

Top Ten HPC Research Insights from 2011

Addison Snell Christopher G. Willard, Ph.D. Laura Segervall

January 2012

EXECUTIVE SUMMARY

Intersect360 Research has identified ten trends emerging in 2011 that will influence HPC markets in the years to come. This report presents our analysis of the following trends and events.

Acceleration Adoption

- Accelerator adoption on the rise

Lustre Roadmap

- The open source file system standard is stabilizing

Facilities Share of Budget

- Facilities share of budget continues to increase

Infiniband Growth

- InfiniBand struggling to displace Ethernet

Risk Management Applications

- Economic turmoil causes greatest growth in risk management applications for the financial sector

Memory Usage for Multi-Core Processors

- Memory usage growing due to multi-core processors

Programming Services

- Programming services spending increasing

High Performance Cloud Computing

- Cloud services are only 3% of HPC spending

Windows Operating Environment

- Windows share deflated after years of growth

Big Data and HPC

- Big Data is a major opportunity for HPC technology vendors