# WC2014 POLICY CHALLENGE

POLICY TASK

Configure eBGP export policy on VJX1 router as follows:

- Advertise a summary route 198.18.96.0/22 out to VJX2 if only all 3 specific contributing routes are received from VJX0 on VJX1:
  - The specific contributing routes are 198.18.97/24, 198.18.98/24 and 198.18.99/24
- In case less than 3 contributing routes are received from VJX0 on VJX1, advertise only specific contributing routes from VJX1 to VJX2

VJX0
AS65001

iBGP

VJX1
AS65001

eBGP

VJX2
AS65002

ge-0/0/1

ge-0/0/1   ge-0/0/2   ge-0/0/2
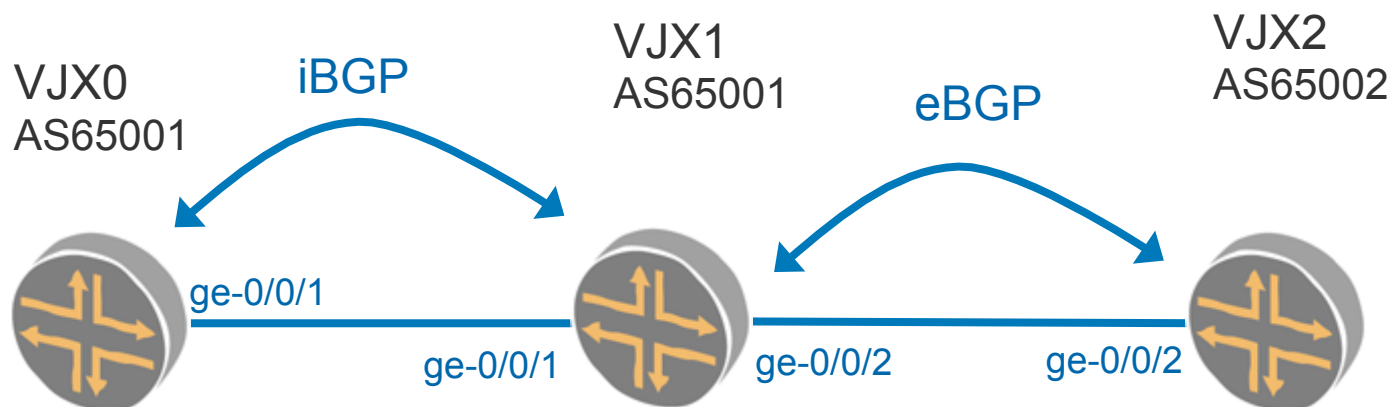
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POLICY SOLUTION

```
juniper@VJX1> show configuration protocols bgp
group iBGP {
    type internal;
    neighbor 198.51.100.250 {
        local-address 198.51.100.251;
    }
}
group eBGP {
    export [ check1 check2 check3 accept-agg ];
    peer-as 65002;
    neighbor 198.51.100.3;
}
juniper@VJX1> show configuration routing-options
aggregate {
    route 198.18.96.0/22 discard;
}
router-id 198.51.100.251;
autonomous-system 65001;
```

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POLICY SOLUTION (CONTD.)

```
juniper@vjx1> show configuration policy-options | no-more
policy-statement accept-agg {
    term 1 {
        from {
            protocol aggregate;
            route-filter 198.18.96.0/22 exact;
        }
        then accept;
    }
    term 2 {
        then reject;
    }
}
policy-statement check1 {
    term 1 {
        from {
            protocol [ aggregate bgp ];
            route-filter 198.18.96.0/22 orlonger;
            condition route1;
        }
        then next policy;
    }
    term 2 {
        from {
            protocol aggregate;
            route-filter 198.18.96.0/22 exact;
        }
        then reject;
    }
    term 3 {
        from protocol bgp;
        then accept;
    }
}
```

POLICY SOLUTION (CONTD.)

```
policy-statement check2 {
    term 1 {
        from {
            protocol [ aggregate bgp ];
            route-filter 198.18.96.0/22 orlonger;
            condition route2;
        }
        then next policy;
    }
    term 2 {
        from {
            protocol aggregate;
            route-filter 198.18.96.0/22 exact;
        }
        then reject;
    }
    term 3 {
        from protocol bgp;
        then accept;
    }
}
```

