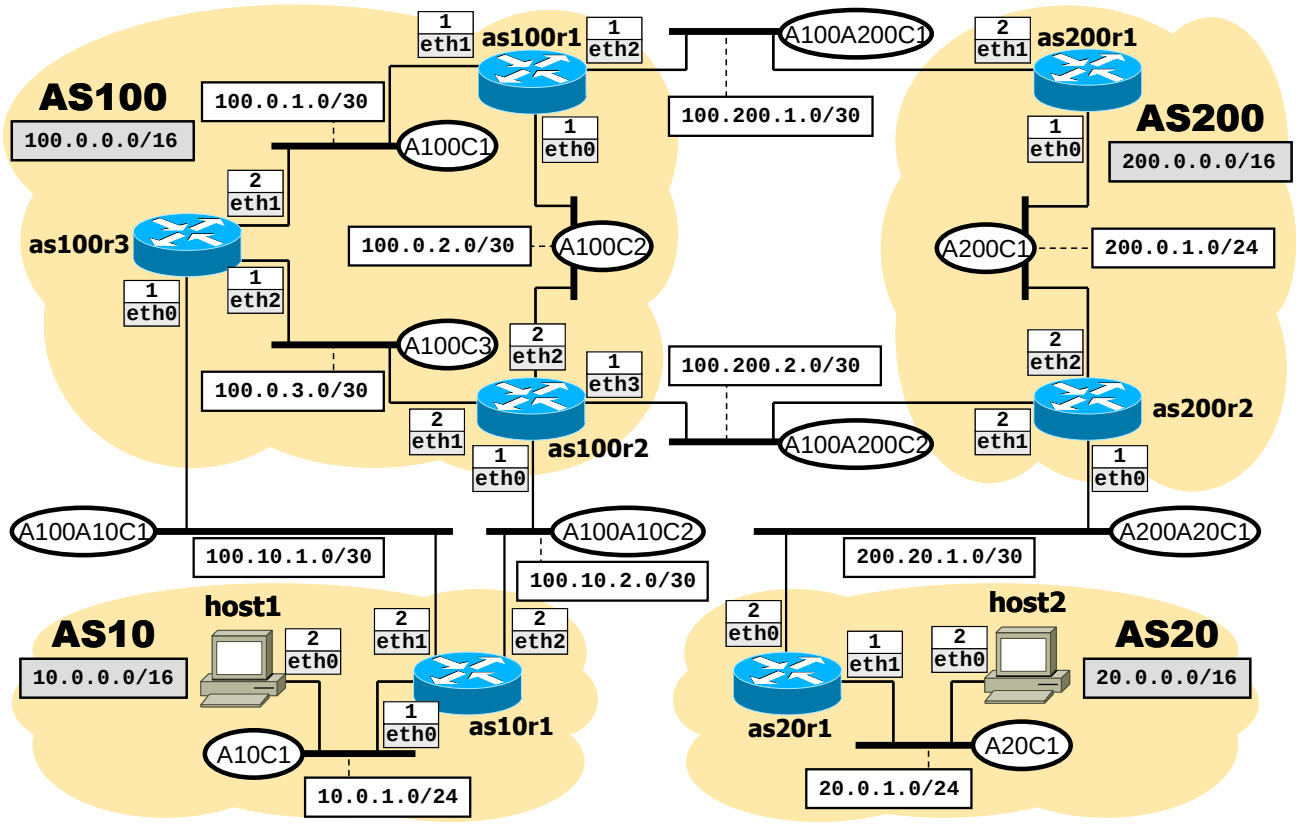
ICN – Examination date: 10-12-2012 – Round 1 – "Sidecar"
Available time: 100 minutes.

Using Netkit, implement the network depicted in the following figure.

