Agenda

- Overview of the network

- Services we provide

- Challenges

- Solution & Best Practices

TTC Network

- Main Island - Funafuti
  - Gateway – 2 satellite providers
    - Speedcast
    - ABS
  - Core Network
    - 2 boarder routers
    - 2 core switches configured with the same VLANs for redundancy
      - Switch1 – handles ABS Internet link
      - Switch2 – handles Speedcast internet link & voice traffic
      - Trunk connection between the two core switches
- Access Switches
  - Configured for autosensing speed and duplex
  - Some ports are manually configured to particular speed and duplex

TTC Network

- Outer Islands

  - VSATs for all islands
    - Shared bandwidth – low
      - Internet Café' setup
    - All outer islands voice traffic are processed at the HUB

  - Wifi Connectivity
    - 3 Islands already installed
    - 4 islands remaining

Services we provide

- Fixed telephone line
  - Main island – Funafuti
    - PSTN
  - Outer Islands
    - VSATs – with Line Expanders
- 3G Network – main island only
  - Voice – local and international
  - Data
- 4G LTE Network
  - VoLTE
  - Data - LTE

- WiFi
  - Main Island – Funafuti
  - 3 Outer Islands
- xDSL
  - ADSL – residential customers
  - VDSL – corporate customers
- TV Installation
  - SkyPacific

Challenges

- Main Island – Funafuti
  - Wifi Coverage
  - Compatibility issue - 4G/VoLTE devices
  - Cost of satellite bandwidth
  - 2 billing systems running separately
    - 4G LTE/VoLTE – automated billing systems
    - Local voice traffic and 3G – separate billing system

- Outer Islands
  - Low bandwidth & speed connectivity
  - Equipment maintenances /replacement
  - Quality of the copper network

Solution and best practices

- Integrating 3G network to the existing 4G Core network
    - CsFB – Call switch fallback
    - Unified billing system

- Installation of a second tower – load balancing

- WiFi deployment to the remaining islands
    - Improve coverage and improve internet connectivity

- Deployment of the 3G mobile network in the outer islands
    - Avoiding costly maintenance/replacement for the copper network
    - More customers will be connecting to the network

- Fiber connection in the main island

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Komol tata!

Thank You!