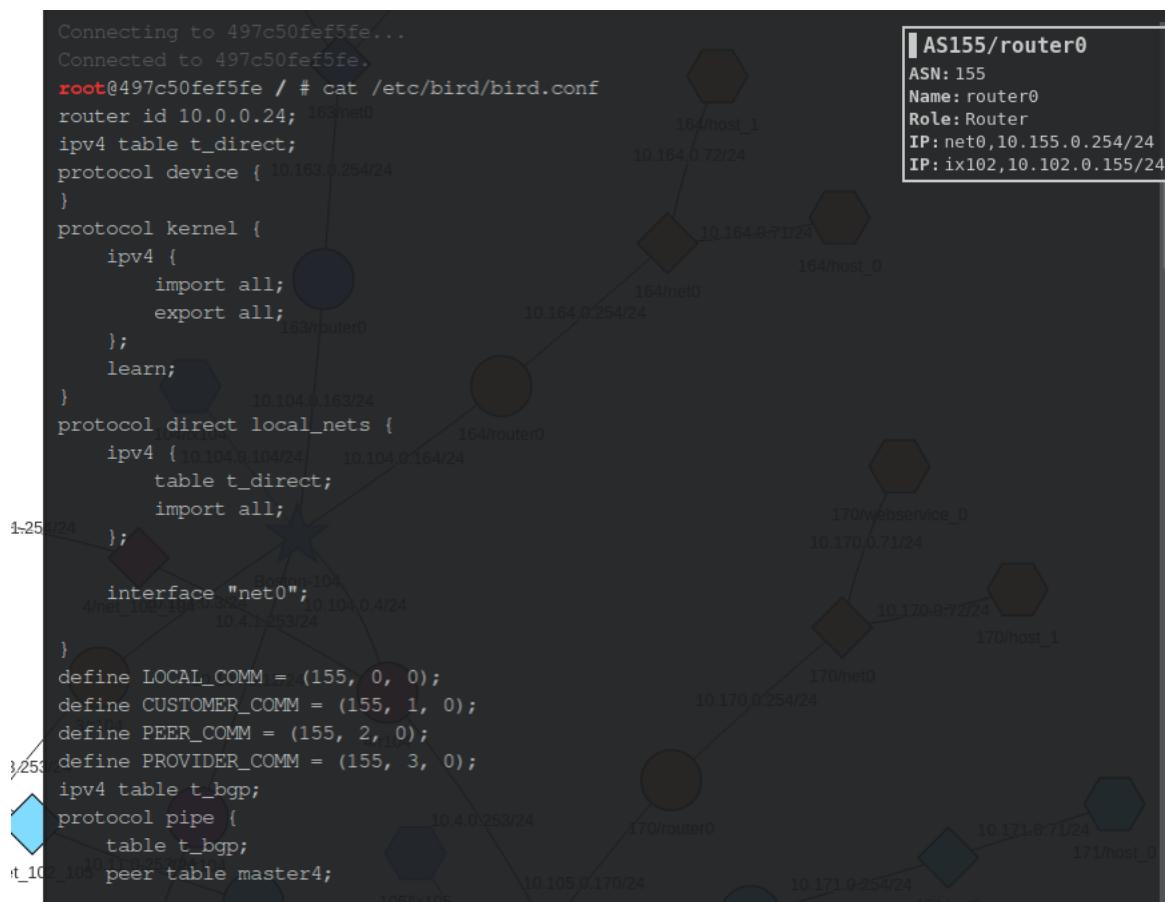


## Task-1

## Task 1.a: Understanding AS-155's BGP Configuration



```

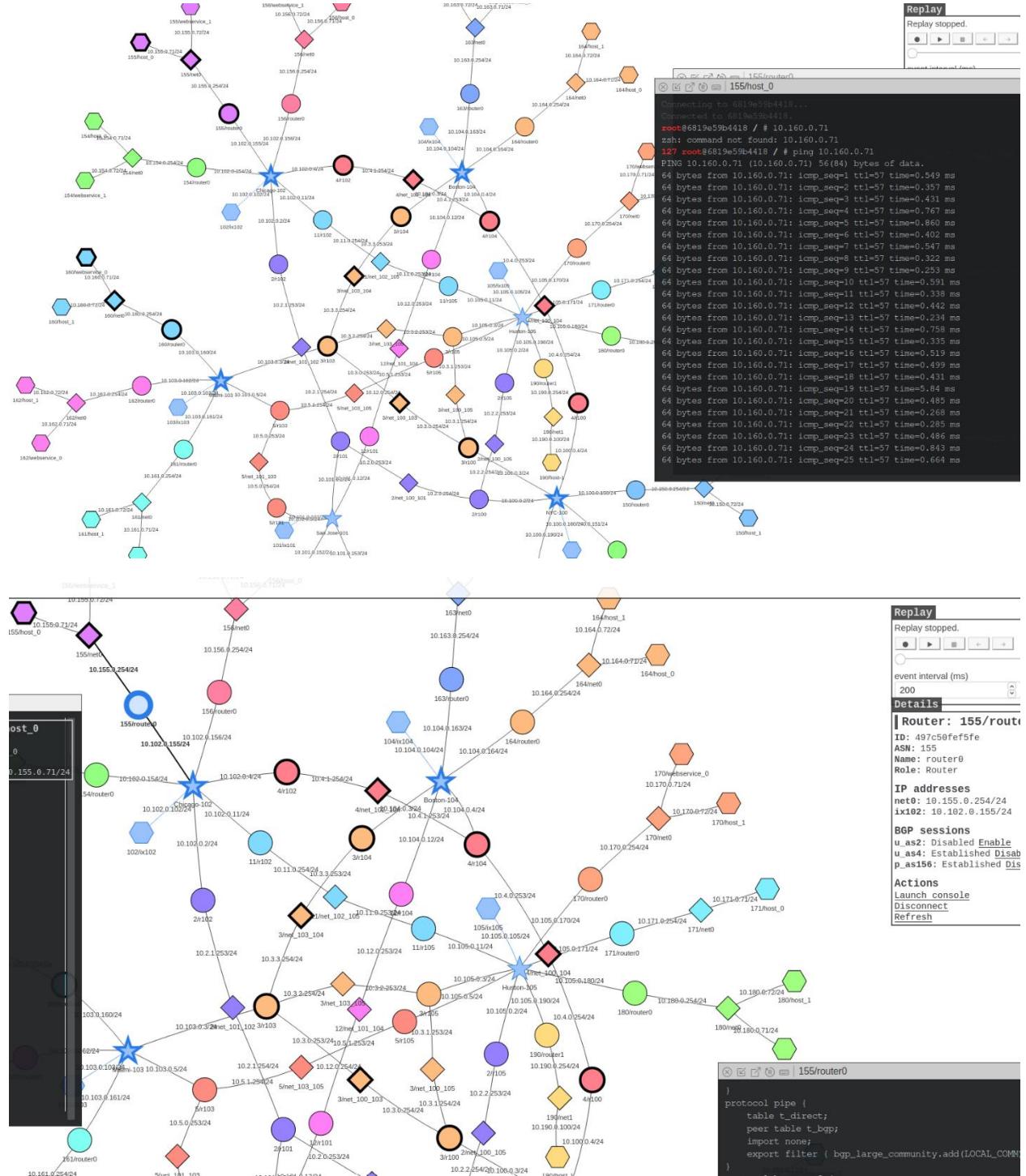
    protocol pipe {
        table t_direct;
        peer table t_bgp;
        import none;
        export filter { bgp_large_community.add(LOCAL_COMM); bgp_local_pref = 10; }
    }
    protocol bgp u_as2 {
        ipv4 {
            table t_bgp;
            import filter {
                bgp_large_community.add(PERIODIC_COMM);
                bgp_local_pref = 10;
                accept;
            };
            export where bgp_large_community ~ [LOCAL_COMM, CUSTOMER_COMM];
            next hop self;
        };
        local 10.102.0.155 as 155;
        neighbor 10.102.0.2 as 2;
    }
    protocol bgp u_as4 {
        ipv4 {
            table t_bgp;
            import filter {
                bgp_large_community.add(PERIODIC_COMM);
                bgp_local_pref = 10;
                accept;
            };
            export where bgp_large_community ~ [LOCAL_COMM, CUSTOMER_COMM];
            next hop self;
        };
    }
}

