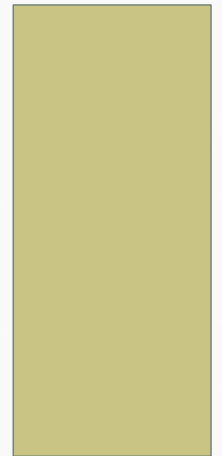


FIJI-INTERNET EXCHANGE POINT (IXP)



INTRODUCTION

- Talks were happening for a long time to setup an internet exchange point (IXP) for Fiji, it was not progressing thus the Regulator TAF (Telecommunications Authority of Fiji) had to step in to setup Fiji-IX.
- Fiji-IX was setup in November 2017.

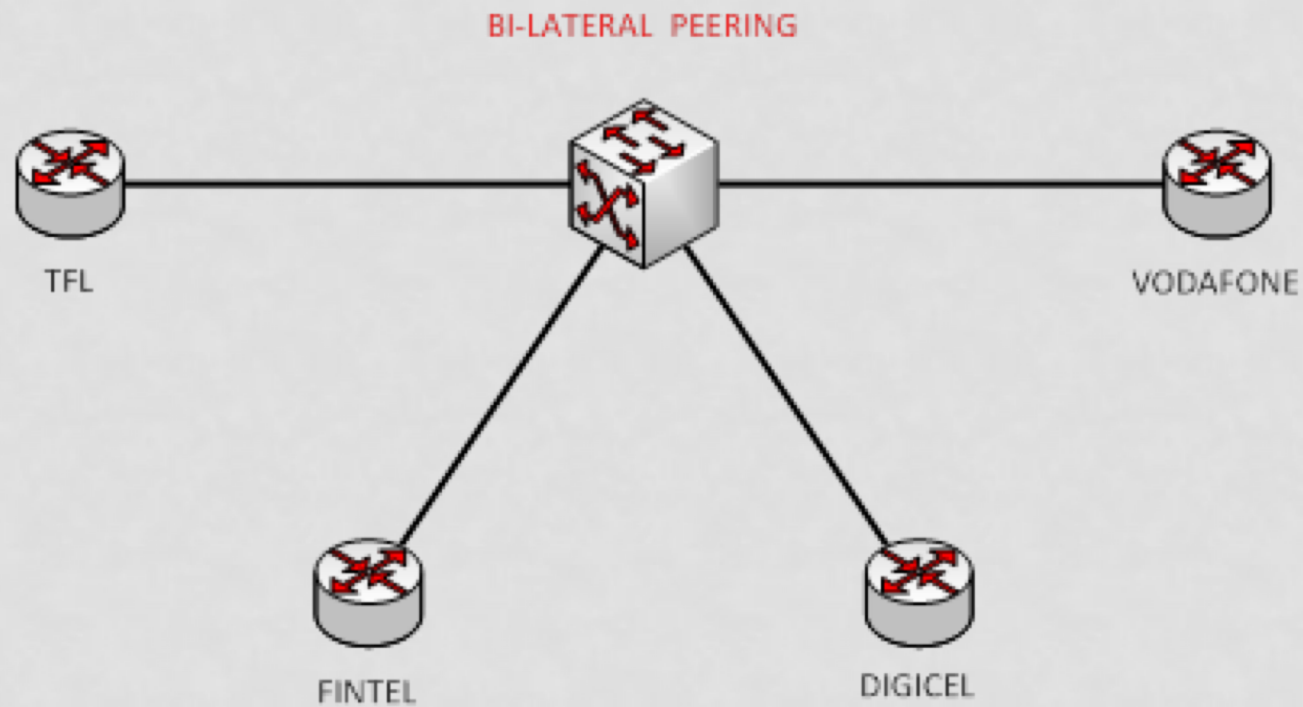
CONTINUE

- During the initial setup we had limited resources available thus the first phase of setup was to use a single switch and private address.
- Mode of operation – Non to Profit. Operational cost for IXP is equally divided amongst all the members.
- Management of Fiji-IXP – IXP Steering committee is setup that consist of 2 members from each operator (technical & Commercial)

PHASE 1 - SETUP

- Phase 1 – to connect all major ISP operators In Fiji (Vodafone, Digicel, Telecom Fiji, Fintel)

