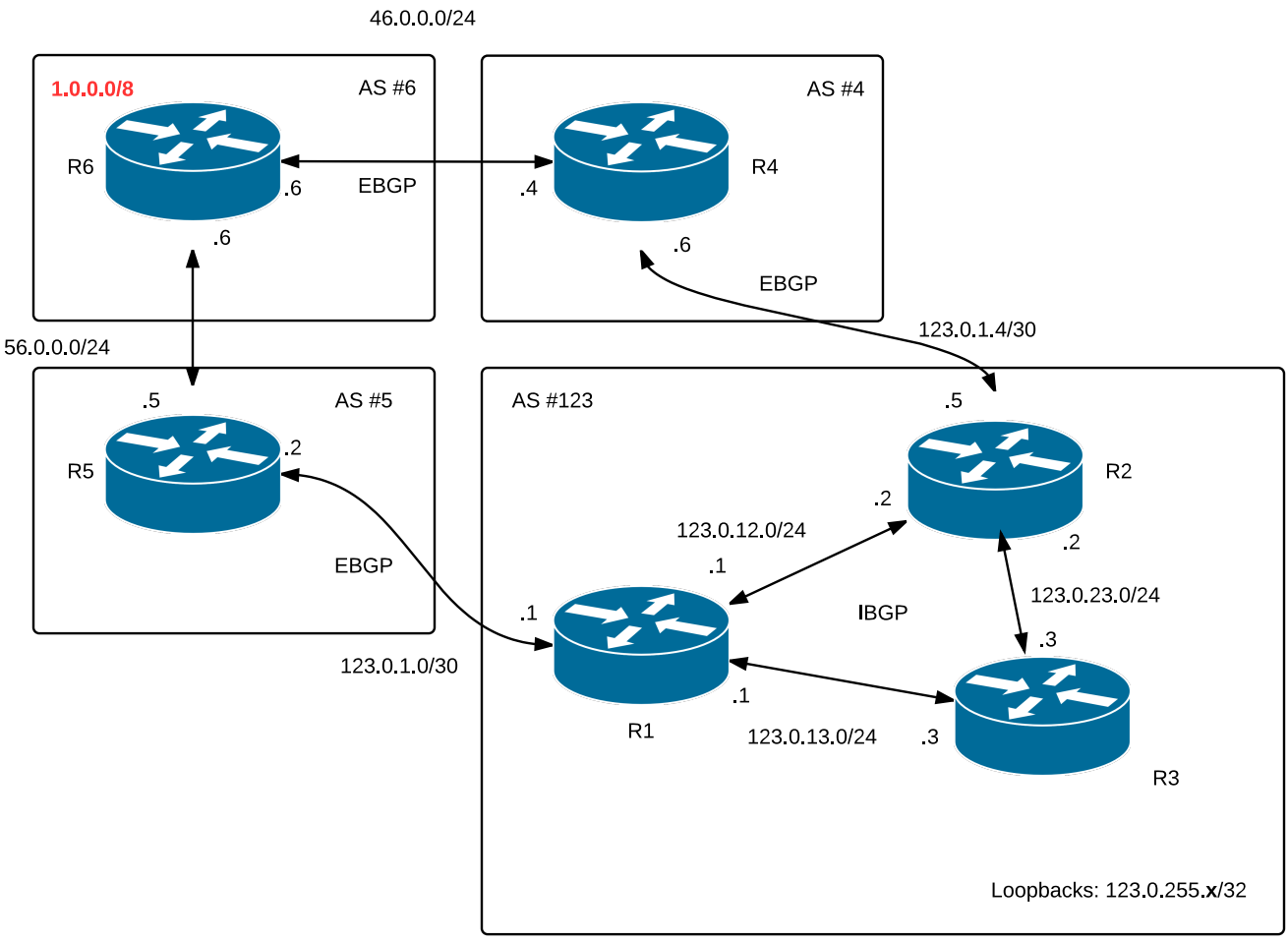

Tasks

EBGP
1. Configure EBGP peerings as shown in the diagram.
2. Configure Loopback0 on R6 as 1.0.0.6/8 and advertise this into BGP

IBGP
1. Configure a full mesh of IBGP peerings between R1, R2, and R3 in AS 123.
2. Source the BGP connection from the loopback addresses of each router.
3. Use any IGP to provide connectivity between the loopbacks but do not run the IGP on the AS-external links

Multipath Part #1.
1. Configure R3 to load share to the 1.0.0.0/8 network. Do not modify any BGP attributes on R1 or R2 to enable this.
* HINT* Remember *where* in the BGP bestpath selection that multipathing is considered. See Notes #1.

Multipath Part #2 (you can remove the solution to multipath task #1)
1. Configure the statement "bandwidth 100" on R2-R4 link.
2. Configure R1 and R2 to send their external link bandwidths as an extended community to R3.
3. Configure R3 to perform unequal cost load sharing based on the external link bandwidth settings

Mutlpath Part #3.
1. Configure another method to perform equal cost load sharing from R in the 1.0.0.0/8 network
HINT you may use the command "bgp confederation identifier 123" as part of the solution; configuration may ONLY be performed on routers in AS 123. You may break the configuration performed in the "IBGP" section

Note #1

The starting state for this task for R3's BGP RIB should look something like as follows:

```
R3#show ip bgp
BGP table version is 2, local router ID is 123.0.255.3
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal,
              r RIB-failure, S Stale, m multipath, b backup-path, f RT-Filter,
              x best-external, a additional-path, c RIB-compressed,
Origin codes: i - IGP, e - EGP, ? - incomplete
RPKI validation codes: V valid, I invalid, N Not found
     Network          Next Hop            Metric LocPrf Weight Path
 * i 1.0.0.0          123.0.255.2              0    100      0 4 6 i
 *>i                  123.0.255.1              0    100      0 5 6 i
```

The final state for task #1 should look as follows in the RIB on R3:

```
R3#show ip route bgp | b ^B
B     1.0.0.0/8 [200/0] via 123.0.255.2, 00:03:09
                [200/0] via 123.0.255.1, 00:03:09
```