UNIVERSITY OF SRI JAYEWARDENEPURA

Annual NOC Meeting 2015/16

Lanka Education And Research Network

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UNIVERSITY OF SRI JAYEWARDENEPURA

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OVERVIEW

HISTORY & MILESTONES

In 1985 Computer Centre was established in the Faculty of Applied Sciences by the Department of Mathematics which changed its name to “Centre for IT Services (CITS)” in 2015.

Currently CITS manages the Campus-wide IT Infrastructure, Server Administration and maintains e-Services & Applications while providing IT Technical Support and Solutions for university students and staff.

OVERVIEW

HISTORY & MILESTONES

1999 : Internet bandwidth: 64Kbps (leased line)

2003: Internet bandwidth: 192Kbps (through Suntel - LEARN)

2003: Fiber Network (stage I) implementation

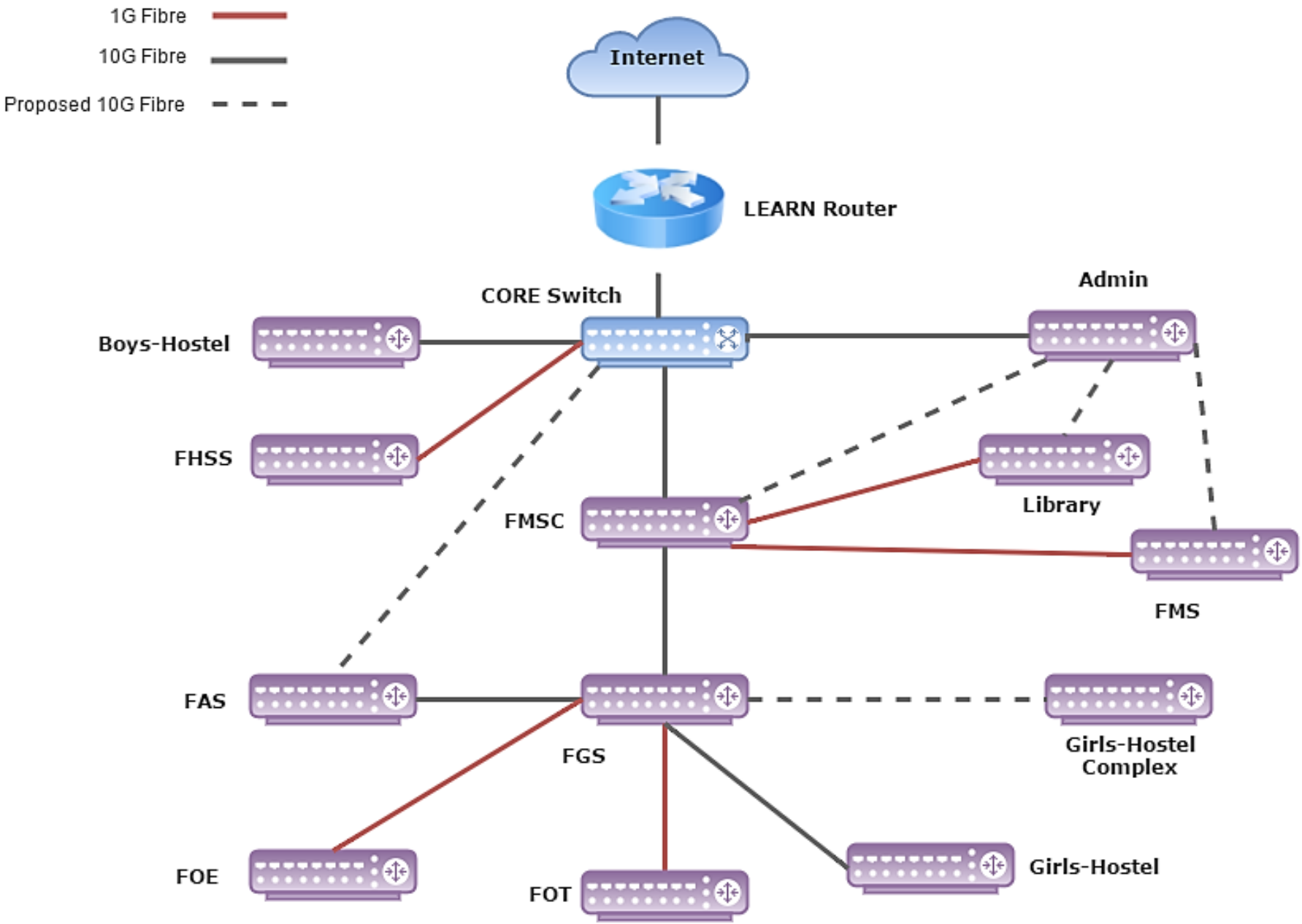
2012: Internet bandwidth: 30 Mbps and Local bandwidth: 100Mbps