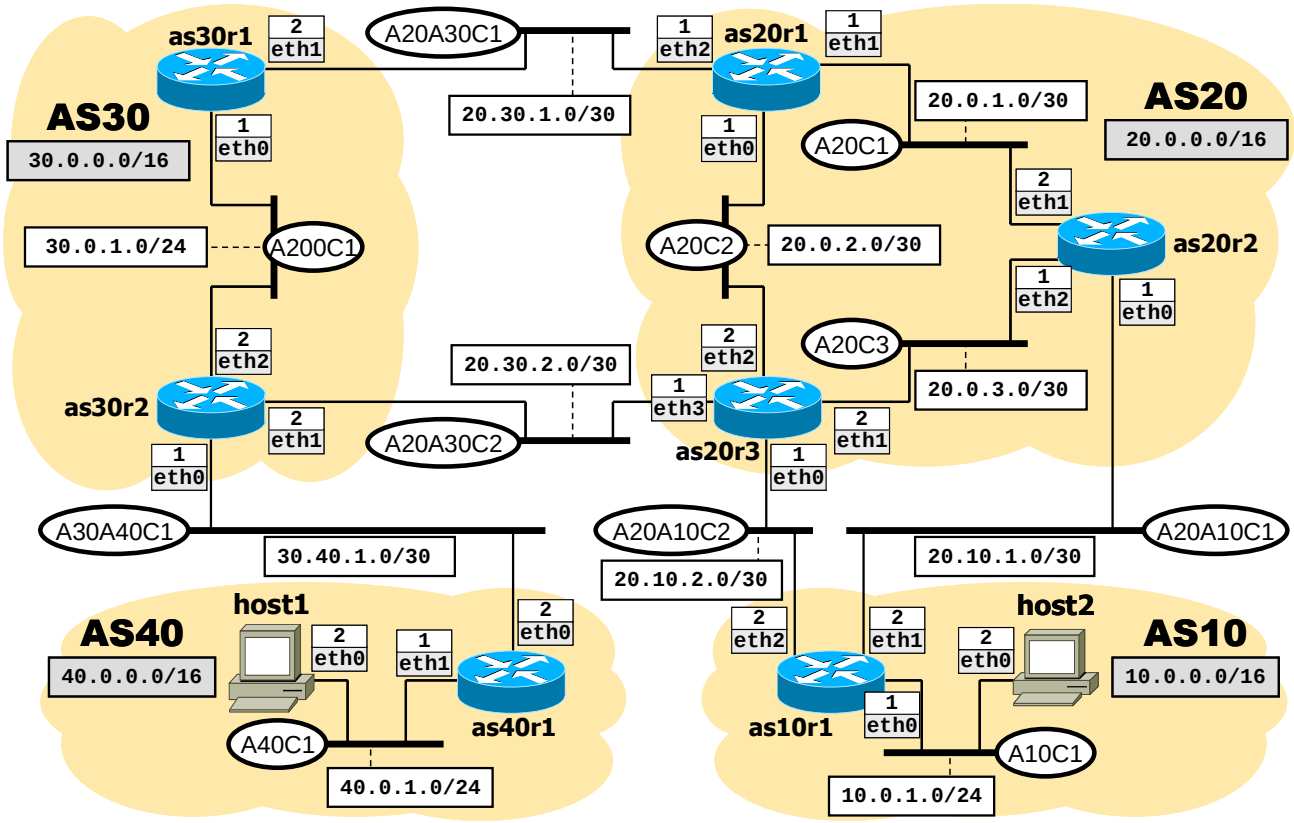


- All the internal networks (in grey) of the ASes must be visible by all BGP routers.
- All the internal networks of the ASes must be reachable from any network nodes.
- Inter-AS peering subnets must be announced in BGP as well.
- No router announces **`0/0`**.
- By altering solely the configuration of **`as200r1`**, implement the following routing policy:
  - Traffic from **`AS200`** to **`AS100`** should favour using link **`A100A200C1`**.
  - Traffic from **`AS100`** to **`AS200`** should favour using link **`A100A200C2`**.

ICN – Examination date: 10-12-2012 – Round 1 – "Pi"
Available time: 100 minutes.

