Configure New Zones

Contents

Introduction

This document describes the Port Worldwide Name (PWWN) zoning and device-alias zoning with Storage Area Networking (SAN) processes.

Prerequisites

Requirements

Cisco recommends that you have knowledge of adding zones in a network environment.

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

PWWN Zoning

Prerequisites

Before you add a new zone you need to determine this information:

- What devices can you zone together?
- What virtual SAN (VSAN) does the new zone belong to?
- Is there an active zoneset? If so, what is the name of the zoneset?

Once the VSAN number has been established, you can check for an active zoneset with this command:

<#root>

switch#

show zoneset active vsan X

Where **X** is the **VSAN** number provided.

Example:

Adding zones for Host_A to talk to Target_1 and Target_2 to the active zoneset Zoneset_10 in VSAN 10.

End Device	PWWN
Host_A	21:01:00:e0:8b:39:a9:07
Target_1	21:00:00:20:37:af:a5:93
Target_2	21:00:00:20:37:af:a5:3d

Add Zones

<#root>

switch#

conf t

switch(config)#

zoneset name Zoneset_10 vsan 10

switch(config-zoneset)#

zone name Host_A-Target_1

switch(config-zoneset-zone)#

member pwwn 21:01:00:e0:8b:39:a9:07

switch(config-zoneset-zone)#

member pwwn 21:00:00:20:37:af:a5:93

switch(config-zoneset-zone)#

zone name Host_A-Target_2

switch(config-zoneset-zone)#

member pwwn 21:01:00:e0:8b:39:a9:07

switch(config-zoneset-zone)#

member pwwn 21:00:00:20:37:af:a5:3d

switch(config-zoneset-zone)#

zoneset activate name Zoneset_10 vsan 10

```
switch(config)#
zone commit vsan 10
```

Command Explanation:

Command	Explanation
switch# **conf t**	Enters the configuration terminal.
switch(config)# **zoneset name Zoneset_10 vsan 10**	Enters the Zoneset configuration mode. Creates Zoneset_10 for VSAN 10 if it does not exist.
switch(config-zoneset)# **zone name Host_A-Target_1**	Enters the in-line Zone configuration mode. Creates zone Host_A-Target_1 in VSAN 10 and as a member to Zoneset_10 if it does not exist.
switch(config-zoneset-zone)# **member pwwn 21:01:00:e0:8b:39:a9:07**	Adds PWWN as a member of zone Host_A-Target_1.
switch(config-zoneset-zone)# **member pwwn 21:00:00:20:37:af:a5:93**	Adds PWWN as a member of zone Host_A-Target_1.
switch(config-zoneset-zone)# **zoneset activate name Zoneset_10 vsan 10**	Sets the active zoneset as the currently configured Zoneset_10 in VSAN 10. Note that only one zoneset can be active in a VSAN at a time.
switch(config)# **zone commit vsan 10**	Commits the change made to the zoneset in VSAN 10. This step is required in enhanced zoning mode after an activation in order for the new activation to occur.

Device Alias Zoning

Prerequisites

Before you add a new zone you need to determine this information:

- What devices can you zone together?
- What VSAN does the new zone belong to?
- Is there an active zoneset? If so, what is the name of the zoneset?
- Map Device Alias/PWWN.

Once the VSAN number has been established you can check for an active zoneset with this command:

```
<#root>
switch#
show zoneset active vsan X
```

Where **X** is the **VSAN** number provided.

Example:

Adding zones for Host_A to talk to Target_1 and Target_2 to the active zoneset Zoneset_10 in VSAN 10.

End Device	Device Alias	PWWN
Host_A	HOST	21:01:00:e0:8b:39:a9:07

Target_1	TARGET1	21:00:00:20:37:af:a5:93
Target_2	TARGET2	21:00:00:20:37:af:a5:3d

Configure Device-Alias

<#root>

switch#

conf t

switch(config)
switch(config)#

device-alias database

switch(config-device-alias-db)#

device-alias name HOST pwwn 21:01:00:e0:8b:39:a9:07

switch(config-device-alias-db)#

device-alias name TARGET1 pwwn

21:00:00:20:37:af:a5:93

switch(config-device-alias-db)#

device-alias name TARGET2 pwwn 21:00:00:20:37:af:a5:3d

switch(config-device-alias-db)#

exit

switch(config)#

device-alias commit

Add Zones

<#root>

switch#

conf t

switch(config)#

zoneset name Zoneset_10 vsan 10

switch(config-zoneset)#

```
zone name Host_A-Target_1

switch(config-zoneset-zone)#
member device-alias HOST

switch(config-zoneset-zone)#
member device-alias TARGET1

switch(config-zoneset-zone)#
zone name Host_A-Target_2

switch(config-zoneset-zone)#
member device-alias HOST

switch(config-zoneset-zone)#
member device-alias TARGET2

switch(config-zoneset-zone)#
zoneset activate name Zoneset_10 vsan 10

switch(config)#
zone commit vsan 10
```

Command Explanation:

Command	Explanation
switch# **conf t**	Enters the configuration terminal.
switch(config)# **device-alias database**	Enters the Device-alias database configuration mode. Allows for the creation, deletion and modification of device-aliases.
switch(config-device-alias-db)# **device-alias name HOST pwwn 21:01:00:e0:8b:39:a9:07**	Assigns the device alias HOST to the PWWN 21:01:00:e0:8b:39:a9:07. A device-alias can only be mapped to one PWWN and a PWWN can only map to one device-alias. This is case sensitive.
switch(config-device-alias-db)# **exit**	Exits the device-alias database configuration mode.
switch(config)# **device-alias commit**	Commits the device-alias changed.
switch(config)# **zoneset name Zoneset_10 vsan 10**	Enters the Zoneset configuration mode. Creates Zoneset_10 for VSAN 10 if it does not exist.
switch(config-zoneset)# **zone name Host_A-Target_1**	Enters the in-line Zone configuration mode. Creates zone Host_A-Target_1 in vsan 10 and as a member to Zoneset_10 if it does not exist.
switch(config-zoneset-zone)# **member device-alias HOST**	Adds PWWN as a member of zone Host_A-Target_1.
switch(config-zoneset-zone)# **member device-alias TARGET1**	Adds PWWN as a member of zone Host_A-Target_1.
switch(config-zoneset-zone)# **zoneset activate name Zoneset_10 vsan 10**	Sets the active zoneset as the currently configured Zoneset_10 in VSAN 10. Note that only one zoneset can be active in a VSAN at a time.
switch(config)# **zone commit vsan 10**	Commits the change made to the zoneset in VSAN 10. This step is

	required in enhanced zoning mode after an activation in order for the new activation to occur.