

ACI Note 1

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How to Create a Fabric

We have a tenant that usually has Contexts within a Context we have Bridge Domains and within a BD we have Endpoint Groups.

For EPG communicate with others EPG we need contracts, for which contract we need to assigned an BD.

We have anycast gateways, that is a "router" or more in disclosure and gateway/13 designed to route the traffic and be the one that usually manage the traffic sent to the network, or communications with other EPG/BD.

Creating EPG & Type of connections

To have an EPG we need to assigned to an interface VLAN Pools(specified an "subnet"), assign one Domain, create a Attachable Entity Profile Configuration(AEEP), create an interface policy, create interface profile, and create an switch profile, if needed, and so we can override some interface profiles, for some difference within a specific interface.

Usually ACI is connected with I2 extensions with a protocol called VXLAN, VXLAN can permit the communication between 1 EPG with 2 hosts with different subnets in the underlay. With a tunnel created for a "End to End" connection.

We have LST connections that is Local Station Table, for MAC and IP direct attached.

GST, Global Station Table is for the connections that had been established and saved to that table, usually its IP and the leaf switch that has that endpoint.

Spine Proxy, usually it's to establish the first connection, or the one that doesn't know where is the endpoint.

ACI Bountries

For Bounce entry it's when an Endpoint change the location/leaf switch.

And then to establish the new connection the leaf that was previously attached it's used as an "proxy", and when the host responds with the new leaf switch, it's update the GST of the other switch that started the connection.

Unknown Unicast Traffic in ACI

The COOP DB is used for the Unknown traffic.

The LST is the local DB. Global hosts out of that leaf connected entries is the COOP DB Global.

Fist the Spine get alerted by the host when connected, and then he redirect every connection to that switch when it's destined to the MAC of the host that first connected.

Broadcast Traffic in ACI

One broadcast domain it's a Vlan in traditional networks, but one the concepts of ACI the Vlan it's replace as the Bridge Domain, so if the host belongs to the BD, all the EPG receives the broadcast sent. But the policy now it's defined by the contract belong to the EPG.