

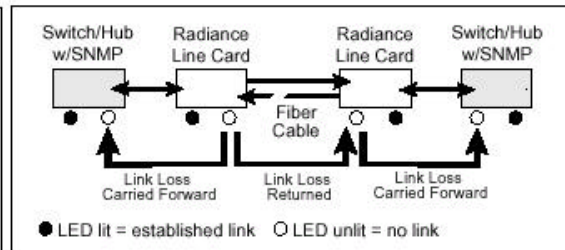
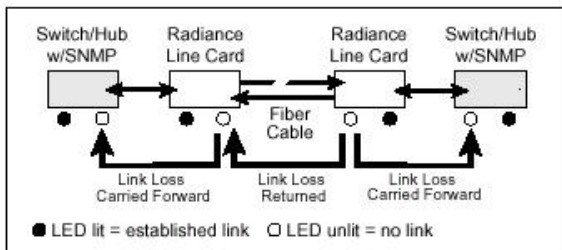
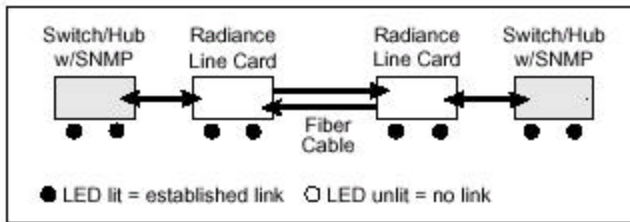
The Problem: Required Truck Roll to Re-Boot Network = High Service Costs and Loss of Uptime

When an optical Ethernet network link fails, an alert is sent to the network administrator who then troubleshoots the problem. While features such as Link Loss Carry Forward (LLCF) and Link Loss Return (LLR) can help identify the location of the link loss, the network element must be re-booted to restore then link. This often requires sending a technician to the site increasing service costs and extending network downtime.

The Solution: Auto-Recovery

Auto-recovery is useful when two back-to-back Interface Line Cards are used to extend network reach between two distant devices. When Link Loss Return is enabled on both ends of the fiber link, both fiber ports wait for the other to transmit link, resulting in a deadlock situation. Auto-recovery allows the deadlock to be broken by periodically sending out pulses from the fiber port forcing the line card to establish its fiber link.

In this back-to-back setup, it may be desirable to see the entire link down if any of the connecting segments fails. This means that both copper ports must relay a no-link condition to the switch/hub when any of the cables is broken. To achieve this, both LLCF and LLR must be enabled on each card. The switch will see the segment as one continual link rather than three.



The diagrams above show how the two switch/hubs are alerted to a broken fiber cable. Notice that both LLR and LLCF must be enabled under this condition.

The Benefit: Reduce Expenses and Increase Uptime

Metrobility's unique link loss auto-recovery feature enables link restoration on the fiber port without human intervention thereby eliminating a required visit by a service technician. The result is lower cost of ownership and increased network integrity.

Product Information

Auto-recovery will be released in May, 2002 on the following Metrobility products.

Radiance Line Card	Standalone	Description
R643-13	2643-13	10/100M TX to 100M FX MM/SC
R643-14	2643-14	10/100M TX to 100M FX SM/SC
R643-15	2643-15	10/100M TX to 100M FX MM/ST
R643-17	2643-17	10/100M TX to 100M FX SM/SC LH (40km)
R643-1J	2643-1J	10/100M TX to 100M FX SM/SC ELH (100km)

For additional information Metrobility's products, contact Metrobility Optical Systems at 1.877.526.2278 or 1.603.880.1833, or visit us at www.metrobility.com.