

TRILL Datacenter Interconnect

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What is it?

- Ability to interconnect TRILL sites
 - TRILL datacenters
 - TRILL Campus networks
- Ability to leverage existing protocols
 - Extending existing protocols
 - Minimize extensions to absolute requirements
 - Work with wide range of protocols

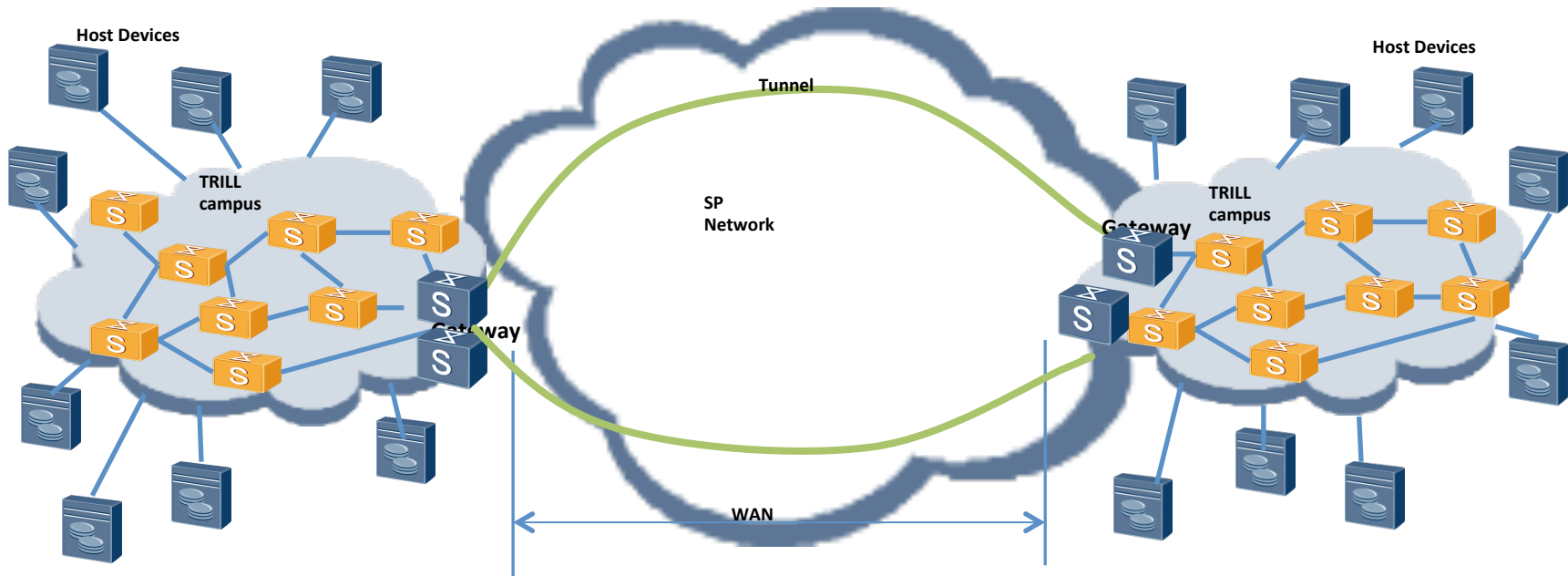
Problem!!

- No clear and solid mechanism to interconnect TRILL network sites, yet.
- MAC learning across TRILL sites brings in additional layer of complexity
- Nickname conflict resolution is not formalized
- Scalability and mobility issues increases proportionally with size of the TRILL network

Solution Requirements

- Ability to stretch or shrink the size of TRILL network by interconnecting different sites
- Minimum enhancements and modifications to existing protocol definitions and no changes to TRILL header
- Ability to interconnect over Layer2 and Layer3 Transport without any TRILL dependency
- Dynamic establishment of network/tunnel between sites
- Secure data transport across public network
- No data duplication and unnecessary traffic generation
- Easier to adopt future TRILL extensions

Solution Details



- Layer2 or Layer3 transport
- No TRILL awareness required from transport infrastructure
- Campus to campus dynamic tunnel establishment
- Dynamic exchange of Edge Rbridge reachability
- Rbridges nickname uniqueness resolution
- Default route advertisement into the TRILL campus

Solution – contd.

- Dynamic creation of tunnels from site to site
 - GRE
 - IPSEC Tunnels
 - MPLS LSP's
- No requirement for Tunnel establishment when E-LAN service is used.
- Service aware intelligence at the Edge Rbridges
- Ability to incorporate new TRILL extensions, without changing interconnection model
- Seamless support for unicast and multicast traffic

Questions?