Physical Switch connection

Ethernet Switch

ZyNOS 4.0

Support Notes

Version 4.00

Nov 2011

ZyXEL
Unleash Networking Power

Physical Switch connection

How to connect two switches via Fiber Channel

Your Switch may come with one or many mini-Gb ports. ZyXEL offers Small Form-factor Pluggable (SFP) transceivers for Gigabit Ethernet and Fiber Channel applications. These small, modular optical interface transceivers offer a convenient and cost effective solution for the adoption of Gigabit Ethernet and Fiber Channel in data center, campus, metropolitan area access, ring networks, and storage area networks. It supports full duplex Gigabit speeds and hot-pluggable feature.

Scenario
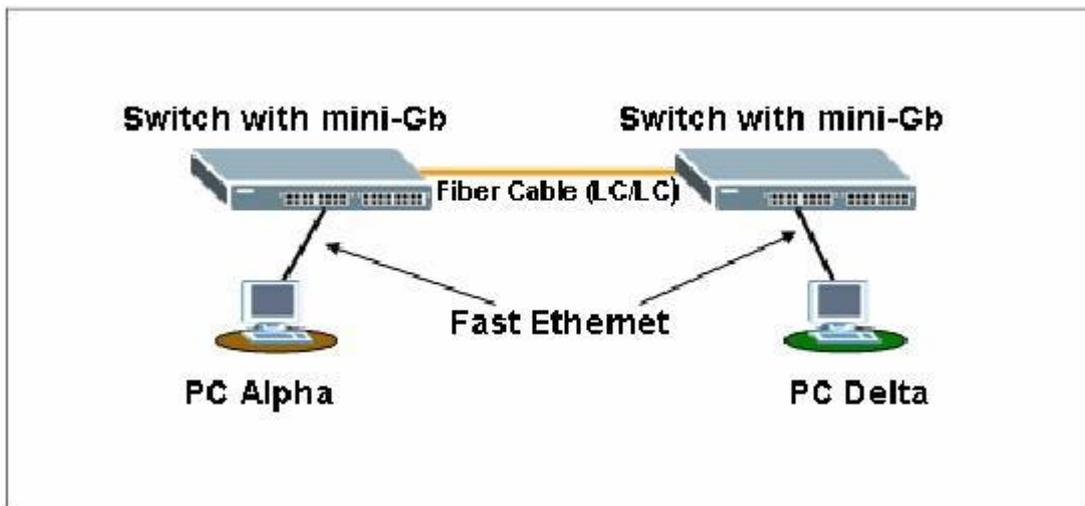
In this scenario, two Switch with mini-Gb port connected together via its mini-GB Port with a LC/LC Fiber cable (62.5/125MM). PC "Alpha" is connected to the Switch on the left and another PC "Delta" is connected to the Switch on the right via the RJ45 Port (Cat 5 cable).
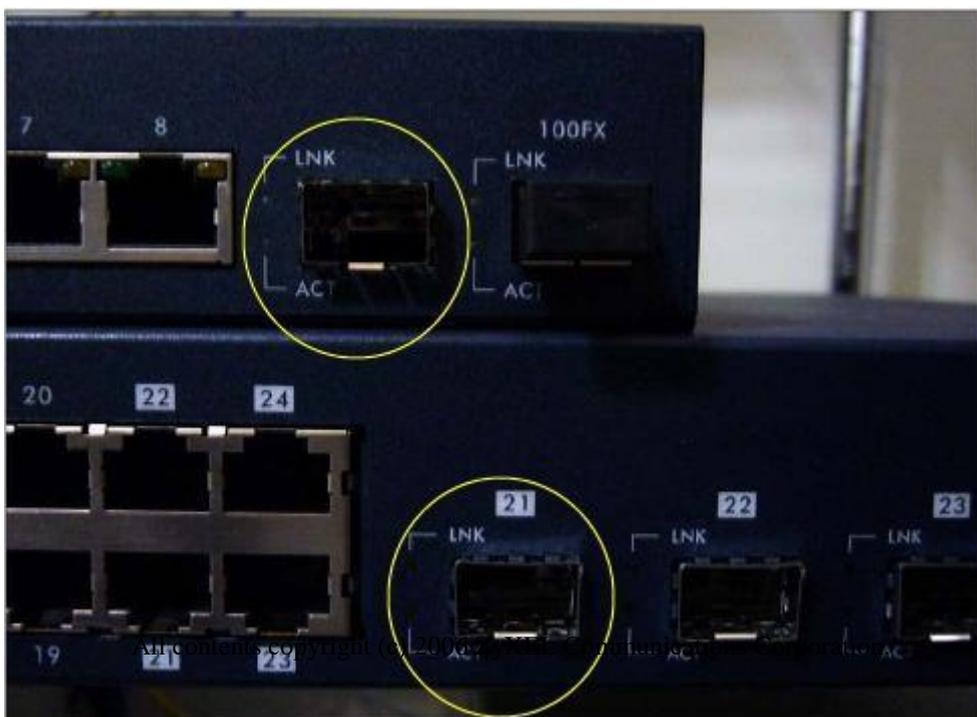
What you need here to complete this scenario:

