

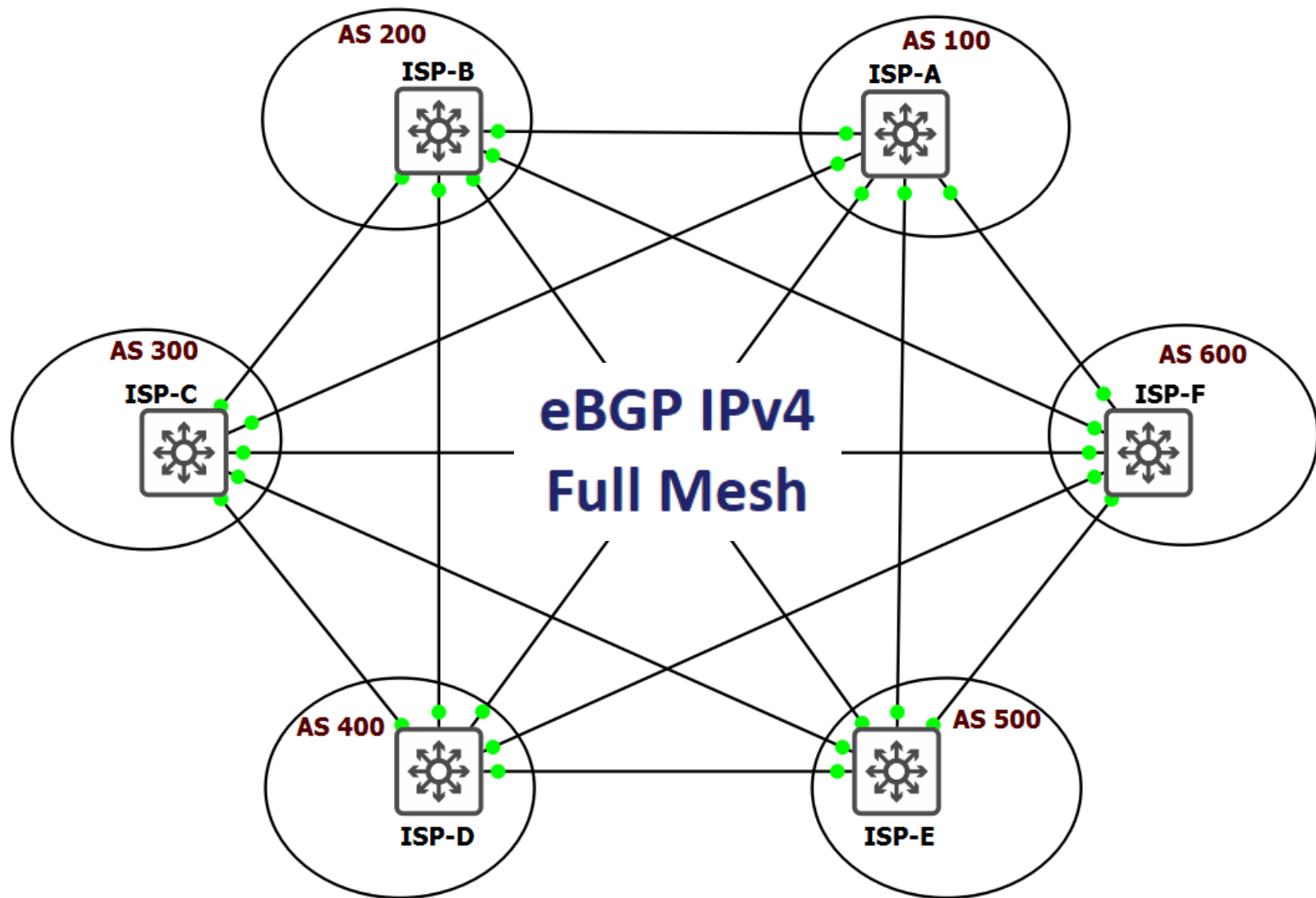
Cisco Data Centers
MP-BGP

BGP Route Server

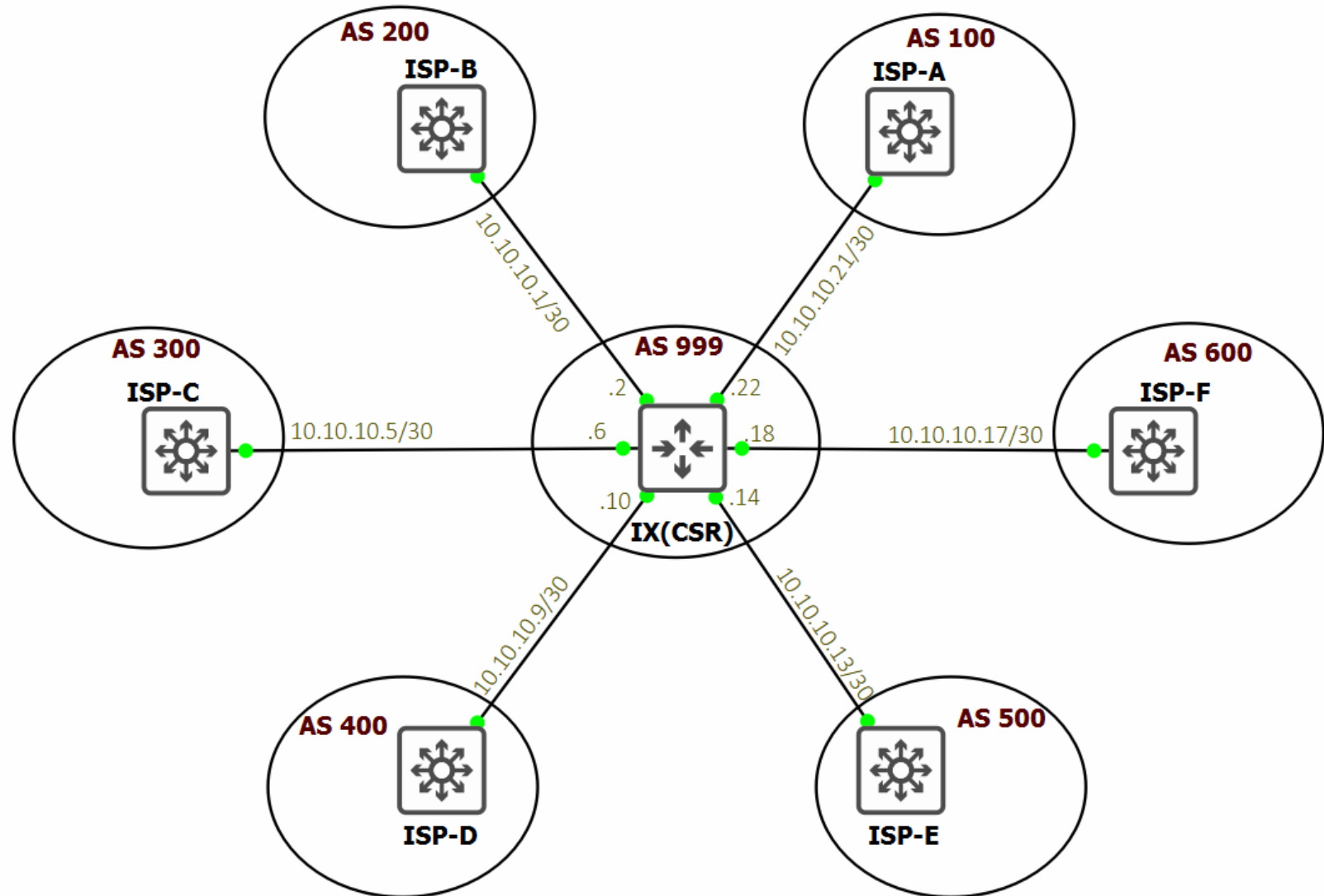
BGP Route Server Overview

- A **BGP route server** is basically an **eBGP route reflector** (not a BGP terminology) and performs the same route reflection function as an iBGP route reflector.
 - BGP route server provides an alternative option to full eBGP mesh peering between ASs.
 - Just like iBGP RR, it doesn't need to be in the data path to perform the route reflection.
- In datacenters BGP route server is commonly used in VXLAN EVPN multi-site deployments; However, in service provider networks, it is used to connect several internet exchange (IX) operators.
- The route server provides AS-path, MED, and next-hop transparency so that peering border routers (BGW) or ISPs at the IX still appear to be directly connected.
- A BGP route server provides the following benefits:
 - Reduce configuration complexity on each border router.
 - Reduce CPU and memory requirements on each border router.
 - Reduce operational overhead incurred by individualized peering agreements.
 - Allows the environment to scale well from control-plane peering and reduces the management burden of configuration and operation.

