

# MS-MPI

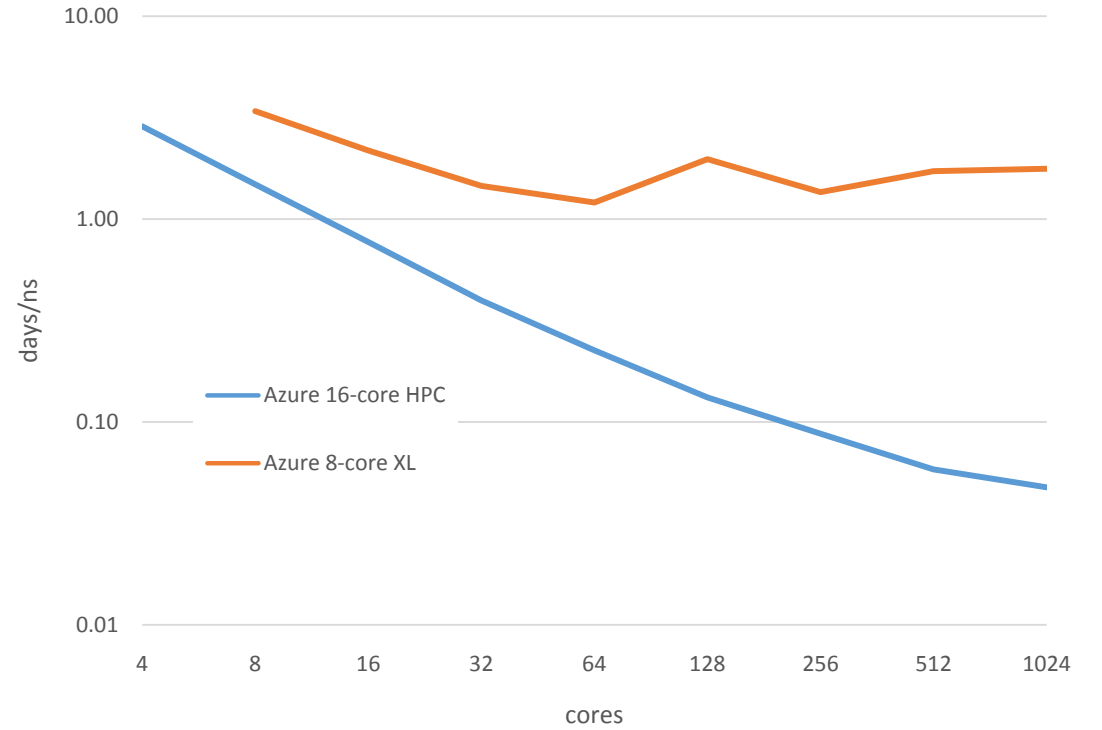
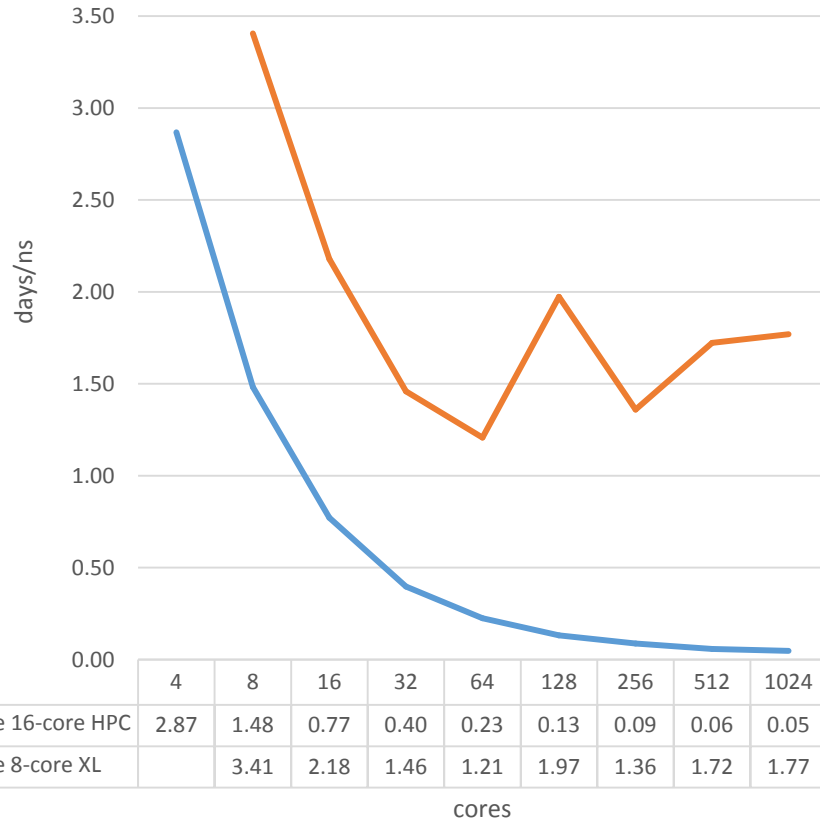
SC|13 Update

# Microsoft is invested in HPC

- Microsoft is, and will continue, investing in HPC
  - All on-premises (HPC Pack evolution, SMB Direct)
  - Hybrid (burst via HPC Pack)
  - All in the cloud (Head Node in IaaS VM)
- Rolling out HPC hardware on Azure now
  - 16-core SandyBridge, 112GB RAM, 32Gbps RDMA network
  - 8-core SandyBridge, 56GB RAM, 32Gbps RDMA network
- We aim to provide the best commercial platform for compute-intensive parallel workloads

# MPI in the cloud is now viable

NAMD apoa1



# Committed to supporting the ecosystem

- MPICH no longer supports Windows
- MS-MPI is supported in all Windows environments:
  - Windows Vista
  - Windows 7
  - Windows 8
  - Windows 8.1
  - Windows Server (2008, 2008 R2, 2012)
  - Cloud
- Free to use
- Free to redistribute with 3<sup>rd</sup> party applications

# Customer driven

- MS-MPI 2012 SP1:
  - <http://www.microsoft.com/en-us/download/details.aspx?id=39961>
  - Fixes firewall popups when running locally (e.g. mpiexec -n 8 foo.exe)
  - Improved compatibility with PGI Fortran compilers
  - Bug fixes (e.g. attribute handling)
  - MPI Debugger extension
- MS-MPI 2012 R2:
  - Coming Q1 2014
  - MPI\_Comm\_connect/MPI\_Comm\_accept
  - Network Direct connection establishment resiliency
  - Simplified setup
  - Support integration with 3<sup>rd</sup> party schedulers

# Don' t be shy!

- MS-MPI team eager to connect with Windows HPC community
  - Home page (<http://msdn.microsoft.com/en-us/library/bb524831%28v=vs.85%29.aspx>)
  - Contact [msmpi@microsoft.com](mailto:msmpi@microsoft.com)
  - Blog (<http://blogs.technet.com/b/windowshpc/>)
  - Web Forum (<http://social.microsoft.com/Forums/en-US/home?forum=windowshpcmpi>)
- Let us know what you need
  - Features
  - Bugs
  - Help