

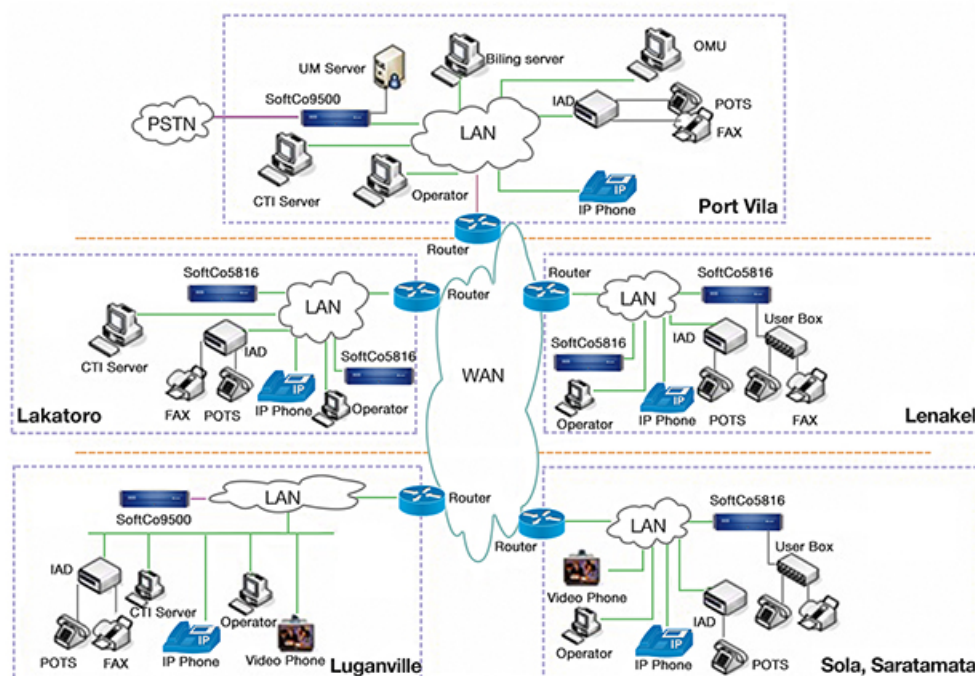
Vanuatu Government VOIP



The current Vanuatu Government VoIP system was installed as part of eGov network project now known as Government Broadband Network (GBN). This VoIP system is a Huawei IP phone system replacing the isolated traditional PABX office telephone system. The Phone migration has been done on second quarter of 2011. This VoIP system provides both voice and Video call. The migration of Government offices telephon started in It is one of the critical network applications for providing communication to Government users. It increases flexibility and cost advantages of placing connected government office call traffic local over GBN. Also increase effectiveness of administrating and managing both Voice and data on a single network.

The SIP VoIP systems has several phone switch installed on GBN main data centres namely Port Vial GDC, Santo DC, Malakula DC, Tanna DC, Ambae DC, Banks DC. VoIP users under each DC (Data Center) subscriber to their phone switch commonly known as SoftCo. VoIP call to outside network particularly the two telecom operators namely TVL and Digicel are via Port Vila SoftCo (Core Phone Switch or gateway), which acts as the main gateway to outside network namely PSTN (Public Switch Telephone Network).

Refer to diagram below to visualize VoIP network.



The VoIP connection to PSTN is using E1 trunk links via fiber channel physical layer. It has 4 E1 trunk connections to TVL and 2 E1 trunk connections to Digicel. The internal VoIP network is basically over GBN IP network.

There are two major Phone switch models which are Huawei SoftCo 9500 and SoftCo 5816 installed that working collaborating to provide the VoIP services. This Phone Switches are installed inside Government rack data centers. There is two VoIP billing called BMU (Billing Management Unit) has been installed to track call details, one BMU for Port Vila and the other for all outer islands.

The security aspect of this VoIP system implies on the SoftCo. Physical security is only through data centres, while login access is only for VoIP administrators through their system accounts.

VoIP calls within Government offices regardless of its location are free of charge, for example a call from a Tanna Office VoIP to a Santo Government office VoIP it will be at zero cost. However Cost to other network operators such as Digicel mobile, TVL mobile or landline or international number will be charged by telecom operators. With this VoIP connection flexibility, Government offices have the choose whether to use either Digicel or TVL for their outside calls, it offers a competitive connection to Digicel and TVL therefore have reduced the call rates.

The Government VoIP has a structured numbering plan both for internal subscribers and PSTN via digicel. Internal numbering plan uses 4 digit number plan; Port Vila (Shefa) has range from 1000 – 5899, Luganville (Sanma) has 5900 – 7399, Lakatoro (Malampa) has 7499 – 8199, Tanna (Tafea) has 8200 – 8999, Sola (Torba) has 9000 – 9499, Saratamata (Penama) uses 9500 – 9999. The PSTN numbering via the TVL and Digicel are 5 digit numbers. TVL allocates its own numbers to Government offices connecting that are connecting to TVL. Government offices connecting via Digicel uses 33xxx number range which the VoIP system administrators manage on behave of Digicel.

The current Huawei VoIP system is going out of date and expensive in terms of hardware maintenance, therefore OGCIO is working to replace it with a better VoIP system that is more robust, more featured, economically.

Contact information

Office of the Government Chief Information Officer (OGCIO)
Prime Minister's Office, Government of the Republic of Vanuatu
PMB 9053, Port Vila, Vanuatu, SW Pacific
VoIP extention: 1135 | Tel: (+678) 33380
ogcio@vanuatu.gov.vu | helpdesk@vanuatu.gov.vu
<http://ogcio.gov.vu>