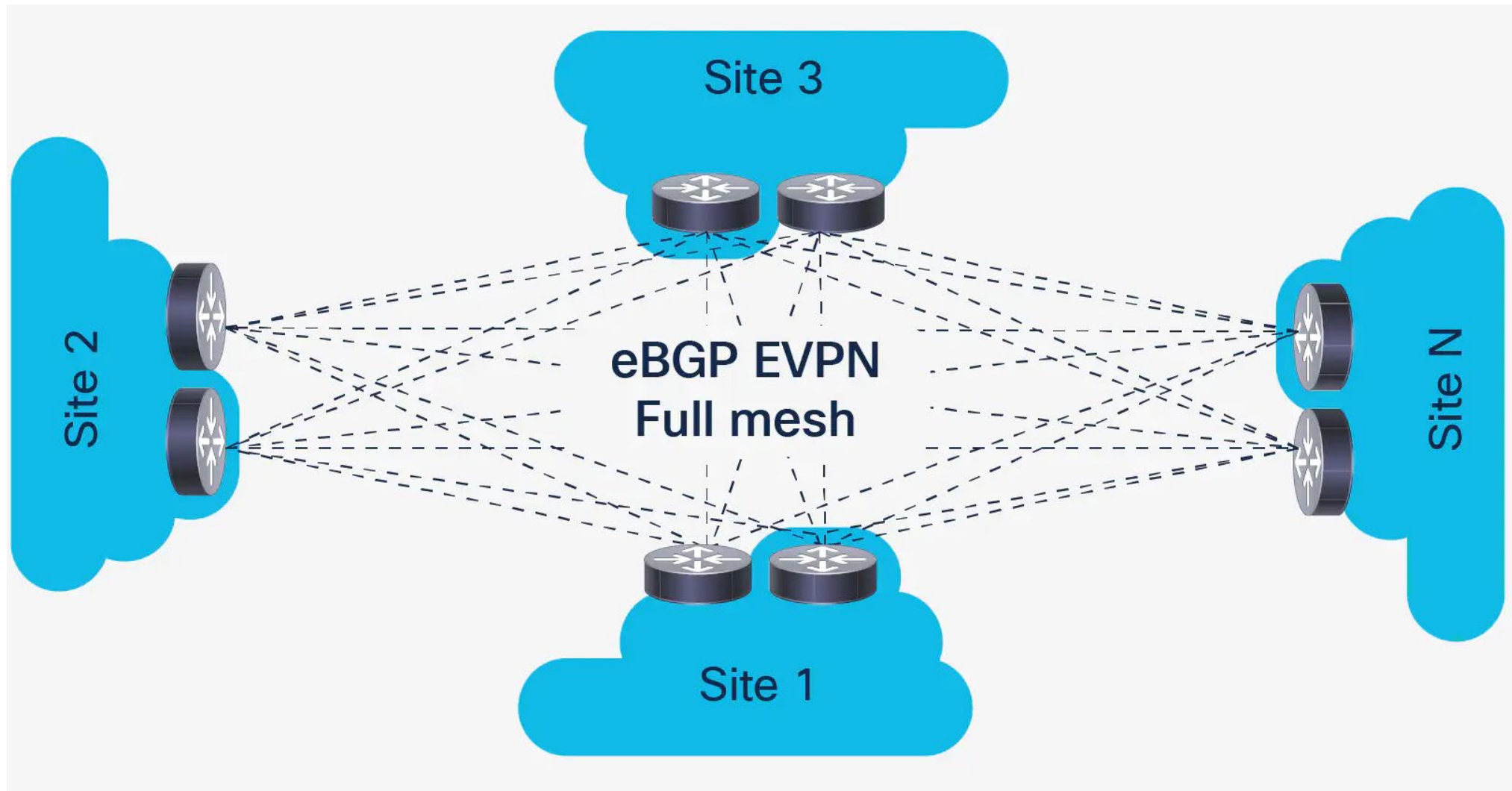
ISPs eBGP Full Mesh Design



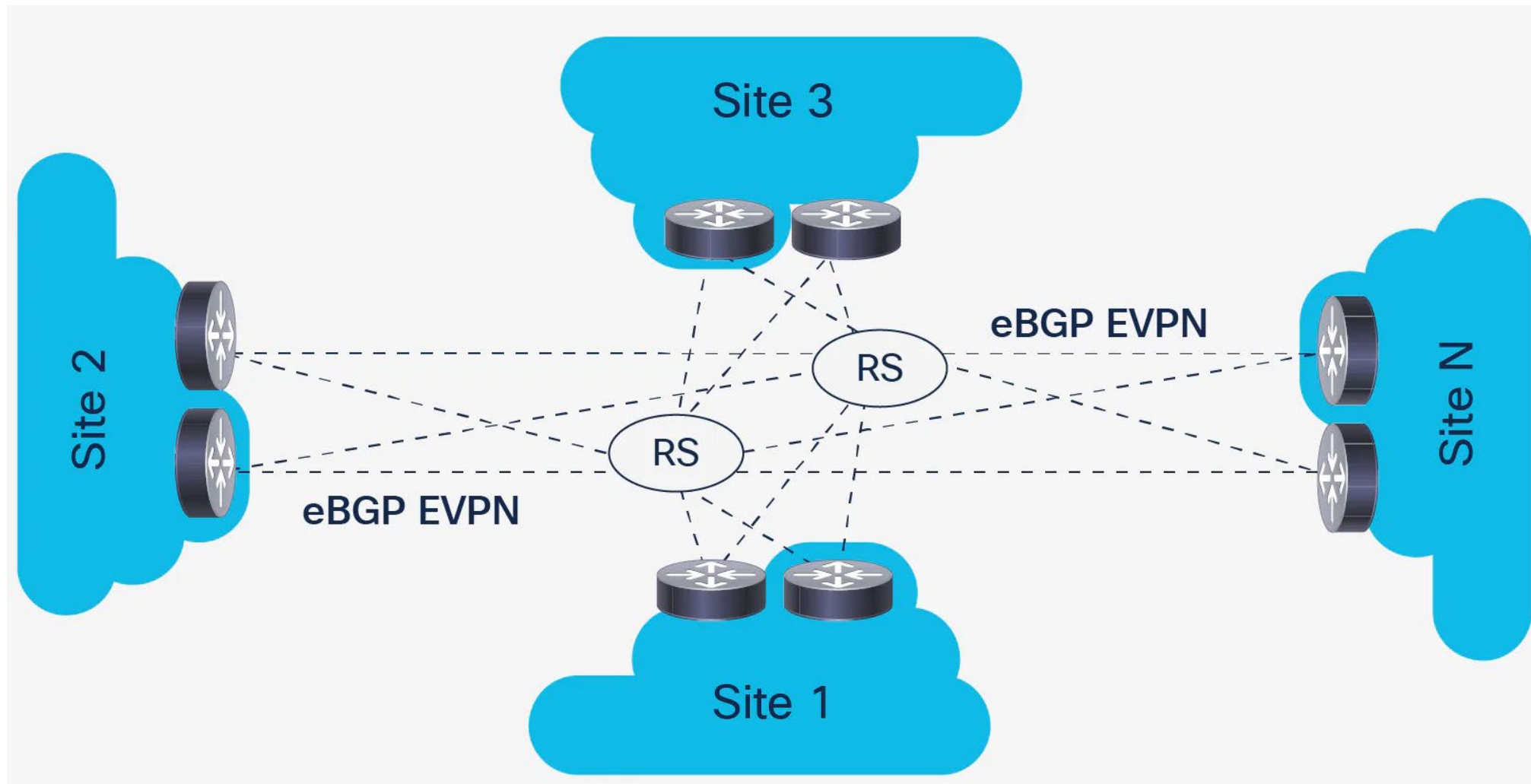