Π

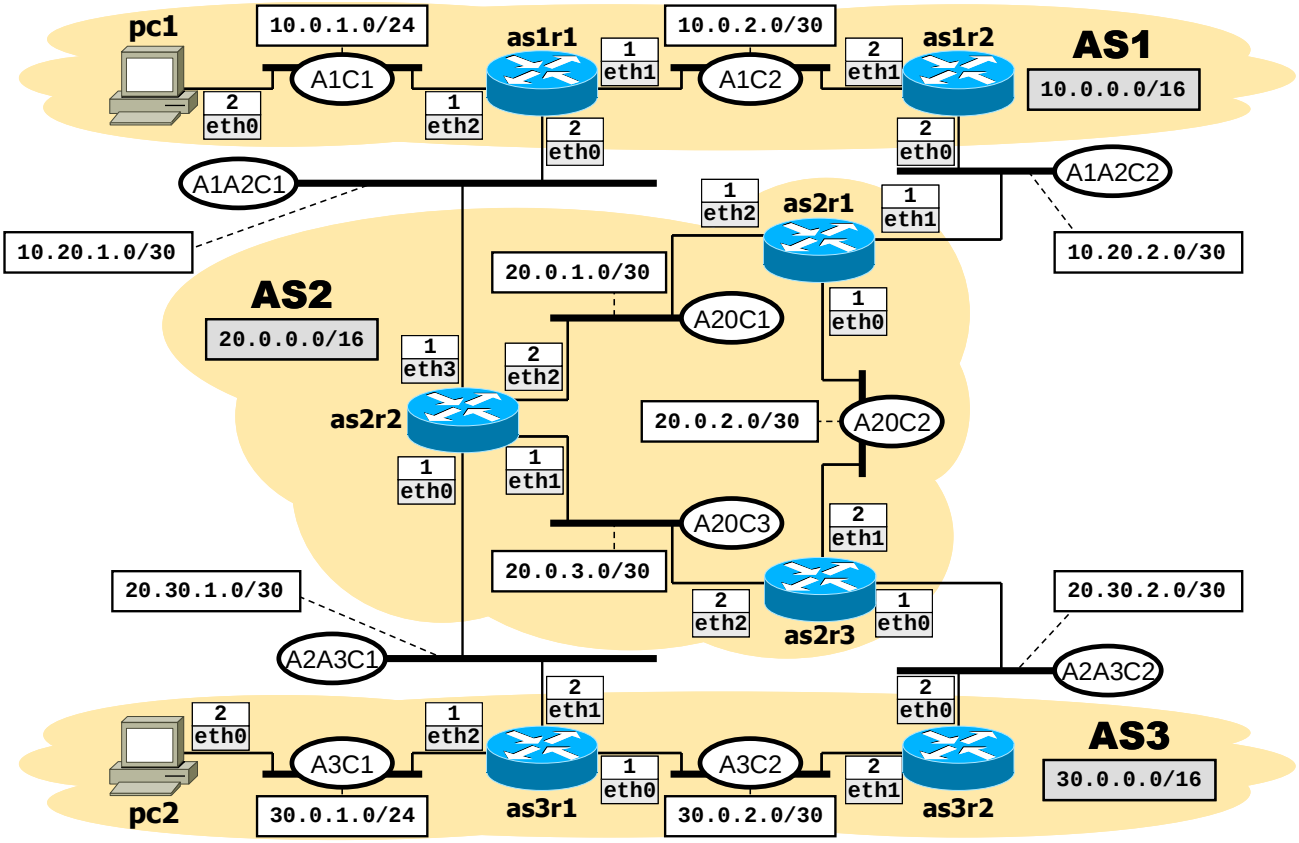
Using Netkit, implement the network depicted in the following figure.



- All the internal networks (in grey) of the ASes must be visible by all BGP routers.
- All the internal networks of the ASes must be reachable from any network nodes.
- Inter-AS peering subnets must be announced in BGP as well.
- No router announces **`0/0`**.
- By altering solely the configuration of **`as10r1`**, implement the following routing policy:
  - Link **`A20A10C1`** must be set up as a backup of **`A20A10C2`** for both inbound and outbound traffic.

ICN – Examination date: 10-12-2012 – Round 2 – "Sandwich"
Available time: 100 minutes.

