BGP BMP quick demo lab

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BMP introduction

- BMP(BGP monitoring protocol) is an sub-protocol inside BGP, you can think it looks like BGP AFI(address-family identifier), the reason that you want to use this, we want to visualize BGP database on WEBGUI, then we can check the BGP neighbor or routing-info. ## Workflow

BGP speaker--BGP speaker→BMP(generate MRT update)→BMP server->WEBGUI

```
 #bmp server https://github.com/SNAS/docker/blob/master/aio/README.md
https://www.snas.io/docs/#usecases https://github.com/SNAS
https://www.snas.io/docs/kafka_apis/##access server
http://localhost:8000
username:openbmp
password:CiscoRA
Openbmp server Mysql infoip address:localhost:3306
username:openbmppassword:openbmp
"sleep 3echo -e ${Green}"
link: mysql-workbench-download-link
https://dev.mysql.com/downloads/workbench/
sudo apt install ./home/hitler/Downloads/mysql-workbench-community_8.0.21-1ubuntu20.04
_amd64.deb
```

CISCO CSR1000V configurations

```
interface g1
 ip address 100.64.1.100 255.255.255.0
 no shutdown
interface loopback0
 description create-BGP-update
 ip address 1.1.1.1 255.255.255.255

router bgp 1
 bmp server 1
  address 100.64.1.20 port-number 5000
  description "BMP Server - I'm in docker"
  initial-delay 10
  failure-retry-delay 120
  flapping-delay 120
  stats-reporting-period 300
```

```
 update-source GigabitEthernet1
 activate
exit-bmp-server-mode
!
!
address-family ipv4
 redistribute connected
!100.64.1.66 <frrouting in docker>
 neighbor 100.64.1.66 activate
exit-address-family
!
```

Feed BGP MRT update to BMP server

- #BMP client https://github.com/SNAS/openbmp-mrt2bmp
- BGP MRT update download link http://routeviews.org/

```
##enable bmp client, double click will kill client
cd ~/openbmp/openbmp-mrt2bmp/src/etc
nohup openbmp-mrt2bmp -c openbmp-mrt2bmp.yml -r router-v4 > /dev/null 2>&1 &
```

Online BGP public router

```
#access routeview-server$telnet route-server.ip-plus.net
```