



Technology
Powers
Business



Streamlined Enterprise Computing Solutions from Egenera, BEA and Intel

PRODUCT HIGHLIGHTS

- **Improves operational efficiency:** BEA provides a unified platform for application development and integration, and the entire application infrastructure can be deployed on a single Egenera BladeFrame. This combination simplifies deployment, improves IT agility and reduces operational costs.
- **Increases adaptability:** Hardware resources can be dynamically allocated to scale capacity and performance based on specific workload demands and business priorities.
- **Delivers better performance:** The BladeFrame system's high-speed, low-latency interconnect complements the compute power of the Intel Xeon processor MP to deliver measurable performance advantages in BEA WebLogic Platform environments.
- **Dramatically reduces Total Cost of Ownership:** By combining the market-leading price/performance of the Intel Xeon processor MP with unique server virtualization software, the Egenera BladeFrame dramatically reduces TCO. BEA delivers comparable cost savings at the software level by reducing the cost of development and integration.



SIMPLIFY YOUR DATACENTER INFRASTRUCTURE

BEA WebLogic Platform* running on the Egenera* BladeFrame* system provides a fully integrated datacenter environment for building, integrating, extending and managing enterprise applications — all in a single chassis.

The BladeFrame consists of up to 24 Intel® Xeon™ processor and/or Intel Xeon processor MP-based server blades, with integrated high-speed networking and I/O capabilities. Full hardware redundancy is built into the system and powerful management software — Egenera PAN Manager* — supports dynamic allocation of hardware resources across multiple operating systems and applications.

BEA WebLogic Platform offers comparable power and flexibility at the software level. It provides IT organizations with a simplified and integrated application infrastructure that accelerates the development and implementation of high-volume, business-critical applications. It enhances Java application performance with the BEA WebLogic* JRockit* Java Virtual Machine (JVM), which is uniquely optimized for Intel-based servers. It also supports advanced clustering and failover solutions that take full advantage of the redundant Egenera hardware environment.

With BEA WebLogic Platform running on an Intel Xeon processor family-based Egenera BladeFrame, multiple N-tier solutions can be developed, tested, integrated and run on a unified platform that is certified for both the Linux operating system and for Microsoft* Windows* Server 2003, Enterprise Edition. All applications and hardware resources can be centrally managed and dynamically allocated to reduce costs, improve resource utilization and support the most rigorous requirements for performance, scalability and availability.

World-Class Performance



With up to 96 Intel Xeon processors and a high-performance (2.5 Gigabit/second) backplane, the Egenera BladeFrame delivers world-class compute power. BEA WebLogic JRockit JVM is optimized for the Intel® architecture, including both Intel® Itanium® and Intel Xeon processor family-based systems.

It supports Intel Hyper-Threading Technology, and helps to ensure leading performance, flexible management and dynamic optimization for Java applications in a wide variety of solution configurations. BEA WebLogic Platform also supplies a variety of advanced software features, such as page and data caching, in-memory session replication, and connection pooling — all of which can boost performance for complex enterprise applications.

High Availability

With its advanced clustering capabilities, WebLogic Server fully utilizes the redundant hardware environment of the BladeFrame to support the highest levels of availability for business-critical applications. Application and transaction failover to another Egenera Processing Blade* is seamless and does not require any additional third-party clustering software or hardware. BladeFrame high availability failover resources are configured easily with a few simple mouse clicks.

Lower Total Cost of Ownership

The Egenera BladeFrame can help IT organizations reduce their total cost of ownership by more than 50 percent compared with comparable RISC-based systems. This is accomplished in part through better utilization of hardware resources, reduced maintenance costs, and elimination of the expensive high-availability software typically associated with mission-critical systems in a UNIX environment. Dramatic price/performance savings are also realized through the use of the Intel Xeon processor MP and the powerful networking infrastructure that is built into the BladeFrame. Cost benefits will continue to increase over time, as the modular BladeFrame architecture enables flexible and cost-effective upgrades to take advantage of the rapid price/performance advances of Intel processors.

