policy\_routing.md 2/18/2021

## 3.1 business relationships

We tagged the incoming bgp routes on all customer / peer / provider routers with the AS they came from with the schema 19:<AS-Nr>

For example from sh run on LOND router (conn. to provider 1 / AS 17):

```
route-map TAG_17 permit 10
set community 19:17
```

route-map TAG\_17 tags all incoming routes from AS 17 with 19:17 to filter them for the IXP eBGP connections.

```
bgp community-list 20 permit 19:21
bgp community-list 20 permit 19:22
```

creates a community list nr. 20, which matches on the tags from AS 21 and 22

```
route-map PROVIDER_FILTER permit 10
match community 20
set community none
...
ip prefix-list our_prefix seq 5 permit 19.0.0.0/8
...
route-map PROVIDER_FILTER permit 11
match ip address prefix-list our_prefix
```

creates the route-map PROVIDER\_FILTER, which only permits bgp routes to the provider, which either came from community list 20 (AS 21 / 22 aka. our customers) or our own 19.0.0.0/8 prefix and also clears our internal community tags.

```
router bgp 19
neighbor 179.0.91.1 route-map TAG_17 in
neighbor 179.0.91.1 route-map PROVIDER_FILTER out
```

activates the two route-maps for in and out on the interface towards AS 17