

1. Record Nr.	UNINA9910812504803321
Autore	Alcatel-Lucent
Titolo	Versatile Routing and Services with BGP : Understanding and Implementing BGP in SR-OS
Pubbl/distr/stampa	Hoboken, : Wiley, 2014
ISBN	1-118-87521-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (362 p.)
Altri autori (Persone)	BookhamColin
Disciplina	004.6
Soggetti	BGP (Computer network protocol) Computer network protocols Internet Electrical & Computer Engineering Engineering & Applied Sciences Telecommunications
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Cover; Title Page; Copyright; Contents; Chapter 1 Getting Started; Session Negotiation and Capabilities; UPDATE Messages; NOTIFICATION Messages; Multi-Protocol BGP; Chapter 2 BGP/MPLS IP-VPN; Basic Configuration; Prefix Dissemination; Automatic Route Filtering; Route Refresh; Outbound Route Filtering; Soft Reconfiguration; Route Target Constraint; Extensions for IPv6 VPN (6VPE); Core Requirements; PE to CE BGP Peering; Multi-AS Backbones (Inter-AS); Chapter 3 Using BGP in VPLS; BGP Auto-Discovery with LDP Signaling; BGP Auto-Discovery and Signaling; BGP Multi-Homing Chapter 4 BGP Signaling for VPWSBGP VPWS; Single-Homed VPWS; Multi-Homed VPWS; Dynamic Multi-Segment Pseudowire; Chapter 5 Labeled Unicast IPv4; Seamless MPLS; Transport Layer; Service Layer; Inter-AS Type C; Carriers' Carrier; Notes; Chapter 6 Reconvergence; Advertisement of Multiple Paths; Best External; Next-Hop Tracking; Prefix Independent Convergence (PIC); Core PIC; Edge PIC; Minimum Route Advertisement Interval; BGP Anycast; Chapter 7 Multicast; Inter-Domain IPv4-IPv6 PIM; Multicast in MPLS/BGP IP-VPNs; Draft-Rosen; Multicast VPN; Chapter 8 Graceful Restart and Error Handling

Graceful Restart Mechanism; Error Handling; Chapter 9 Security; FlowSpec; Attack Mitigation with Blackhole Action; Attack Mitigation with Redirect to VRF Action; Remote Triggered Blackholing; Generalized TTL Security Mechanism; Auto-Generation of Filters for BGP Peers; Chapter 10 General Applicability; IPv6 PE Router (6PE); Load-Balancing; IBGP-Multipath; Multipath; EIBGP Multipath; IGP Shortcuts; Split Horizon; Peer Groups; BGP in Residential Broadband Networks; QoS Policy Propagation Using BGP; Route Policy Framework; Basic Path Attribute Manipulation; Nested Policies (Next-Policy) Subroutines; Notes; Chapter 11 Looking Ahead; Ethernet VPN (EVPN); Ethernet Auto-Discovery Route; MAC Advertisement Route; Inclusive Multicast Ethernet Tag Route; Ethernet Segment Route; IP Prefix Advertisement Route; Multi-Homing Mode; Control-Plane-Only Route-Reflection; Virtual Route-Reflector; Optimal Route Reflection (ORR); Prefix Origin Validation; Link State Information Distribution Using BGP; Appendix A Path Selection Process; Best-Path Selection Algorithm; Always-Compare-MED; Deterministic MED; References and Glossary; Index

Sommario/riassunto

Design a robust BGP control plane within a secure, scalable network for smoother services. A robust Border Gateway Protocol setup is vital to ensuring reliable connectivity, an essential capability for any organization. The Internet has become a necessary, always-on service in homes and businesses, and BGP is the protocol that keeps communication flowing. But BGP also has become crucial to delivery of intra-domain business services. But the network is only as reliable as BGP, so service enablement depends upon making BGP more stable, reliable, and service-rich. Alcatel-Lucent Service
