CMCC’s considerations for MPLS-TP
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PTN Application

- Metro area with ring topology fiber (1k to 5k nodes/metro)
- Service: 2G/3G backhaul dedicated Ethernet line and PON (OLT)
- Deployed 38,000 PTN nodes in 2009, will deploy 110,000 more in 2010
- Protection: 1:1 LSP
- OAM: based on Y.1731 and pre-standard G.8114
CMCC’s Considerations for MPLS-TP

- Low TCO
- High reliability
  - 50ms protection switching
- Powerful OAM tools & Network Management System
  - Fault management, performance monitoring for PWs, LSPs, Sections and tandem connections (cc/cv, AIS, RDI, LB, LM, DM, …)
  - Easy to operate for current transport network staff
    - Support for static provisioning, powerful GUI & NM
    - Transport operation behavior
- Scalability
  - Future application: LTE backhaul
  - Monitor >1,000 LSPs/node
Upgrade Considerations

● Able to upgrade from the currently deployed PTN
  ➢ Upgrade each complete metro network overnight
  ➢ Minimize the service interruption

● Urgent upgrade action
  ➢ Window of opportunity for upgrade closes by the end of 2010
    ❖ Currently: Only 10 ~ 20% of the 38,000 nodes carry service
    ❖ 110,000 more PTN nodes to be deployed from now on
    ❖ By the end of 2010: Almost all deployed nodes will carry service