



## Key Features

- **Standards Based Messaging**

- **High Availability**

- HA Clustering
- Load Balancing

- **Scalable Performance**

- File-Based Message Store
- Scalable Connection Management
- Content Based Routing

- **Robust Security**

- Authentication & Authorization
- Transport Security
- Data Security

- **Global Manageability**

- Monitoring
- Management
- Auditing

- **Advanced Features**

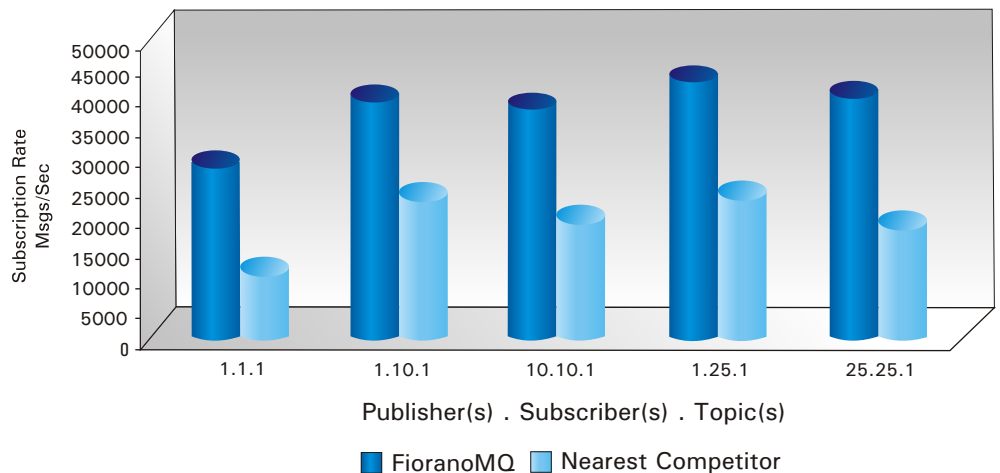
- Distributed Transactions
- Web Service Integration
- XML Interoperability
- Large Message Size Support
- Multi-Part Messages

## FioranoMQ<sup>®</sup>

### High Performance Enterprise Communication Backbone

FioranoMQ is the industry's most scalable, secure, and fastest Java Messaging Server delivering a new breed of high-performance, reliable, low latency solution for demanding enterprise applications. Fiorano's enterprise backbone seamlessly integrates heterogeneous IT systems improving operational efficiency, business agility and performance. With comprehensive support for standards-based communication, connectivity and transformation, FioranoMQ minimizes proprietary dependencies while providing a powerful communication backbone that can be extended easily, allowing real-time delivery of data spanning multiple applications and platforms. Fiorano is the messaging middleware of choice supporting mission-critical operations at Global Leaders worldwide.

### FioranoMQ Performance Comparison



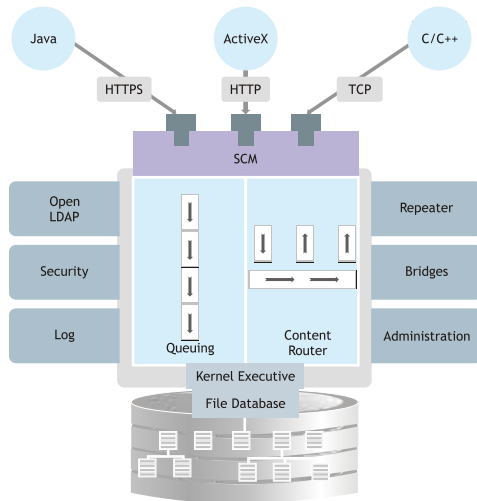
Fiorano delivers industry-leading performance with minimal end-to-end latency, outperforming competing products by an order of magnitude in real world application

### COMPREHENSIVE SUPPORT FOR STANDARDS

FioranoMQ supports multiple standards including JMS 1.1, J2EE 1.4, JTA XA Resource API, XML Message Exchange, SOAP, HTTP, HTTPS, SSL, and TCP/IP. Security standards include SSL, TLS, JCE, LDAP and PKCS.



## FioranoMQ Architecture



## HIGH AVAILABILITY

FioranoMQ's guaranteed message delivery ensures complete fault tolerance ensuring that business applications continue to operate in the event of software, network or hardware failure.

### HA Clustering

With its leading HA support, FioranoMQ allows routing of messages in a guaranteed order of delivery independent of the current state of the server to which a message is originally published. Operational connections are automatically routed to available MQ Serves and in-process transactions resumed without significant rollback time.

