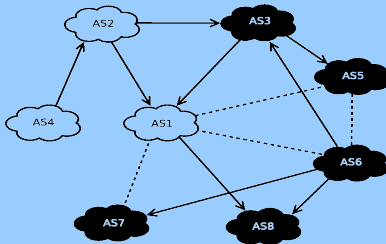


# Routing policies and BGP

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## External relations of an AS in the Internet

- Peering agreements
- Upstreams
- Customers
- Costs
- Reliability of lines
- Trustworthiness of BGP peers
- Traffic engineering
- Inter-AS VPNs
- Protocol support
- Multicast support



Human

## Routing policy expressed in RPSL

- Well-formated
- Standardized
- Machine-readable
- High level descr.
- Arbitrary precision
- Publicly available
- Unique routing policy source

```
aut-num: AS3
remarks: Peering
import: from AS2; accept ANY
export: to AS2; announce AS3
remarks: Customers
import: from AS1; accept ANY
export: to AS1; announce AS3
import: from AS5; accept AS5
export: to AS5; announce AS3
import: from AS6; accept AS6
export: to AS6; announce AS3
```

BGP

## Router configurations and other outputs

- Configurations in various formats
- Multi-platform
- Multi-vendor
- Rich debug output
- Offline filtering engine
- API for custom scripts

```
DENY 10.0.0.0/8
DENY 10.11.0.0/9
ACCEPT 14.0.0.0/7
DENY 23.0.0.0/16
ACCEPT 4.0.0.0/8
ACCEPT 4.1.0.0/16
DENY 37.0.0.0/8
DENY 37.44.11.0/24
ACCEPT 217.31.48.0/20
ACCEPT 62.109.143.0/19
DENY 192.168.1.0/24
```