

## Meeting the Rising Challenges of Healthcare IT

Enterprise healthcare applications handle millions of messages per day, processing terabytes of data from clinical devices, cross-venue messaging, data sharing, community portals and many other data sources. With such an explosion of data, increasing regulatory requirements for system integration and calls for secure and rapid information sharing, healthcare IT is evolving.



### How would you handle



**3 Million Messages a Day**



**9000 Custom Rules**



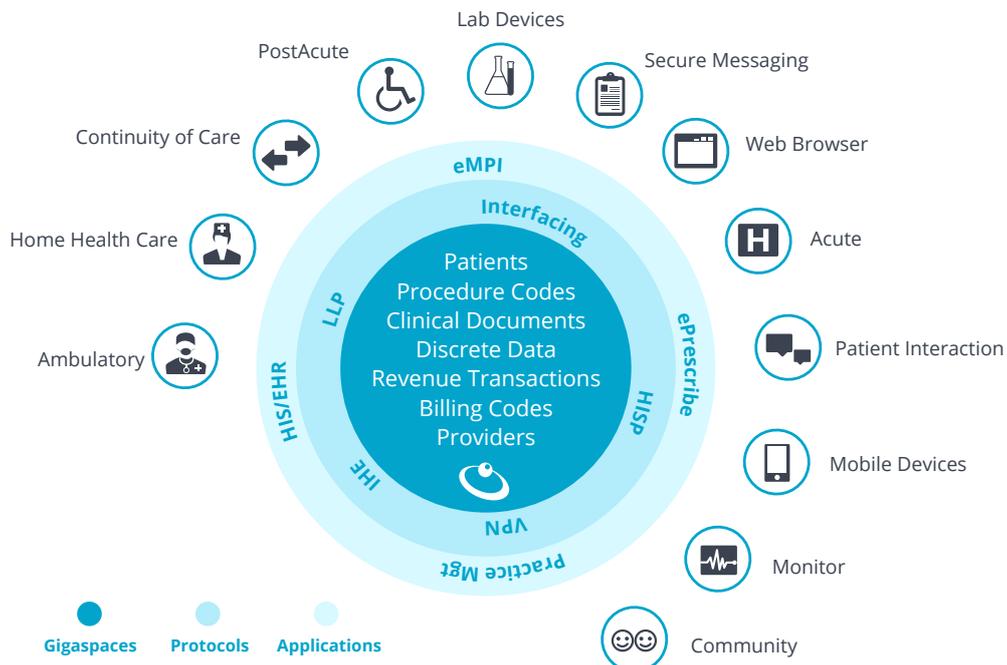
**150 Hospitals**

### What would you do?

XAP can process these messages in **< 5 seconds** and generates actionable decisions.

**GigaSpaces' XAP In-Memory Computing Platform** provides an end-to-end solution to accommodate the needs of complex healthcare applications and requirements, meeting the rising challenges of healthcare IT.

XAP enables delivery of fast patient intelligence, effective information sharing across portals and users, and clinical workflow automation, making it possible for organizations to provide efficient, accurate and effective care.



## Meeting Healthcare IT Challenges

High throughput messages (HL7, EMR, etc) processing of various formats and content from various sources

→ With GigaSpaces XAP, the message processing components are fused with their data and integrated onto a single platform. Co-located data, messaging and processing mean that all the data is immediately available, no matter how complex, with no network hops, vastly speeding up processing. Support for large-volume (double digit terabyte) storage through SSD and flash memory (MemoryXtend).

### Cost containment

→ XAP enables maximized resource utilization because the logic and data are co-located, which eliminates latency due to network or storage. Spend a lot less money for the same throughput as with legacy architecture. With XAP as your single platform, save on costs of expensive RDBMS and storage HW/SW/middleware.

## Meet XAP

XAP enables your app to run entirely on a single platform with all the tiers collapsed into one container. The platform gives you fast data access by storing ALL your data in-memory, ensuring high availability and scaling your app automatically and on-demand.

End-to-end elasticity enables all system components to scale as resource requirements increase.

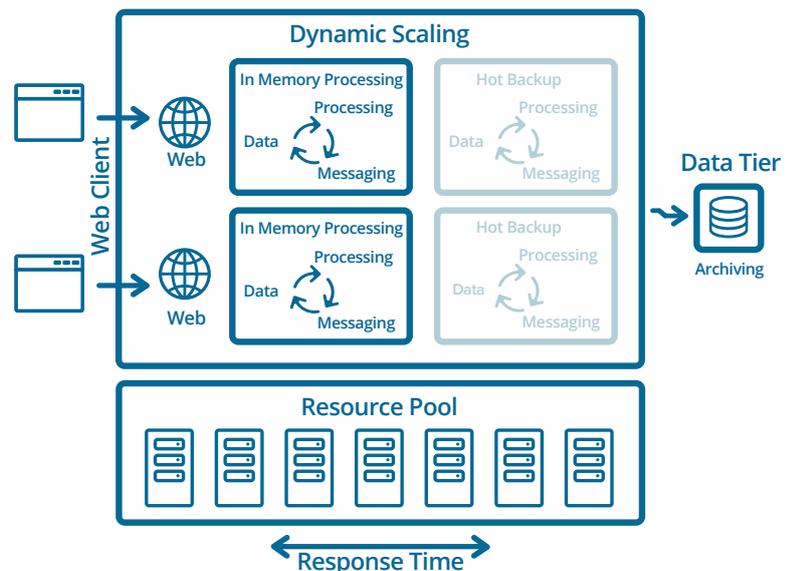
XAP provides full data consistency, high-availability and data integrity, ensuring that patient information will remain accurate and up to date.

Interactive applications (Physician Portal, ePrescribe, etc) need to support more users and different types of users

→ With XAP, web applications and services can “live in the grid,” and be called by a variety of protocols (eg: SOAP, REST, JSON, etc). XAP’s extreme scaling supports hundreds of thousands of users, which cannot be done with legacy tier architecture.

### Regulatory requirements around data integrity and auditing

→ Since XAP stores your data in-memory and on disk with real-time replication and self-healing capabilities, your system will not go down and you will not lose data. Traditional auditing approaches slow down the business logic. With XAP, rapid auditing is performed transactionally and asynchronously, without impacting the performance of business logic



## About GigaSpaces

GigaSpaces Technologies provides software middleware for deployment, management and scaling of mission-critical applications on cloud environments through two main product lines, XAP In-Memory Computing and Cloudify. Hundreds of Tier-1 organizations worldwide are leveraging GigaSpaces’ technology to enhance IT efficiency and performance, from top financial firms, e-commerce companies, online gaming providers, healthcare organizations and telecom carriers.

GigaSpaces was founded in 2000 and has offices in the US, Europe and Asia. For more information, please visit [www.gigaspaces.com](http://www.gigaspaces.com) or our blog at [blog.gigaspaces.com](http://blog.gigaspaces.com).

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