> **ZyXEL Switch with Mini-GB port   x2**
> **(note: The Switch may come with 2~4 Mini-GB Port)**
> **SFP-SX Transceiver   x2**
> **LC/LC Fiber Cable (62.5/125MM)   x1**

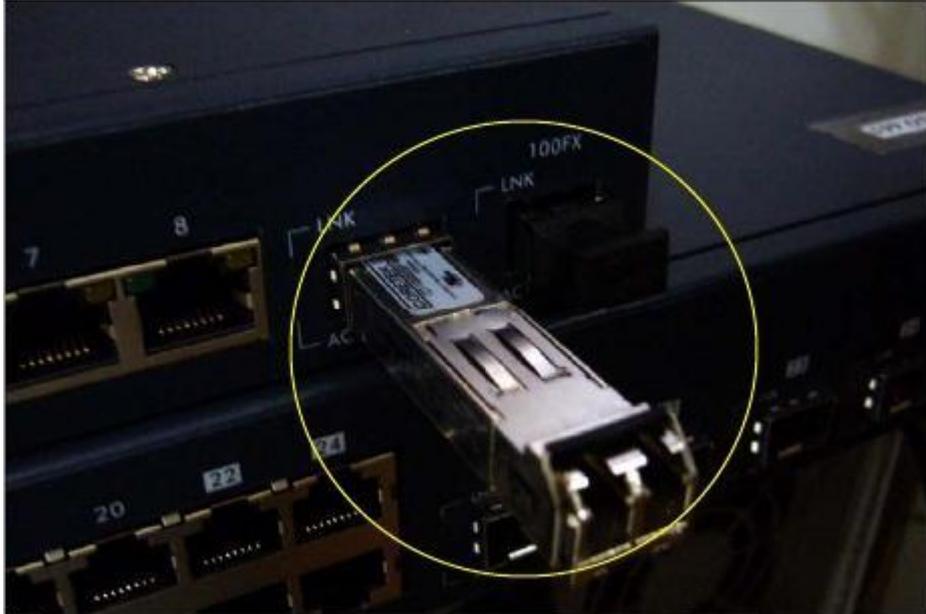Here is the photo of the SFP-SX Transceiver & the LC/LC Fiber Cable.

