



ZebOS-XP®

Network Platform

Version 1.4
Extended Performance

**Edge Virtual Bridging
Configuration Guide**

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Preface

This guide describes how to configure Edge Virtual Bridging (EVB) in ZebOS-XP.

Audience

This guide is intended for network administrators and other engineering professionals who configure EVB.

Conventions

Table P-1 shows the conventions used in this guide.

Table P-1: Conventions

Convention	Description
<i>Italics</i>	Emphasized terms; titles of books
Note:	Special instructions, suggestions, or warnings
<code>monospaced type</code>	Code elements such as commands, functions, parameters, files, and directories

Contents

This guide contains this chapter:

- [Chapter 1, Configuring EVB](#)

Related Documents

Use this guide with these command references for details about the commands used in the configurations.

- *Edge Virtual Bridging Command Reference*
- *Network Services Module Command Reference*

Note: All ZebOS-XP technical manuals are available to licensed customers at http://www.ipinfusion.com/support/document_list.

Chapter Organization

The chapters in this guide are organized into these major sections:

- An overview that explains a configuration in words

- Topology with a diagram that shows the devices and connections used in the configuration
- Configuration steps in a table for each device where the left-hand side shows the commands you enter and the right-hand side explains the actions that the commands perform
- Validation which shows commands and their output that verify the configuration

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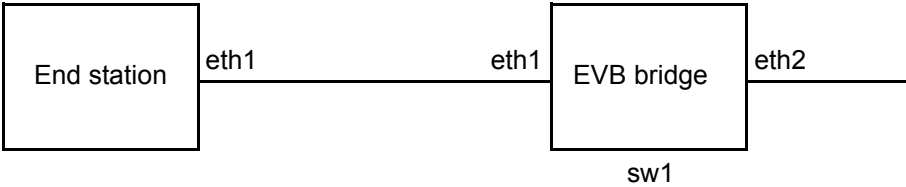
CHAPTER 1 Configuring EVB

This chapter shows how to configure Edge Virtual Bridging (EVB).

EVB as defined by IEEE 802.1Qbg specifies the interaction between virtual switching environments in a hypervisor and the first layer of the physical switching infrastructure. EVB is also referred to as VEPA (Virtual Ethernet Port Aggregation).

Topology

In this topology, the end station is a virtual machine and sw1 is an EVB bridge (layer 2 switch).



sw1

sw1#configure terminal	Enter configure mode
sw1(config)#bridge 1 protocol evb	Configure EVB bridge protocol
sw1(config)#vlan database	Configure VLAN database
sw1(config-vlan)#vlan 10 type service multipoint-multipoint bridge 1 state enable	Configure service VLAN 10 and associate with bridge 1
sw1(config-vlan)#exit	Exit VLAN mode
sw1(config)#int eth1	Enter interface mode
sw1(config-if)#switchport	Configure switchport and switch to Layer 2 mode
sw1(config-if)#bridge-group 1	Enable bridge group 1
sw1(config-if)#switchport mode sbp	Configure switchport mode as SBP for EVB bridge
sw1(config-if)#evb cdcp enable	Enable CDCP on interface
sw1(config-if)evb reflective-relay enable	Enable reflective relay on the interface
sw1(config)#set ll dp enable txrx	Enable LLDP
sw1(config-if)#lldp tlv ieee-8021-org-specific	Specify LLDP TLV
sw1(config-if)#exit	Exit interface mode
sw1(config)#evb bridge 1 tlv-mode auto	Configure TLV mode as automatic
sw1(config)#evb bridge 1 ecp-acktimer 20	Configure the acknowledgement time
sw1(config)#evb bridge 1 ecp-max-retry 7	Configure the maximum number of retries

Configuring EVB

sw1(config)#evb bridge 1 vdp-keep-alive 31	Configure VDP keep-alive time
sw1(config)#evb bridge 1 resource-wait-delay 31	Configure resource-wait-delay time
sw1(config)#evb bridge 1 cdcp channel-capacity 167	Specify the channel capacity
sw1(config)#evb bridge 1 cdcp svid-pool-range 2 4094	Specify the SVID pool range
sw1(config)#exit	Exit configure mode

Validation

```
sw1#show evb-bridge 1
```

```

                                BRIDGE PARAMETERS FOR EVB
Admin Configuration:
acktimer  max_retry  Resource   Resource   Channel   Svid Pool   TLV
              Wait Delay  Keep Alive  Cap       Range      Mode
=====
    20         7         31         31        167        2 - 4094  Manual

Operational Configuration:
acktimer  max_retry  Resource   Resource   Channel   Svid Pool   TLV
              Wait Delay  Keep Alive  Cap       Range      Mode
=====
    20         7         31         31        167        2 - 4094  Manual

sw1#show evb interface eth1
Interface: eth1

Admin Configuration:
acktimer  max_retry  Resource   Resource   Channel   Svid Pool   TLV   Reflective   CDCP
              Wait Delay  Keep Alive  Cap       Range      Mode    Relay
=====
    20         7         31         31        167        2 - 4094  Manual  Enable     Enable

Operational Configuration:
acktimer  max_retry  Resource   Resource   Channel   Svid Pool   TLV   Reflective   CDCP
              Wait Delay  Keep Alive  Cap       Range      Mode    Relay
=====
    20         7         31         31        167        2 - 4094  Manual  Enable     Enable
```


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