

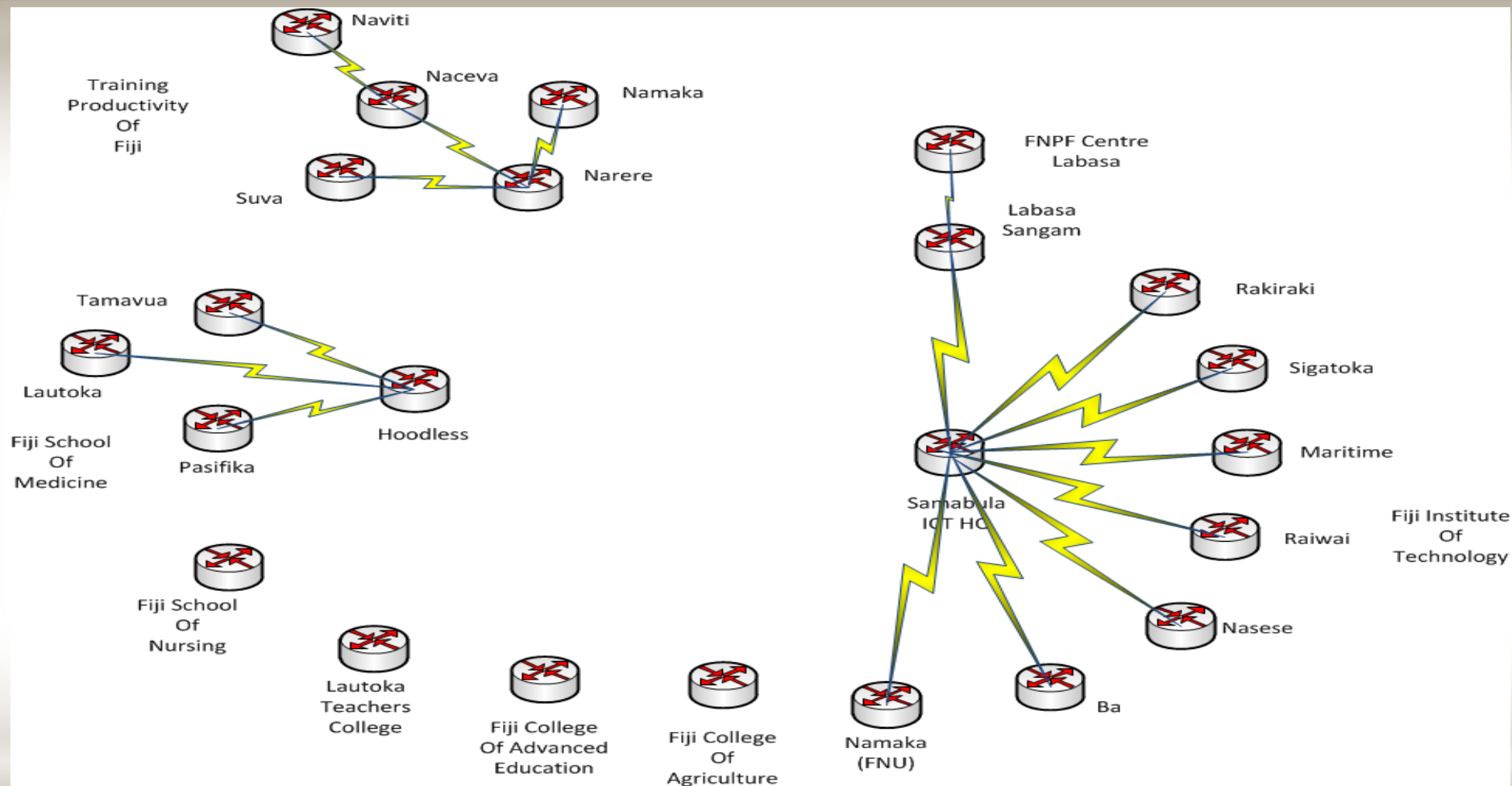
Challenges with Campus Network (FNU)

