

XAP

Any Speed. Any Scale.

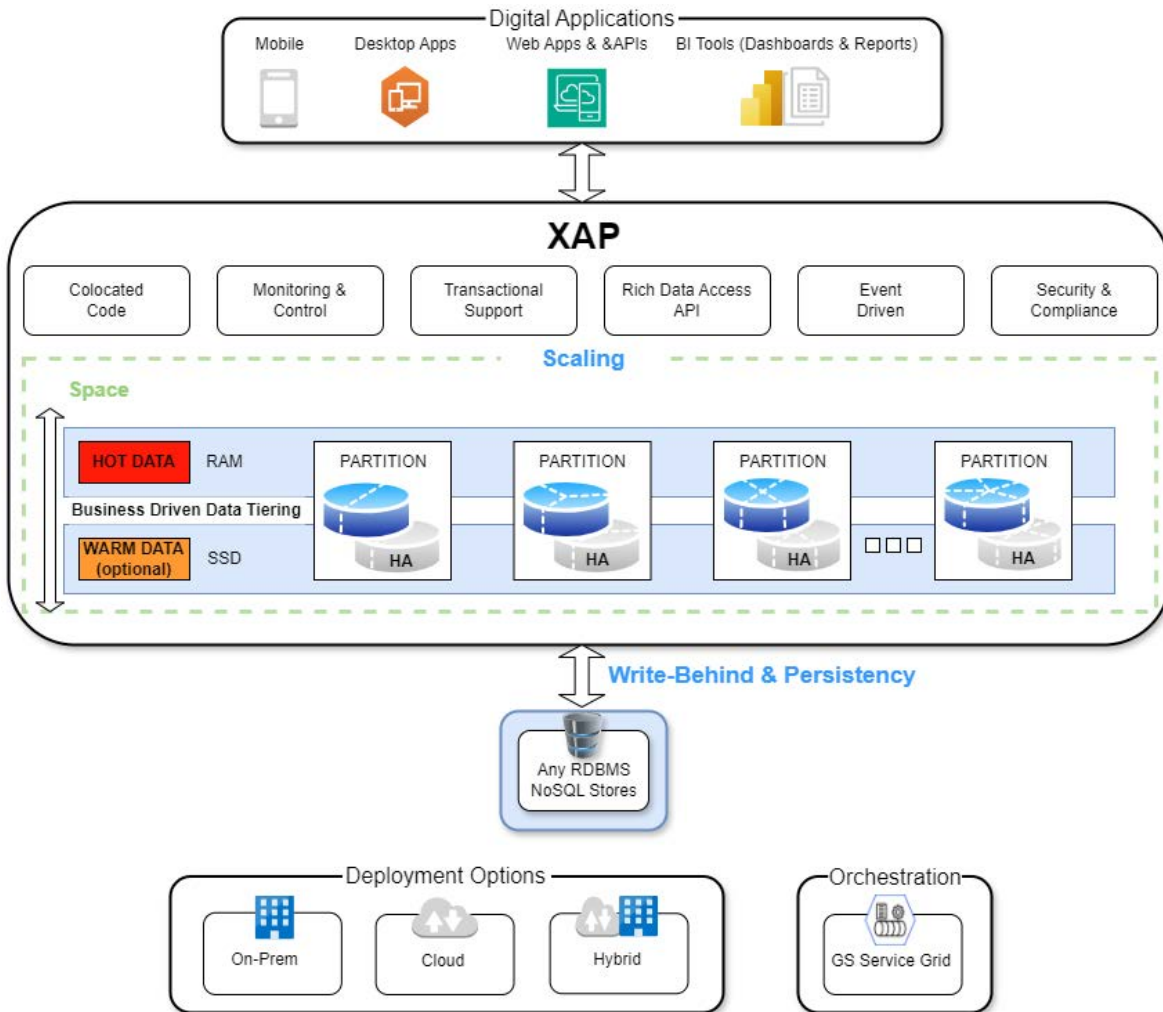
GigaSpaces XAP provides a powerful solution for ultra-fast transactional processing and task execution, offering high availability, reliability and scale.

