



## Key Benefits

- Distributed, dynamic service deployment and management
- Scalable, peer-to-peer communications backbone with 24x7xForever availability
- Event-driven business process orchestration
- Service/ process-level configuration management
- Enterprise-class web services
- Comprehensive security

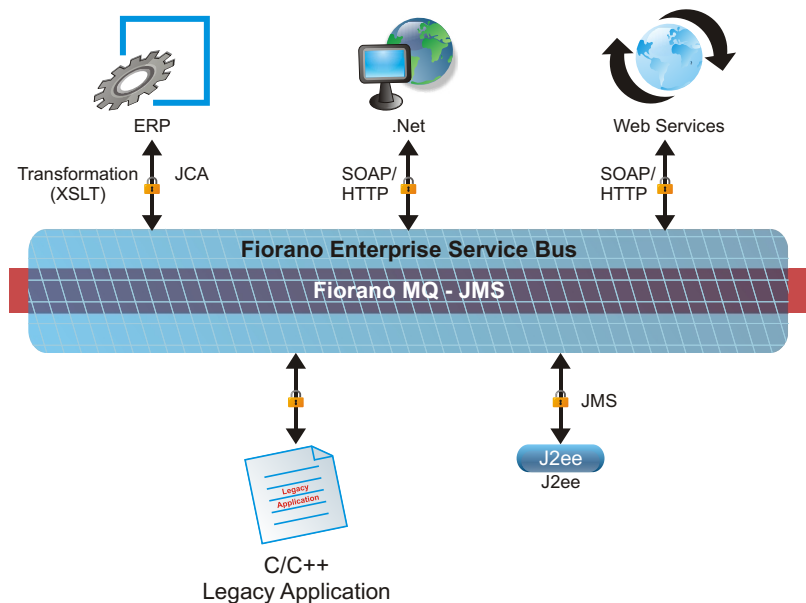
## Supported Standards

- JMS, JCA, JMX
- XML - XSLT, XPath, Xquery
- Web Services - WSDL, UDDI, SOAP
- Security - SSL, JAAS, JSSE
- BPM
- Others - J2EE, .NET, HTTP, JDBC

## The Fiorano Enterprise Service Bus<sup>™</sup>

### RAPID INTEGRATION ACROSS THE ENTERPRISE

Fiorano ESB is an Enterprise Service Bus that allows companies to integrate applications and processes across the extended enterprise using a standards-based, Service Oriented Architecture (SOA). With a highly distributed, yet centrally managed architecture, Fiorano ESB overcome the problems of monolithic integration brokers and application servers. It enables companies to draw on existing business logic residing anywhere within the enterprise to rapidly assemble efficient solutions for business problems. Fiorano ESB's event-driven architecture allows improved responsiveness to changing business conditions, leading to unmatched flexibility and increased productivity. The proven market leader, Fiorano ESB has been deployed in large-scale, secure, mission-critical environments. With a distributed services implementation, Fiorano ESB enables effective reuse, allowing projects to be incrementally scaled and extended across the enterprise.



## ESB – Enabling Standards-Based Integration

An ESB is a foundation for an enterprise-wide SOA, allowing enterprises to integrate applications and processes as standards-based, event-driven services over a highly distributed, centrally managed infrastructure. With no single point of failure, ESBs are inherently reliable and linearly scalable and have no performance bottlenecks. ESB Services including application/business logic as well as fundamental transformation, routing, connectivity and distribution services may be deployed and managed from any physical location across the enterprise network. Built entirely on industry standards including XML and Web Services, ESBs enable the next wave of comprehensive and affordable integration solutions, unifying applications and infrastructure within an enterprise and delivering the value IT departments are looking for via reuse, flexibility and faster time to market.