```

Task 1.a.2:

```
[04/24/23]seed@VM:~/.../output$ docksh as155r-router0-10.155.0.254
root@497c50fef5fe / # birdc show protocols
BIRD 2.0.7 ready.
Name      Proto     Table      State   Since      Info
device1   Device    ---        up      03:27:10.798
kernel1   Kernel    master4   up      03:27:10.798
local_nets Direct   ---        up      03:27:10.798
pipe1     Pipe      ---        up      03:27:10.798 t_bgp <=> master4
pipe2     Pipe      ---        up      03:27:10.798 t_direct <=> t_bgp
u_as2     BGP       ---        up      03:27:11.804 Established
u_as4     BGP       ---        up      03:27:14.040 Established
p_as156   BGP       ---        up      03:27:11.080 Established
ospf1     OSPF      t_ospf    up      03:27:10.798 Alone
pipe3     Pipe      ---        up      03:27:10.798 t_ospf <=> master4
root@497c50fef5fe / # birdc disable u_as2
BIRD 2.0.7 ready.
u_as2: disabled
root@497c50fef5fe / # birdc show protocols
BIRD 2.0.7 ready.
Name      Proto     Table      State   Since      Info
device1   Device    ---        up      03:27:10.798
kernel1   Kernel    master4   up      03:27:10.798
local_nets Direct   ---        up      03:27:10.798
pipe1     Pipe      ---        up      03:27:10.798 t_bgp <=> master4
pipe2     Pipe      ---        up      03:27:10.798 t_direct <=> t_bgp
u_as2     BGP       ---        down    06:53:15.673
u_as4     BGP       ---        up      03:27:14.040 Established
p_as156   BGP       ---        up      03:27:11.080 Established
ospf1     OSPF      t_ospf    up      03:27:10.798 Alone
pipe3     Pipe      ---        up      03:27:10.798 t_ospf <=> master4
root@497c50fef5fe / # █
```

