



Speed & Cost Matter

Thomas Scheibe

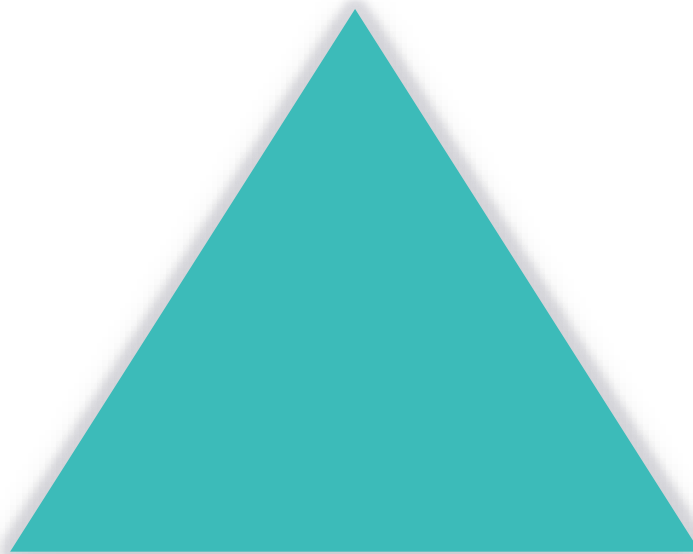
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Roadmap Alignment Needed to Achieve TCO Goals

