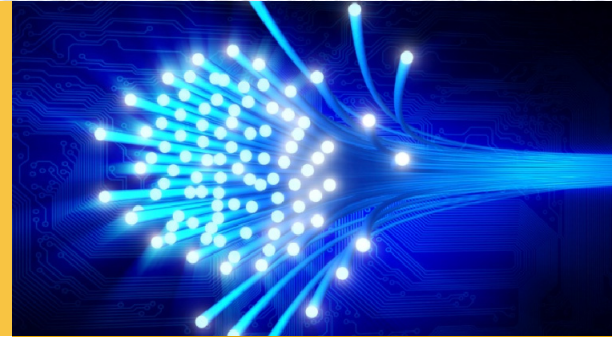


## BiDi Explained

- Cisco launched BiDi technology in 2013
- BiDi = “BiDirectional”
- BiDi is transceiver technology allowing 40GbE over two fibers
- Allows migration to 40G using existing duplex LC connections
- BiDi is not standards compliant, it is proprietary to Cisco

In 2013, Cisco launched a new transceiver for their 40GbE switches. It provides the ability to transmit multiple wavelengths in both directions (BiDirectionally or BiDi) on only two fibers. This is a potentially attractive alternative for Data Center Managers because it allows them to use existing duplex LC connections supporting 10G to now support 40G using BiDi technology.

The standard implementation of 40GBASE-SR4 is four lanes of 10G travelling in each direction requiring a total of eight (8) fibers. Using BiDi technology, there are two lanes of bidirectional 20G data requiring a total of two fibers. Coarse Wavelength Division Multiplexing (CWDM) is not new, but applying CWDM to a 20G line rate is. Please note this technology is proprietary to Cisco, it is not a standards compliant technology.



### Application:

Data Center Managers who want to migrate to 40G without having to replace existing duplex LC connections used to support 10G.

### Problem to solve:

Support 40G over existing duplex LC connections so there is no need to replace duplex LCs with MTP (MPO) connections.

### Solution:

Cisco’s BiDi System is a non-standards compliant option that provides 40G networking using CWDM over two fibers.

### 40GBASE-SR4 Link



### Cisco’s BiDi

