

Ethernet in the Last Mile: Customer Requirements

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The Value Proposition

DVD Download "The Matrix" 7.81 GB

Technology	Minutes	Hours	Days
Modem 56K	18,904.8	315.1	13.1
ISDN 128Kbps	8,720.8	137.8	5.7
Cable Modem 1.56Mbps	705.8	11.8	0.5
T-1 1.54Mbps	685.7	11.4	0.5
 FedEx Express	600.0	10.0	0.4
PON OC-3/32	218.6	3.6	0.2
DSL 8.5 Mbps	125.1	2.1	0.1
PON OC-12/32	54.4	0.9	0
Gigabit Ethernet 1,000 Mbps	1.1	0.1	0
10 Gigabit Ethernet 10,000 Mbps	0.1	0.01	0

Customer Issues

- Who is the customer?
 - ILECs, CLECs, BLECs, ISPs, OSPs,
 - Ethernet “Carriers”, power companies
- Where is the customer?
 - Business centers of major metros
 - Small towns and cities
- What problem are we trying to solve?
 - Business to business
 - Ethernet to the home
 - Laterals from metro rings into the building
- What should be the topology?
 - Active vs. passive
 - Fiber vs. copper

Conclusions

- Customer requirements are diverse
- Ethernet can be a true “broadband” solution in the last mile
- We should do this

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