DC Network Infrastructure

ASIC BW and Port Speed

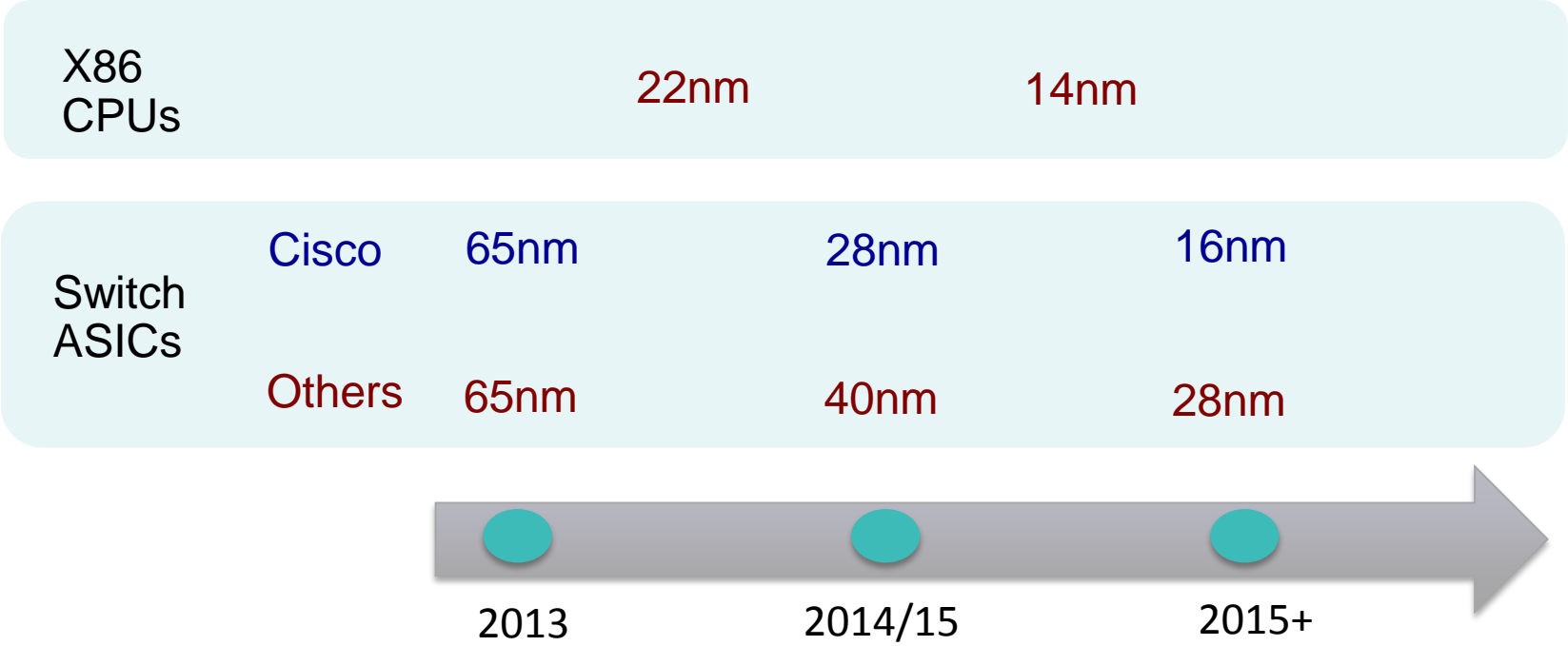


Cabling Infrastructure

Optics Speed and Size

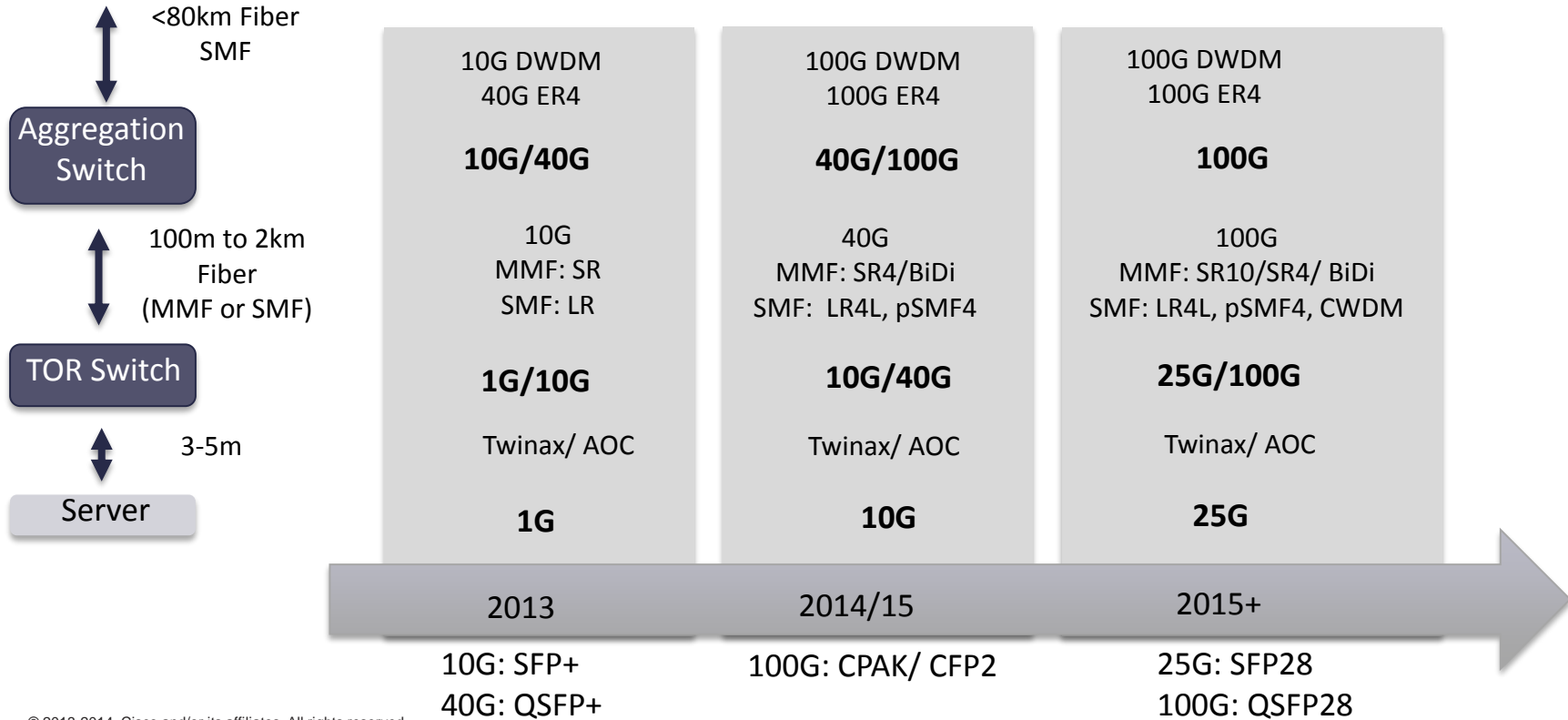
- Innovation
- Standardization
- Open Ecosystems