**PacNOG 11th Educational
Workshop & Training
for IP/ISP Network Operators**

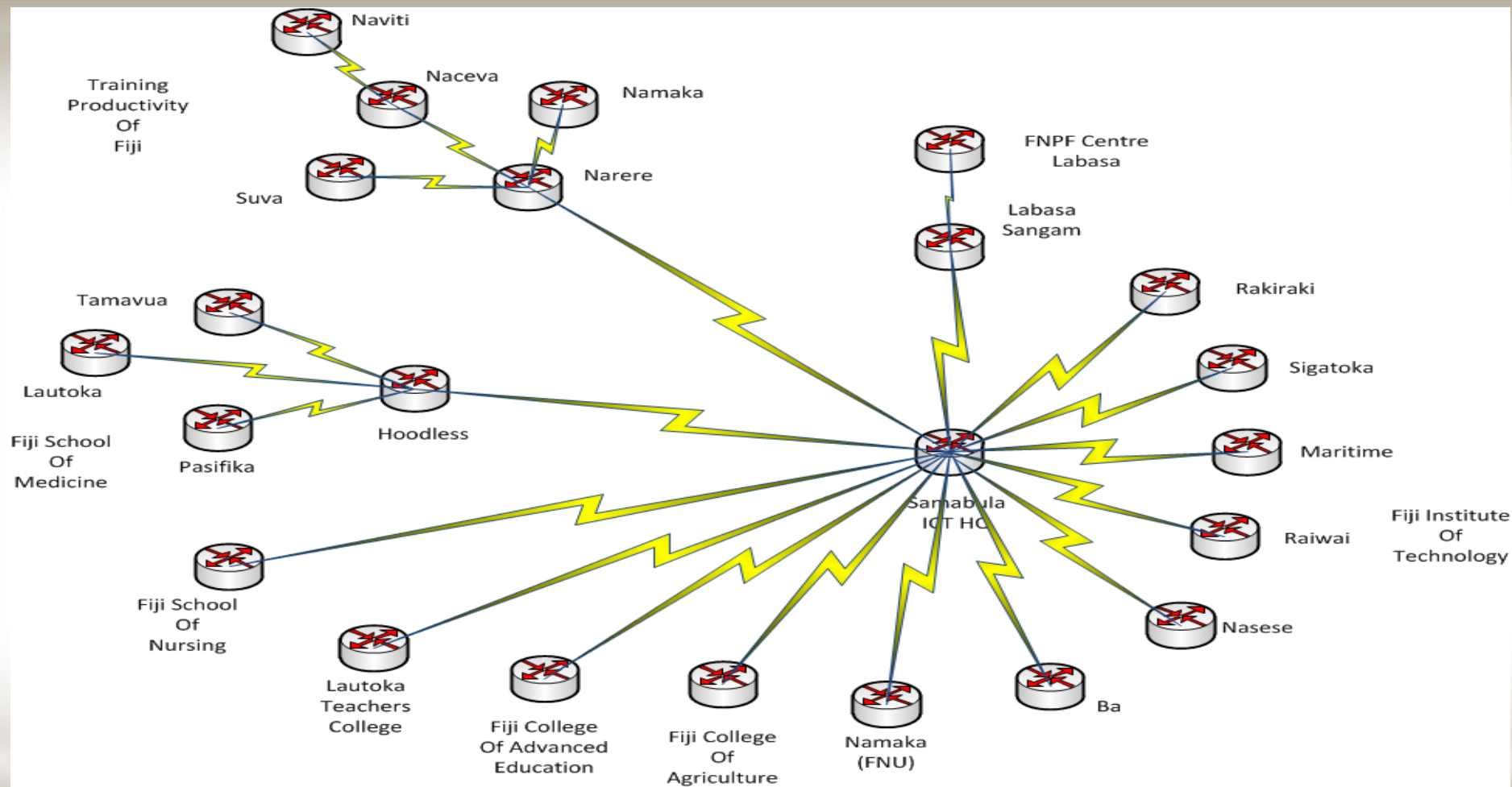
A little background on FNU

- FNU – Fiji National University is the largest university in the South Pacific, formed in 2010 with the merger of Fiji's 7 Major institutions.
- The University comprises of 5 colleges namely College of Engineering Science & Technology, College of Agriculture Forestry & Fisheries, College of Business, Hospitality & Tourism, College of Humanities & Education and College of Medicine, Nursing & Health Science.
- We have a total of around 30,000 students with approximately 2,500 staffs that are the users of FNU network.
- Campuses are located all over Viti Levu and Vanua Levu therefore a total of 24 sites (Campuses).

