One endusers perspective on 40GE SMF

Henk Steenman

AMS-IX

Henk.Steenman@ams-ix.net

Supporters

Alan Judge - Amazon

Donn Lee - Facebook

Doug Wilson - Microsoft

Jason Weil - Cox Communications

Jay Moran - AOL

Louis Lee - Equinix

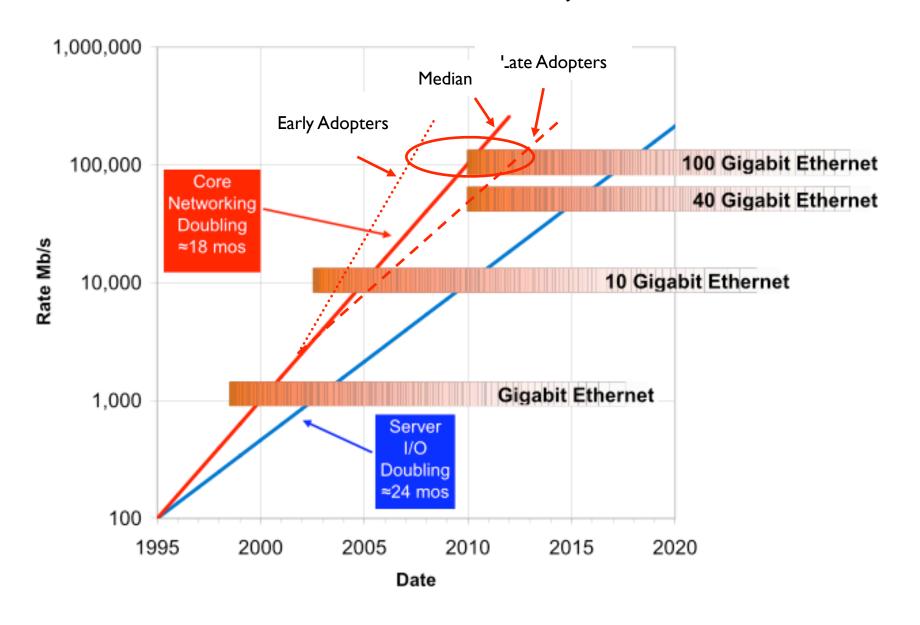
Mike Bennet - LBL

Ted Seely - Sprint

Introduction

- Ongoing debate on 40GE SMF design:
 - Serial and CWDM
 - Concern about the impact on the whole project
- Both solutions viable, but cost and timing are the critical factors

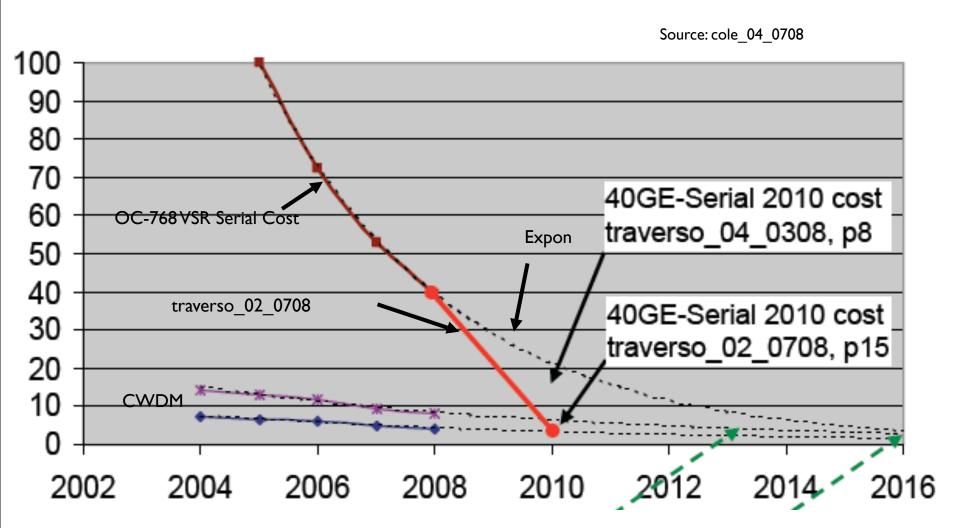
Bandwidth Projections



Right cost at the right time

- There should be a low cost solution from day one.
 - 40GE I0 km SMF expected to be used in cost sensitive environment.
 - Server traffic aggregation
 - Enduser connections to carriers
 - These will drive the initial deployment of 40GE SMF

Risk Assessment



Aggressive cross-over of 40GE-CWDM cost by 40GE-Serial cost is in 2013, with more likely cross-over after 2016

Risk Assessment

- Observations form reviewing all data presented to the Task Force:
 - 6 year variance in cost crossover projections by experts for Serial vs CWDM
 - very aggressive cost reduction curve for Serial
- Conclusion:
 - Significant risks/challenges in obtaining cost curve for Serial
 - Observations imply high risk for serial solution

Summary

- Our recommendation:
 - Adopt CWDM as baseline for 40G 10km SMF Objective
 - Overall project schedule should not be jeopardized.
- If NO decision:
 - We recommend dropping the objective