Steps to complete this scenario

1. Find both Mini-GB ports on your Switch first.

2. Get one transceiver and plug it into the Mini-GB Port of your Switch
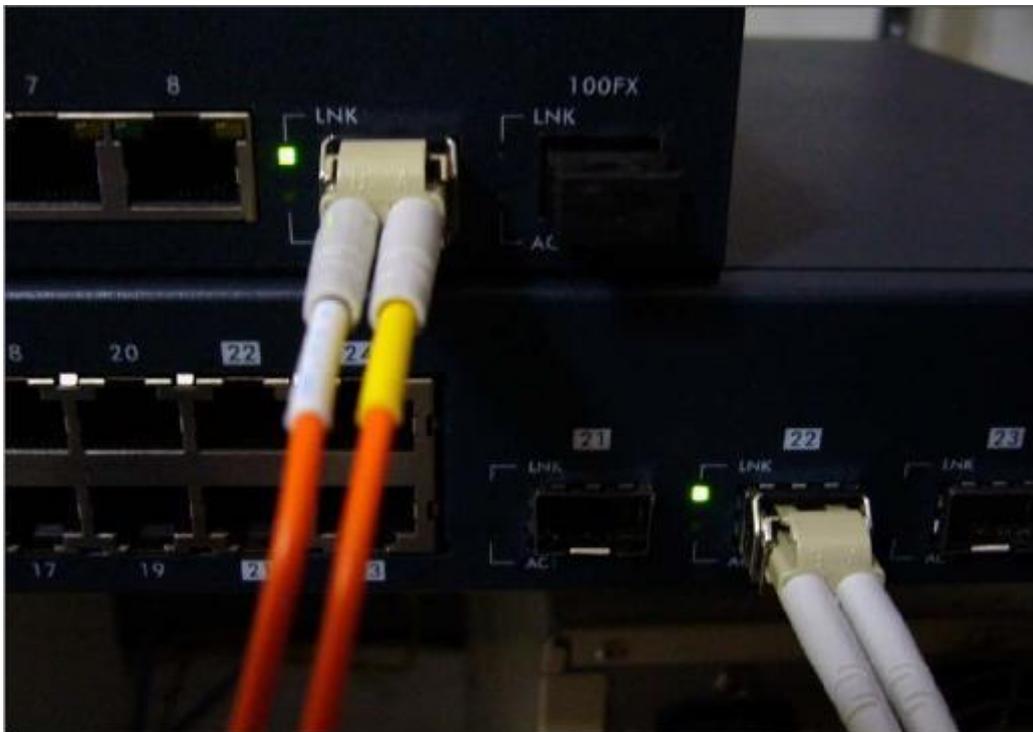

3. Plug another transceiver into the Mini-GB Port of the other Switch

4. Remove both side of the protection cap from the LC/LC Fiber Cable.

5. Plug the LC/LC Fiber Cable into the transceivers on both Switch.

If you connected the cable correctly, the LED of the "LINK" will light up.

6. Now, connect the first PC "Alpha" to the Switch on the left and the second
   PC "Delta" to the Switch on the right via the regular Ethernet cable.
7. Set the NICs in both computers to the same IP Domain.
     (ex, PC "Alpha" :192.168.1.4/24;   PC "Delta" : 192.168.1.5/24)
8. From PC "Alpha", PING PC "Delta" at 192.168.1.5

```
C:\>ping 192.168.1.5

Pinging 192.168.1.5 with 32 bytes of data:

Reply from 192.168.1.5: bytes=32 time=10ms TTL=254
Reply from 192.168.1.5: bytes=32 time=5ms TTL=254
Reply from 192.168.1.5: bytes=32 time=5ms TTL=254
Reply from 192.168.1.5: bytes=32 time=6ms TTL=254

Ping statistics for 192.168.1.5:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 10ms, Average = 6ms
```

9. From PC "Delta", PING PC" Alpha" at 192.168.1.4

```
C:\>ping 192.168.1.4

Pinging 192.168.1.4 with 32 bytes of data:

Reply from 192.168.1.4: bytes=32 time=5ms TTL=254
Reply from 192.168.1.4: bytes=32 time=9ms TTL=254
Reply from 192.168.1.4: bytes=32 time=5ms TTL=254
Reply from 192.168.1.4: bytes=32 time=28ms TTL=254

Ping statistics for 192.168.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 28ms, Average = 11ms
```

10. Now you can confirm that the network connection between these two
    Switch is up and running.