

Need for 2.5G and 5.0G
Ethernet Rates for HDDs

Tom Skaar, Seagate

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Need for 2.5G and 5.0G Intermediate Speeds for HDDs

- HDD maximum transfer rates are gradually increasing.
- 1Gb/s Ethernet is the mainstream connection for native Ethernet storage today.
- 1Gb/s has already become a bottle neck for HDD today, thus the need to enable 2.5G so as to not limit performance.
- In the next few years, HDDs will be limited by 2.5Gb/s and will require 5.0Gb/s.
- HDDs will not require 10Gb/s bandwidth for the next 10 years.
- Modern Ethernet systems could offer 2.5Gb/s speed at relatively similar cost points as 1Gb/s. Similarly, 5Gb/s at a lower cost channel than 10Gb/s.
- Max sequential rate calculated by multiplying line rate * coding ratio / 8 bits per byte * 90% efficiency (lost due to protocol and software overhead)

HDD Max Transfer Rate for Past 5 years and into Future