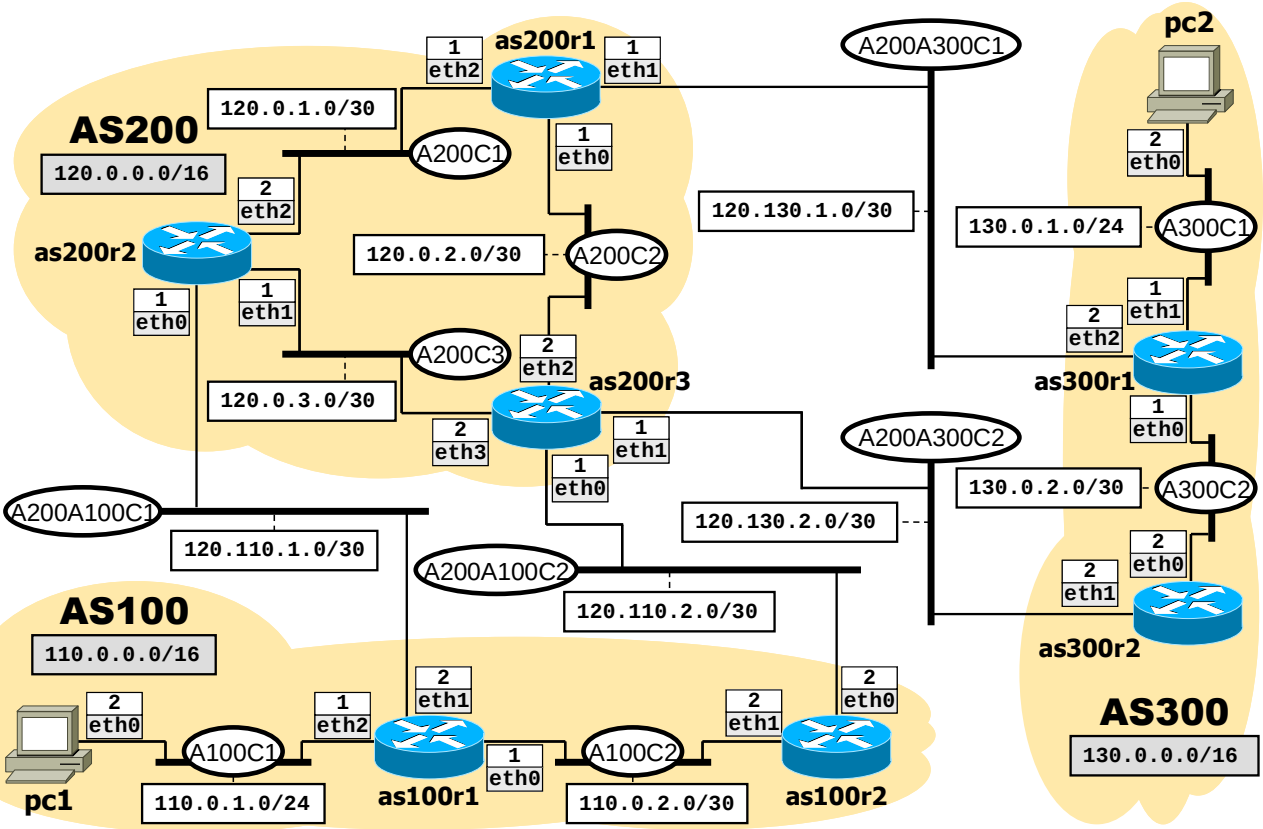
Using Netkit, implement the network depicted in the following figure.



- All the internal networks (in grey) of the ASes must be visible by all BGP routers.
- All the internal networks of the ASes must be reachable from any network nodes.
- Inter-AS peering subnets must be announced in BGP as well.
- No router announces `0/0`.
- By altering solely the configuration of `as3r2`, implement the following routing policy:
  - Traffic from **AS3** to **AS2** should favour using link **A2A3C2**.
  - Traffic from **AS2** to **AS3** should favour using link **A2A3C1**.

ICN – Examination date: 10-12-2012 – Round 2 – "Eta Beta"
Available time: 100 minutes.

Using Netkit, implement the network depicted in the following figure.



- All the internal networks (in grey) of the ASes must be visible by all BGP routers.
- All the internal networks of the ASes must be reachable from any network nodes.
- Inter-AS peering subnets must be announced in BGP as well.
- No router announces **`0/0`**.
- By altering solely the configuration of **`as300r1`**, implement the following routing policy:
  - Link **`A200A300C1`** should be set up as a backup of link **`A200A300C2`** for both inbound and outbound traffic.