## Task 1.b: Observing BGP UPDATE Messages

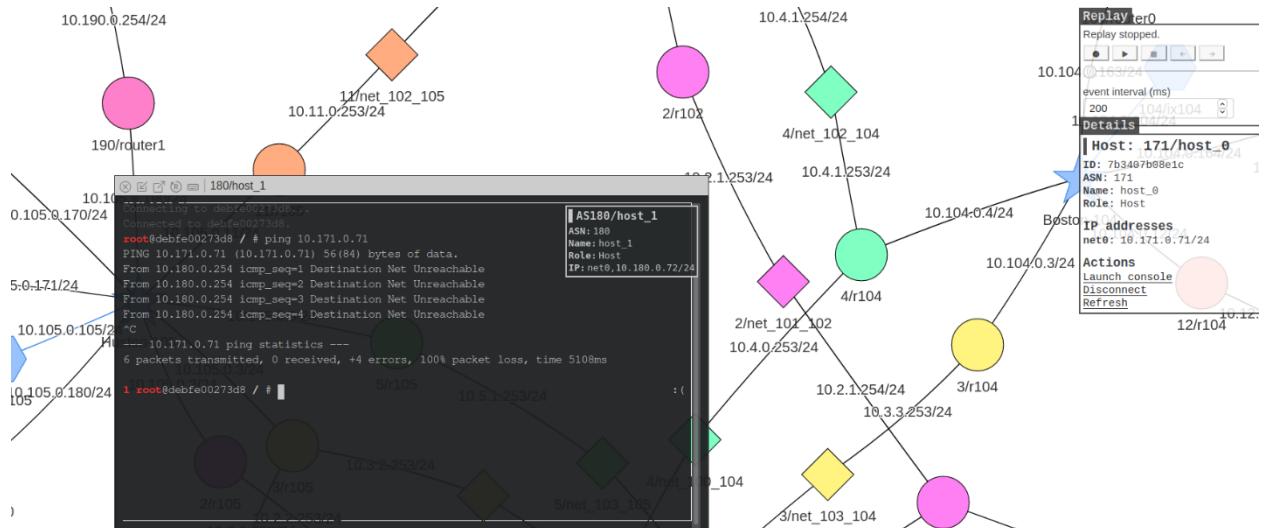


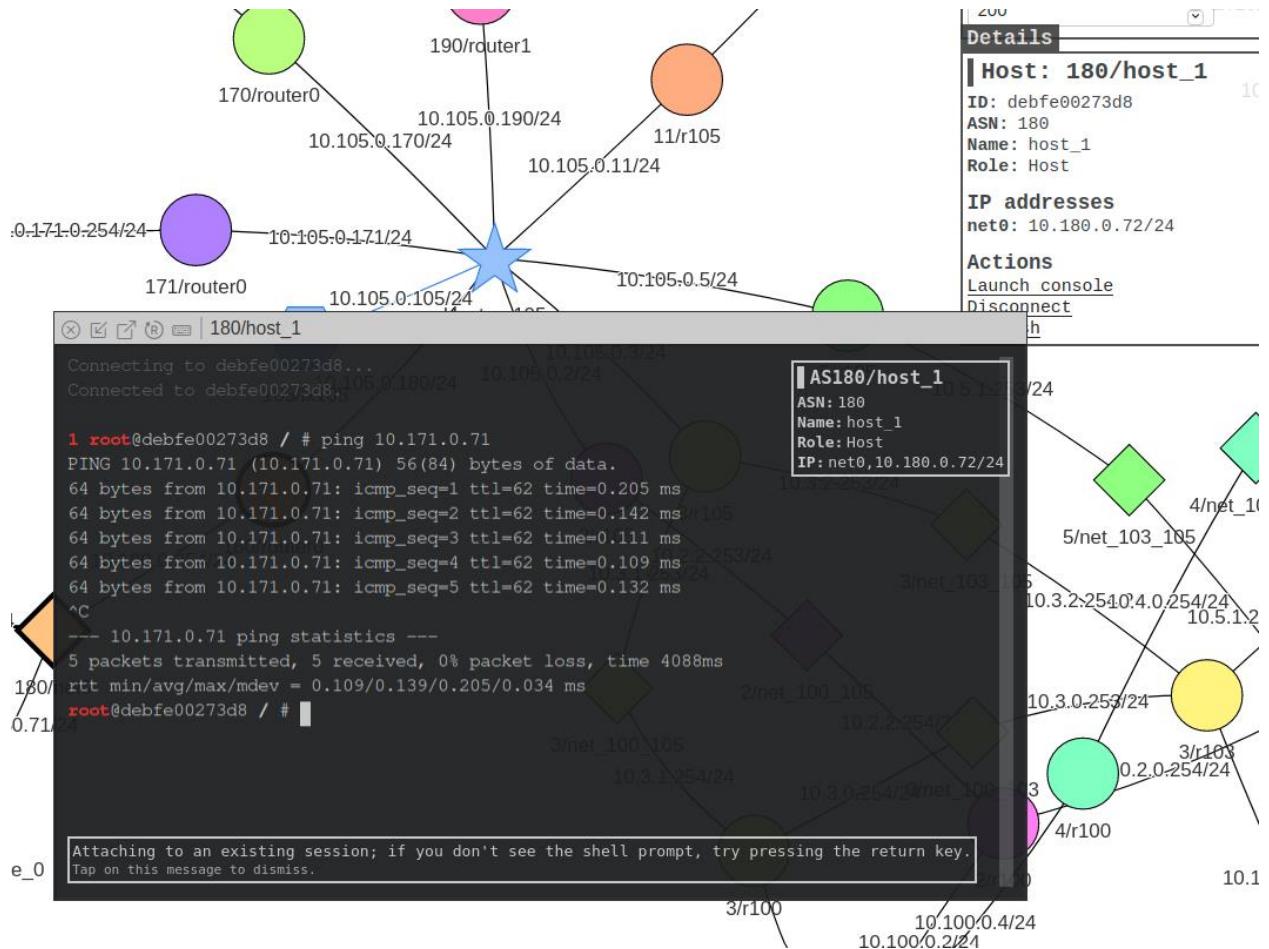
```

130 root@00d1e6f2f0df / # tcpdump -i any -w /tmp/bgp.pcap "tcp port 179"
tcpdump: /tmp/bgp.pcap: Permission denied
1 root@00d1e6f2f0df / # tcpdump -n -i ix100 -vvv "tcp && dst port 179"
tcpdump: listening on ix100, link-type EN10MB (Ethernet), capture size 262144 bytes
07:31:19.049239 IP (tos 0xc0, ttl 1, id 60560, offset 0, flags [DF], proto TCP (6), length: 52)
    10.100.0.150.56129 > 10.100.0.3.179: Flags [.], cksum 0x1587 (incorrect -> 0xbff69), seq 724269797, ack 4083780309, wi
    ,nop,TS val 3654411517 ecr 1857122871], length 0
07:31:32.099887 IP (tos 0xc0, ttl 1, id 60561, offset 0, flags [DF], proto TCP (6), length: 71)
    10.100.0.150.56129 > 10.100.0.3.179: Flags [P.], cksum 0x159a (incorrect -> 0x883f), seq 0:19, ack 1, win 502, option
654424569 ecr 1857122871], length 19: BGP
        Keepalive Message (4), length: 19
07:31:54.213873 IP (tos 0xc0, ttl 1, id 13512, offset 0, flags [DF], proto TCP (6), length: 71)
    10.100.0.150.38423 > 10.100.0.151.179: Flags [P.], cksum 0x162e (incorrect -> 0x21d0), seq 3785668336:3785668355, ack
2, options [nop,nop,TS val 2782163817 ecr 1449837734], length 19: BGP
        Keepalive Message (4), length: 19
07:31:54.303039 IP (tos 0xc0, ttl 1, id 57660, offset 0, flags [DF], proto TCP (6), length: 52)
    10.100.0.150.51791 > 10.100.0.2.179: Flags [.], cksum 0x1586 (incorrect -> 0x9e64), seq 2280622976, ack 3897368539,
p,nop,TS val 3308568915 ecr 2051004831], length 0
07:31:59.098578 IP (tos 0xc0, ttl 1, id 13513, offset 0, flags [DF], proto TCP (6), length: 52)
    10.100.0.150.38423 > 10.100.0.151.179: Flags [.], cksum 0x161b (incorrect -> 0x1502), seq 19, ack 20, win 502, option
782168701 ecr 1449902695], length 0
07:32:13.791728 IP (tos 0xc0, ttl 1, id 57661, offset 0, flags [DF], proto TCP (6), length: 71)
    10.100.0.150.51791 > 10.100.0.2.179: Flags [P.], cksum 0x1599 (incorrect -> 0x4e15), seq 0:19, ack 1, win 502, option
308588404 ecr 2051004831], length 19: BGP
        Keepalive Message (4), length: 19
07:32:24.717553 IP (tos 0xc0, ttl 1, id 60562, offset 0, flags [DF], proto TCP (6), length: 52)
    10.100.0.150.56129 > 10.100.0.3.179: Flags [.], cksum 0x1587 (incorrect -> 0xbe37), seq 19, ack 20, win 502, options
4477186 ecr 1857188540], length 0
07:32:39.938994 IP (tos 0xc0, ttl 1, id 60563, offset 0, flags [DF], proto TCP (6), length: 71)
    10.100.0.150.56129 > 10.100.0.3.179: Flags [P.], cksum 0x159a (incorrect -> 0x7e93), seq 19:38, ack 20, win 502, opti

```

### 3.4 Task 1.d: Configuring AS-180





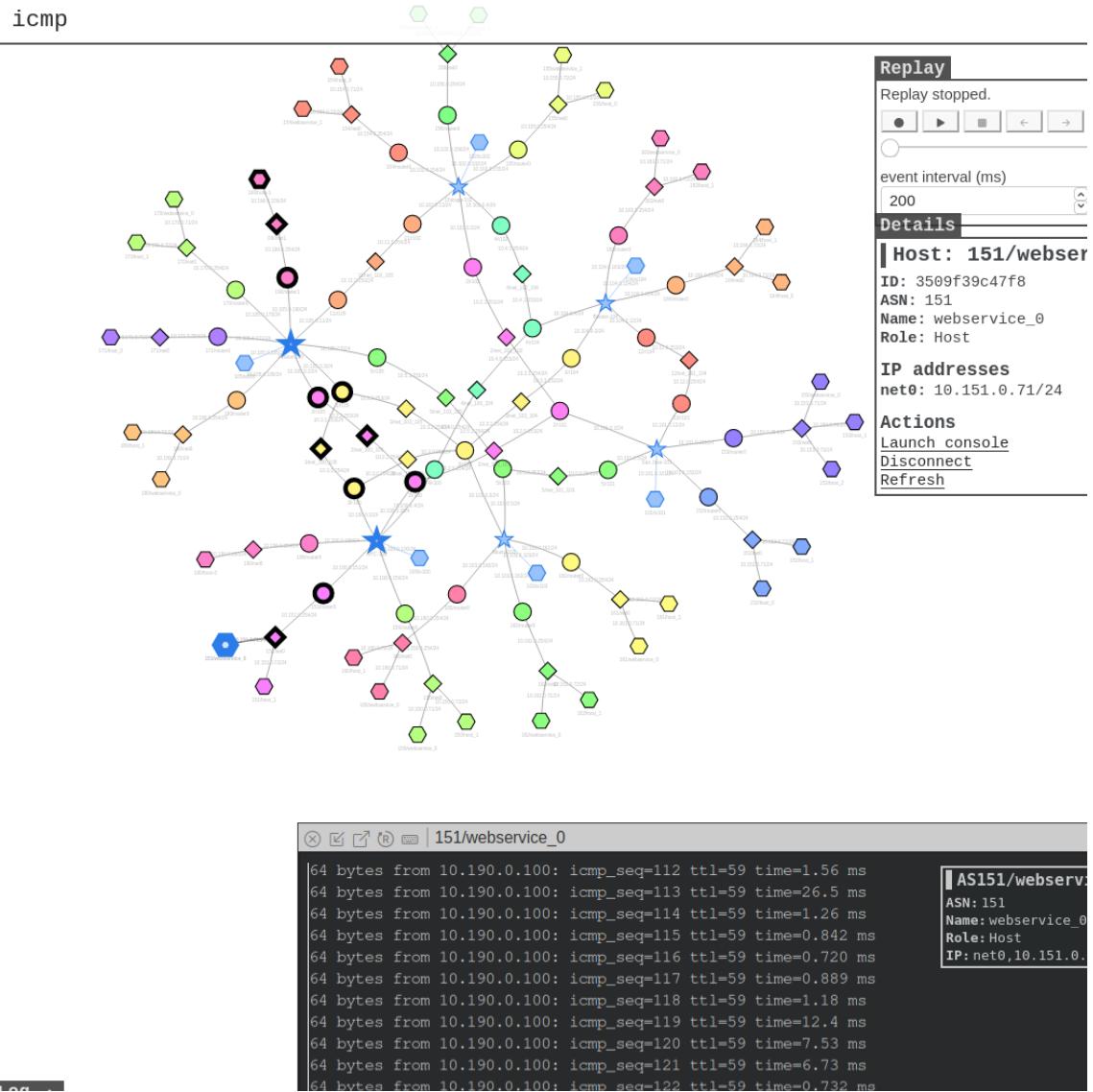
bird\_171.conf  
~/Desktop/BGPLAB/Labsetup

