

Moderator: John Kim, HP Labs / KAIST **Panelists:**

Dave Mayhew, San Diego University, Bill Dally, NVIDIA and Stanford Torsten Hoefler, ETH Zurich

Panel questions

- 1. Define how MSN and ICN are similar and different.
- 2. Should research funding agencies support research in MSN or ICN?
- 3. Bandwidth: Do we need more bandwidth for either MSN or ICN?
- 4. MSN are more cost-conscious, compared with ICN. Should MSN providers invest in HPC ICN to help drive down cost?
- 5. Will MSN and ICN converge in the future? If so, when and what will that network look like?

Panel Topic

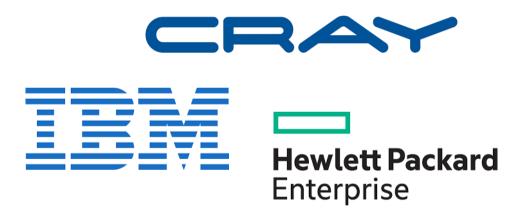
Massive-storage Networks

Intensive-computing Networks





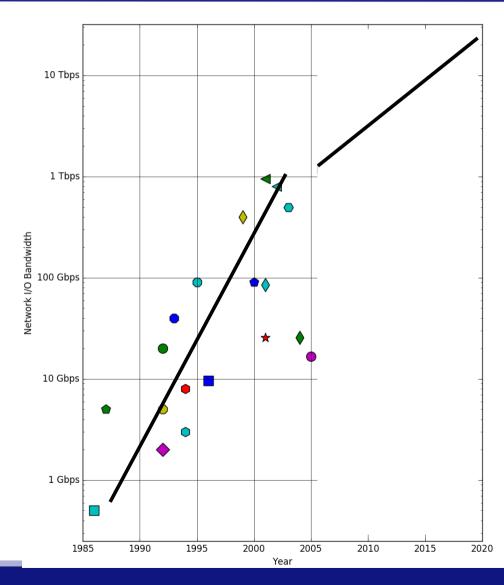








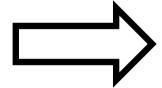
Bandwidth trend



Lowering cost for others



turbocharged 8-cylinder engine 600 horsepower 590 lb-ft torque







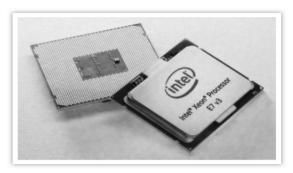




Intel (ISC'15)

ONE SINGLE SYSTEM ARCHITECTURE TO RULE THEM ALL

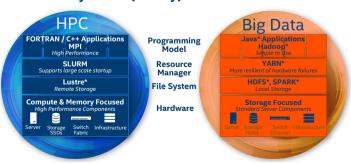
July 20, 2015 Nicole Hemsoth

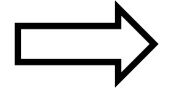


There is little doubt that the worlds of large-scale data analytics and high performance computing share common features, but when it comes to meshing these two disparate technology (and to a large degree, cultural) divides, there are clear challenges. From an architectural perspective, to programming paradigms, to the tools that are standardized upon, big data and HPC have to travel quite a ways to meet in the middle.

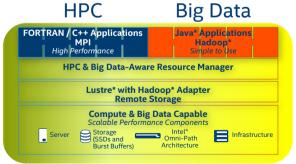
Converged Architecture for HPC and Big Data

Different Systems (Today)









[Intel ISC'15]

Panelists

Massive-storage Networks vs Intensive-computing Networks

Moderator: John Kim, HP Labs / KAIST, South Korea



Torsten Hoefler ETH Zurich Switzerland



Bill Dally nVIDIA and Stanford **USA**



David Mayhew San Diego University **USA**

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