2013: Internet bandwidth: 160 Mbps and Local bandwidth: 200Mbps

2015: Internet bandwidth: 525 Mbps and Local bandwidth: 700Mbps

NETWORK TOPOLOGY

- Our network structure consists of both ring and star topologies.
- All the nodes are Layer 2 (L2) and Layer 3 (L3) switches.
- 10Gbps single mode fiber cable connection and 10Gbps multi mode fiber cable connection are used in the network.
- 1Gbps multi mode fiber channel is used as back up.



University of Sri Jayewardenepura Network Architecture (in brief)

NETWORK SERVICES

- Maintaining sjp.ac.lk domain
- Handling web services
- Designing, developing, monitoring and controlling the whole internal network system of USJP
- Provide IPV6 connectivity up to end user who are using centralized Wi-Fi facility
- Managing IP Cameras
- Maintaining VOIP (IP PBX) System
- Managing Wi-Fi facility
- Providing online Help Desk service
- Monitoring university Network

NETWORK SERVICES

VOIP (IP PBX)

- We are operating this service for nearly eight years
- IP PBX is connected to analog PABX by an E1 link
- Currently around 200 sip phones have been installed within the university premises as well as mobile clients.

NETWORK SERVICES

IP PHONE (VOIP) SYSTEM

Current features of IP Phone system:

- Video conference call facility
- Call waiting
- Call Forwarding
- Call billing (on going)
- Direct Inward Dialing(DID)