Hardware Defined Performance

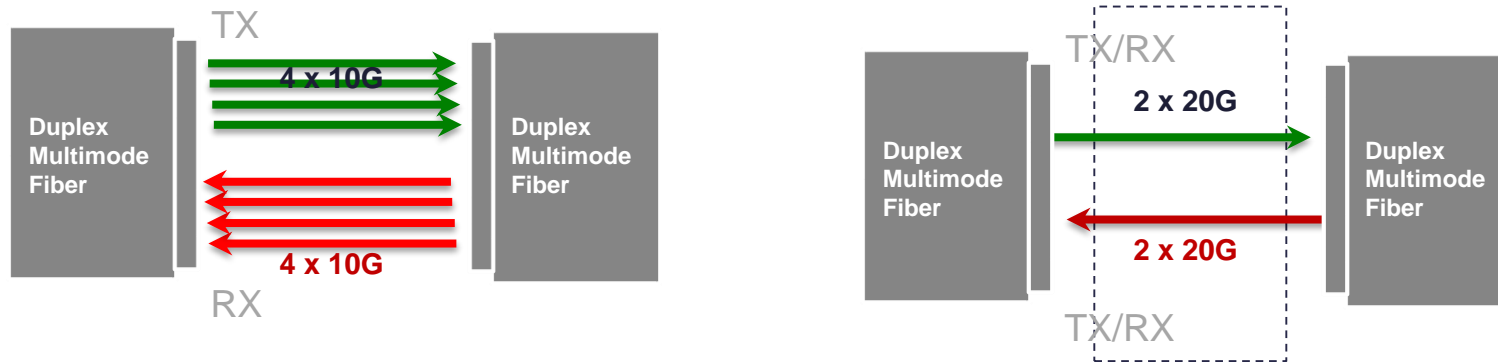


Software Defined Control

DC Interconnect Speeds/ Transceivers

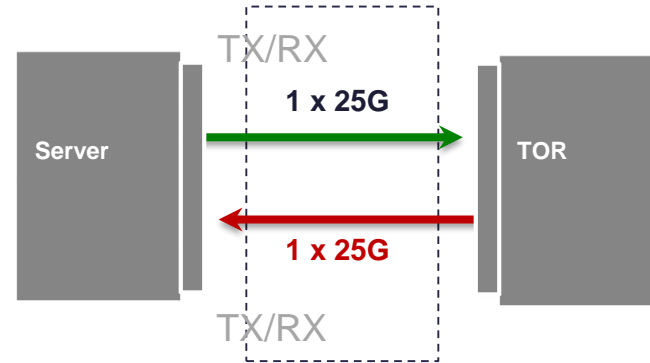
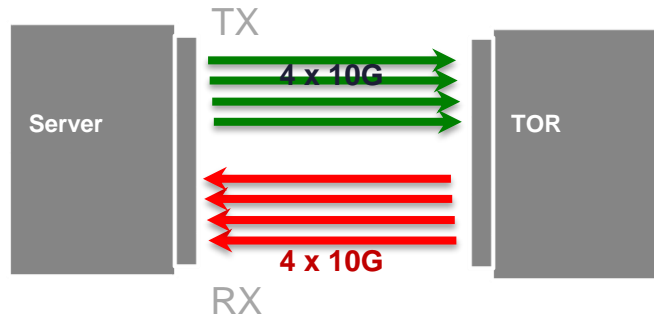


