

# MSMPI

HPC for the Cloud

# Develop Apps (FREE!)

- Visual Studio Express 2012 for Windows Desktop
  - <http://www.microsoft.com/visualstudio/eng/products/visual-studio-express-for-windows-desktop>
- Microsoft Windows 8 SDK
  - <http://msdn.microsoft.com/en-us/windows/hardware/hh852363.aspx>
- Microsoft MPI Redistributable
  - <http://www.microsoft.com/en-us/download/details.aspx?id=14737>

# Debug Apps (FREE!!)

- Debugging Tools for Windows
  - Included in Windows SDK
  - <http://msdn.microsoft.com/en-us/windows/hardware/gg463009.aspx>
- MSMPI WinDbg Extension
  - Live and post-mortem debugging
  - Upcoming toolpack release, come see our demo

# Profile Apps (FREE!!!)

- Monitor Application Performance with Clusmon
  - Upcoming toolpack release, come see our demo
- Profiling with Windows Performance Kit
  - MSMPI extensively uses ETW tracing
  - <http://msdn.microsoft.com/en-us/performance/cc825801.aspx>

# Don't have a Supercomputer? Use Windows Azure!

- HPC class Virtual Machines
  - 8 or 16 Xeon E5-2670 cores
  - 7.5GB RAM per core
  - 32Gbps NetworkDirect interconnect
- 90.2% Linpack efficiency
  - 151 TF
  - 8,064 Cores
- 2.5us latency
- 3500MB/s bandwidth
- Public CTP early next year.