

BROCADE



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

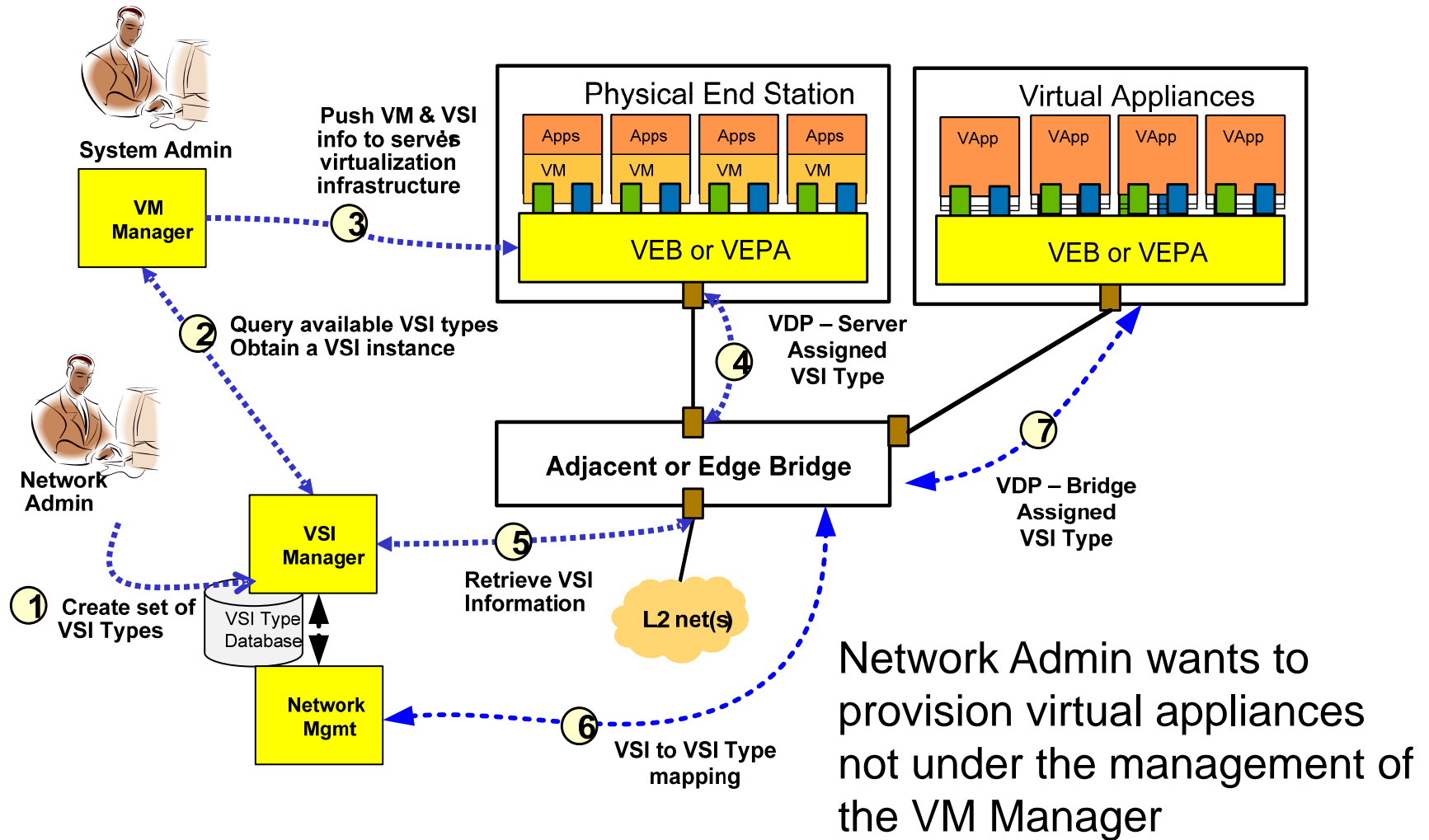


Motivation – An Example

- Network Admin would like to set up virtual appliances
- The server used for the appliances are not under the administration of the VM manager



Use Case for Bridge Assigned VSI Types



Modifications to P802.1Qbg/D1.0

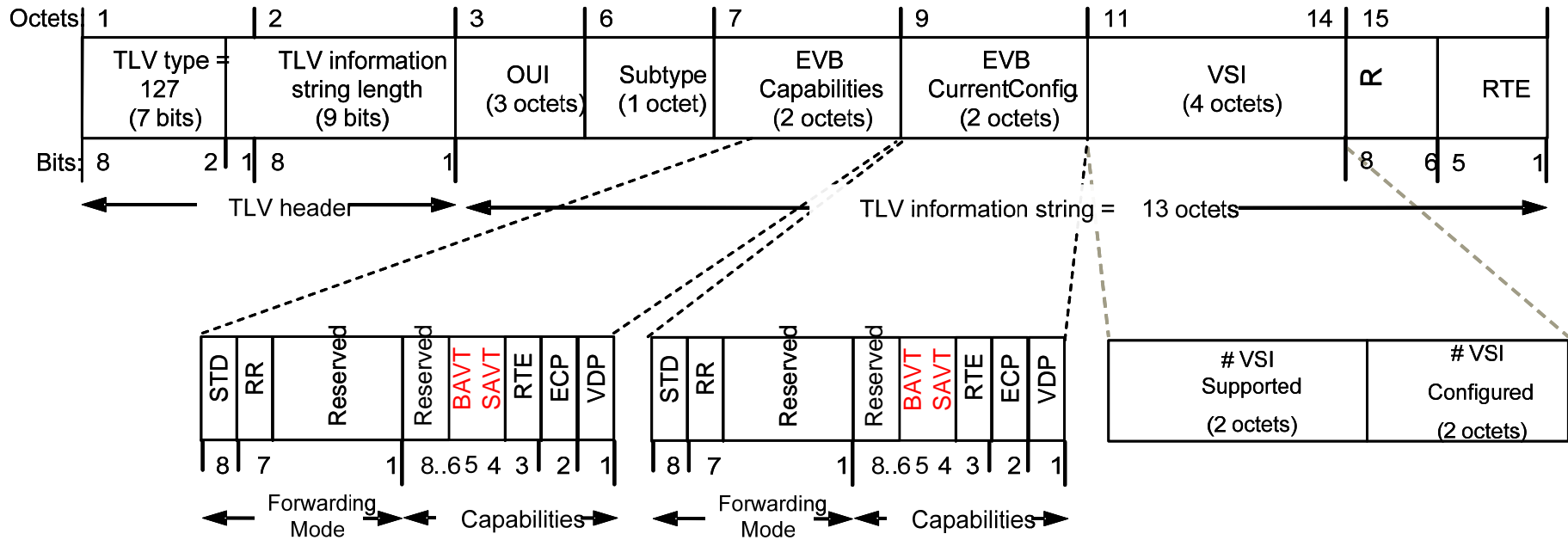
- EVB TLV
- VDP

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



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THANK YOU