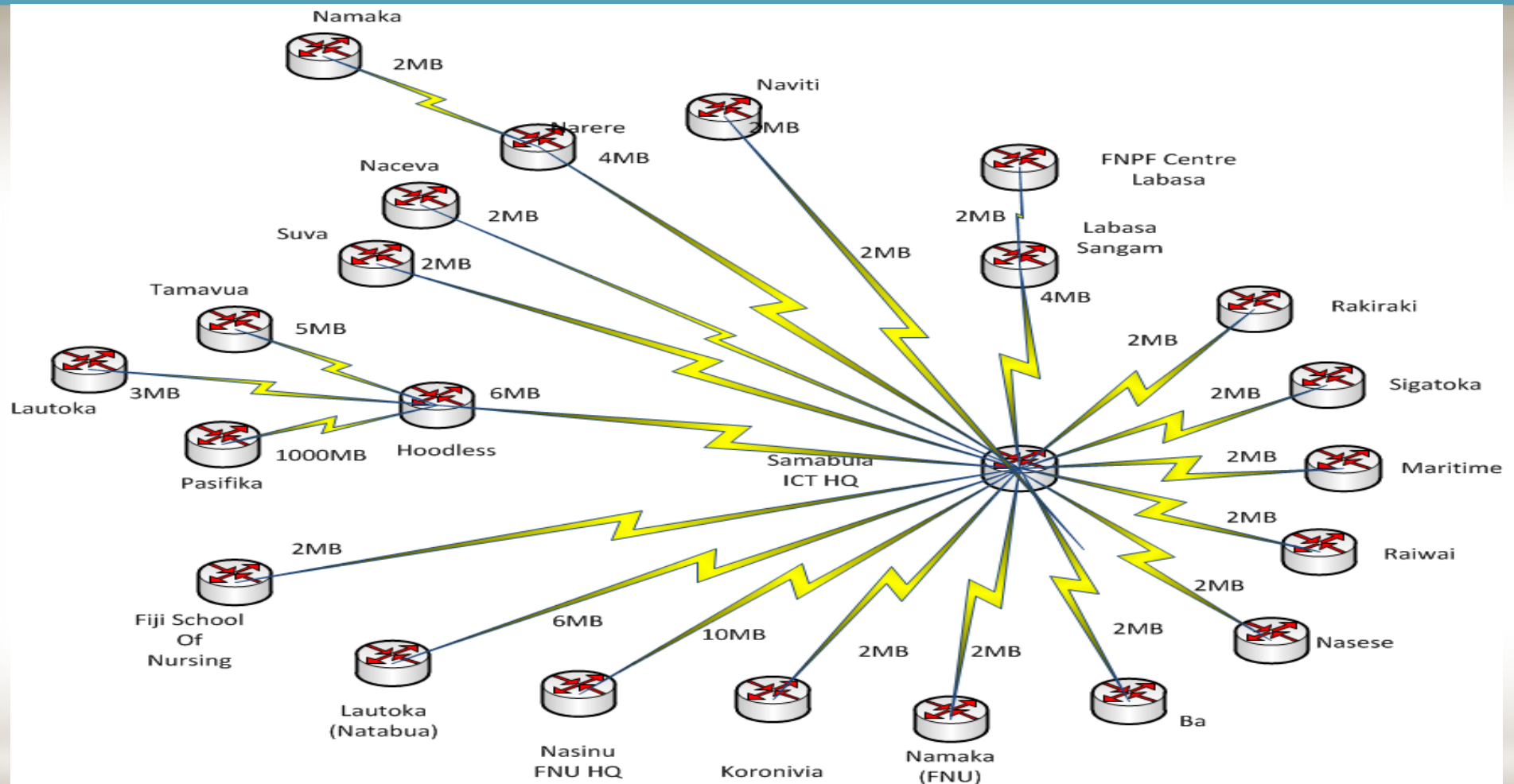
Various Institute Networks



FNU's Network after Merger



FNU's Current Network



How to Manage?



Challenges with Current Network

Managing and Maintaining



FNU Network

Managing and Maintaining

Monitoring

- Bandwidth Usage
- Link contention
- Quality of Service
- Application performance

Trouble Shooting Network Issues

- Cable Loop
- Limited Connectivity

Implementation & Maintenance

- Implement / Upgrade Hardware
- Firmware upgrade
- Bandwidth Upgrade

Challenges with Current Network

Cont'd

Managing and Maintaining



Security



FNU Network

Security

Firewall Upgrade (Policy and Software)

- New patches and fixes
- New features
- Stability
- ACL

Filtering (Web & Email for spam)

- Avoiding Bandwidth Flooding

Update Domain Policy

- Flash drives
- User rights

Proxy Anonymizers

- TOR Browser
- UltraSurf

Challenges with Current Network

Managing and Maintaining



Security



FNU Network



Network Application

Network Based Applications

Performance

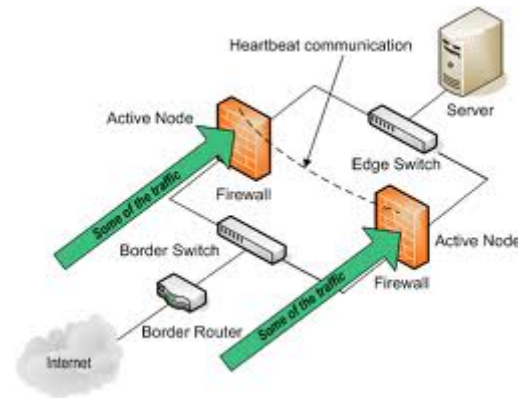
- Requests from different sites
- Resource Contention
- Multiple Application
- Demand for growth



Future Upgrades

Firewall Redundancy

DR Setup



A little about ME

- I am Amit Krishneel Prasad and I am the Principal Network Administrator for FNU.
- My work experience in the IT field ranges from being a cable guy to PABX Guy, Network Support Technician to Network Administrator and now Principal Network Admin for FNU.
- I have gained wide range of expertise in IT field (Bits & Pieces). I have hands on knowledge in windows platforms (Windows 2003, 2008), Email Platform (Exchange 2003, 2010), Security (ISA 2006, TMG (Forefront), LDAP (MS-AD), DNS, Networking – Routing, Switching & Cabling)
- My Academic Qualification aren't that colorful but I have the following: MCP, MCSA, MCTS, VCP, CCNA and a Diploma in Electronics

Thank You for Being Patient!!!