XAP improves the performance, scalability, and reliability of applications that require high-speed access to frequently accessed data. For organizations that depend on accurate, near real time responses and require full persistence and ACID compliance, XAP accelerates digital applications at the speed and scale of your business, across any environment.

Key Business Benefits

- ✓ Enhances customer experience with millisecond response time
- ✓ Balances cost and performance with smart data management
- ✓ Faster time-to-market with easy deployment and integration
- ✓ Always-on high availability guarantees business continuity
- ✓ Maintains business and service levels for applications under any load and demand

XAP offers **unique capabilities** that are not available in simple caching solutions, such as full SQL compatibility, multi-criteria queries, dynamic server-side processing, full data integrity, policy-driven data tiering, seamless database integration, and hybrid and multi-cloud deployments.



Key Features



High Availability

XAP is an always-on, **ACID-compliant** and secured system, with disaster recovery ensured through efficient data replication (Active-Active) between sites, including hybrid environments.



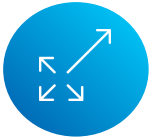
Storage Tiering

Data is stored in multiple data **storage tiers** – hot (in-memory, and warm (SSD). User-defined business rules place the most important data - the most accessed data, or the data that should be retrieved the fastest, or more likely to be used - in hot storage. Other data that is less frequently accessed can be kept in warm storage.



Persistence

XAP data persistence handles the fast cache recovery of data from the persistence layer (source) and handles changes made within the space delegation to the persistence layer (endpoint). The XAP mirror service (write-behind) provides reliable asynchronous persistence that ensures that data will not be lost in the event of a failure.



Scaling Up and Out

XAP delivers a scaling process that can be performed both horizontally and vertically, enabling the increase or reduction of the number of partitions allocated to a service.

Deployment

XAP can be deployed on any public, private cloud or hybrid environment, offering:

- Easy deployment and provisioning across any scale, on cloud, on-premises and hybrid environments.
- Hot rolling and automated deployment, upgrading, monitoring, scaling and recovery.
- Support of elastic orchestration systems such as Kubernetes, Red Hat OpenShift among others.
- Efficient and cost-effective data replication across regions/clouds or between on-premises and cloud deployments.



Enables Speedy Complex Queries

Supports an unlimited number of advanced indexes with SQL-99 compliance, only creating additional indexing data structures on one instance of data, enabling complex queries to be performed with optimal speed and minimal memory footprint.



Supports Multiple Data Models

Multi-model cache supporting structured, semi-structured and unstructured data models in a single solution without fragmenting the data to multiple different data stores.



Operational Reporting

Easily integrates with operational reporting and data integration tools.



Ensure Optimal Customer Experiences at Peak Data Volumes & High Concurrency



Native Multi-Criteria Queries

Supports an unlimited number of diverse indexes including nested objects, collections, compound index, geo-spatial and full text search for faster performance and smaller footprint.



Never Lose Writes

XAP provides strong consistency which ensures data integrity and data freshness, unlike other caching solutions which support eventual consistency between nodes.



Business Policy-Driven

Optimizes performance and cost with advanced business-driven policies that place the data in fast access RAM, or in SSDs, depending on the how quickly the data should be retrieved.



Fastest In-Memory Performance

Data processing is distributed on the server side in the same memory space as the data to accelerate performance and reduce networking and serialization overhead.

About GigaSpaces

GigaSpaces is a global pioneer in in-memory computing. Smart DIH, the company's operational data hub, powers real-time modern applications, unleashing the power of customers' data by transforming data silos into assets, turning organizations into digital-first, data-driven enterprises.

GigaSpaces XAP, an event-driven, distributed development platform, delivers extreme processing for mission critical applications. XAP provides high availability, resilience and boundless scale under any load.

XAP Skyline, an in-memory distributed technology for mission critical applications running in cloud-native environments, unites data and business logic within the Kubernetes cluster. XAP Skyline is used in financial services, retail, and other industries where speed and scalability are critical.

GigaSpaces serves customers such as American Airlines, Morgan Stanley, Bank of America, CSX, Goldman Sachs, Societe Generale, Credit Agricole, and Avanza Bank. GigaSpaces is an IBM Gold Partner and has business partnerships with Boomi, Capgemini, Cognizant, DataSciences and lemontree.

For more information visit www.gigaspaces.com.