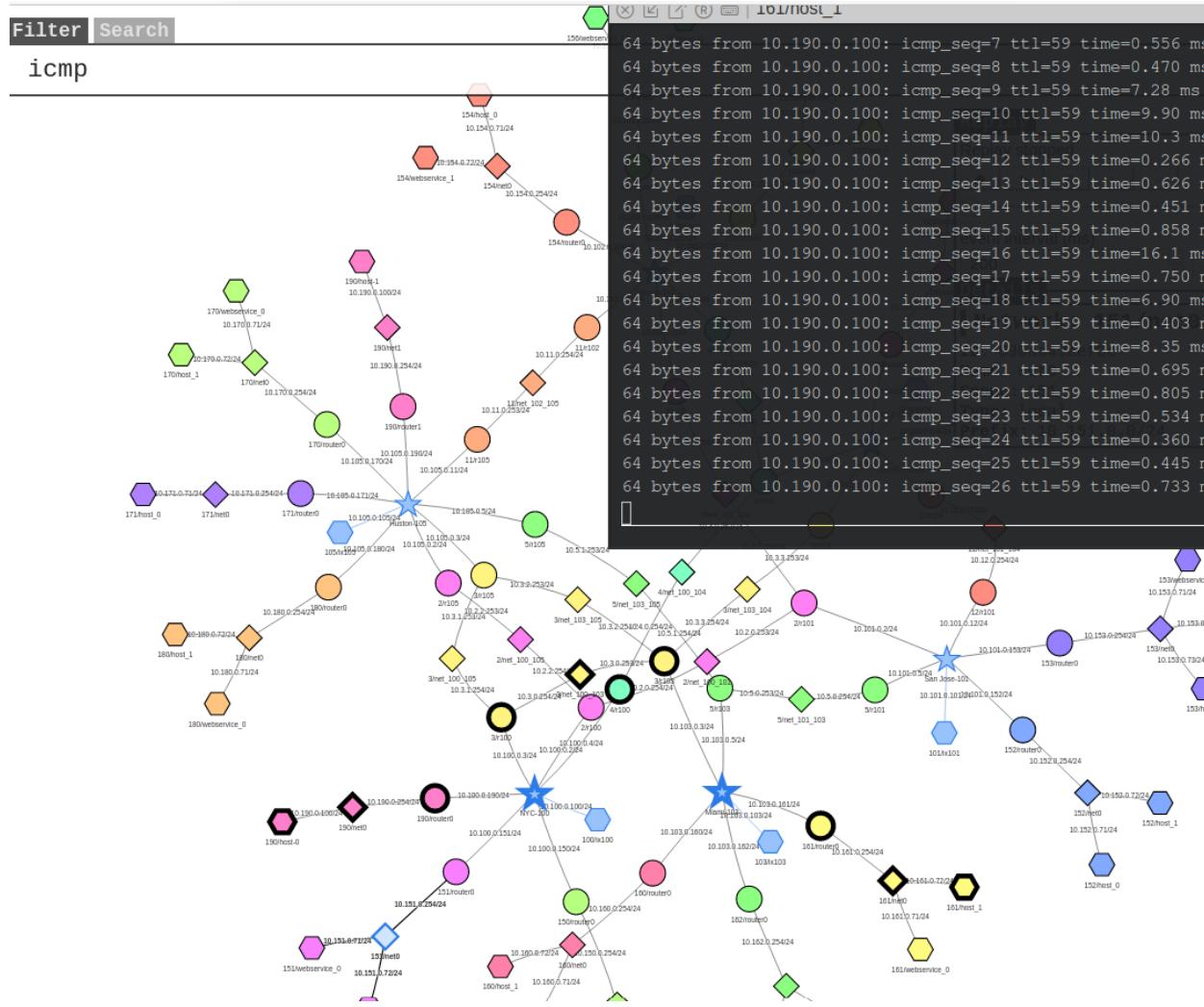
```
33     table t_direct;
34     peer table t_bgp;
35     import none;
36     export filter { bgp_large_community.add(LOCAL_COMM);
37     bgp_local_pref = 40; accept; };
38 protocol bgp u_as11 {
39     ipv4 {
40         table t_bgp;
41         import filter {
42             bgp_large_community.add(PROVIDER_COMM);
43             bgp_local_pref = 10;
44             accept;
45         };
46         export where bgp_large_community ~ [LOCAL_COMM,
47             CUSTOMER_COMM];
48         next hop self;
49     };
50     local 10.105.0.171 as 171;
51     neighbor 10.105.0.11 as 11;
52 }
53 protocol bgp u_as180 {
54     ipv4 {
55         table t_bgp;
56         import filter {
57             bgp_large_community.add(PROVIDER_COMM);
58             bgp_local_pref = 10;
59             accept;
60         };
61         export where bgp_large_community ~ [LOCAL_COMM,
62             CUSTOMER_COMM];
63         next hop self;
64     };
65     local 10.105.0.171 as 171;
66     neighbor 10.105.0.180 as 180;
```

bird\_180.conf  
~/Desktop/BGPLAB/Labsetup

```
27
28 protocol pipe {
29     table t_bgp;
30     peer table master4;
31     import none;
32     export all;
33 }
34 protocol pipe {
35     table t_direct;
36     peer table t_bgp;
37     import none;
38     export filter { bgp_large_community.add(LOCAL_COMM) ;
bgp_local_pref = 40; accept; ;}
39
40 protocol bgp u_as171 {
41     ipv4 {
42         table t_bgp;
43         import filter{
44             bgp_large_community.add(PROVIDER_COMM);
45             bgp_local_pref = 10;
46             accept;
47         };
48         export where bgp_large_community ~ [LOCAL_COMM,
CUSTOMER_COMM];
49         next hop self;
50     };
51     local 10.105.0.180 as 180;
52     neighbor 10.105.0.171 as 171;
53 }
54
55
56
57
58 ipv4 table t_ospf;
59 protocol ospf ospf1 {
60     ipv4 {
61         table t_ospf;
62         import all;
```

## Task- 4: IP Anycast





## Task 5: BGP Prefix Attack

### Task 5.a. Launching the Prefix Hijacking Attack from AS-161

The screenshot shows a network simulation interface with a terminal window and a configuration panel.

