## **PBB-TE support of LAG protection**

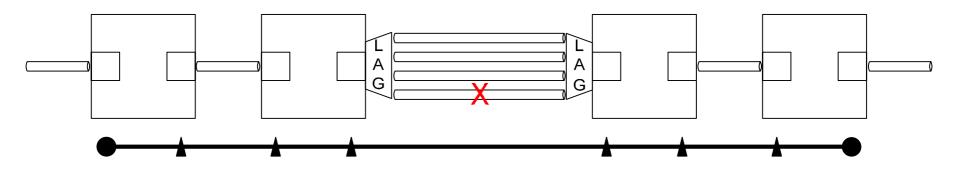
15 Nov 2007

**IEEE 802.1 meeting** 

Muneyoshi Suzuki

## LAG diagnosis issue

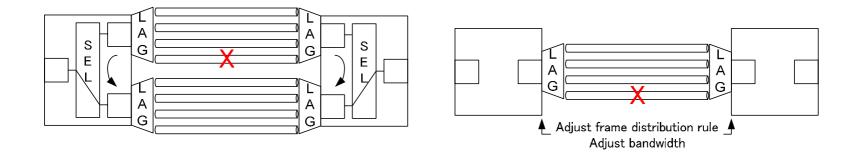
- If a portion of Bridged network is deployed with LAG, a CCM, LTM, or LBM passes through one physical link which composes a LAG
- Since CCM, LTM, and LBM may not detect partial links failure of LAG, they provide unreliable diagnosis



If LAG inverse multiplexer distributes CCM, LTM, and LBM to all physical links which compose a LAG, they can detect partial links failure, however it may be unrealistic scenario

## LAG diagnosis and protection

- Practical solution may be monitoring continuity of all physical links in a LAG, then ensure availability of the LAG
- If a physical link failure in a LAG is detected:
  - the working LAG is switched to a protection LAG or
  - frame distribution rule and QoS parameter are adjusted



## **Proposed solution**

- However, current CFM specification does not support monitoring continuity of all physical links in a LAG
- Therefore, CFM specification should be extended for support of CCM MEPs located end points of physical links which compose a LAG



Otherwise, development of 1:N Ethernet link protection protocol is necessary for replacement of LAG