BEA WebLogic adds to the savings by providing a unified, simplified and extensible application infrastructure platform. This powerful and integrated environment accelerates application development and integration, improves consistency across applications, and reduces administrative and software maintenance costs over the life of each application. The unprecedented performance of BEA WebLogic JRockit on Intel processor-based servers delivers additional cost savings through increased capacity, allowing IT organizations to allocate a greater share of budget to application development.

Manageability

Through software-based resource allocation, the BladeFrame enables a system administrator to add or remove virtual servers from a cluster on the fly, a process that is both time-consuming and disruptive with legacy platforms. Egenera PAN Manager software virtualizes 80 percent of server hardware components, replacing error-prone, physical activities with point and click or scripted commands. This capability dramatically reduces deployment timelines, decreases management costs and eliminates the need for complex clustering software.

Infrastructure Scalability

The combination of an Egenera BladeFrame, BEA WebLogic Platform and the Intel Xeon processor MP brings the unparalleled scalability of blade technology into the mid-tier and back-end of the datacenter. The server infrastructure can be scaled up to 24 nodes, entirely through software, and without shutting down or deploying additional hardware. Scaling can be achieved with blades based on either the Intel Xeon processor (for dual-processor blades) or the Intel Xeon processor MP (for 4-way blades), both optimized for high-performance. The flexible Egenera BladeFrame enables customers to mix and match 2-way and/or 4-way Processing Blades to deliver tailored processing power based on specific workload requirements.

BEA scales across the entire application infrastructure by providing a unified architecture on a common programming model and code base. Built on a highly scalable clustered architecture, BEA WebLogic Platform supports load balancing, connection pooling, caching and optimized communications among Web servers, operating systems, virtual machines and databases. The optimized performance of BEA WebLogic JRockit enables linear scalability across clustered blades, which complements the provisioning capabilities of the BladeFrame to enable quick and easy capacity scaling.

Flexibility

A single Egenera BladeFrame can support multiple operating systems, including Linux and Microsoft Windows Server 2003, Enterprise Edition. This gives businesses great flexibility for mixing

and matching operating systems and applications across a common platform. For example, a three-tier BEA application can be deployed on a BladeFrame using a different OS or OS version at each tier. At the same time, hardware resources for the entire solution can be managed from a single PAN Manager console.

The Intel Processor Advantage

Based on the innovative Intel® NetBurst™ microarchitecture, the Intel Xeon processor MP is available at industry-leading speeds. Performance for complex, multi-threaded applications is enhanced with Intel Hyper-Threading Technology and an integrated three-level cache architecture with 512KB of L2 cache, and a large 2MB L3 cache. Intel Xeon processor MP-based servers and blades increase business value by delivering outstanding performance for today's demanding mid-tier application server workloads. The Intel NetBurst microarchitecture provides the scalability and headroom needed for future business growth, stability for maximum uptime, and compatibility for supporting a wide variety of today's leading enterprise solutions.

More Information

- For general information about Intel and BEA solutions, visit:
www.intel.com/ad/bea
www.bea.com/linux/customers
- For developer resources, visit:
<http://cedar.intel.com/cgi-bin/ids.dll/topic.jsp?catCode=DDF>
- For a technical demonstration by Intel Solution Services, contact your BEA or Intel sales representative.
- For a free trial download of BEA WebLogic JRockit JVM, visit:
<http://commerce.bea.com/downloads>
- For more information about the Egenera BladeFrame, including a special report on the new enterprise computing model, visit:
www.egenera.com/ad/intelbea
- For more information about the Egenera BladeFrame and the Egenera/BEA/Intel solution, contact Egenera at 508-858-3600.



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1 Hyper-Threading Technology requires a computer system with an Intel processor that supports Hyper-Threading Technology and an HT Technology enabled chipset, BIOS and operating system. Performance will vary depending on the specific hardware and software you use. See <http://www.intel.com/info/hyperthreading/> for more information, including details on which processors support HT Technology.

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