



Advanced Routing Workshop (IPv4 & IPv6)

AfNOG 2012

Serrekunda, The Gambia

7th to 11th May, 2012



House Rules

- Have fun!
- Ask questions
- No Skype, IM, Facebook, Twitter or other social media
- Mobile phones OFF or on SILENT
 - And if you must take calls, please do so OUTSIDE the room
- Please be back on time after breaks

AR-E



- Meeting your Instructors:
 - Mark Tinka (Track Leader – in absentia)
 - Philip Smith
 - John Gitau
- Meeting the Participants



Agenda – Monday

09:00 Introductions, Objectives

09:30 Presentations

“Internet Introduction”, “Routing Basics”,
“Introduction to OSPF”, “OSPF for ISPs”

12:00 Lab 1 – Basic OSPF

13:00 Break for Lunch

14:00 Presentation

“Introduction to BGP”

15:00 Lab 2 – Basic iBGP

17:00 Presentation

“Introduction to IPv6”

18:30 Dinner

20:00 Evening Session - TACACS

(breaks for tea/coffee at 10:30 and 16:00)



Agenda – Tuesday

09:00 Presentations

“IPv6 Standards and Protocols”, “IPv6 Addressing & Routing”
“OSPFv3 & BGP for IPv6”

13:00 Break for lunch

14:00 Lab 3 & 4 – OSPFv3 and iBGP

15:00 Presentations

“Introduction to ISIS”, “ISIS for ISPs”
“OSPF to ISIS Migration”

17:30 Lab 5 – OSPF to ISIS migration

18:30 Dinner

20:00 Evening Session

“Comparing OSPF and ISIS”

(breaks for tea/coffee at 10:30 and 16:00)



Agenda – Wednesday

09:00 Presentation

“BGP Attributes”, “BGP Policy Control”

“BGP Scaling Techniques”

13:00 Break for lunch

14:00 Lab 6 & 7 – Route Reflector

IPv4 and IPv6 labs

15:00 Lab 8 – iBGP and eBGP (IPv4)

16:30 Presentation

“BGP Best Practices”

18:30 Dinner

20:00 Evening Session

“4-byte ASNs”

(breaks for tea/coffee at 10:30 and 16:00)



Agenda – Thursday

09:00 Presentation

“ISP Network Design”

11:00 Lab 9 – iBGP and eBGP (IPv6)

13:00 Break for lunch

14:00 Lab 10 – Route Filtering

16:30 Presentations

“BGP Multihoming – Part 1”, “The Value of Peering”

18:30 Dinner

20:00 Free Evening

(breaks for tea/coffee at 10:30 and 16:00)



Agenda – Friday

09:00 Presentation

“BGP Multihoming – Part 2”

11:00 Lab 11 – Multihoming Strategies

13:00 Break for lunch

14:00 Lab 11 (continued)

16:30 Presentation

“IPv6 Deployment Case Study”

18:00 Extra Topics:

Configuring Dynamips,...

18:30 End of Workshop

18:45 Workshop Dinner & Certificate Ceremony

(breaks for tea/coffee at 10:30 and 16:00)