

Application Note – Voice/Data Integration with fSONA’s Optical Service Unit

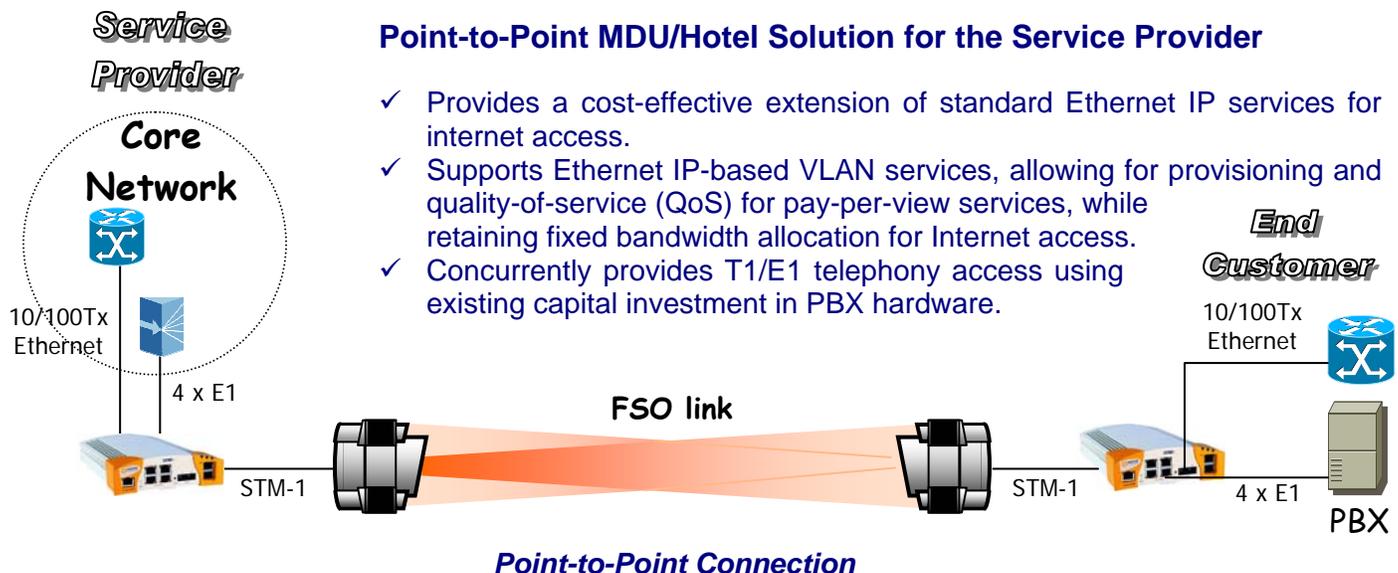
Are you looking to integrate voice and data traffic on your SONAbeam™ link?

Introducing the new Optical Service Unit (OSU)

fSONA’s new OSU is a low-cost, ultra-compact, multi-protocol, CLE/CPE access device that combines Ethernet and TDM T1/E1 circuits in their native format into an optical trunk interface for connection to the SONAbeam™ transceiver. With the OSU, multiple services can be delivered from point to point over the SONAbeam FSO link. Some key features include the following...



- Standard SDH/SONET synchronization
- Supports STM-1/OC3 optical trunks
- Supports up to four E1/T1 interfaces and one full rate, full duplex, 10/100-base-TX Ethernet interface



Point-to-Point MDU/Hotel Solution for the Service Provider

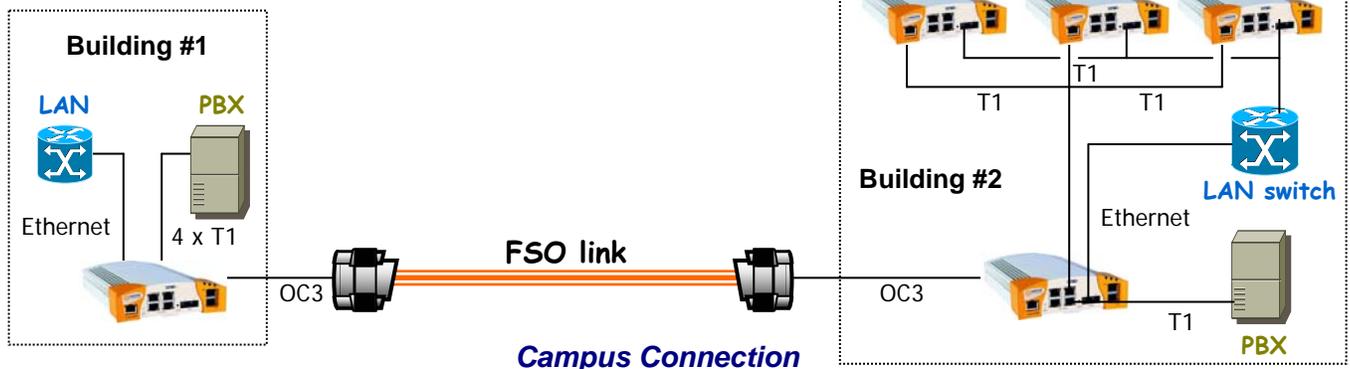
- ✓ Provides a cost-effective extension of standard Ethernet IP services for internet access.
- ✓ Supports Ethernet IP-based VLAN services, allowing for provisioning and quality-of-service (QoS) for pay-per-view services, while retaining fixed bandwidth allocation for Internet access.
- ✓ Concurrently provides T1/E1 telephony access using existing capital investment in PBX hardware.

Point-to-Point Enterprise Solution

- ✓ Allows for full-rate native extension of Fast-Ethernet LAN's, eliminating concerns over server locations, WAN link congestion, or router configuration.
 - Creates a connection to a far-end Ethernet switch that looks as if it were located in the same wiring closet.
- ✓ Provides industry standard T1/E1 connectivity for legacy telephony and serial data connections.
 - Includes remote office PRI connectivity between PBX's.
 - Allows for extension of fractional T1/E1 service from an existing facility to a new building.
 - Serial connection for heavy-duty mechanical control systems can be provided over T1/E1 interface or DS0's, with the inclusion of a channel bank.

Campus Solution

- ✓ OSU's can be distributed throughout a campus with drop-and-insert functionality for the T1/E1 lines.
- ✓ Drop Fast-Ethernet connections from building to building via LAN switches, with each port of the switch connected to an OSU.
- ✓ Connections can be made in a linear daisy-chain configuration or in a hub-and-spoke architecture (as shown here).



fSONA Systems

1750 Tysons Blvd, Suite 240
 McLean, VA 22102 USA
 703.917.4007
 US/Canada 877 463 7662
 International 877 (2) 463 7662

11120 Horseshoe Way, Suite 140
 Richmond, B.C. Canada, V7A 5H7
 604.273.6333
 info@fsona.com
 www.fsona.com