

Workshop Development Notes

Needs to cover: * setting up IS-IS

- NSAP address plan
- · setting metrics, level-2, wide metrics
- selecting DIS
- multi-topology
- point-to-point ethernets
- Notes:
 - all done in existing IS-IS Lab
- * securing IS-IS (with OSPF side example)
 - neighbour authentication
 - no IS-IS outside ASN
 - Notes:
 - all done in existing IS-IS Lab
 - need to add OSPF footnote example
- * setting up BGP securely
 - RFC8212 filters in and out on eBGP
 - passwords on eBGP and iBGP sessions
 - RIR checks on assigned address space of customers jwhois
 - RFC6890 filtering of bogons & Team Cymru bogon BGP feed
 - Notes:
 - 8212 needs to be explicitly mentioned in eBGP lab
 - the rest all covered in BGP Best Practices slide deck
- * BGP scalability & stability features
 - iBGP between loopbacks & next-hop-self
 - · route reflector
 - deterministic-med
 - BGP distance > IGP distance
 - stable announcement of covering aggregates out of all eBGP peers
 - Notes:
 - All done in existing BGP materials & labs
- * BGP security features
 - maxas-limit
 - max-prefix
 - ttl-security aka GTSM

- community propagated for iBGP by default, eBGP selective
- strip private ASNs
- Notes:
 - Needs a new lab "Securing BGP Lab"
- * Setting up Communities for BGP scaling
 - security feature → consistent policies across the ASN
- * Control plane security
 - setting up SSH on routers
 - protecting VTYs with access filters
- * uRPF
 - show how to set up
- * RTBH
 - set up within an AS
 - set up between ASNs
 - need to have done communities for this
- * BGP SEC
 - Creating ROAs (RIR dependent, but explain the process)
 - Installing and operating NLnet Labs Routinator
 - need containers on VTP for this
 - Setting up RPKI support on a router
 - Implementing route origin validation & related policies
 - Need address space that has been validated APNIC offered their blocks, but longer term we should have our own.
 - propagating validation state across iBGP
 - standards which vendors aren't supporting, or DIY?
- * Troubleshooting BGP Security Operations
 - RouteViews: for analysis, monitoring, troubleshooting
 - Looking Glasses supporting ROA/ROV
 - SEACOM
 - ∘ HE BGP Tool: bgp.he.net
 - RIPE NCC: bgpplay
- * MANRS
 - · conclude with summary of MANRS and what it is about

Back to Home page

From:

https://mail.bgp4all.com/pfs/ - Philip Smith's Internet Development Site

Permanent link:

https://mail.bgp4all.com/pfs/training/riso/development?rev=1562240268

Last update: 2019/07/04 11:37

