

## Enterprise Grid Computing Symposium

30 March 2007 (Friday)  
0830 hours to 1710 hours

@ NLB Building, 100 Victoria Street  
Possibility Room, Level 5

### **Speakers and Abstracts**

Kevin Walsh  
Senior Vice President, Research & Development  
Oracle Corporation

#### **Topic**

Enterprise Grid Computing

#### **Abstract**

Grid computing produces more resilient and lower cost enterprise information systems. With grid computing, groups of independent, modular hardware and software components can be connected and rejoined on demand, to meet the changing needs of businesses.

Grid computing has increased momentum as the enterprise IT architecture of choice. Forrester Research reports that 37 percent of enterprises are piloting, rolling out, or have implemented some form of grid computing. IDC identifies grid computing as the Fifth Generation of computing, after Client-server and Multi-tier. Hear why enterprises are compelled to implement grid computing for infrastructure, applications and information resources.

#### **Biodata**

Kevin R. Walsh is Senior Vice President for Research and Development at Oracle Corporation's Asia Pacific Division. He is responsible for Oracle's Research and Development centres in Asia and is Chief Technology Officer for Oracle Asia Pacific.

Kevin directs Oracle's centres for software and advanced technology development in China, Singapore, Japan and South Korea. He is the founder of the Oracle China Development Centres and the Oracle Singapore Advanced Technology Solutions Centre. He oversees numerous cutting-edge software development projects, which span Asia and North America. His current work is centred on finding new applications of software and digital technology to manage large volumes of information in both Government and Private Sector areas.

Kevin has worked in Asia for more than 20 years and has previously led Oracle's systems support and technology marketing divisions from the Oracle Asia Pacific Headquarters in Singapore. He is recognized as a visionary and

technologist amongst his peers in Oracle and is a frequent speaker on future trends and emerging technologies that have impact on business and social lifestyles. His current areas of software research and development include Grid Computing, Open Source Development, Ubiquitous Sensor Networks, Embedded Systems, Social Networking and Bioinformatics.

He has also been responsible for developing Oracle's long-term strategy for business growth in China, known as the "Golden China Initiative".

Since joining Oracle in 1988, Kevin has led the development of many leading edge business and technology strategies. He has been responsible for managing the relationship with Oracle's Global Alliance partners in North America, Asia and Europe. While working at Oracle's headquarters in Redwood Shores, California, he spearheaded the development of several of Oracle's core technology projects including e-Commerce Infrastructure provisioning, Very Large Databases, Massively Parallel Processing (MPP) Database Systems, Server Appliances and the first Oracle RDBMS products for Linux.

Prior to joining Oracle, Kevin was an Information Systems Architect with McDermott International, where he was responsible for Oracle database systems in Asia, Europe, and the Middle East.

Kevin received his Master of Business Administration degree from the University of New Orleans at New Orleans, Louisiana.

Jason Tan  
Program Director  
Hewlett-Packard, Singapore

## **Topic**

Technology & Market Forces Leading To and Challenging Grid

## **Abstract**

Hewlett-Packard (HP) has been pioneering the adoption of Grid technology and open standards for several years. The talk first provides HP's view of grid technology for enterprise customers and the challenges for commercial adoption of grid technologies. Then, market trend and data will be outlined to support the call for moving grid from the traditional high performance computing environment into the enterprise space.

## **Biodata**

Jason Tan is the Program Director for HP Singapore, driving strategic program and research collaboration in Singapore. In his previous function, he led the High Performance Computing team for South East Asia, developing several key grid initiatives in the region, including Malaysia, Singapore and Thailand grid.

Jason has extensive industry and technical experience in several key initiatives for Singapore, such as High Performance Computing, Life Sciences and Grid Computing. He was instrumental in the setup for the joint R&D lab in Singapore, between HP Lab and A\*STAR.

Jason holds bachelor degree in Electrical and Electronics Engineering from Nanyang Technological University, Singapore.

