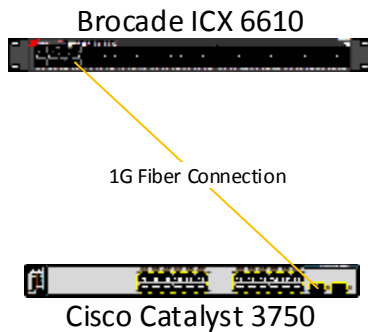# Brocade ICX to Cisco Catalyst Interoperability

When connecting a Brocade ICX, SX, or FCX switch to a Cisco Catalyst switch there are some features that have to match for optimal performance and interoperability. This document will outline the basic needs to interoperate between the two different devices. Below is a diagram of a Brocade ICX 6610 connected to a Cisco Catalyst 3750 via 1G fiber.

Figure 1:

Brocade ICX 6610

1G Fiber Connection

Cisco Catalyst 3750

This configuration consists of three VLANs that must cross between the switches. VLAN 110 is the Data VLAN, VLAN 120 is the Voice VLAN, and VLAN 1 is the Native VLAN. The native VLAN must be sent across the trunk for CDP to function properly.

Here is this configuration on the Brocade switch:

1. Set the default VLAN to a VLAN other than VLAN 1.

   default-vlan-id 1499

2. Configure the VLANs and tag the port connecting to the Cisco switch.

```
SSH@Lab-6610(config)#vlan 1 name Native
SSH@Lab-6610(config-vlan-1)#tagged e 1/3/8
Added tagged port(s) ethe 1/3/8 to port-vlan 1.
SSH@Lab-6610(config-vlan-1)#vlan 110 name Data
SSH@Lab-6610(config-vlan-110)#tagged e 1/3/8
Added tagged port(s) ethe 1/3/8 to port-vlan 110.
SSH@Lab-6610(config-vlan-110)#vlan 120 name Voice
SSH@Lab-6610(config-vlan-120)#tagged e 1/3/8
Added tagged port(s) ethe 1/3/8 to port-vlan 120.
SSH@Lab-6610(config-vlan-120)#exit
SSH@Lab-6610(config)#
```

3. Configure the port connecting to the Cisco Switch.

```
SSH@Lab-6610(config-if-e10000-1/3/8)#dual-mode 1
SSH@Lab-6610(config-if-e10000-1/3/8)#pvst-mode
SSH@Lab-6610(config-if-e10000-1/3/8)#port-name Cisco_Catalyst_Uplink
SSH@Lab-6610(config-if-e10000-1/3/8)#speed-duplex 1000-full-master
SSH@Lab-6610(config-if-e10000-1/3/8)#
```

4. Enable CDP

cdp run

Here is the configuration on the Cisco switch:

1. Configure the VLANs on the switch.

```
Cisco_SW#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Cisco_SW(config)#vlan 110
Cisco_SW(config-vlan)#name Data
Cisco_SW(config-vlan)#exit
Cisco_SW(config)#vlan 120
Cisco_SW(config-vlan)#name Voice_VLAN
Cisco_SW(config-vlan)#exit
Cisco_SW(config)#
```

2. Configure the port connecting to the Brocade switch.

```
Cisco_SW(config)#int g 1/0/1
Cisco_SW(config-if)#switchport
Cisco_SW(config-if)#switchport trunk encapsulation dot1q
Cisco_SW(config-if)#switchport mode trunk
Cisco_SW(config-if)#
```