**Terminal Output:**

```
root@98ee475540c1 ~ # export all; t 10.154.0.71
}

protocol static hijacks {
    ipv4 { table t_bgp; };
    route 10.154.0.0/25 blackhole {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.128/25 blackhole {
        bgp_large_community.add(LOCAL_COMM);
    };
}

root@98ee475540c1 ~ # birdc configure
BIRD 2.0.7 ready.
Reading configuration from /etc/bird/bird.conf
Reconfigured
root@98ee475540c1 ~ # birdc configure
BIRD 2.0.7 ready.
Reading configuration from /etc/bird/bird.conf
Reconfigured
root@98ee475540c1 ~ #
```

**Configuration Panel (AS161/router0):**

- ASN:** 161
- Name:** router0
- Role:** Router
- IP:** net0, 10.161.0.254/24
- IP:** ix103, 10.103.0.161/24

**Details:**

- Router:** 3/r103
- ID:** 50c8fc45e0c7
- ASN:** 3
- Name:** r103
- Role:** Router

**IP addresses:**

- ix103: 10.103.0.3/24
- net\_100\_103: 10.3.0.253/24
- net\_103\_105: 10.3.2.254/24
- net\_103\_104: 10.3.3.254/24

**BGP sessions:**

```

Connecting to a18b107ad0bb...
Connected to a18b107ad0bb.
root@a18b107ad0bb / # birdc show route all 10.154.0.0/25
BIRD 2.0.7 ready.
Table master4:
10.154.0.0/25      unicast [u_as11 01:48:34.304] * (100)
    via 10.105.0.11 on ix105
    Type: BGP univ
    BGP.origin: IGP
    BGP.as_path: 11 3 161
    BGP.next_hop: 10.105.0.11
    BGP.local_pref: 10
    BGP.large_community: (3, 1, 0) (11, 3, 0) (161, 0,
root@a18b107ad0bb / # birdc show route all 10.154.0.0/24
BIRD 2.0.7 ready.
Table master4:
10.154.0.0/24      unicast [u_as11 01:44:28.660] * (100)
    via 10.105.0.11 on ix105
    Type: BGP univ
    BGP.origin: IGP
    BGP.as_path: 11 154
    BGP.next_hop: 10.105.0.11
    BGP.local_pref: 10
    BGP.large_community: (11, 1, 0) (154, 0, 0) (171, 3, 0)
root@a18b107ad0bb / # birdc show route all 10.154.0.128/24
BIRD 2.0.7 ready.
Invalid IPv4 prefix 10.154.0.128/24, maybe you wanted 10.154.0.0/24
root@a18b107ad0bb / # birdc show route all 10.154.0.128/25
BIRD 2.0.7 ready.
Table master4:
10.154.0.128/25      unicast [u_as11 01:48:34.304] * (100) [AS161i]
    via 10.105.0.11 on ix105
    Type: BGP univ
    BGP.origin: IGP
    BGP.as_path: 11 3 161
    BGP.next_hop: 10.105.0.11

```

**AS171/router0**

- ASN: 171
- Name: router0
- Role: Router
- IP: net0, 10.171.0.254/25
- IP: ix105, 10.105.0.171/25

event interval (ms): 200

**Details**

**Router: 3/r103**

- ID: 50c8fc45e0c7
- ON: 0 (171, 3, 0)
- Name: r103
- Role: Router

**IP addresses**

- [AS154i]: 10.103.0.3/24
- net\_103: 10.3.0.253/24
- net\_103\_105: 10.3.2.254/24
- net\_103\_104: 10.3.3.254/24

**BGP sessions**

- c\_as160: Established Disable
- c\_as161: Established Disable
- c\_as162: Established Disable
- b1: Established Disable
- ibgp1: Established Disable
- ibgp2: Established Disable
- ibgp3: Established Disable

**Actions**

- Launch console
- Disconnect
- Refresh

```

root@a18b107ad0bb / # birdc show route all 10.154.0.128/25
BIRD 2.0.7 ready.
Table master4:
10.154.0.128/25      unicast [u_as11 01:48:34.304] * (100)
    via 10.105.0.11 on ix105
    Type: BGP univ
    BGP.origin: IGP
    BGP.as_path: 11 3 161
    BGP.next_hop: 10.105.0.11
    BGP.local_pref: 10
    BGP.large_community: (3, 1, 0) (11, 3, 0) (161, 0, 0) (171, 3, 0)
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / #

```

Connecting to a1d5a625f043...

Connected to a1d5a625f043.

```

root@a1d5a625f043 / # ping 10.154.0.71
PING 10.154.0.71 (10.154.0.71) 56(84) bytes of data.
^C
--- 10.154.0.71 ping statistics ---
33 packets transmitted, 0 received, 100% packet loss, time 32767ms
event interval (ms) 200
Details
Router: 3/r103
ID: 50c8fc45e0c7
ASN: 3
Name: r103
Role: Router
IP addresses
ix103: 10.103.0.3/24
net_100_103: 10.3.0.25
time 12281ms
net_103_104: 10.3.2.25
net_103_104: 10.3.3.25
BGP sessions
c_as160: Established Disabl
c_as161: Established Disabl
c_as162: Established Disabl
ibgp2: Established Disabl
ibgp3: Established Disabl
Actions
Launch console
Disconnect
Refresh
AS155/host_0
ASN: 155
Name: host_0
Role: Host
IP: net0,10.155.0.71/25

```

```

1 root@a1d5a625f043 / # ping 10.154.0.71
PING 10.154.0.71 (10.154.0.71) 56(84) bytes of data.
^C
--- 10.154.0.71 ping statistics ---
65 packets transmitted, 0 received, 100% packet loss, time 65544ms
event interval (ms) 200
Details
Router: 3/r103
ID: 50c8fc45e0c7
ASN: 3
Name: r103
Role: Router
IP addresses
ix103: 10.103.0.3/24
net_100_103: 10.3.0.25
time 12281ms
net_103_104: 10.3.2.25
net_103_104: 10.3.3.25
BGP sessions
c_as160: Established Disabl
c_as161: Established Disabl
c_as162: Established Disabl
ibgp2: Established Disabl
ibgp3: Established Disabl
Actions
Launch console
Disconnect
Refresh

