

Contents

တစ်ခုချင်းအမှတ်စဉ်

ဆရာတို့အားဖြည့်စွမ်းအမှတ်စဉ်

Border Gateway Protocol (BGP)

What is BGP?

What Else is BGP?

What is BGP not?

IGP and BGP

Why use BGP?

Who Needs BGP?

When not to use BGP?

Planning and Internet Connectivity

BGP Data Structure

BGP Message Types

How BGP works?

BGP Peering Types

EBGP peerings

Establishing eBGP Peerings

IBGP peerings

Establishing iBGP Peerings

BGP Update Source Mismatch

BGP Peering Redundancy

BGP Peering State

Inter-AS Routing and ASNs	24
4 Bytes AS Numbers	25
Basic BGP Configuration	26
Basic BGP verification	27
Verify BGP peering	27
Example eBGP Configuration	27
Command ရှင်းလင်းချက်	30
iBGP Full Mesh Scalability	32
BGP Route Reflectors	33
Route Reflector Configuration	34
Route Reflector Split-Horizon Rules	38
Classic iBGP	39
iBGP Using Route Reflector	40
Redundant Route Reflector	40
Route Reflector Clusters	41
Hierarchical Route Reflector	52
BGP Confederation	54
Configuring BGP Confederation	56
<i>Sample Configuration</i>	57
Verification	59
Confederation Summary	60
BGP Peer Groups	60
Peer Group Summary	64
BGP Authentication	65

BGP Configuration Example	66
BGP NLRI Aggregation	66
BGP Aggregation Summary Only	69
Aggregation အတွက် မှတ်တမ်း	74
BGP Aggregation - Suppress Map	74
BGP Aggregation - Unsuppress Map	76
BGP Aggregation - AS SET	81
BGP Attribute Type	84
Next-hop Attribute	87
BGP AS-Path	91
Summary	92
BGP Origin	93
BGP Local Preference	94
Configuring Default Local Preference	96
Configuring Local Preference with Route-map	97
Summary	97
BGP Multi-Exit Discriminator (MED)	98
Summary	99
Cisco Weight Attribute	100
Summary	102
Configuring BGP	102
iBGP Configuration for AS 100	103
EBGP configuration Between AS 100 and 200	104

EBGP Multihop Configuration Between AS 100 and AS 300	104
Verification	106
Command ရှင်းလင်းချက်	107
BGP Route Selection Process	110
Manipulating BGP Bestpath Selection	111
Basic BGP Path Manipulation Using Route Map	112
Configuring Route Maps in BGP	113
BGP Best Path Selection with Weight	115
BGP Weight Exercise	118
Verification	119
BGP Best Path Selection with Local Preference	120
BGP Local Preference Exercise 1	122
Verification	123
BGP Local Preference Exercise 2	124
Verification	126
BGP Local Preference Exercise 3	129
Verification	131
BGP Patch Selection with AS-Path Prepending	133
AS Path Prepending Exercise	135
Verification	137
Summary	140
BGP Best Path Selection with Origin Code	141
BGP Origin Exercise	141

BGP Best Path Selection with MED (Multi-Exit Discriminator)	143
BGP MED Exercise 1	147
BGP MED Exercise 2	149
BGP Best Path Selection with Always Compare MED	153
BGP MED Exercise 3	155
Verification	156
BGP Backdoor	159
Back Door Exercise	161
BGP Conditional Advertisement	165
Exercise 1	166
Exercise 2	168
Exercise 3	168
BGP Community	169
Exercise BGP Community no-advertise	172
Command ရှင်းလင်းချက်	175
BGP Community no-export Exercise	176
Command ရှင်းလင်းချက်	177
BGP Community local-as Exercise	178
BGP Community Internet Exercise	179
BGP no-advertise Exercise 2	181
BGP Filtering	183
BGP Filtering With Prefix-Lists	184
BGP Filtering with Prefix-list exercise	189

BGP Filtering with Standard Access-Lists	191
BGP AS-Path Regular Expressions	193
AS Path Regular Expression	196
String Matching? Regular Expression	196
String Matching? Range and Wildcard Characters	197
Configuring BGP AS-Path Filters	199
BGP Filtering With Maximum Prefix	210
Configuring the BGP Maximum-Prefix Function	211
BGP Default Route	212
Verification	214
Local AS (BGP Hide Local-Autonomous System)	219
BGP Remove Private AS	222
Verification	224
BGP Convergence	225
BGP Advertisement Interval	227
Out Bound Route Filtering	228
ORF Configuration	229
BGP Filtering With Route-Map	235
BGP Filtering Using Route-Map	238
BGP Dampening	241
BGP Dampening Configuration	244
Summary	247
Load Sharing with eBGP Multihop	247

BGP Load Sharing Exercise 1	248
BGP Load Sharing Exercise 2	249
Verification	251
BGP Allow AS IN and AS Override	252
Allow AS IN Configuration	253
Verification	256
BGP Exercises	257
Exercise 1	257
Task	257
Solution	257
BGP Exercise 2	263
Task	264
Solution	264
Backdoor	270
Verification	270
Exercise 3	274
Tasks	274
Solution	276
Verification	279
Exercise 4	280
Task	280
Solution	281
Verification	282

Verification	283
--------------	-----