### Load Balancing

The FioranoMQ clustering architecture combines robust load balancing and fail-over protection with inbuilt server-to-server communication. This flexible clustering solution can be easily configured to handle different deployment topologies required by various application domains.

## SCALABLE PERFORMANCE

FioranoMQ's native connection management over an optimized file based message store provides unmatched scalability with high speed and reliable message throughput in the most demanding environments.

### File Based Message Store

FioranoMQ's file-based message store is specially designed for mission critical communications, maximizing message throughput and minimizing delivery latency. A typical messaging application running over FioranoMQ performs up to 10 times faster than competitive products.

### Scalable Connection Management (SCM)

FioranoMQ provides the industry's only native connection management module (optional), allowing thread pools to handle several thousand concurrent client connections per server without compromising message latency or server stability.

## ROBUST SECURITY

Fiorano's highly configurable, comprehensive authentication and authorization, coupled with superior encryption provides a resilient security shield for enterprise grade messaging applications.

### Authentication & Authorization

FioranoMQ provides Java 2 Security API's for authentication and authorization of users in the MQ domain, with plug-in support for various external systems including LDAP, NT/UNIX realms and databases. Administrators can easily control privileges of authenticated users using configurable ACLs.

### Transport Security

FioranoMQ supports up to 256-bit message encryption and plug-in SSL connections for both TCP as well as HTTP[s] connections. JMS applications can securely use any available transports (including SOCKS/ HTTP proxy tunneling across corporate firewalls) without any additional programming effort.

### Data Security

FioranoMQ allows messages to be encrypted while in transit with flexibility in specifying the key for message encryption. This feature provides the next level of security for business messaging applications across the extended enterprise.

## GLOBAL MANAGEABILITY

FioranoMQ's standards-based JMX-compliant management support provides a comprehensive framework for managing and monitoring FioranoMQ deployments, lowering overall costs associated with supporting the entire enterprise infrastructure.

### Monitoring

FioranoMQ provides API's and visual tools for real time activity monitoring and reporting without a trade-off in the functionality or speed. FioranoMQ also provides support for registering message listeners for internal system events, ensuring applications have advanced warning for problems before they cause major system downtime.

### Management

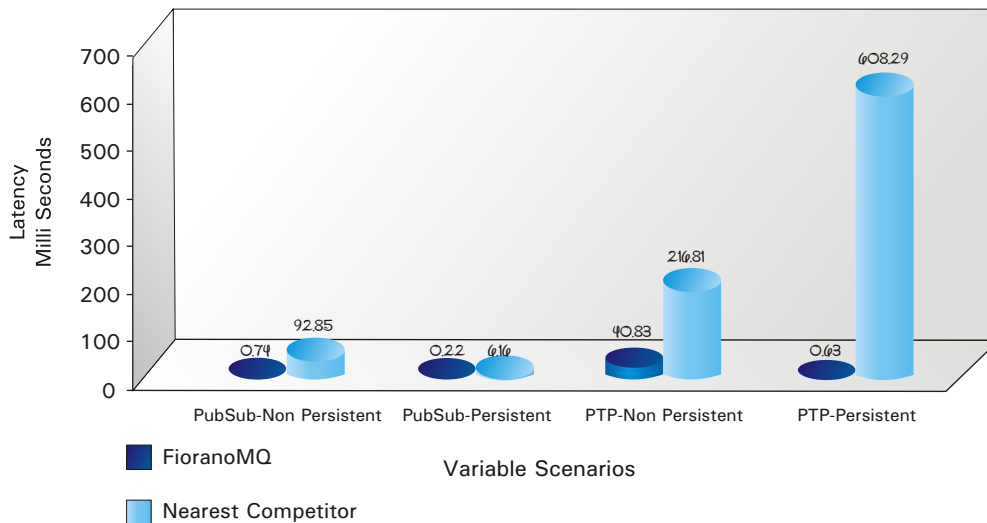
FioranoMQ JMX-compliant management API's provide extensive support for dynamic configuration, deployment and management of networks and destinations. A comprehensive administration tool facilitates creation and querying of administered objects from any remote administration node.

### Auditing

FioranoMQ's advanced logging capabilities provide API's for auditing past logs and events. Support for dynamically changing the trace levels for various internal modules reduces the time required to detect, diagnose and respond to problems easing system management and increasing availability.



