Document Name: SVL

StackWise Virtual Link or SVL is a high availability technology used to combine two connected switches in a single virtual one. Multiple HA technologies are rolled into this feature mainly, Stateful Switch Over (SSO), Non-Stop Forwarding (NSF) and, Multi-chassis EtherChannel (MEC) also known as MC-LAG.

SVL is supported on Catalyst 9000 series switches currently this includes (9400, 9500 and, 9600). It also requires the device to have a Network Advantage license.

Configuration

The configuration for SVL is simple but also requires a reload of each switch to activate it.

First you enable SVL and configure the domain.

Switch(config)# stackwise-virtual

Switch(config-stackwise-virtual)# domain [1-255]

Switch(config-stackwise-virtual)# exit

Next you need to configure SVL on at least one interface. This will ack like a VPC peer or standard StackWise cable will, moving traffic between the physical switches when needed.

Switch(config)# interface HundredGigE 1/0/25

Switch(config-if)# stackwise-virtual link 1

It is important to renumber at a minimum the secondary switch and set the priority. I like to set my primary unit with a priority of 15 then set the secondary to 10.

Switch# switch 1 renumber 2 Switch# switch 1 priority [1-15]

To finish the configuration, you must reload both switches. To ensure they come up in the correct configuration I like to apply power to the primary unit and then wait momentarily and then apply power to the secondary unit.

There are additional features that can be configured but the features and how to configure them may vary from one specific platform to another. This includes L2 BUM Optimization, DAD, Recovery Reload and others. Refer to Cisco's documentation for specifics to that platform and code version.

Show Commands

Switch# show stackwise-virtual

Switch# show stackwise-virtual bandwidth

Switch# show stackwise-virtual link

Switch# show stackwise-virtual switch [switch number 1-2]

Cisco Configuration Documentation

Cisco Catalyst 9000 SVL White Paper