The Azul CentiCore Solution

Impossibly small. Gigantically powerful. Surprisingly affordable.

The CentiCore solution is a fully integrated solution that combines the power of multicore architecture with open source software. This specially-configured solution enables small and mid-tier enterprises (SMEs) with symmetric multiprocessing (SMP) quality compute resources, while delivering all the benefits of commodity scale-out economics and significantly fewer servers to manage.

With a specially configured Azul 960 Compute Appliance, JBoss® open source application server and portal, and Linux®-based servers, the CentiCore solution is the ideal open-source development platform for cost-conscious smaller enterprises, enabling dramatically improved application performance. Network attached processing allows businesses to seamlessly tap into Azul compute pools, regardless of existing infrastructure, and solves some of the most difficult challenges typically associated with scaling service-oriented applications. This fundamentally new approach allows customers to get more out of their existing servers and drive significant cost out of managing their data centers.

The CentiCore solution occupies 8U of standard rack space, consumes 1.75 kilowatts and is priced at less than two similarly configured 4-way Dell™ PowerEdge™ 6850 systems, making it ideal to address the needs of SMEs or individual projects in large enterprises. This cost-effective platform increases developer productivity, decreases time to market, and can quickly address resource requirements of web-enabled application development. Through a strategic partnership with JBoss and Penguin Computing®, Azul Systems® has combined the substantial benefits of open source and multicore technologies, creating a multiplier effect in cost savings.

The CentiCore Integrated Solution: For Developers

With industry-leading multicore architecture, the Azul 960 Compute Appliance is designed with 96 processor cores in a single, flat symmetric multiprocessing system. This next generation compute platform is ideal for developers in order to avoid workarounds and memory errors, simplifying debugging efforts. This cost-effective platform increases developer productivity, decreases time to market, and quickly addresses resource requirements of web-enabled applications in development and testing environments.

MASSIVE PROCESSING POWER FOR $59,000

For roughly the price of two similarly configured Dell™ Linux®/Intel® servers, customers can now afford large-scale SMP-quality processing power (100CPUs, 34 GBytes of memory), allowing them to get more out of their existing infrastructure, rescue runaway development projects, and provide an ideal platform for service-oriented applications. This plug-and-play solution works with any application server, requires no code changes to your existing applications, and offers massive processing power – all for only $59,000.

DEVELOPER BENEFITS

- Enable massively scalable parallel applications
- Increase productivity
- Decrease time to market
- Eliminate garbage collection pauses
- Access 96GB heaps (64-bit)
- Efficiently manage tens or hundreds of application threads through Optimistic Thread Concurrency
- Unleash application development innovation

The CentiCore Integrated Solution: For IT

By delivering dramatically more application throughput for transaction-intensive applications—with less cost, less complexity, and faster time-to-deployment—Azul enables datacenters to operate at significantly greater efficiency. Azul is the only solution offering true economy of scale: the larger the applications and the more applications accessing the Azul solution, the greater the margins.

IT BENEFITS

- Ensure predictable service levels and faster response times under unpredictable loads
- Eradicate over-provisioning and minimize software licensing costs
- Increase existing hardware utilization of server infrastructure
- Minimize power consumption and environmental constraints
- Reduce capacity planning from months to days
- Accelerate Service-Oriented Architecture (SOA) deployments

The combined power of multicore and open source introduces a massive multiplier effect that provides unprecedented productivity and cost savings to IT projects. Application development will no longer be constrained by traditional server infrastructure limitations, but can now be tied to business goals and objectives.

Contact Azul Systems

For technical questions, please contact testdrive@azulsystems.com

To purchase the CentiCore integrated solution, visit http://www.azulsystems.com/centicore/how_to_buy.htm

AZUL 960 COMPUTE APPLIANCE (SPECIALLY CONFIGURED)

- 32GB RAM
- 4 Vega™ processors (24 cores each)
- 1 Network processor board (dual GbE ports)

TWO PENGUIN RELION™ 1400 SERVERS (2-WAY INTEL® XEON®-BASED SERVERS)

- 1U (1.75") Rack Mount Chassis
- Dual 3.0GHz Intel Xeon w/ EM64T, 1MB L2 Cache, 800MHz FSB
- 1GB Low Profile PC3200 ECC DDR2 (2 x 512MB)
- 36GB, 15,000RPM, Low Profile SCA
- Slimline 24X IDE CD-ROM
- Dual Integrated Gigabit Ethernet Ports
- One Available 64-bit/66MHz PCI-X Slot
- Integrated ATI Rage XL Graphics Controller
- One 600W Power Supply
- Preload, Red Hat Fedora Core, Version 3
- Relion 1400 Documentation
- Penguin Computing Three Year Warranty

ONE HEWLETT PACKARD® PROCURVE 2824 (24P J4903A#ABA)

- 24-port Gigabit switch with 20 10/100/1000 ports

SOFTWARE STACK

- RedHat® Server Fedora Core V3
- JBoss Application Server 4.0
- JBoss Portal 2.0
- Grinder 2.8
- xPetStore 3.1.3 demo application
- Apache version 2.0.53
- MySQL® Database version 4.1.15
- Sun™ J2SDK 1.4.2.10
- Azul Virtual Machine software

OTHER

- Digital library VM tuning best practices guide & quick install poster
- All necessary cables

AZUL SYSTEMS

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