802.1ap
Service Creation in PBBN

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Service Data Model

- **B-Component**
  - Comp ID
  - **VLAN (B-VLAN)**
    - B-VID
    - Port Member Set
  - **Bridge Base Port**
    - Port type (External/Internal)
    - PNP
    - CBP
  - 1:N

- **I-Component**
  - Comp ID
  - **Current VLAN (S-VLAN)**
    - S-VID
    - Port Member Set
  - 1:N
  - **Bridge Base Port**
    - Port type (External/Internal)
    - CNP
    - VIP
  - 1:N
Service configuration steps
Operator configuration

Assumptions:
• B-component is already configured with at least one CBP and several PNPs
• I-components are already configured each with at least one PIP and several CNPs

The operator configures the following data:
• Service name
• Local I-SID
• Backbone I-SID (optional)
• Default B-DA (optional)
• Type: Port, S-tagged-one-to-one, S-tagged-Bundled, I-tagged
• B-VID (optional)
• List of CBP ports
• List of I-components. Per I-component
  – PIP number
  – Service interface S-VIDs (for S-tagged service)
  – For each S-VID (S-VID range) List of CNP ports
Service configuration steps
Agent actions

• Create an entry in the service instance table for all CBPs on which the service is configured with the following values:
  – B-VID
  – Default B-DA
  – Local and Backbone I-SIDs

• Create an entry in the VIP tables on all I-components on which the service is configured with the following values:
  – I-SID
  – Note: an entry in the bridge base table will be created as a consequence of creating an entry in the VIP table
Service configuration steps
Agent actions (cont’d)

• Create an entry in the current VLAN table of the I-components for the S-VIDs and add the newly created VIP and all the defined CNPs to the member set of the VID
  – ieee8021QBridgeVlanCurrentEgressPorts in ieee8021QBridgeVlanCurrentEntry
MIBS

• ieee8021PbbServiceTable –
  – add row status to enable creation and deletion of services initiated to create and wait, and modified to create and go once all other service objects are created
  – Add default B-VID and default B-MAC
  – List of CBPs
• ieee8021PbbServiceInstanceTable → ieee8021PbbCBPTable
  – Should be read only – display the service instance table per CBP
• ieee8021PbbServiceTemplateVIPTable → ieee8021PbbServiceVipTable (name change)
• ieee8021PbbServiceTemplateCNPEntry → ieee8021PbbServiceInterfaceTable (name change)
• ieee8021PbbServiceTemplateVIPIComponentTable → What is the usage of this table? Seems the same as ieee8021PbbServiceTemplateCNPEntry
Thank You

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