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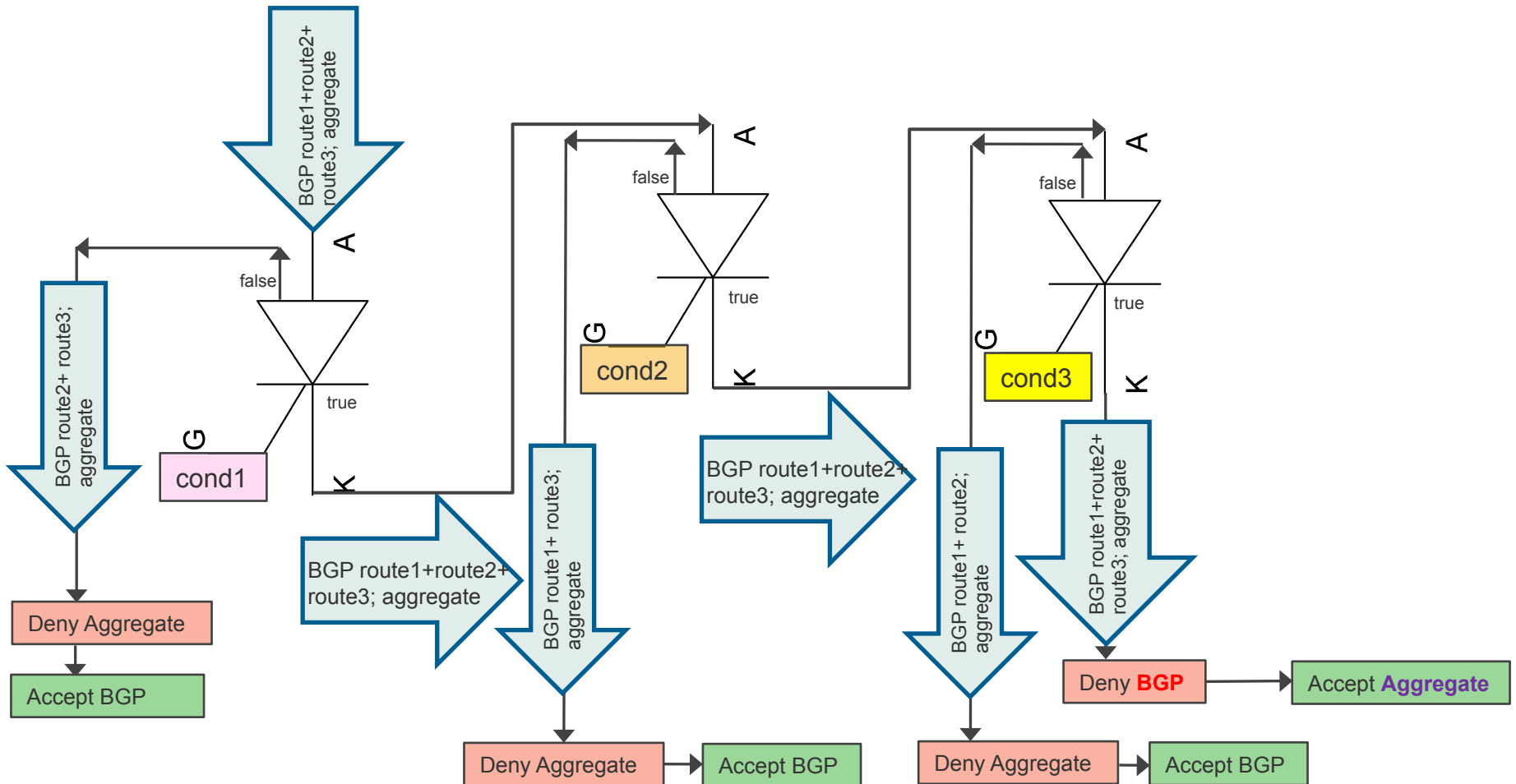NETWORKS

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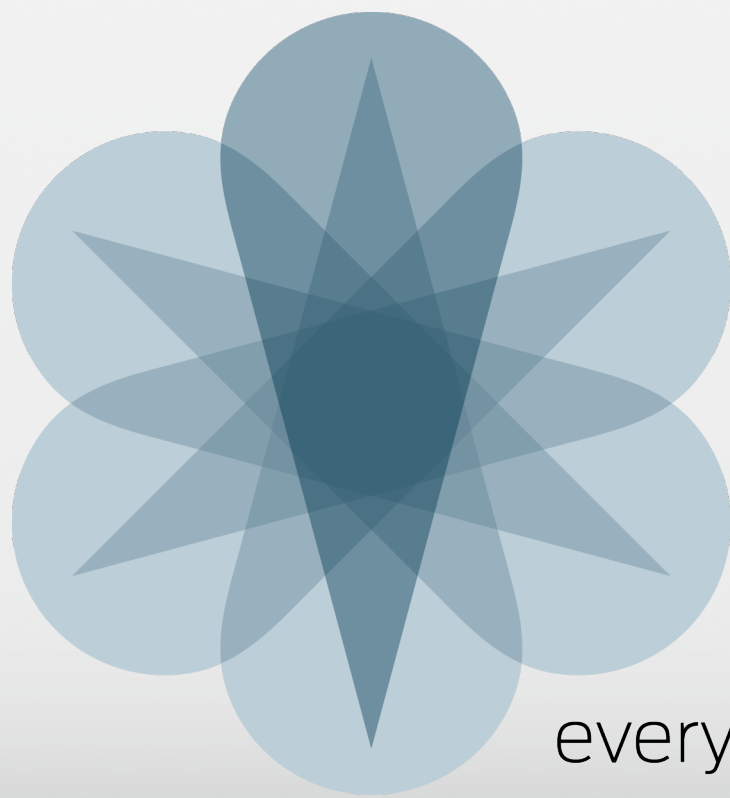
```
policy-statement check3 {
    term 1 {
        from {
            protocol [ aggregate bgp ];
            route-filter 198.18.96.0/22 orlonger;
            condition route3;
        }
        then next policy;
    }
    term 2 {
        from {
            protocol aggregate;
            route-filter 198.18.96.0/22 exact;
        }
        then reject;
    }
    term 3 {
        from protocol bgp;
        then accept;
    }
}
```

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```
condition route1 {
    if-route-exists {
        198.18.97.0/24;
        table inet.0;
    }
}
condition route2 {
    if-route-exists {
        198.18.98.0/24;
        table inet.0;
    }
}
condition route3 {
    if-route-exists {
        198.18.99.0/24;
        table inet.0;
    }
}
```

POLICY SOLUTION (CONTD.)

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