ISPs Route Server Design

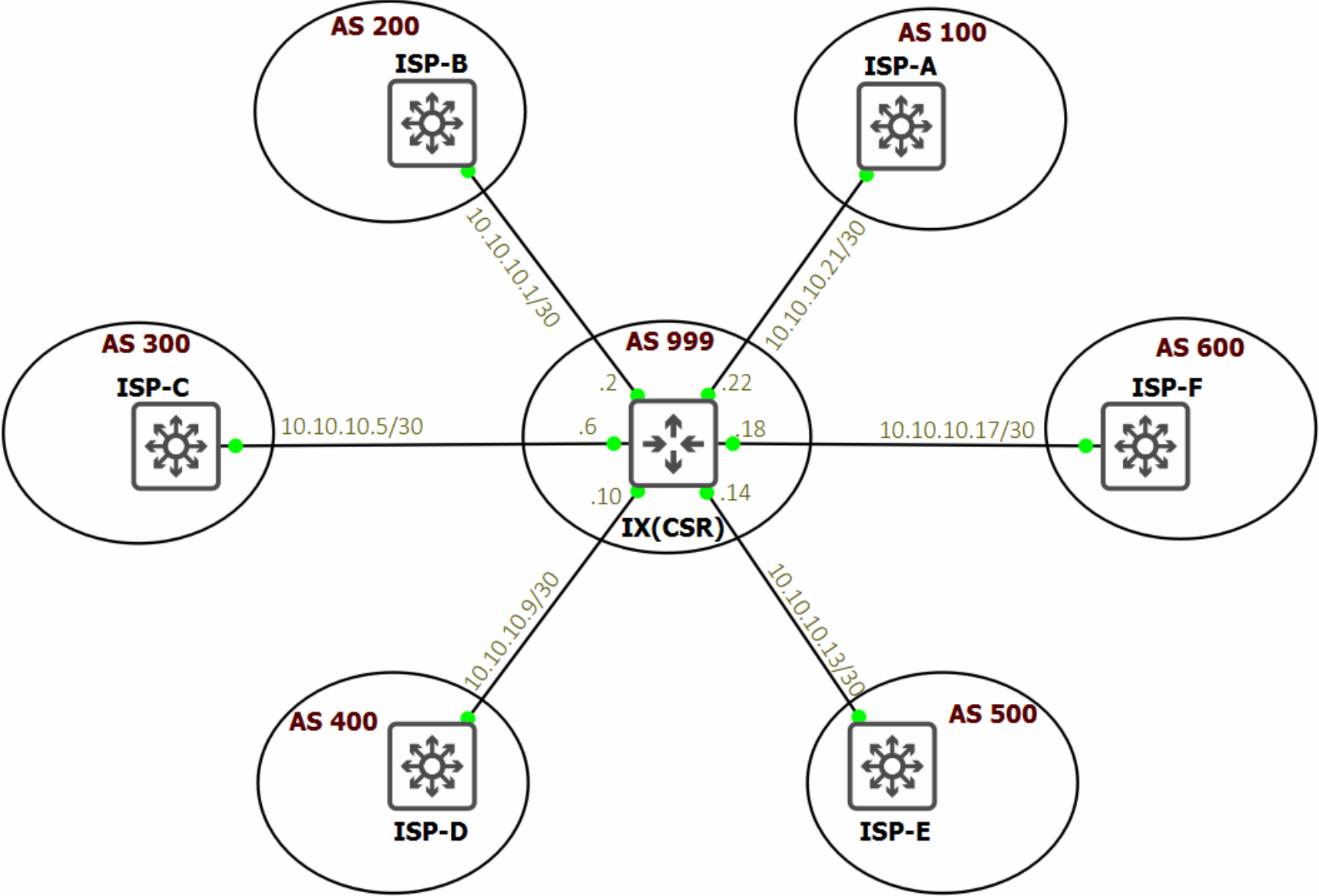


BGP Full Mesh Design in Multi-Site Datacenter



BGP Route Server Design in Multi-Site Datacenter





Thanks for watching!