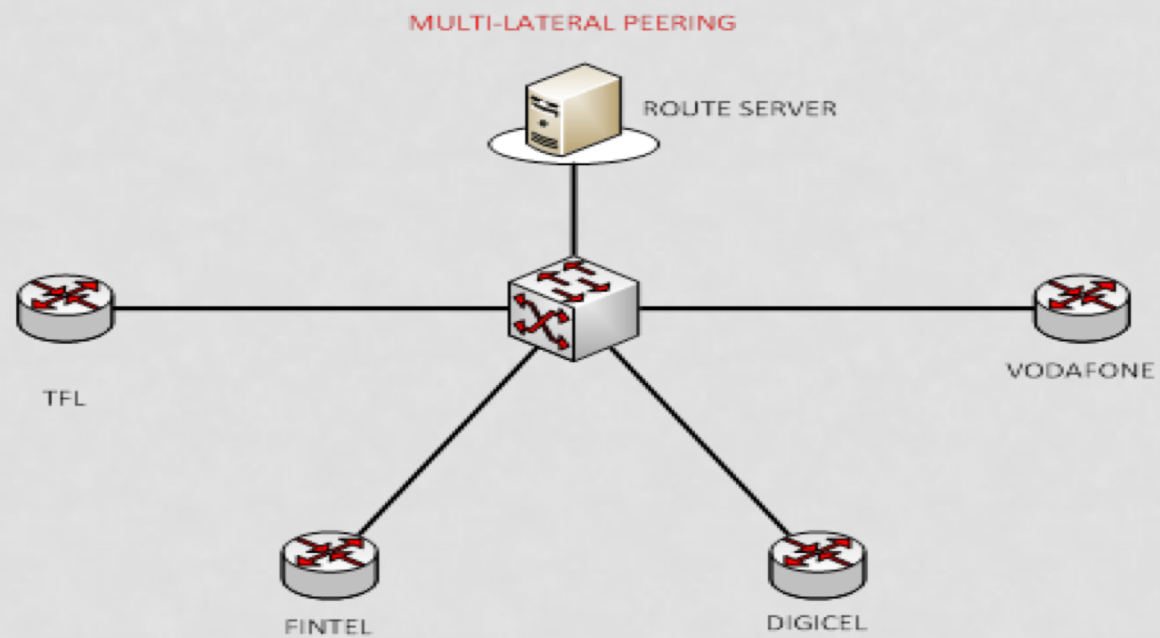
NETWORK LAYOUT DIAGRAM



PHASE 2

- To get public IP address & AS Numbers from APNIC
- To get a Route Server
- To get a backup Switch

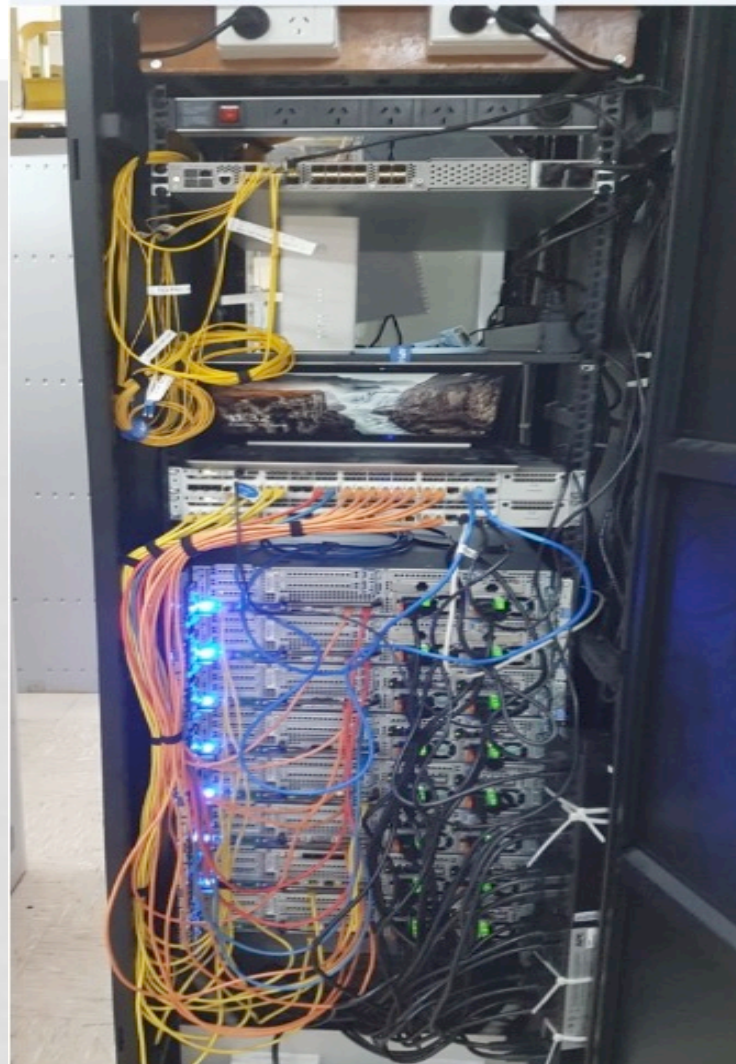
CONTINUE



NEW MEMBERS

- Phase 1 - Consists of four major ISP operators in Fiji (Vodafone, Digicel , Telecom ,Fintel)
- New member joined in June 2018 was USP (University of the South Pacific) and WALESI (CND Provider - providing IP TV via Mobile app & WALESI website (WALESI App to be launched soon)

IXP RACK



CURRENT TRAFFIC

- Current traffic for all operators – around 638 Mbits

OPERATORS COMMENTS

- The latency to reach other operators was minimum of around 60ms, as the nearest point of exchange between VFL and Digicel, for example, was in Australia (or 120ms+ if the exchange was happening in US). After the Fiji IX deployment, we can reach out to their IPs within 2ms.
- **Ravikash Chandra, Technical Support Manager – Data Network and Services, Vodafone**

CONTINUE

- The average latency has greatly improved averaging around 20ms from Fintel to the other providers. Before it used to be far more than this so we can say connectivity has improved a lot.
- **Laisiasa Momo, Manager Network & Technology, Fintel**

CONTINUE

- We have seen traffic spike up to 100 Mbps over the past month and this is saving us bandwidth and any upgrade costs on our upstream circuit. The IXP allows Digicel to venture into more locally targeted services.
- **Tomu Lawaniyasan, IP Manager, Digicel Fiji**

CONTINUE

- The Fiji IXP has not only improved network performance, it has also improved communication and collaborative efforts between network operators. This collaboration will greatly impact the future enhancement of Fiji's Internet to be more open and secure.
- **Navitalai Taka, Team Leader IP/MPLS & ISP, Telecom Fiji Limited**

FIJI-IX - FUTURE

- Register a Company to manage the Fiji IXP - ongoing
- Connect new members FNU (Fiji National University) and Aarnet
- Currently working on with some CDN Providers to connect to the IXP (facebook, Google cache etc)



Thank You

Prepared by: Gyanen kumar - Telecommunications Authority of Fiji