MTS180

| Multi-port Ethernet Demarcation switch for E-Line and E-LAN services with deep level traffic flow classifications and management
| Up to 16 FE plus two GE user ports, and up to two GE line ports
| Traffic flow and EVC classifications based on UNI Ports, IP subnet, MAC address, Ethernet Protocol type, DSCP/TOC/Drop Precedence, IP/TCP protocol, 802.1p and 802.1Q
| QoS: traffics trTCM (RFC2607) policing, queuing and multiple scheduling schemes, and shaping with up to 8 CoS
| SLA: CIR and PIR per flow/EVC with rates up to the port physical rate. The granularity is 512k/s with up to 1000 flow
| Data forwarding and transparency: Stacking Q-tag labeling and switching with user data and control traffics transparency
| In-service performance monitoring according to RMON/SMON (RFC2819 and RFC2021 per flow/EVC
| Link aggregation or sub-50ms EAPS (Ethernet Automatic protection Switchover) for link protections
| Supports OAM 802.3ah, Y.1713, and 802.1ag
| In-band and remote user management,19" 1RU compact chassis with redundant power supply

The Ethernet demarcation switch MTS180 is a CPE device offered as part of Dowslake carrier Ethernet solutions. They provide cost effective Ethernet services (such EPL, EVPL) with carrier grade QoS and OAM features.

Deep level packet flow classifications and management make MTS180 ideal to support multi-user, multimedia services with user configurable priorities. The traffics from different Users, IP subnet, MAC address and C-VLAN are hierarchal, classified into different EVCs, and the priority fields 802.1p are further assigned based on L2/L3/L4 service types. Each service is under a specific SLA with CIR and PIR.

MTS180 provides remote OAM capabilities complying with Ethernet OAM standards, supporting 802.3ah, Y.1713, and 802.1ag. In addition, in-service monitoring based on RMON/SMON is also available.

For service resiliency, either EAPS or link aggregation is available to users, with EAPS under 50ms service interrupt. The system supports in-band remote management, and offers CLI, and SNMP agent.

MTS180's extended features offer to carriers and enterprise customers a product that fulfills the most advanced carrier Ethernet requirement.

Hardware Feature

| Up to 16x FE and two GE user port
| Up to two GE line ports
| 1RU 19" compact shelf

Management Feature

| CLI Command Line Interface: this interface can be accessed either through local craft terminal (RS232) or via telnet using TCP/IP.
| SNMP (V2): with MIBs integrated into user's control center, user can configure and monitor remotely
| Graphic User Interface (GUI): on roadmap for Q3 2008

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Application Example figure A below: Ethernet Service Delivery

Using MTS180 as an Edge Switch at customer premeses, carriers can offer service level agreement based on different fee standards - Gold, Silver, Bronze, Normal. Packets labeled Gold have highest priority to pass, with no danger of losing frames even when there is over subscription (traffic jam). Normal (Standard) service is still based on availability - traffics would be dropped when there is over subscription.

Figure A

Application Example figure B: Packet ADM over WDM

MTS180 can allow packet ADM in conjunction with WDM equipment. In this example, at WDM node A, several MTS180 brings a number of FE on to WDM ring, and then drop certain numbers at other WDM nodes
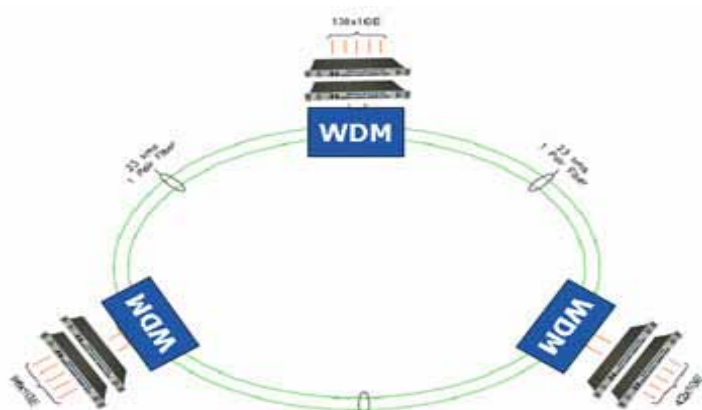
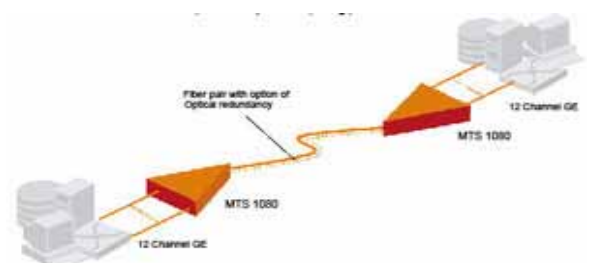**Application Example figure C: Point to Point Ethernet Aggregation**

Figure B

Figure C

MTS180 shelf

Technical Information

Fiber Optic User Ports	
Port Density	16 x Copper + 8 x SFP
Data Rate	100Base Fx for SFP, 100BaseT for RJ45
Wavelength or Distance	Choose SFP separately
Single Fiber Solution	Support Bi-Directional SFP
Fiber Optic Line Ports (SFP)	
Port Density	up to 4
Data Rate	1 GbE
Wavelength or Distance	Choose SFP separately (1310, 1550, WDM)
Single Fiber Solution	Optional
Ethernet Features	
Bandwidth Limitation	tamper-proof in steps of 1 Mbps per port
Performance Monitoring	Yes
DHCP Client Support	Yes
VLAN Support	Port, EVC or Flow based tagging and QinQ. Policing/Shaping/Scheduling
Supported MAC Addresses	4096
Link Protection (EAPS)	acc. RFC3619
Network Management	
Ethernet Port	Telnet/SSH
Local Craft	RS232 (VT100)
User Interface	SNMPv.2, CLI, GUI
Secure Configuration	SSHv2 (Secure Shell) terminal
Operating Conditions	
Temperature	- 5 to + 55 °C
Humidity	5 to 85% non-condensing
Mechanical	
1U 19" Rackmount	44.3 x 482.6 x 240 (H x W x D, mm)
Power compsumtion	<50W

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Revision History

Date	Revision	Brief Description
9/19/2007	1.0	First release
1/10/2008	1.1	Added Application A,B,C and Feature
1/27/2008	1.2	MTS180 picture added
2/12/2008	1.3	Graphic User Interface added in Management Features
5/28/2008	1.4	1)Updated MTS180 picture 2)Updated user port qty.

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