T. Mohandoss  
Regional Director, Government, Education & Healthcare  
Sun Microsystems

## **Topic**

Peta Scale Grid Computing - Value to Businesses

## **Abstract**

The need for HPC and Grid Computing is increasing to cater to the kind of problems that require solving. On one hand there is a need to solve 'grand challenge' problems to either to understand the Universe or sub-atomic structures. On the other hand, Genotype based medicines, Monte-carlo simulations in an ever globalized world for financial transactions and climate and weather modelling both on atmospheric and oceanographic impact, are driving the need for massive scale computing.

HPC and Grid Infrastructure is now moving towards standardized processors like X64 based processors, and the use of standardized interconnects. With ever increasing speeds of microprocessors and improved interconnects, it is possible to achieve higher performance, with tens of thousands of processors, in an affordable manner. This opens the possibility of solving a new range of problems in many industry verticals. This presentation will discuss technology directions and the solutions that deliver, enabling the solving of business problems in life sciences, bioinformatics and financial modelling.

## **Biodata**

T. Mohandoss is the Regional Director of Sun Microsystems covering Government, Education & Healthcare (GEH) segments for Asia South, covering all ASEAN Countries. In his role, he is responsible for business for Sun Microsystems in the GEH Sector. Mohan has been with Sun for 12 years and has over 20 years of experience in Sales, Sales Management, Business Development and Product Management. He is a Mechanical Engineer with a post-graduate degree in Business administration.

Adesh Gupta  
Regional Platform Architecture Manager, Asia Pacific  
Intel Technologies Asia

**Topic**

Multi-core Processor Architectures for Grid Computing

**Abstract**

Grid Computing is expected to become a mainstream business-enterprise topology during the rest of the decade. A number of technology transitions are taking place that will lower the barriers that exist today to deploy, maintain, and run applications on computer grids. Technology developments like multi-core CPUs are becoming forcing functions for pervasive use if multi-threaded and parallel programming techniques that have been in use in the HPC space for more than 20 years, both for grid computing and in other areas of the computing industry.

In this talk, we will explore processor architectures and technologies thereof, using standard off-the-shelf industry standard hardware.

**Biodata**

Adesh Gupta is the Regional Platform Architecture Manager in the Server Platform Group (SPG) for Intel based in Singapore. Adesh joined Intel in 1999 and since then has been in various marketing roles in channels, OEM and platform enabling. He has been in the IT industry for 18 years with a focus on server solutions. As an Intel Architecture Manager, his primary responsibility is to drive Intel architecture benefits and value to enterprise customers and partners.

Bruce Moxon  
Senior Director, Strategic Technology  
Network Appliance

**Topic**

A Service-Oriented Storage Grid : Beyond Storage Virtualization

**Abstract**

The storage industry typically talks about "virtualization" in somewhat static and device-specific contexts - RAID systems that virtualize underlying disks, volume management systems that virtualize underlying block devices, and file virtualization solutions capable of transparently migrating files across storage tiers.

Meanwhile, Enterprise IT organizations are under increasing pressure to deliver a range of storage "services" to their customers - with a tiered pricing model and well quantified and verifiable service levels.

These disparate producer and consumer-oriented views of storage leave an implementation gap that must be filled in order to realize the "virtual everything" vision of enterprise grid computing. In this presentation, Bruce Moxon identifies key storage technology trends that are evolving to deliver this service-oriented view of storage.

## **Biodata**

Bruce Moxon is Senior Director, Strategic Technology at Network Appliance, where he works with enterprise customers deploying grid computing and data management solutions. He brings more than twenty years of experience in distributed computing for both scientific and commercial applications, and writes, speaks, and teaches extensively on the continuing evolution of grid computing.