The proven leader in large-scale, mission-critical deployments, Fiorano ESB was architected with reliability and flexibility in mind, allowing a logical application design to be mapped directly to the physical implementation, making the development process more intuitive and easier than that of conventional integration suites. Fiorano ESB's distributed services architecture enables effective reuse, providing the ability to extract business-value from existing business and legacy applications and allowing the easy coordination of processes across heterogeneous networks. Key features and benefits include:

## Distributed Services Architecture

### Event-Driven Service Model

Defines a coarse-grained, event-driven model for Enterprise Services, simplifying the componentization of existing Web Services, Database applications, Legacy, J2EE and .NET software assets, enhancing their reuse within event-driven business processes and automatically maximizing the parallelism within each business process.

### Distributed, Dynamic Deployment and Management

Enables service deployment across the ESB infrastructure from any centralized location, allowing each individual service to be independently configured, managed, updated and redeployed without disrupting other services or processes.

### Event-Driven Process Orchestration

By enabling event-flows between distributed services to be set up dynamically by the underlying middleware, allows the logical process design to be mapped directly to physical services distributed across the ESB, empowering non-technical business-users to compose, deploy and modify event-driven business processes.

### Lifecycle Management and Versioning

Enables controlled deployment of business processes across network endpoints, together with automatic transitions across the software lifecycle (development, QA, staging and production) via customizable services and process profiles.

### XML Transformations

Supports sophisticated XSLT transformations with pluggable external transformation engines. Enables assertion-based verification of processes via XSD/DTD port matching.

## Peer-to-Peer Communications Backbone

### Unbounded Performance and Scalability

Peer-to-Peer messaging obviates the need for events to traverse a central hub, enabling concurrent event-flows between distributed services, obviating any single points of failure within the infrastructure.

### Service-Level Failover and 24x7xForever Availability

Enables failover instances of services to be dynamically deployed on remote ESB nodes based on multiple triggers, creating self-healing application networks with continuous availability under all operating environments.

### Comprehensive Security

Provides a flexible framework for authentication, authorization and encryption, with support for J2EE, LDAP and other security standards, adapting to a wide range of federated enterprise security policies.

## ESB Generic Services and Adapters

### Distributed Intelligent Routing

Enables dynamic changes to be seamlessly incorporated into running processes by automatically routing events between distributed ESB Services.

### Monitoring, Logging and Auditing

Supports asynchronous event-based notification of critical errors in event-driven business processes, with dynamic tracing, logging, auditing and monitoring of messages, documents and services.

### Adapters and Pre-built Services

Ships with a rich set of pre-built enterprise services including adapters to all popular relational databases, files, Messaging Middleware (MQSeries, JMS, MSMQ, others), Web Services, EJB, FTP, SMTP and more.

## Advantages of a Standards-Based Solution

Fiorano ESB implements standards for communication, connectivity, transformation and security, enabling application interoperability and allowing skills and software-assets to be easily transferred between integration projects. Fiorano supports and drives industry standards for integration, including Java, Web Services and XML.

**Mitigating Proprietary Dependencies:** Proprietary integration solutions 'lock-in' customers by forcing them to code to non-standard APIs, inhibiting flexibility, preventing reuse and ultimately proving to be extremely expensive. Fiorano ESB's standards-based, service oriented approach, however, smoothes the operational path of the processes running a business, reducing the time, effort and cost of integrating applications.

**Easy Interoperability:** Support for Web Services and other standards within Fiorano ESB enables seamless interoperability of disparate applications distributed across heterogeneous platforms; applications can now exchange data with ease, without the need for expensive custom transformations, extra coding or language translation capabilities.

**Reuse of Software Assets:** The adoption of a standards-based, Service Oriented Architecture (SOA) allows existing legacy and packaged applications within an organization to be used as building blocks, enabling their reuse within enterprise business processes, driving down development and management costs. With a quicker learning curve, standards further enable development skills and resources to be effectively reused across projects.

**Seamless Connectivity:** The emergence of connectivity standards including Web-Services, JMS, J2EE-JCA and .NET allow Fiorano ESB to seamlessly integrate multiple enterprise assets including application servers, messaging middleware, legacy systems and mainframe applications, without requiring custom coding or application rewrites; standards shield users from version and API changes, ensuring that existing processes are not disrupted by new releases.

