CernVM Users Workshop



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Virtualizing High Performance Computing Workloads

Tuesday 7 June 2016 09:00 (45 minutes)

A short presentation on how and why HPC users are moving beyond public cloud for HPC workloads, including a discussion of achievable performance for both throughput and (briefly) MPI applications. We will also touch on compute accelerators, file system access, and containers, and provide some performance tuning tips for virtualizing HPC applications with high performance.

About the Speaker

With over 20 years of experience in High Performance and Technical Computing, Josh currently leads an effort at VMware to bring the value of virtualization to Research, Engineering, and Science environments. Previously, he was a Distinguished Engineer at Sun Microsystems with broad responsibilities for HPC direction and strategy. He joined Sun in 1996 from Thinking Machines Corporation, a pioneering company in the area of Massively Parallel Processors (MPPs), where he held a variety of technical positions. Josh has worked on developer tools for distributed parallel computing, including language and compiler design, scalable parallel debugger design and development, and MPI. He has also worked in the areas of 3D graphics, image processing, and real-time device control. Josh has an undergraduate degree in Engineering from Harvard College and a Masters in Computer Science from Harvard University. He has served as a member of the Board of Directors of OpenMP since 2002.

Summary

Presenter: SIMONS, Josh (VMware)

Session Classification: Technology Outlook II