



Using Kathará, implement the network depicted in the above figure and described below.

- AS3's routers run RIPv2 in all the internal interfaces redistributing all connected LANs and redistributing BGP.
- No device has the default route with exception of pc1, pc2, pc3, and pc4 which have the default gateway set.
- Links between different ASes correspond to eBGP peerings.
- All ASes announce in BGP the /30 networks they are adjacent to and their internal networks (if any).
- The BGP policies are as follows:
 - AS3 does not announce to AS1 prefixes with community 3:1.
 - AS3 does not announce to AS2 prefixes with community 3:2.
 - AS4 announces prefix 4.4.1.0/24 with community 3:1 and announces prefix 4.4.2.0/24 with community 3:2.
 - AS5 announces prefix 5.5.1.0/24 with community 3:1 and announces prefix 5.5.2.0/24 with community 3:2.

Tips:

- To attach a community use the route-map set command: **"set community X:Y"**
- To detect a community, first define a community list:
bgp community-list standard <community_list_name> permit X:Y
 and then use a route-map with the **"match community <community_list_name>"** clause.

Goals:

- AS1 does not receive 4.4.1.0/24 and 5.5.1.0/24.
- AS2 does not receive 4.4.2.0/24 and 5.5.2.0/24.