

## **Scientific Computing Associates and HP team up to provide Parallel Development Utilities for Productivity Workers on HP ProLiant Servers and BladeSystems**

Scientific Computing Associates, Inc. (SCAI) and HP have certified TCP Linda® on HP ProLiant Cluster Platforms, providing a certified cluster solution based on HP ProLiant DL rack mounted and BL Blade servers. Linda® is certified on RHEL3, RHEL4, Novell SUSE SLES8, SLES9, and Microsoft Windows Server 2003.

Linda is a proven industry standard for parallel programming, and well known for reliability and efficiency. Introduced in the mid-1980s, Linda was the first commercial product to implement virtual shared memory (VSM) for supercomputers and large workstation clusters. Linda is content-addressable, not address-based, making it much easier to build applications and fully utilize hardware capacity. Cost-effectiveness, speed and ease of use are just some of the advantages of using Linda.

Linda technology is embedded in parallel versions of Gaussian 03, the computational chemistry program based on the methodology for which John Pople won the 1998 Nobel Prize in Chemistry. Other uses by such companies as Lehman Brothers and Hess have proven the power of Linda's parallel processing capabilities for compute intensive applications.

As industry standard multi-core processors and clusters are becoming more available and affordable, the lack of parallel applications has become a problem. With Linda, a wide range of applications can take advantage of these scalable compute configurations. Linda makes it especially simple to automate and accelerate parametric studies, where the same application is executed many times with multiple sets of input parameters.

Based on six parallel commands, this easy to deploy and operate tool with simple command line installation and deployment steps, is optimized for cluster operation by providing self-configuring and self-managing features, thereby reducing the cost of setup and administration of a cluster. The industry-standard HP Cluster Platform with Linda can be integrated easily into IT infrastructures without network or administrative disruption.

### **Product features include:**

- \* **Application development productivity** – Build parallel programs quickly (C or Fortran) using six simple commands.
- \* **Simplicity** – Get ease of use without loss of functionality or performance. The Linda compiler (not the programmer) does the grunt work.
- \* **Versatility** – Linda exploits multi-core processors, clusters, SMPs, and supercomputers. Supports Intel and AMD.
- \* **Flexibility** – Linda provides full features that can be tailored to each individual environment.
- \* **Mixed Environments** - Works flawlessly with heterogeneous environments, supports Windows, Unix, and Linux operating environments and all major hardware platforms.

**Target Customers:**

- Enterprises where productivity workers are under pressure to drive new parallel algorithms to improve information utilization across enterprise organizations.
- Where parallel application development needs leverage, scarce expert talent, and minimization of cost and time to completion.
- Where a mix of Linux and Windows platforms need to be coordinated.

**Sample Configurations:**

<b>16 Node BL25 Cluster DC 2P 8 GB 144GB</b>			<b>16 Node BL35 Cluster DC 2P 4GB 72GB</b>		
2	243564-B22	HP BLp Enhanced Enclosure	1	283192-B21	HP BLp-Class C-GbE2 Interconnect Switch
2	283193-B21	HP BLp-Class F-GbE2 Interconnect Switch	16	406024-B21	HP BL35p 2.4GHZ-1M DC 2G 2P SAS Svr
16	399598-B21	HP BL25p 2.4Ghz-1M DC 2G 2P Svr	16	376639-B21	HP 2GB Reg PC3200 2x1GB Memory
48	376639-B21	HP 2GB Reg PC3200 2x1GB Memory	32	384038-B21	HP BL35p SAS 36GB Drive Kit
32	286778-B22	HP 72GB 15K U320 Pluggable Hard Drive	1	243564-B22	HP BLp Enhanced Enclosure
<b>Rack</b>			<b>Rack</b>		
1	245163-B22	HP 10622 22U Shock Rack Pallet	1	245163-B22	HP 10622 22U Shock Rack Pallet
1	221546-001	HP TFT5600RKM Integ 1U US KeyBrd&Monitor	1	221546-001	HP TFT5600RKM Integ 1U US KeyBrd&Monitor
1	AF072A	HP 1U 10pk Universal Filler Panel	1	AF072A	HP 1U 10pk Universal Filler Panel
1	380314-B21	HP BLp 1U Pwr Encl w/2 Pwr Sply Kit	1	380314-B21	HP BLp 1U Pwr Encl w/2 Pwr Sply Kit
1	252663-D74	HP 24A HV Core Only Corded PDU	1	252663-D74	HP 24A HV Core Only Corded PDU
<b>Software</b>			<b>Software</b>		
1	393328-B21	RHEL AS Std 1YR RHN Eltronic No Media S	1	393328-B21	RHEL AS Std 1YR RHN Eltronic No Media SW
1	398384-B21	RHEL WS4 1Yr Base 8 pk, ET/Opt	1	398384-B21	RHEL WS4 1Yr Base 8 pk, ET/Opt
1	398385-B21	RHEL WS4 1Yr Add on 8 pk ET/Opt	1	398385-B21	RHEL WS4 1Yr Add on 8 pk ET/Opt
1	398378-B21	SCAI LINDA Agent Base 1yr Support-4 Node	1	398378-B21	SCAI LINDA Agent Base 1yr Support-4 Node
12	399710-B21	SCAI Paradise Agent 1yr Support-Add Node	12	399710-B21	SCAI Paradise Agent 1yr Support-Add Node
1	398377-B21	SCAI Development Toolkit Document	1	398377-B21	SCAI Development Toolkit Document
<b>Total Hardware and OS \$152,444.00</b>			<b>Total Hardware and OS \$112,788.00</b>		

**For more information, contact your HP representative, or contact SCAI at [sales@lindaspaces.com](mailto:sales@lindaspaces.com)**