Routing Workshop

Event: PacNOG 22

Date: 26-29 June 2018

Venue: Heritage Park Hotel, Honiara Solomon Is

Level - Basic to Advanced

Synopsis

This technical workshop is made up of lectures and hands-on lab exercise to teach basic routing concept, classifications of different routing protocols, Internet routing architecture, Basic network infrastructure design principles, OSPF, BGP etc. Also presented for understanding and to encourage best practice.

The course also includes considerable practical work based on IPv4 as well as IPv6 and Cisco IOS router configuration commands.

Target audience

Entry and/or mid level technical staff of ISP, network operators or enterprise, who are involved in day-to-day network operation function.

Prerequisites

It is assumed that participants have a basic understanding of network operations, Internet technologies, OSI reference model, TCP/IP and router operating system software (i.e Cisco IOS etc).

Workshop Topics

- Introduction to IP Routing
- Routing Protocol Basic
- IPv6 Address Structure
- Routing Lab Topology Overview
- Operation of OSPF Routing Protocol
- Lab Exercise on Basic Router and OSPF Dynamic Routing Configuration

- Basic BGP Operation
- BGP Attributes and Path Selection Process
- BGP Scaling Techniques
- Lab Exercise on iBGP, eBGP, RR, Peer group etc
- Internet Exchange [IX] Policy Overview and Configuration requirement

Other requirements

Participants are advised to bring their own laptop computers with high-speed Wi-Fi (802.11a/g/n/ac) and administrative access to system. It is also recommended that laptops have Intel i5 or i7 processor, >=8GB of RAM and 30GB of free hard disk space.

Instructor

Mark Prior (APNIC)