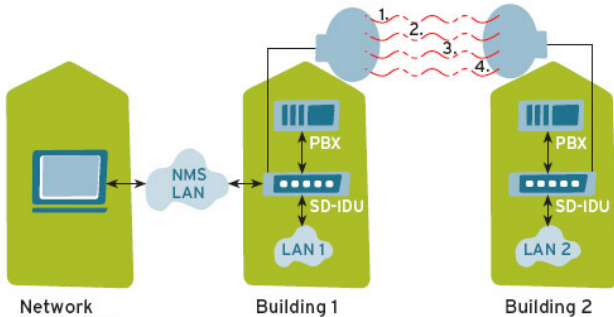


Application Examples Using CFQ Products

nxE1 + Ethernet with SD-IDU (e.g., 63E1 + 30Mbps Ethernet)



- **Data traffic over a radio link:**
 - Payload: E1 (2 - 63), STM-1, Ethernet (1-100Mbps);
 - Auxiliary: Voice Orderwire, Data Orderwire;
 - NMS - Network Management System Traffic;
 - Radio overhead (e.g., Adaptive Power Control).
- **Point-to-Point:**
 - Useful for Ethernet bridge, E1 extension, STM-1 extension.

Nr.	Data Interfaces	Capacity
1.	nxE1 between PBX boxes	Up to 63E1
2.	Auxiliary: Voice & Data Orderwire	63Kbps + Voice
3.	NMS: Building 1 -> Building 2	0.5 - 10 Mbps
4.	Ethernet: LAN 1 -> LAN 2	Up to 155 Mbps
Total capacity		Up to 160 Mbps

----- Logical Connection
 <-----> Physical Connection

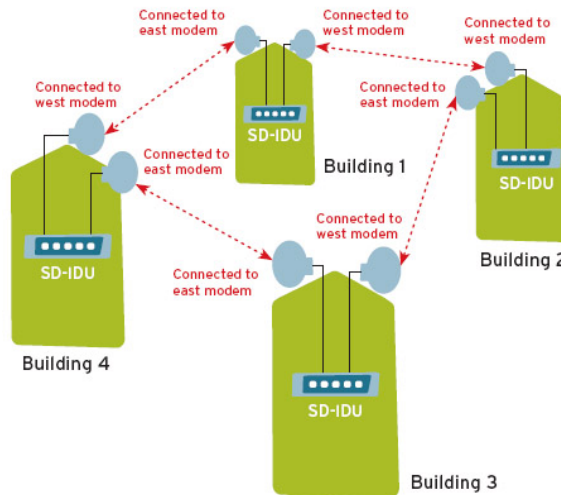
SD-IDU East/West Ring

■ Ring Switching

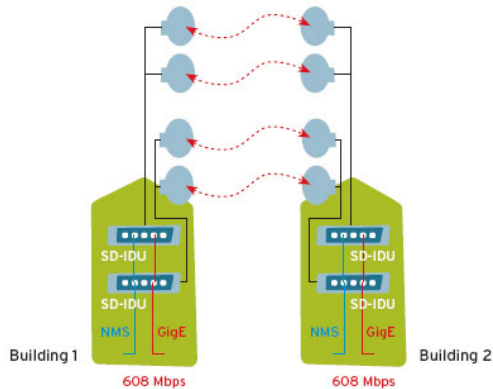
The ring consists of 3 or more SD-IDUs connected with the east modem of one SD-IDU connected to the west modem of the next SD-IDU, forming a continuous chain of SD-IDUs.

At each site CFQ-SD-IDU can be configured to:

- Add to radio link or Drop from the radio link E1s via RJ-45 interface (Standard Base);
- Add/Drop Ethernet traffic up to 155Mbps via RJ-45. Traffic at each site is fixed to all the sites in the ring (Standard Base);
- Mux/Demux up to 63E1s via STM-1 interface (Enhanced Base).



4+0 East/East 608 Mbps Gigabit Ethernet with SD-IDU



- Ethernet capacity up to **608 Mbps** at 28 MHz using 4x28 MHz channels;
- 4+0 unprotected system at the same time works also as 3+1 protected system, thus loss of a link reduces bandwidth only by **25%**;
- Both IDU are operated in 2+0 East/East mode. Master IDU has 1 SFP and 3 RJ-45 Ethernet active ports for data traffic while slave IDU is connected to master IDU only.
- Similar configurations are available: 2+0 (1+1) East/East (**304 Mbps**) and 3+0 (2+1) East/East (**456 Mbps**).