```

```

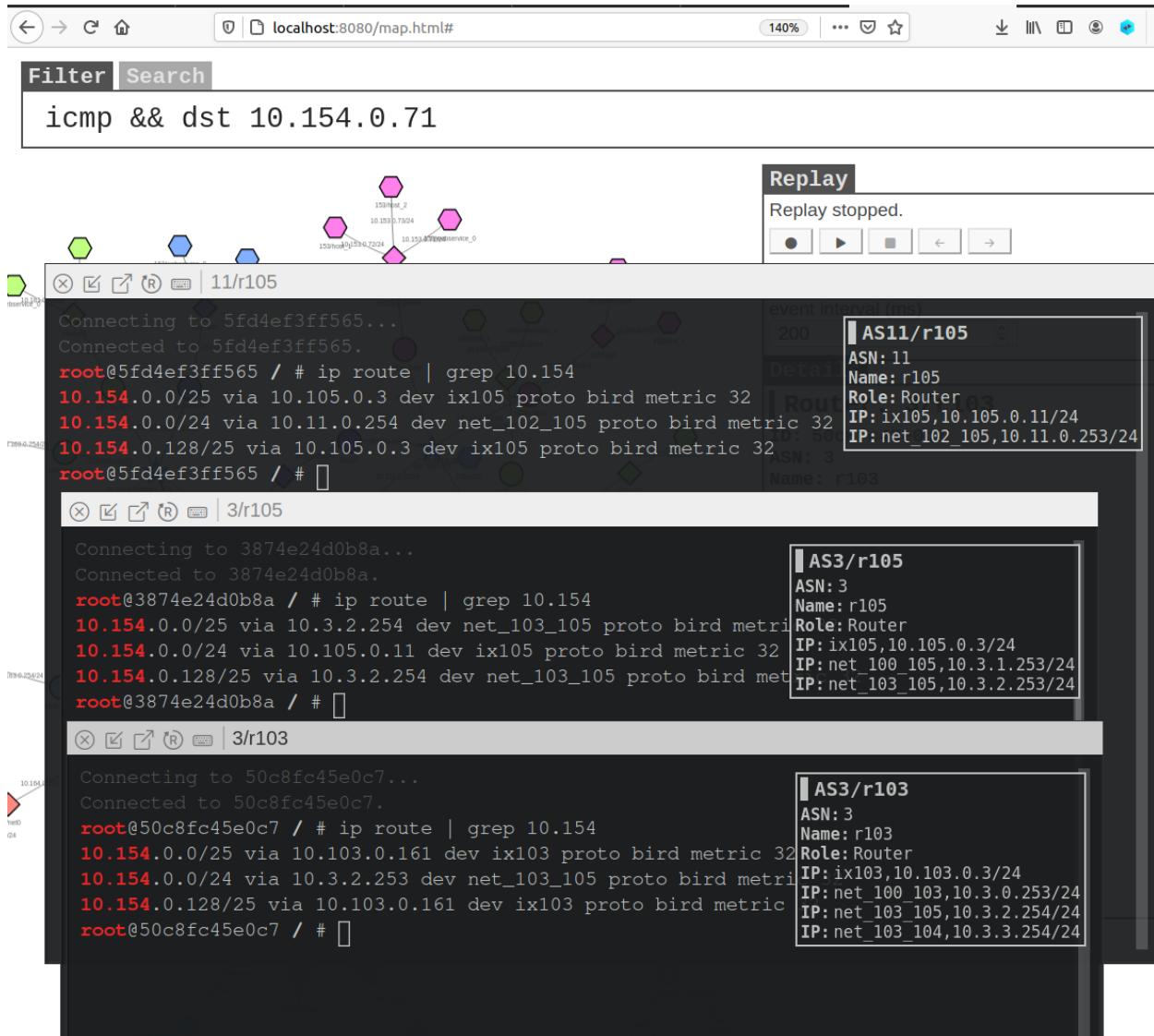
1 root@a1d5a625f043 / # ping 10.154.0.71
PING 10.154.0.71 (10.154.0.71) 56(84) bytes of data.
^C
--- 10.154.0.71 ping statistics ---
13 packets transmitted, 0 received, 100% packet loss, time 121845ms
event interval (ms) 200
Details
Router: 3/r103
ID: 50c8fc45e0c7
ASN: 3
Name: r103
Role: Router
IP addresses
ix103: 10.103.0.3/24
net_100_103: 10.3.0.25
time 12281ms
net_103_104: 10.3.2.25
net_103_104: 10.3.3.25
BGP sessions
c_as160: Established Disabl
c_as161: Established Disabl
c_as162: Established Disabl
ibgp2: Established Disabl
ibgp3: Established Disabl
Actions
Launch console
Disconnect
Refresh

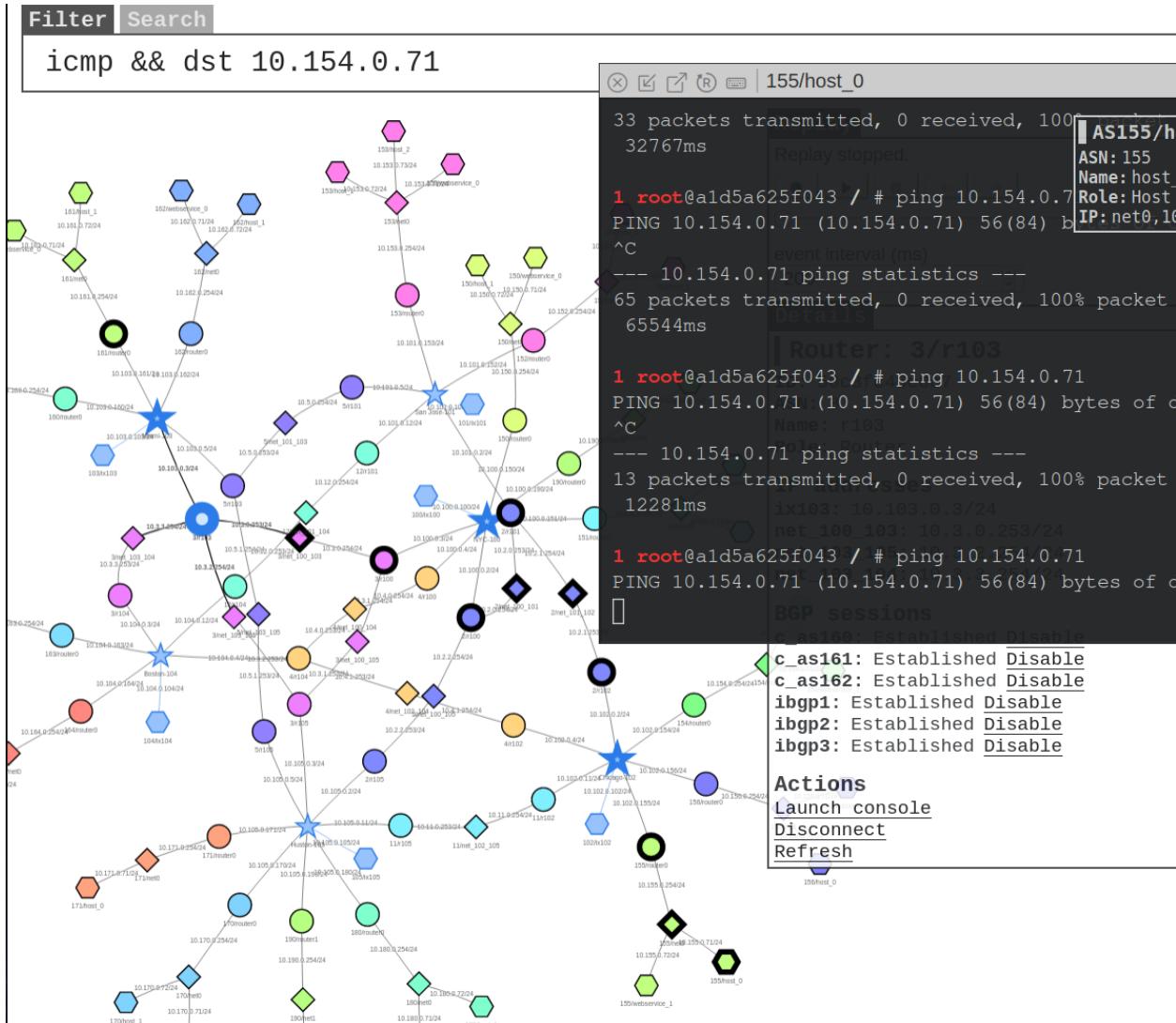
```

```

1 root@a1d5a625f043 / # 

```





## Task 5.b. Fighting Back from AS-154

The screenshot shows a network simulation interface with a central configuration window and a sidebar.