Prior to joining Network Appliance, Bruce was Chief Solutions Architect at Panasas, where he worked with customers deploying scalable storage solutions for Linux clusters. Bruce has architected and developed solutions for a number of high throughput computing environments, including Perlegen Sciences' SNP discovery system, Bank of America's CRM and analytics systems, and NASA's Earth Observing System.

Bruce has a BS degree in engineering from the University of California, Los Angeles, and a MS degree in computer engineering from the University of Southern California.

Laurence Liew  
Director, Open Source Grid Development Centre  
Platform Computing, Singapore

## **Topic**

IT Agility With Enterprise Grid

## **Abstract**

Leading edge organizations are transforming their IT systems from monolithic vertical silos to a shared resources model that support virtual business domains. This talk will share with the audience Platform's enterprise grid technologies which allows such an Agile enterprise to be built, and also how Platform's technology will support the core requirement of a business. We will focus on demonstrating how building the Agile datacenter is a requirement to allow business to grow on a demand basis.

## **Biodata**

Laurence Liew manages Platform Computing Inc. Open Source Grid Development Centre (OSGDC) in Singapore and also has Asia-Pacific-Japan business responsibilities for Platform Open Cluster Stack – the leading cluster management software for building, managing and simplifying Linux-based compute clusters and grids.

Laurence is a veteran of the open source and HPC/Grid community and has been promoting the use of Linux/HPC/Grid since 1998. He was involved in building the very first commercial Linux cluster for a local research institute in 1999 and has since implemented and consulted for many organizations in APJ, Europe and US, on HPC and Grid. Laurence graduated from National University of Singapore with First Class Honours in Engineering.

Rajesh Chhabra  
Program Manager India (Enterprise Computing)  
Altair Grid Technologies

**Topic**

Enterprise Grid Portals

**Abstract**

Recent few years have witnessed the tremendous demand for having easy to use interfaces for the HPC and Grid resources of an organization. While initially organizations responded slowly on meeting the needs of their users concerning security and management of web based applications for their HPC resources, there are now growing numbers of portal deployment projects underway around the world.

This talk will present the pros and cons of deploying Grid Portals and also highlight the path ahead for the organizations as the industry is moving towards the Service Oriented Architecture (SOA).

**Biodata**

Rajesh Chhabra is one of the pioneers in Grid Computing in the Austral-Asian region. Starting his Grid Computing journey from Bioinformatics Institute (BII)-A\*STAR, Singapore, he moved to Australia where he lead the User Interface & Visualization Infrastructure (UI &VI) projects of Australian Grid Program from 2004-2006. He is currently appointed as the Program Manager of Altair Grid Technologies India and leading the core development of PBS-Pro and various Grid Portal products.

Rajesh holds a Master's in Technology Management (2004) from Griffith University, Australia, and also holds a Master's in Information Technology from Swinburne University of Technology, Australia. Rajesh has conducted various seminars and training session in the Grid Computing domain around the world.

Stan Nguyen  
Director, Enterprise Technologists  
Dell Computer Corporation, APJ

**Topic**

High Performance Computing Solutions

**Abstract**

Evolution of Clustering  
Today's High Performance Computing  
Upcoming Technologies for HPCC  
Dell's Strategy : The Scalable Enterprise  
Dell High Performance Computing Solution

**Biodata**

Stan Nguyen is Director of Enterprise Technologists, Dell Asia Pacific and China. In this position, he is responsible for advancing Dell's Enterprise business in the region, providing technical expertise to augment the Dell Advance Systems Group capability. Stan has a broad knowledge of high-end Enterprise requirements and specializes in scaleable systems.

Since joining the company 9 years ago, Stan has played a pivotal role in advancing Dell's server and storage business in the region, integrating marketing and program management as well as the development of industry partnerships.

Stan joined Dell from Compaq/Digital Equipment Corporation where he spent 9 years holding positions in enterprise solutions, marketing and product development in the Asia Pacific.

Stan obtained a Bachelor of Science degree in Computer Science from Melbourne, Australia in 1993.