Single Lane .. Less Complexity (and Lower Cost) The 40G QSFP BiDi Optics Example



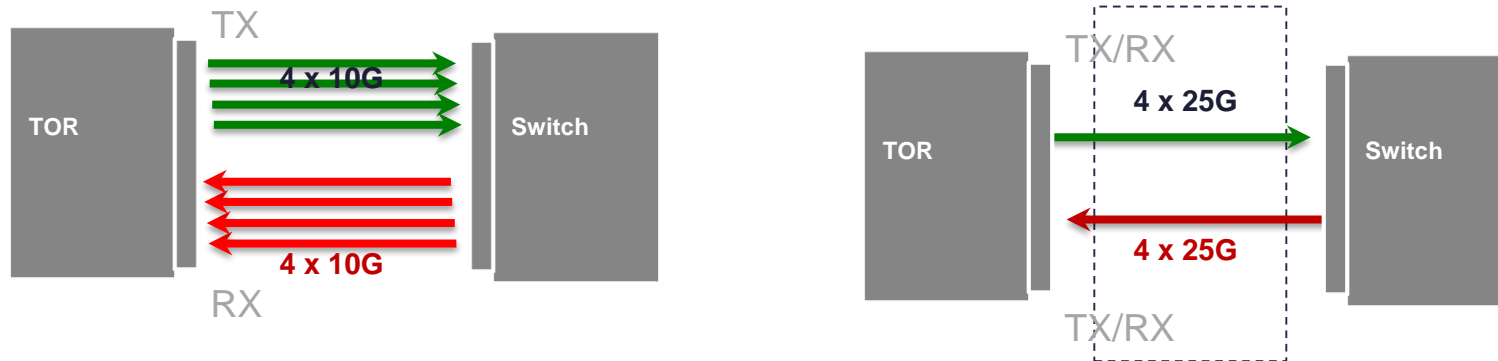
Toolkit: Speed-up, WDM, Modulation

Single Lane .. Less Complexity (and Lower Cost) The 25G Server Access Example



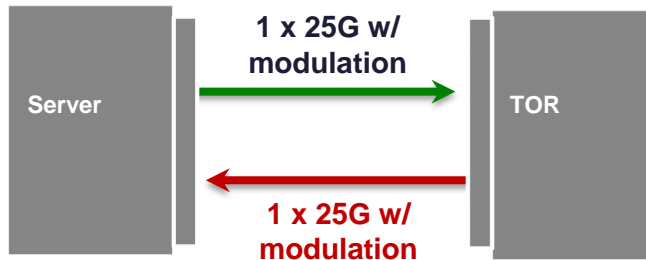
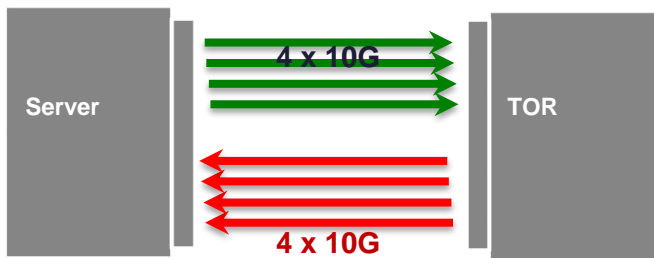
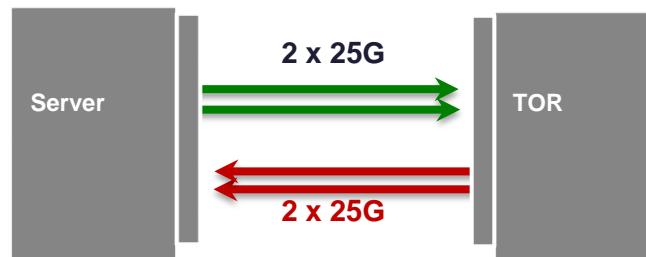
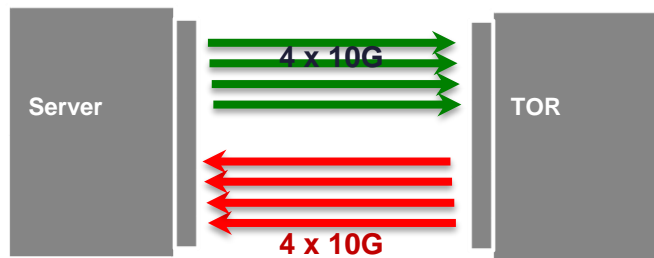
Toolkit: Speed-up, WDM, Modulation

