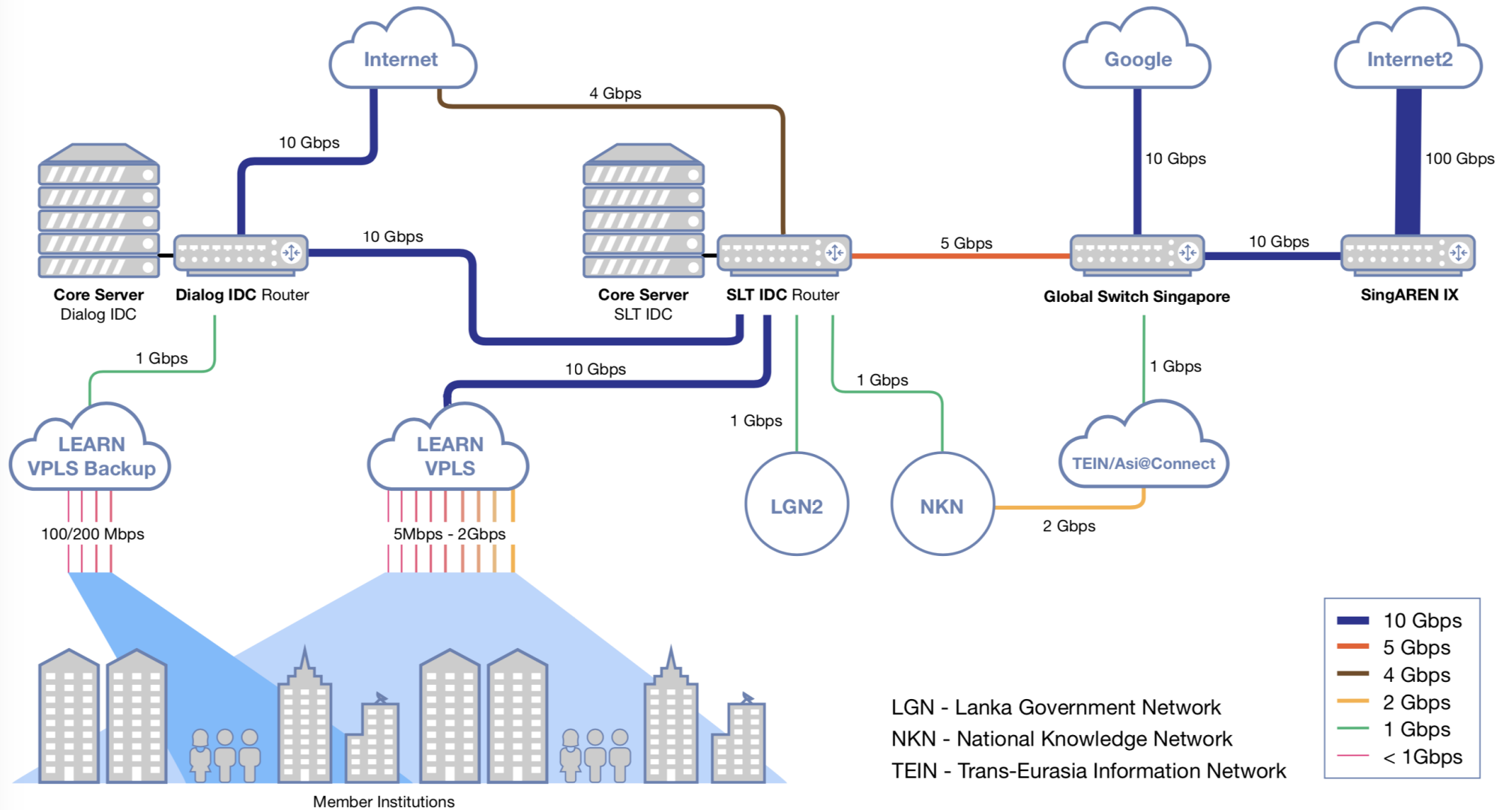
Lanka Education & Research Network

- ▶ National Research and Education Network of Sri Lanka
 - Started 30 years ago as project
 - Now as company owned by state universities and UGC
 - 45 R&E institutions include 75 separate connections spread across entire country
- ▶ LEARN Backbone
 - 2Gbps to 20Mbps connections depending on the size of the institute
 - Big institutions additional have a low capacity backup circuit
- ▶ LEARN Internet Capacity
 - 10Gbps transit via Dialog Axiata
 - 4Gbps transit via Sri Lanka Telecom

Lanka Education & Research Network

- Direct peering
 - Google (5Gbps)
 - On premise Google cache
- Academic Internet
 - 1Gbps to NKN
 - 1Gbps TEIN (Singapore)
 - 1Gbps to SGIX
- Other Connectivity
 - SLT IX (100Mbps)
 - Local Government Network (LGN) and School Network - 1Gbps

Network Map



LEARN Operation

- Board of Directors (16 members)
 - Head of LEARN
 - Secretary to LEARN
 - Operations Manager (Finance/Administrative)
 - Assistant Operation Manager
 - Finance Executive
 - Account Assistant
 - Technical Manager
 - Network Engineer
 - System Engineer
 - Engineer Technical Assistance

LEARN Services

- ▶ Commodity Internet
- ▶ Academic Internet
- ▶ Internet university connectivity by primary and backup circuits
- ▶ Domain registration (ac.lk)
- ▶ Email relaying with spam filtering
- ▶ Technical assistance (TAC)
- ▶ Eduroam
- ▶ Federated Identity Access (LIAF)
- ▶ EduVPN
- ▶ Video conferencing (Zoom)

LEARN Services in Roadmap

- Virtualization for
 - IAAS
 - HPC
 - Hosting
 - Disaster recovery
 - Virtual Lab

 - SAAS
 - Cloud based applications over federated SSO
 - LMS
 - Event/Meeting management
 - Media service

Eduroam Deployment in Sri Lanka

- ▶ First effort
 - APAN34 in August 2012
 - Silent for sometime

- ▶ Production NRS setup in early 2015 in parallel with XeAP-1 project
 - IRS for LEARN office as the first IRS
 - Few institutions got joined
 - Had a workshop to training institutional systems/network engineers in March 2016
 - More institutions added
 - 19 institutions now in total
 - <https://eduroam.ac.lk/participants.html>
 - <https://eduroam-admin.ac.lk/participants>

Eduroam Roadmap and Challenges

- ▶ Improve/maintain the eduroam **admin tool** to meet the standard
- ▶ Enable eduroam in public places in the country
 - In-corporation with local ISPs (Sri Lanka Telecom and Dialog)
- ▶ Get rest of the institutions joined
 - Is the most challenging part
 - Lack of proper WiFi network inside the institutions
 - Convince people on importance

Identity Access Federation Status

- ▶ In parallel to asi@connect Backfire project in mid of 2018
- ▶ LEARN Identity Access Federation (LIAF)
 - Detail at <https://liaf.ac.lk/>
- ▶ 21 institutions by now
 - Came quite fast why because of the Zoom as the killer-app
- ▶ eduGAIN membership in early 2019

Identity Access Federation Status

- Services over LIAF
 - Zoom video conferencing
 - eduVPN
 - LEARN event management system
 - Services offered over eduGAIN

Identity Access Federation Roadmap

- ▶ Get rest of the institutions joined
 - Challenging due to complexity of production deployment of IDP by themselves
- ▶ IDP as a service for those who are not cable of doing it themselves
 - Looking for open--source solution
- ▶ IDP in a box
 - LEARN to build and maintain
- ▶ More Services for R&E community
 - LMS, Library services, Media service, etc

Lanka Education and Research Network

Thank You

Q & A

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