**Configuration Window:**

```
import none;
export all;
}

protocol static {
    ipv4 { table t_bgp; };
    route 10.154.0.0/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.64/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.128/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.192/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
}

root@4a96bb6da37d / # birdc configure
BIRD 2.0.7 ready.
Reading configuration from /etc/bird/bird.conf
Reconfigured
root@4a96bb6da37d / # birdc configure
BIRD 2.0.7 ready.
```

**Router Information Sidebar:**

AS154/router0
ASN: 154
Name: router0
Role: Router
IP: net0, 10.154.0.254/24
IP: ix102, 10.102.0.154/24

**Actions Sidebar:**

- Launch console
- Disconnect
- Refresh

**BGP sessions:**

- u\_as2: Established Disable
- u\_as4: Established Disable
- u\_as11: Established Disable

171/router0

```

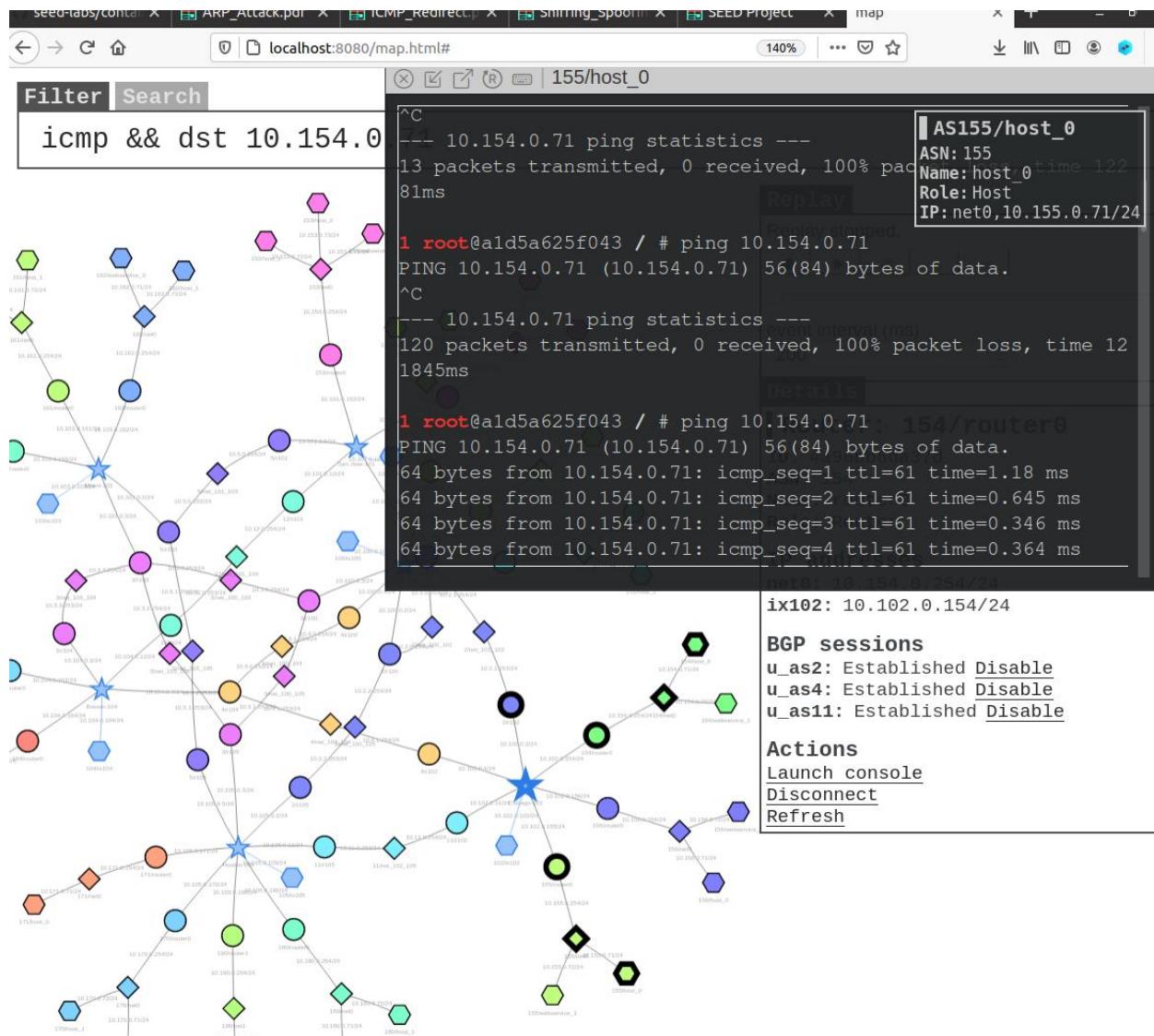
BGP.origin: IGP
BGP.as_path: 11 154
BGP.next_hop: 10.105.0.11
BGP.local_pref: 10
BGP.large_community: (11, 1, 0) (154, 0, 0) (171, 3, 0)
root@a18b107ad0bb / # birdc show route all 10.154.0.128/24
BIRD 2.0.7 ready.
Invalid IPv4 prefix 10.154.0.128/24, maybe you wanted 10.154.0.0/24
root@a18b107ad0bb / # birdc show route all 10.154.0.128/25
BIRD 2.0.7 ready.
Table master4:
10.154.0.128/25      unicast [u_as11 01:48:34.304] * (100) [AS161i]
    via 10.105.0.11 on ix105
    Type: BGP univ          rtt min/avg/max/mdev = 0.157/0.421/9.248/0.799 ms
    BGP.origin: IGP
    BGP.as_path: 11 3 161
    BGP.next_hop: 10.105.0.11
    BGP.local_pref: 10
    BGP.large_community: (3, 1, 0) (11, 3, 0) (161, 0, 0) (171, 3, 0)
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.64/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.192/26 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # 
```

**AS171/router0**

**ASN:** 171    **Name:** router0    **Role:** Router  
**IP:** net0,10.171.0.254/24    **IP:** ix105,10.105.0.171/25

**Actions**

[Launch console](#)



154/router0

```
/*
protocol static {
    ipv4 { table t_bgp; };
    route 10.154.0.0/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.64/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.128/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
    route 10.154.0.192/26 via "net0" {
        bgp_large_community.add(LOCAL_COMM);
    };
}
*/
root@4a96bb6da37d ~ # birdc configure
BIRD 2.0.7 ready.
Reading configuration from /etc/bird/bird.conf
Reconfiguration in progress
root@4a96bb6da37d ~ # birdc configure
BIRD 2.0.7 ready.
Reading configuration from /etc/bird/bird.conf
Reconfigured
root@4a96bb6da37d ~ #
```

**AS154/router0**

event interval (ms)  
200

**Details**

ID: 4a96bb6da37d  
ASN: 154  
Name: router0  
Role: Router  
IP: net0, 10.154.0.254/2  
IP: ix102, 10.102.0.154/24

