Bridge Assigned VSI Type IDs for VDP
bg-ghanwani-bridge-vsi-0710-v2

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Overview

- Background
- Motivation for network assigned VSI Type IDs
- Modifications to VDP in 802.1Qbg/D1.0
Background

- 802.1Qbg/D1.0 contains a protocol to communicate VSI Type IDs between end stations and bridges
- Currently, the end station is always responsible for indicating the VSI Type ID to a bridge
- It would be useful to allow the *option* of having the bridge assign the VSI Type ID for a given VSI

This is in addition to, not instead of, the existing mechanism for server assigned VSI Type ID
Motivation for Bridge-assigned VSI Type IDs

- The VSI Type ID for a VSI determines what policies get applied to the server represented by that VSI at a VEB/VEPA/bridge port
- The policy is usually something that would be maintained in the VM Manager
- There are instances where the end station need not be involved in VSI Type ID assignment
Motivation – An Example

- Network Admin would like to set up virtual appliances
- The server used for the appliances are not under the administration of the VM manager
Network Admin wants to provision virtual appliances not under the management of the VM Manager.
Modifications to P802.1Qbg/D1.0

- EVB TLV
- VDP
EVB TLV Changes

- Need a mechanism for the Controlling Bridge to indicate whether or not it will accept VSI Type IDs from the end station
- 2 additional bits are needed
  - “support server assigned VSI Type ID” - SAVT
  - “support bridge assigned VSI Type ID” - BAVT
EVB TLV Changes (2)

BAVT = Bridge Assigned VSI Type ID
SAVT = Server Assigned VSI Type ID
VDP Changes

- Currently, during the pre-associate and associate phases, the end station always specifies the VSI Type ID
- Instead, at this step, the end station provides a reserved VSI Type ID indicating “To be provided by Bridge”
- The Bridge would provide the assigned VSI Type ID in the confirmation message
Server Assigned & Bridge Assigned VSI Types

- P802.1Qbg/D1.0 specifies SAVT
  - This mode will continue to be **mandatory** for conformance
- A new mode, BAVT, is allowed
  - This mode would be **optional**
- End stations and bridges will indicate their capabilities and configuration for each mode by setting bits in the EVB TLV
  - A mode may be used only if set by both the bridge and the end station
  - Both SAVT and BAVT may be set by the bridge and the end station
  - SAVT operates as specified today
  - If only BAVT is set, then the bridge will only accept pre-associate and associate messages from the end station with a reserved VSI Type ID and will return the VSI Type ID to be used in the response
THANK YOU