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The workshop materials are based on the content of the extremely successful Cisco ISP/IXP Workshop programme which ran from 1997 until 2011. While the programme is sadly no longer active within Cisco, many industry friends and volunteers still use and develop the materials for use in workshops taking place in the Network Operations Group fora and other gatherings around the world.

If you like the materials, and want to make derivative works, Philip is happy for you to do that. Just please acknowledge Philip, Cisco, and the Network Startup Resource Center, without whom this collection of training materials would simply not be available.

 materials, these would be most welcome, with full acknowledgements, of course.

 Category
 Presentation
 Notes

 Internet Introduction
 Introductory slideset

 Routing Introduction
 How routing works

 OSPE Introduction
 25 slide primer on OSPE

If you have any suggestions for improvements, or any contributions you'd like to make to the

Routing	Internet Introduction	Introductory slideset
	Routing Introduction	How routing works
	OSPF Introduction	25 slide primer on OSPF
	OSPF for ISPs	A lot more detail about OSPF
	OSPF in detail	Out dated now
	ISIS Introduction	25 slide primer on IS-IS
	ISIS for ISPs	A lot more detail about IS-IS
	ISIS in detail	Out date now
	Comparing ISIS with OSPF	Valuable comparison between the two protocols
	Migration from OSPF to ISIS	The simple steps to move from one to the other
BGP	BGP Introduction	
	Scaling BGP	
	32bit AS Numbers	
	BGP Attributes	
	BGP Policy	
	BGP Best Current Practices	
	Transitioning to BGP	
	Simple Multihoming	
	Advanced Multihoming	
	BGP Communities	

Category	Presentation	Notes	
IPv6	IPv6 Introduction		
	The IPv6 Protocol		
	IPv6 Address Planning		
	IPv6 Address Planning Exercise		
	IPv6 Routing		
	Introduction to OSPFv3		
	ISIS for IPv6		
	BGP for IPv6		
	IPv6 Transition Planning		
	Securing IPv6 Transition Mechanisms		
	IPv6 Deployment Study		
	IPv6 Deployment Planning		
	IPv6 Security		
	IPv6 Device Hardening		
	IPv6 Routing Security		
	The Value of Peering		
	ISP Network Design		
	ISP Systems Design		
Design	IXP Design		
	LINX History		
	Network Monitoring		
	Choosing Routers		
Security	Remotely Triggered Blackhole Filtering		
Category	Lab Modules		Notes
	Workshop Setup		
	Introducing ISIS or Introducing OSPF		
	Introducing iBGP		
	OSPF Areas		
	BGP Route Reflector		
	Cisco IOS Essentials		
	Policy Routing		
	ISIS, iBGP & eBGP or OSPF, iBGP & eBGP		
IPv4	ISIS, iBGP & eBGP from scratch		For IXP Workshop
	BGP Route Filtering		
	BGP Policy		
	BGP Best Practices		
	Simple IXP		
	Advanced ISIS & iBGP or Advanced OSPF	F & iBGP	
	Multi-AS (ISIS) & Advanced IXP or Multi-A	AS (OSPF) & Advanced IXP	
	Address Plan for single AS lab		
	Address Plan for 4 AS lab		

Category	Lab Modules	Notes
	Workshop Setup	
	Introducing ISIS or Introducing OSPFv3	
	Introducing iBGP	
	OSPF Areas	
	BGP Route Reflectors	
	Migrating from OSPF to ISIS	
	Migrating Dual Stack OSPF to ISIS	
	ISIS, iBGP & eBGP or OSPFv3, iBGP & eBGP	
IPv6	ISIS, iBGP & eBGP from scratch	for IXP Workshop
	BGP Route Filtering	
	BGP Policy	
	IPv6 Access	
	Simple IXP	
	Advanced ISIS & iBGP or Advanced OSPFv3 & iBGP	
	Multi-AS (ISIS) & Advanced IXP or Multi-AS (OSPF) & Advanced IXP	
	Address Plan for single AS Labs	
	Address Plan for 4 AS Labs	

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