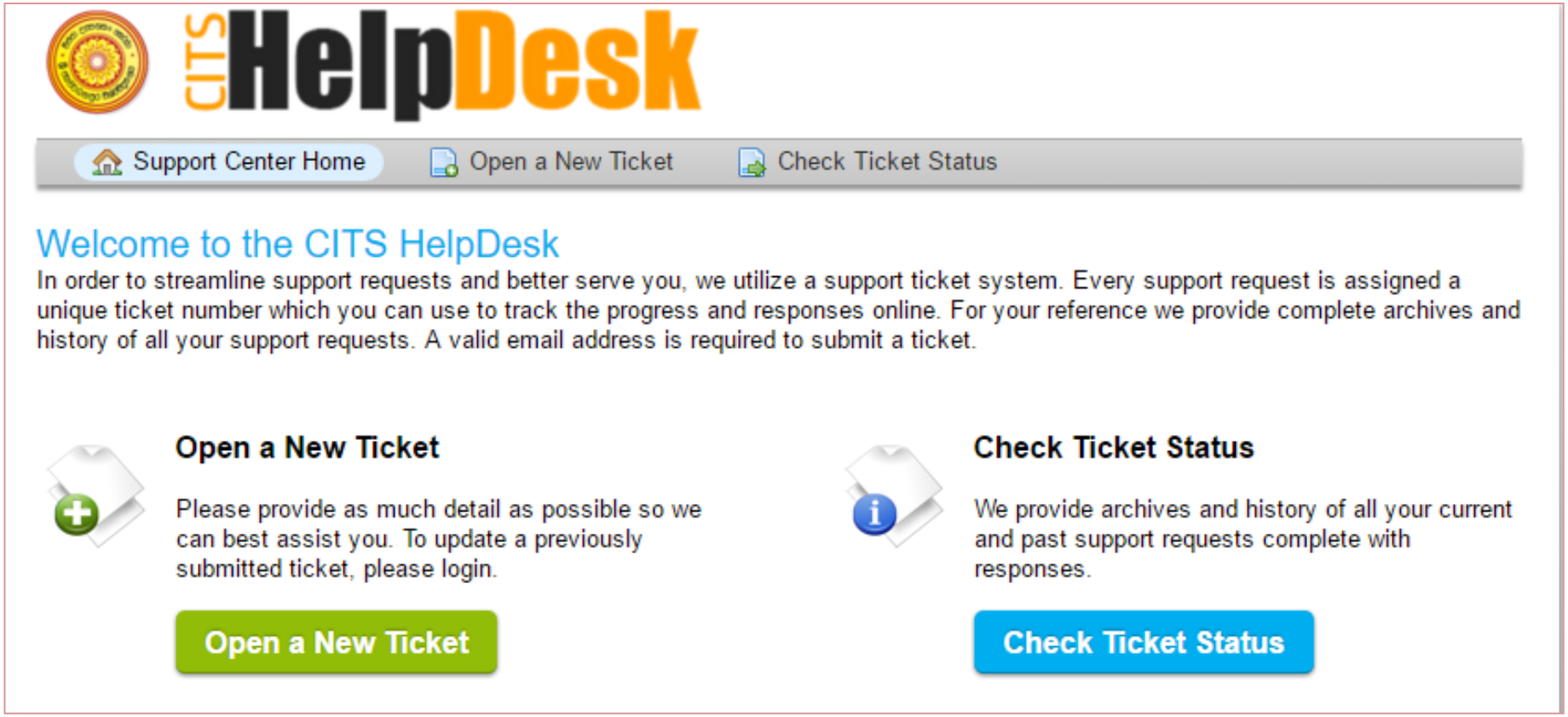
NETWORK SERVICES

WI-FI FACILITY

- Centralized control
- Centralized authentication using LDAP and RADIUS
- Operates in 2.4 GHz and 5 GHz to maximize available throughput
- Available in almost all the common areas of University of Sri Jayewardenepura
- Provide IPV6 connectivity up to the end user

NETWORK SERVICES

ONLINE HELP DESK SERVICE



OUR SUCCESSFUL STORY

Centralized Authentication

- University of Sri Jayewardenepura did not have a centralized database of student and staff suitable for any authentication control.
- Centre for IT Services (CITS) decided to establish a centralized authentication scheme to fill the gap.
- Now we are running both RADIUS and LDAP services.
- For many years we ran the system with open Wi-Fi access points and today most of the Wi-Fi access points are protected with passwords powered by centralized authentication scheme.

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Wi-Fi User Registration

Please Read Before Continue

User Should Activate the Account Before Using Wi-Fi

You can use below informations to log in to the system for the first time, then enter your new password to activate the account

After the password Reset Process is Completed

Employee number or student ID will be your username and new password will be used as the Wi-Fi passwod

User Name:	**Staff Members**	Use your Employee Number
	Contract basis staff and trainees	Fill This Form and Handover to CITS
	MGT Students	Reg.No.(Eg- MC19991)
	FHSS Students	Reg.No.(Eg- AR19991)
	Medical Students	Full Reg.No. Without dots and slashes(Eg- FMSR9999 FMSHB999 BMLS999 BScN999 FMSP999)
	Science Students	Visit science.sjp.ac.lk
	Phd Students	Reg.No.(Eg- 0123FM20139999)
Password:	NIC Number (Eg-123456789V)	

To Activate Account Click Here.

FUTURE OUTLOOK

- Restructuring internal fiber network in a more rational manner to meet the future bandwidth and network reliability.
- Deploying local cloud server to meet all current and future server storage and backup requirement - (Almost completed).
- IPV6 connectivity for every user.
- Implement Single sign on service.

THANK YOU