Single Lane .. Less Complexity (and Lower Cost) The 100G Switch Link Example



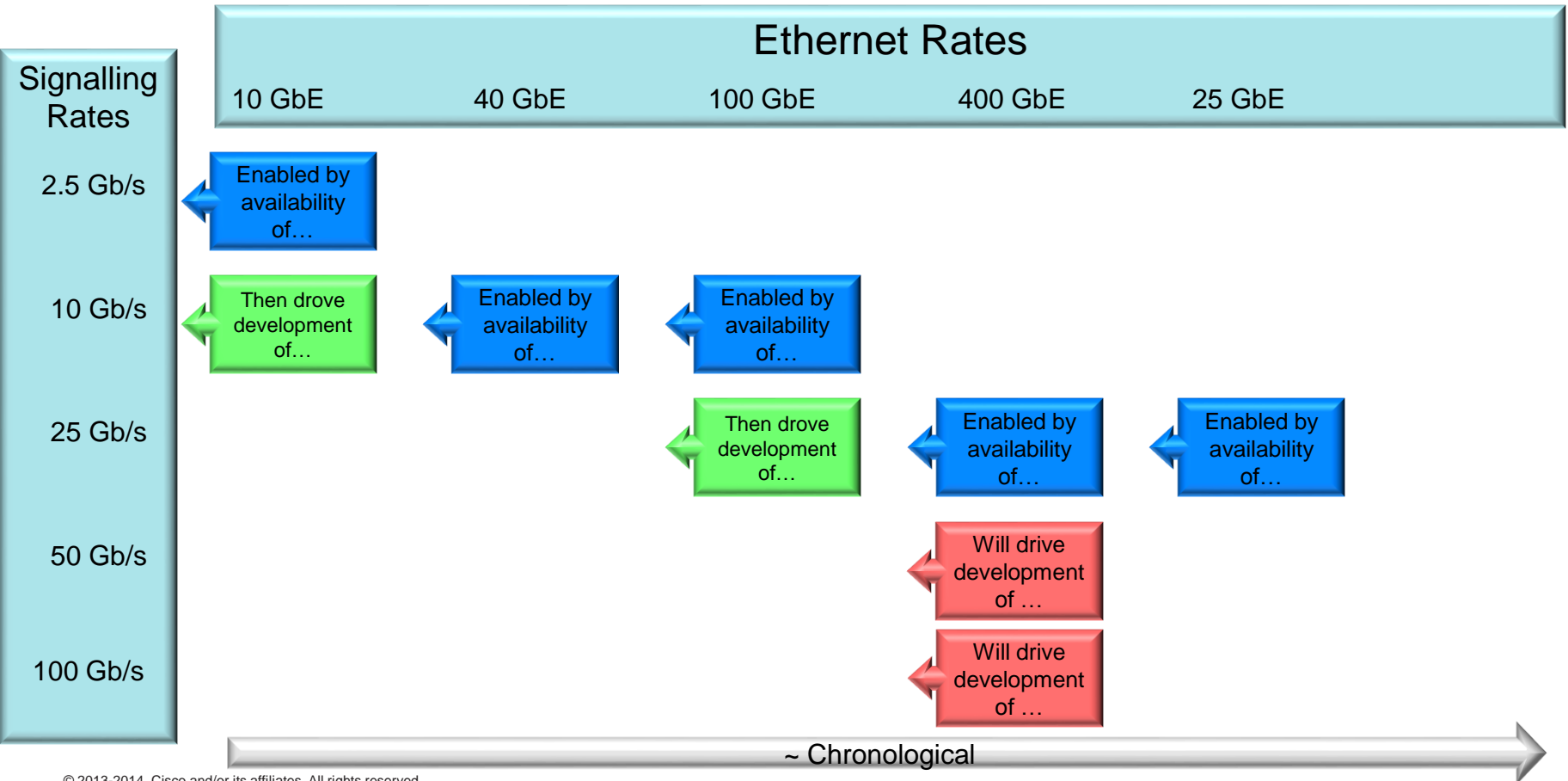
Toolkit: Speed-up, WDM, Modulation

Single Lane .. Less Complexity (and Lower Cost) 50G Server Access?