## Fiorano ESB Business Benefits

Fiorano ESB offers a number of benefits over existing solutions for integration and real-time enablement, including faster implementation and deployment cycles, a flexible platform for future expansion offering a high degree of reuse, easy extensibility, seamless interoperability and an improved ROI. Key advantages include:

### Dynamic Responsiveness

Deployed as service-oriented processes, solutions on the Fiorano ESB improve responsiveness to changing business requirements, minimizing impact on existing business applications and often eliminating the need for new packaged applications. Fiorano ESB is based on an event-driven, service-oriented architecture, providing the ability to rapidly specify controlled changes to operations based on business objectives, and to implement these changes directly, quickly and more efficiently for business agility and integrity.

### Reusability

Fiorano ESB is built on top of standards, enabling efficient reuse of existing enterprise applications and infrastructure and lowering capital requirements for new projects. Fiorano ESB tools simplify the componentization of existing Web services, database applications, legacy, J2EE and .NET software assets, enhancing their reuse within event-driven enterprise business processes, driving down development and management costs.

### Accelerated Time to Market

Fiorano ESB enables the creation of interactive, end-user service-oriented processes without programming, by orchestrating existing services with visual tools. The ability to synthesize applications from multiple, distributed enterprise assets without any programming is extremely vital for achieving flexibility in a dynamic environment, leading to the automation of common development tasks and accelerated time-to-market.

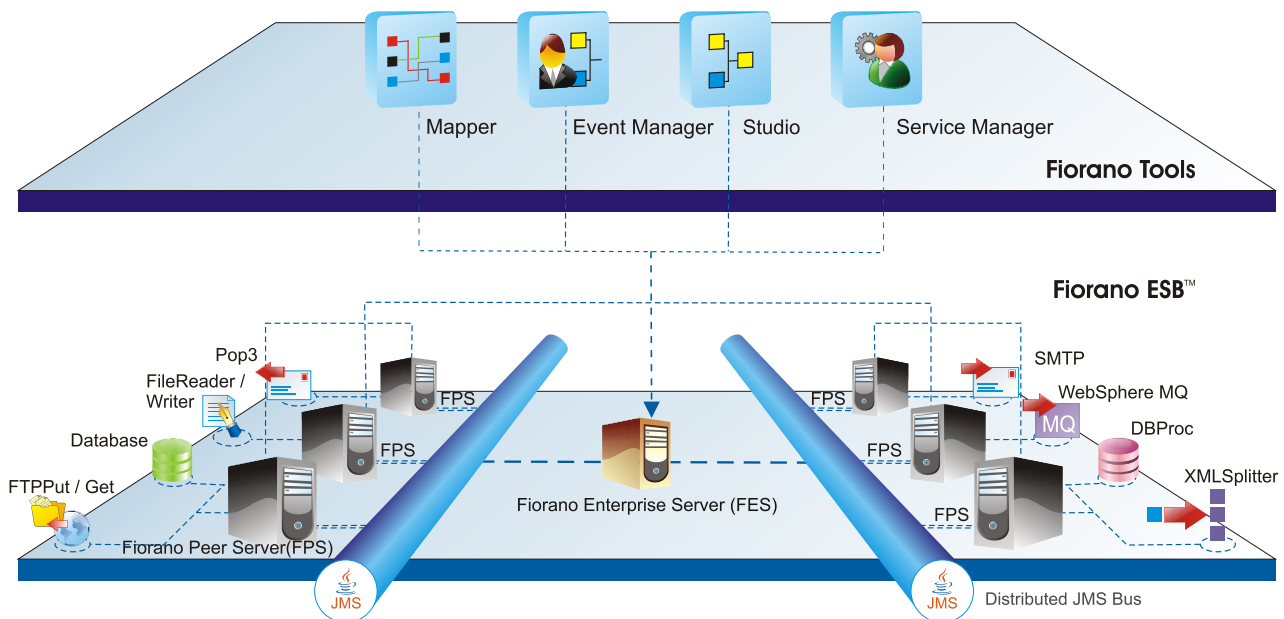
### Reduced Training Costs

Fiorano ESB improves the productivity of organizations by including a variety of pre-built services necessary for the creation of service-oriented processes, together with tools to componentize existing enterprise software assets. Comprehensive support for industry Standards, including J2EE, .NET, XML and Web-Services, ensure a fast learning curve, allowing developers and even enterprise managers to quickly become proficient at synthesizing custom solutions to problems in the form of interactive service-oriented processes.

