



GigaSpaces with HP BladeSystem

GigaSpaces XAP: Scaling applications to meet extreme processing demand



To efficiently and cost-effectively meet fluctuating processing demand is no longer an impossible mission

Application workload getting you down?

Across transactional application domains, the number of clients, depth of services, and volumes of data are growing quickly. At the same time, data-intensive analytics applications are moving towards near-real-time processing. In this environment, ensuring that applications can scale to support fast and unpredictable growth is a make-or-break imperative. Because if your business is growing, but your ability to do business is not, you're leaving opportunities on the table. Don't let your growing application workload shrink your business. Multi-dimensional changes in demand make it difficult to accurately forecast future application workload. Underestimating growth increases the risk of downtime and unacceptable latency levels, while overestimating future demand can translate to time and money wasted on unnecessary machines.

Scaling applications to meet extreme processing demand

GigaSpaces eXtreme Application Platform (XAP) is a complete middleware platform that simply and easily transforms new and existing applications into powerhouse services with limitless scalability and low-latency performance. Based on a holistic space-based architecture (SBA), GigaSpaces XAP eliminates the scalability barriers inherent in multi-tier applications by managing the data, messaging and business logic associated with a transaction on a single computer node. This innovative approach resolves application bottlenecks at all levels, dramatically reducing latency and enabling applications to scale linearly, dynamically and cost-effectively. And deployment of GigaSpaces XAP on powerful HP BladeSystem clusters enables users to tackle grand-scale challenges. This combined environment delivers incredible computational and modeling power in

a small, compact design that addresses issues of space, power consumption and heat generation.

Solution benefits

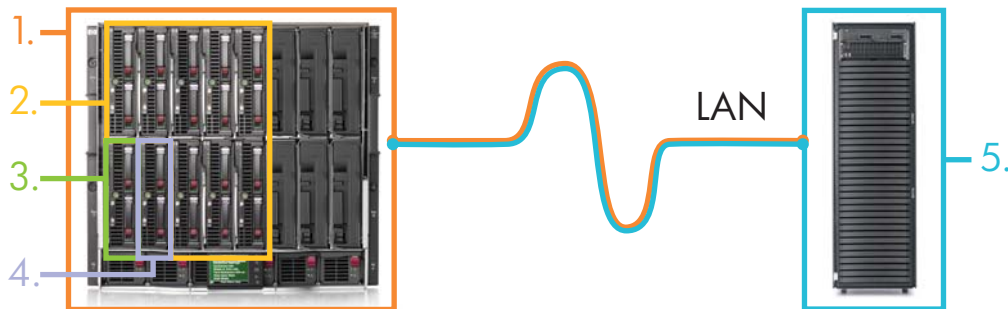
- Enhance decision making – increase profit through faster decision making, based on real-time information
- Accelerate business growth - drive revenue and profit by accelerating time to market
- Mitigate risk – meet compliance requirements by continuous assessment of portfolio risk
- Cost-effective operations – with the ability to share resources and to enhance asset utilization, GigaSpaces XAP solutions on HP BladeSystem offers substantial reductions in operations, maintenance and IT costs
- Investment protection – GigaSpaces XAP implemented on HP BladeSystem is highly scalable now and ready for future application needs

Working together with HP

Together with HP, GigaSpaces is advancing the power of computing with scalable solutions for high performance computation (HPC), data management and visualization. Our innovative solutions are leveraging the versatile HP BladeSystem to deliver cost-effective supercomputing performance to a growing range of HPC users around the world. Supercomputing performance is now accessible and affordable to more research teams in more applications areas, and it is the catalyst in accelerating more and faster scientific discovery around the globe.

HP BladeSystem consolidates compute, storage, power, cooling, connectivity, redundancy and security all within a single rack-mount enclosure. Its modular, virtualized components enhance agility, while HP Thermal Logic reduces power and cooling demands. And you save time and money with integrated management tools to simplify administration of the entire HP BladeSystem solution. It all adds up to a best-run infrastructure to meet needs of HPC solutions—right out of the box.





1. Infrastructure enclosure
2. Application server
3. Security server
4. Management
5. Storage

Reduce cost and complexity

The HP BladeSystem makes it fast and easy to deploy, customize and grow your business technology infrastructure on your terms. When configured with HP ProLiant blades, you get proven server reliability and innovation in an industry-standard platform that improves operational efficiency while managing complexity and risk. HP ProLiant blades and Linux let you do more with less—more innovation and high-value business services with less overhead and costs. With HP StorageWorks blades as an integral part of the HP BladeSystem infrastructure, you also gain simple storage expansion and flexible data protection. And with HP Insight Control, you can manage all HP BladeSystem components as one system, streamlining operations and increasing administrator productivity.

Service and support

Working with HP Services, GigaSpaces provides you with a complete portfolio of services tailored to your unique business and IT needs. We leverage the proven methodologies and expertise of over 65,000 HP services professionals around the world to help your company design, build, integrate, manage and evolve a BladeSystem infrastructure that lets you respond to business changes easily and cost-effectively.

Bill of materials

Infrastructure

- 1 HP Blc7000 1 PH 4 PS 6 Fan
- 2 HP Blc Cisco MDS 9124e 12-port Fabric Switch Opt Kit

Application server

- 8 HP ProLiant BL460c, (2) Dual-Core, 2.66 GHz Intel Xeon™ processor, 8GB RAM, (2) 146GB 10k 2.5in. Hot Plug SAS Drive
- GigaSpaces XAP Suite Software licenses
- DataSynapse GridServer Software licenses
- Oracle 10.x database licenses
- 10 Red Hat Enterprise Linux 5.0 Server licenses

Security server

- 1 HP ProLiant BL460c, (2) Dual-Core, 3.2 GHz Intel Xeon processor, 4GB RAM, (2) 36GB 15k 2.5 Single Port SAS Drive
- HP ProLiant Essentials Vulnerability and Patch Management

Management

- 1 HP ProLiant BL460c, (2) Dual-Core, 3.2 GHz Intel Xeon processor, 4GB RAM, (2) 36GB 15k 2.5 Single Port SAS Drive
- 10 HP Insight Control Environment for BladeSystem
- 10 HP iLO Power Management Pack for BladeSystem

Storage

- 1 HP StorageWorks EVA4100, 7 TB with 300GB SAS drives

Service and Support

- HW and SW Support – HP 1yr Next Day
- Factory Express level 1-Integrated-Simple Box Config

Driving better business outcomes

By choosing GigaSpaces software on the HP BladeSystem c-Class, you can accelerate growth and mitigate risks with a simplified, consolidated infrastructure that's agile to efficiently handle change. And you can lower costs through automation, virtualization and improved IT efficiency. Together, we drive better business outcomes by making business technology a major contributor to your bottom line.

*n = number of licenses required by vendor licenses regulations

**BOM should be used as example only, architecture will vary by customer environment

For more information, visit www.hp.com/go/bladestystem or www.gigaspaces.com

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