**Router:** 154/router0

**IP addresses.**  
net0: 10.154.0.254/24  
ix102: 10.102.0.154/24

**BGP sessions.**  
u\_as2: Established Disable  
u\_as4: Established Disable  
u\_as11: Established Disable

**Actions**

[Launch console](#)  
[Disconnect](#)  
[Refresh](#)

171/router0

```
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb ~ # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb ~ # ip route | grep 10.154
10.154.0.0/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.64/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.192/26 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb ~ # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
```

**AS171/router0**

event interval (ms)  
200

**Details**

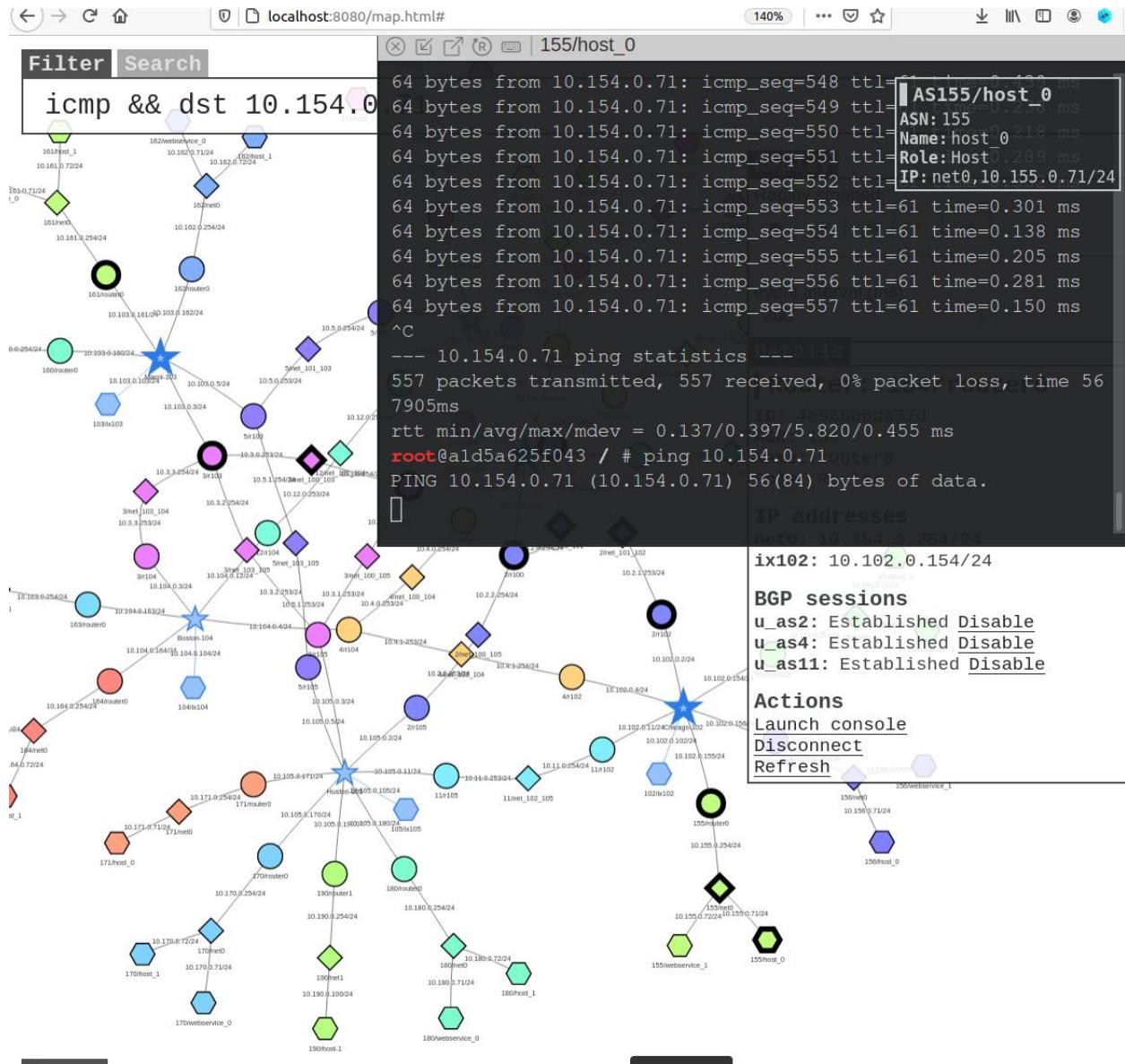
Router: 154/router0

**IP addresses.**  
net0: 10.171.0.254/24  
ix102: 10.102.0.154/24

**BGP sessions.**  
u\_as2: 154  
u\_as4: 154  
u\_as11: 154

**Actions**

[Launch console](#)  
[Disconnect](#)  
[Refresh](#)



### Task 5.c. Fixing the Problem at AS-3

(X) (F) (R) | 3/r103

```
local 10.103.0.3 as 3;
neighbor 10.103.0.160 as 160;
}
protocol bgp c_as161 {
    ipv4 {
        table t_bgp;
        import filter {
            bgp_large_community.add(CUSTOMER_COMM);
            bgp_local_pref = 30;
            if (net != 10.161.0.0/24) then reject;
            accept;
        };
        export all;
        next hop self;
    };
    local 10.103.0.3 as 3;
    neighbor 10.103.0.161 as 161;
}
protocol bgp c_as162 {
    ipv4 {
        table t_bgp;
        import filter {
```

**AS3/r103**

ASN: 3 : 154/router0  
Name: r103  
Role: Router  
IP: ix103,10.103.0.3/24  
IP: net 100\_103,10.3.0.253/24  
IP: net\_103\_105,10.3.2.254/24  
IP: net\_103\_104,10.3.3.254/24

t0: 10.154.0.254/24  
102: 10.102.0.154/24

BGP sessions

u\_as2: Established Disable  
u\_as4: Established Disable  
u\_as11: Established Disable

Actions

Launch console  
Disconnect  
Refresh

171/router0

```
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.64/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/26 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.192/26 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/25 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
10.154.0.128/25 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
root@a18b107ad0bb / # ip route | grep 10.154
10.154.0.0/24 via 10.105.0.11 dev ix105 proto bird metric 32
```

AS171/router0

ASN: 171  
Name: router0  
Role: Router  
IP: net0,10.171.0.254/24  
IP: ix105,10.105.0.171/24

Router: 154/router0

addresses

te: 10.154.0.254/24  
162: 10.102.0.154/24

sessions

u\_as2: Established Disable  
u\_as4: Established Disable  
u\_as1: Established Disable

Actions

Launch console  
Disconnect

**Filter** **Search**

155/host\_0

```
root@alld5a625f043 / # ping 10.154.0.71
PING 10.154.0.71 (10.154.0.71) 56(84) bytes
--- 10.154.0.71 ping statistics ---
73 packets transmitted, 0 received, 100% packet loss
47ms
```

**AS155/host\_0**

- ASN: 155
- Name: host\_0
- Role: Host
- IP: net0, 10.155.0.71/24

**Replay**

Replay stopped.

**event interval (ms)**  
200

**details**

**Router: 154/router0**

- ID: 4a96bb6da37d
- ASN: 154
- Name: router0
- Role: Router

**IP addresses**

- net0: 10.154.0.254/24
- 102: 10.102.0.154/24

**BGP sessions**

- u\_as2: Established Disable
- u\_as4: Established Disable
- u\_as11: Established Disable

**Actions**

- [Launch console](#)
- [Disconnect](#)
- [Refresh](#)

**Log**