### Lower Total Cost of Ownership

Fiorano ESB's dynamic versioning, deployment, and change-management capabilities, reduce development and maintenance costs by an order of magnitude in comparison to incumbent solutions. Further, Fiorano ESB's architectural-level innovations enable linear, build-as-you-grow scalability.

## The Fiorano SOA Platform



Fiorano ESB serves as the foundation of the Fiorano SOA Platform which adds the Fiorano Event Process Orchestrator, Fiorano Integration Studio, Fiorano Deployment Manager and Fiorano Adapters to form a comprehensive integration platform.



## Global Leaders Choose Fiorano

Fiorano helps organizations worldwide improve operational efficiencies and business performance by sharing information dynamically across global operations. Our commitment to developing standards based solutions that deliver immediate ROI with proven interoperability and industry-leading reliability helps ensure our customers' sustained success in worldwide markets

Fiorano understands the development, infrastructure and performance challenges facing IT departments in today's hyper-competitive markets. Over 450 enterprises worldwide have deployed Fiorano solutions, allowing them to:

- Extract business value from existing business and legacy applications spanning multiple, cross organizational boundaries;
- Deploy in a cost effective, incremental fashion, without disrupting existing operations or major up-front investments;
- Meet dynamic surges in demand, deliver services without disruption and increase customer satisfaction without having to provision new hardware systems;
- Lower the cost of ownership and maintenance of IT systems via enhanced reuse of software assets and standards based implementations;
- Reduce training costs and reliance on outside consultants, allowing in-house developers to deploy and manage complex integrations;
- Enhance productivity by allowing business-analysts to compose business processes with minimal programmer intervention.

### Manufacturing

Leading manufacturers have selected Fiorano over competing solutions for real-time process control across multiple platforms and applications over heterogeneous protocols.

### Retail

Some of the largest retailers in the world use Fiorano solutions to deliver real-time pricing information to stores worldwide.

### Financial Services

Leading financial institutions have selected Fiorano solutions to deploy the next wave of flexible and adaptable risk management and STP solutions.

### Telecommunications

Leading telecommunications companies use Fiorano Software to deliver millions of messages daily across complex, distributed workflows in mission-critical 24x7 environments

### Government /Defense

State and Federal Governments have deployed the Fiorano SOA Platform to significantly improve citizen services while simultaneously increasing revenues, while Defense Agencies have used the solutions to significantly enhance their response and intelligence gathering activities.

## Product Bundle

- Fiorano Enterprise Server
- Fiorano Peer Server
- Fiorano SOA Studio
- Fiorano SOA Visual Tools
- Fiorano Business Services

## Supported Platforms

- Sun Solaris
- Microsoft Win 32
- IBM AS 400
- HP-UX
- Linux
- Apple Macintosh

## ABOUT FIORANO SOFTWARE

Fiorano's peer-to-peer distributed dataflow platform integrates applications and complex systems, increases business process performance, yields higher message throughput, and enhances availability through agent-based visual composition that bridges the capability gap between business models and their implementation - the model is the application, ready to run. Global leaders including ABN AMRO, Boeing, British Telecom, Capgemini Telecom, Chicago Mercantile Exchange Group, McKesson, NASA, POSCO Steel, Qwest Communications, Rabobank, Schlumberger, Lockheed Martin, United States Coast Guard and Vodafone have deployed Fiorano to drive innovation through open, standards-based, dataflow SOA applications built in just days, yielding unprecedented productivity.

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

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