802.1ap
Service Creation in PBBN

Zehavit Alon

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Nokia Siemens Networks

Service Data Model

BEB

B-Component

Comp ID

I-Component

Comp ID

Service
- Name
- Type (port/bundle)
- S-VIDs
- B-VID
- Local I-SID
- Backbone I-SID
- Default B MAC-DA
- List of CBP ports
- List of CNP ports

VLAN (B-VLAN)

B-VID
Port Member Set

Bridge Base Port

Port type
External/Internal

Current VLAN (S-VLAN)

S-VID
Port Member Set

Bridge Base Port

Port type
External/Internal

1:N

PNP

1:N

CBP

1:N

CNP

1:N

VIP
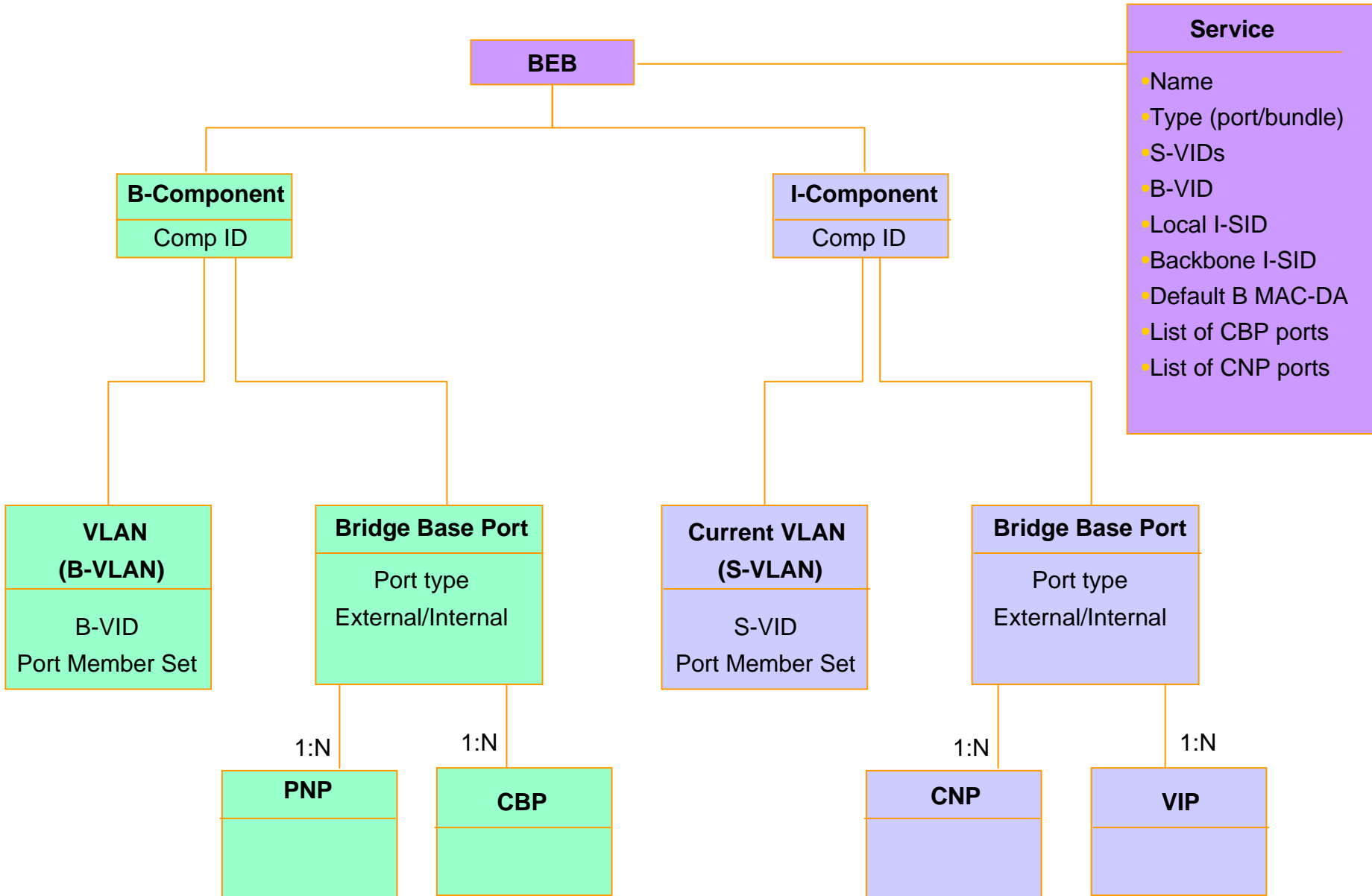
Service configuration steps
Operator configuration

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

zehavit.alon@nsn.com

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