

Basic Remote Monitoring

Traditionally, service providers who deliver Ethernet services to customers, use a form of remote management that is designed to isolate physical fault conditions by using a technique from reverse engineering. The operator is notified of a fault condition either by a Link Pass Through (LPT) alert or by a Far End Fault (FEF) notification. In both instances the cable connectivity is disrupted, copper for LPT and fiber for the FEF— notifying the management system that this disruption may have been caused by someone disconnecting one of the ports.

LPT states that if the copper demarcation port loses a signal, the device will then pass the link fault condition through to the next device in the sequence—which then disables the local copper port, therefore alerting the managed switch or router that the demarcation copper port is effectively disconnected. While this deployment strategy does allow for a Network Management System (NMS) to be alerted to a customer failure, it does require some additional manpower to troubleshoot each of the devices and link segments along the service path to the customer—starting with the central office device and connectivity. After the link failure condition has occurred, Automatic Link Restoration will automatically re-establish the link without the need to physically reset the device.

Features

- Far End Fault (FEF)
- Link Pass Through (LPT)
- Auto Link Restoration
- Remote Firmware Update

Application

This basic level of management by an Ethernet service delivery package would be deployed by a service provider that is not bound by a fixed SLA and with sufficient staff resources to troubleshoot failures.

