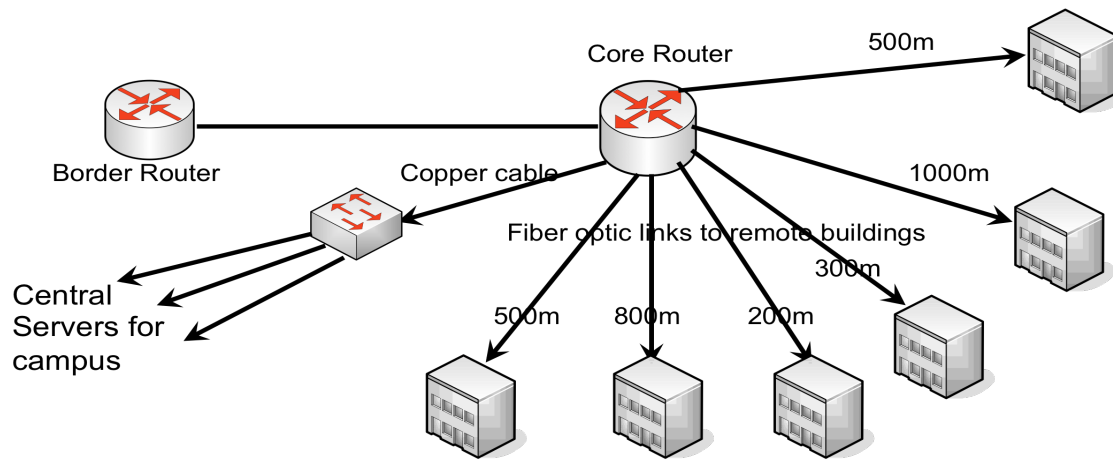


Fiber Optic Cabling and Interface Pricing Exercise

Consider the following simple network (very similar to example in talk, just with longer and more fiber links):



Use the tables below to develop pricing for a network based on gigabit Ethernet and 10gig Ethernet links for all fiber types (OM1, OM2, OM3, OM4, and G.652.D).

Types of Optical Interfaces

Standard	Speed	Supported Fiber	Cost
100baseFX	100Mbps	MM	\$250
1000baseSX	1000Mbps	MM	\$500
1000baseLX/LH	1000Mbps	MM or SM	\$1,000
10GbaseSR	10Gbs	MM	\$1,500
10GbaseLRM	10Gbs	MM	\$1,300
10GbaseLR	10Gbs	SM	\$4,000
10GbaseER	10Gbs	SM	\$10,000

Distances Supported by Interfaces

Standard	OM1	OM2	OM3	OM4	G.652.D
100baseFX	2km	2km	2km	2km	No
1000baseSX	275m	550m	1km	1.1km	No
1000baseLX/LH	500m	500m	500m	500m	10km
10GbaseSR	33m	82m	300m	550m	No
10GbaseLRM	220m	220m	220m	220m	No
10GbaseLR	No	No	No	No	10km
10GbaseER	No	No	No	No	40km

Fiber Optic Cabling and Interface Pricing Exercise

Cost of Fiber

Fiber Type	Budget Cost per km
OM1	\$4,884
OM2	\$4,054
OM3	\$10,151
OM4	\$19,959
G.652.D	\$1,185

Here are some worksheets to use.

What is the total installed fiber length? _____

Cost of 1 Gigabit Network

Fiber Type	Fiber Cost	Optics Used	Optics Cost	Total Cost
OM1				
OM2				
OM3				
OM4				
G.652.D				

Cost of 10 Gigabit Network

Fiber Type	Fiber Cost	Optics Used	Optics Cost	Total Cost
OM1				
OM2				
OM3				
OM4				
G.652.D				