### FioranoMQ Latency Comparison



**JMS Server Latency:** Lower numbers indicate superior performance and better

## FioranoMQ BUSINESS BENEFITS

FioranoMQ is an enterprise-class messaging platform for mission critical communication across the extended enterprise. Being standards based, it dramatically reduces the implementation time and lowers deployment costs of projects while enabling effective integration of existing IT assets, and maximizing returns on investments.

### Bringing it All Together

Over the years, most businesses have accumulated a host of proprietary applications to address different business needs. In addition, as market consolidation continues, more and more businesses need to merge their existing systems with acquired ones. With support for multiple languages (including Java, C, C++ and C#), FioranoMQ seamlessly interoperates with these heterogeneous systems, empowering businesses with speedy access to integrated information. Architects can implement FioranoMQ as an "easy-fit" solution into complex architectural designs and developers can work with standards-based APIs for communication and connectivity.

### Lowest Cost for High-Performance Environments

Businesses with high-performance messaging requirements will minimize both hardware and software costs with FioranoMQ. Being the fastest, lowest latency JMS server in the industry, FioranoMQ lowers hardware investments required for achieving a given volume of messages per second in comparison with competing products.

### Mission-Critical Data Availability

In today's environment, continuous availability of data is a critical business requirement. FioranoMQ's advanced features go beyond just ensuring that you never lose data;

they ensure 24x7 real-time access to your data despite software and hardware failures. This makes FioranoMQ the solution of choice particularly for applications where continuous access to data is a mission-critical requirement.

### Faster Time-to-Market

Businesses need to respond dynamically to market changes. With FioranoMQ, data and applications can be easily separated or moved to different locations based on changing business requirements. Remote management, dynamic reconfiguration and minimal coding requirements dramatically compress time to market solutions with FioranoMQ.

### Flexible Enterprise-Wide Scaling

As scalability requirements grow, flexibility in core architecture is a key differentiator. As part of the Fiorano SOA platform suite, FioranoMQ provides the foundation for Fiorano's Enterprise Service Bus (ESB) architecture, allowing enterprises to move away from ad-hoc, project-driven integration (involving expensive point-to-point solutions) towards enterprise-driven integration. This enables reuse and allows companies to extract more value from existing hardware and software investments and to build new applications that can immediately communicate with existing systems.



## WHAT CUSTOMERS ARE SAYING...

"Customers are committing money in real-time, so we needed high levels of reliability. Rapid movement in stock prices means that even miniscule delays are significant. We did not want to compromise on speed and scalability. FioranoMQ® has performed exceptionally well for us and has helped us compete confidently in this market."

Jeff Polsgrove,  
CTO, Scottrade

FioranoMQ® has been a critical component of our global, multi-site architecture for over two years. JMS standards compliance allows us to retain flexibility in JMS product selection, while the performance and value-added features of FioranoMQ®, plus the personalized service offered by the Fiorano team, have kept us loyal to them."

Brad Worsham,  
CTO, BIT Systems, Inc

"We are very pleased with FioranoMQ and are committed to it. We look forward to working with such a progressive and innovative company as Fiorano"

Arturo Altamirano,  
Schlumberger America

As information technologies become more pervasive across campus and their complexity and rate of change increases, the need for campus wide technology standards and reference architectures that are aligned with campus strategic goals also becomes a growing priority. FioranoMQ was the best fit here as it is easy to maintain over a long period of time with guaranteed ROI and a lower Total Cost of Ownership

Jeff McCullough,  
IST, University of California, Berkeley

For further information on how FioranoMQ can help your enterprise messaging challenges and to download your FREE Evaluation edition, Please visit [www.fiorano.com/downloads](http://www.fiorano.com/downloads)

### • FioranoMQ Editions

FioranoMQ Enterprise Edition  
FioranoMQ Premier Edition

### • FioranoMQ Bridges

IBM WebSphere MQ  
MSMQ  
TIBCO EMS

### • Supported Platforms

Sun Solaris  
Microsoft Win32  
IBM AS 400  
HP-UX  
Linux  
Apple Macintosh  
Unix (Tru-64)  
Alpha VMS  
AIX

## ABOUT FIORANO SOFTWARE

Fiorano Software is a leading provider of enterprise class business process integration and messaging infrastructure technology. Fiorano's network-centric solutions set a new paradigm in ROI, performance, interoperability and scalability. Global leaders including Fortune 500 companies such as American Express, Boeing, British Telecom, Lockheed Martin, NASA, POSCO, Qwest Communications, Scottrade, Schlumberger and Vodafone among others have used Fiorano technology to deploy their enterprise nervous systems.

[www.fiorano.com](http://www.fiorano.com)

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