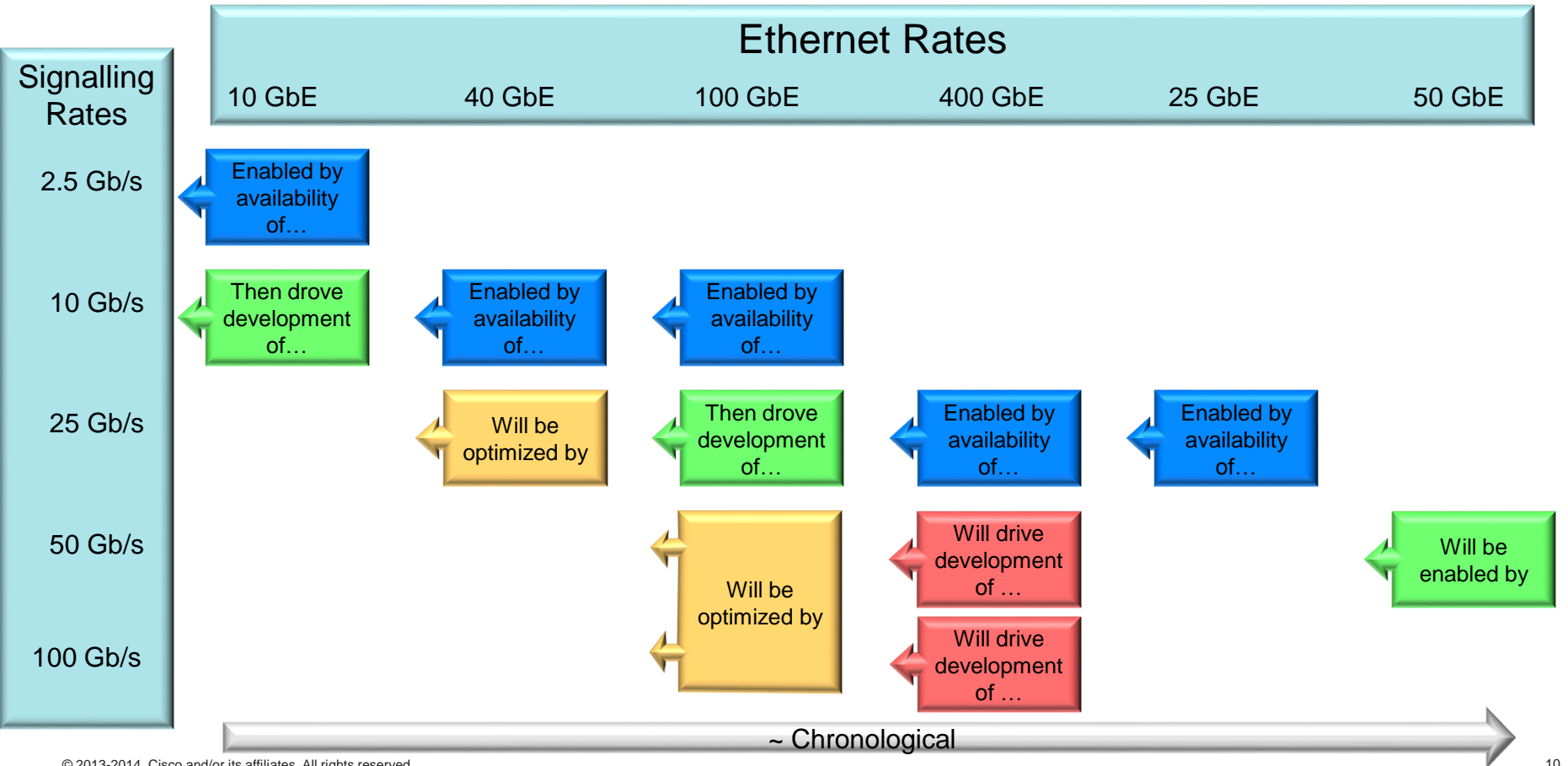


Toolkit: Speed-up, WDM, Modulation

The Story So Far...



Polishing Off the Crystal Ball...



Summary

- Bandwidth will be used
- Higher cost sensitivity & shorter investment cycles at the edge
- Backward compatibility will de-couple investment cycles for server/ TOR & aggregation switching

