

EsperTech's Event Stream and Complex Event Processing software turns large volume of disparate real-time event streams into actionable intelligence.

More than ever, projects can turn to real-time Event Processing, from SOA to Edge and eXtreme Transaction Processing deployments. Complex Event Processing can provide the simplicity, scalability and level of abstraction required to turn real-time disparate event streams into a sustainable competitive advantage.

Esper, NEsper - Event Processing for Java & .Net

Event Stream and Complex Event Processing - Design continuous queries and complex causality relationships between disparate event streams with an expressive Event Processing Language (EPL). EPL statements are registered into (N)Esper and continuously executed as live data streams are pushed through.

Rapid development and deployments – EPL has a "SQL look alike" and statement matches trigger plain Java or .Net/C# objects for real-time customized actionable intelligence. (N)Esper is pure Java/.Net and can run standalone or embedded into existing middleware systems (application servers, services bus, in-house systems). This ensures optimal end to end latency and flexible architecture.

Enterprise grade – Esper Enterprise Edition bundles the core Esper CEP engine with a data distribution service, rich multi-window GUI and real-time data displays (Eventlets). Eventlets are configurable, interactive and easy to compose into a dashboard and present historical and event stream data from multiple distributable sources. Esper EE also provides a JDBC client and server endpoints for third party tools interoperability and a JMX adapter for runtime management and monitoring over standard interfaces.

Features at a glance

Efficient Event Processing

- Continuous queries, filtering, aggregations, joins, sub-queries
- Comprehensive pattern detection
- Pull and Push
- High performance, low latency

Extensible Middleware

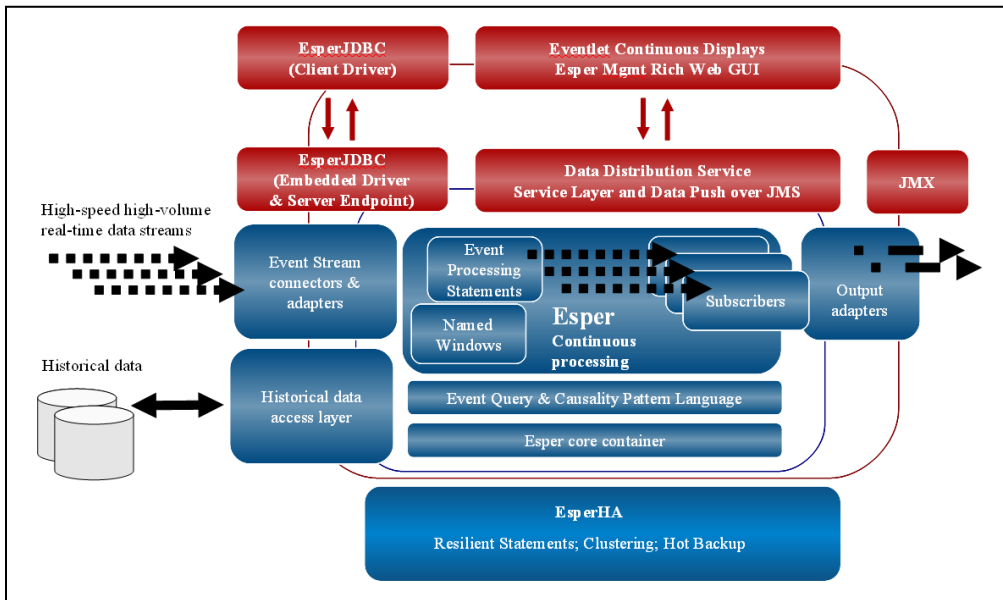
- Java, .Net, Map or XML events
- Runtime statement management
- API or configuration driven
- Plug-in SDK for functions, aggregations, views and pattern detection extensions
- Agile development and testing, integrates with Eclipse
- Adapters: CSV, JMS in/out, API
- Runtime management, operational visibility, interoperability
- Data distribution service for data push management and service layer

Rich Web-Based User Interface

- Real-time event displays: Eventlet technology
- Customizable and interactive displays
- CEP engine management

HA enabled (EsperHA)

- Per statement configuration
- Transient, out of heap storage, or fully resilient behaviour
- Hot standby API, hot backup
- Highly optimized and scalable data storage technology
- Engine state RDBMS storage option
- Plug-in SDK for third party event stores and distributed caches



EsperHA - High-Availability for Event Processing

Resiliency – EsperHA provides resilience and thus turns any Esper application into a zero-downtime event processor with just declarative configuration and limited operational requirements suitable for both standalone and embedded deployments. EsperHA also provides heap storage, clustering and hot backup capabilities for event and statement state.

Optimized and extensible – EsperHA includes highly-optimized market-proven data storage technology and also features a plug-in SDK to leverage third party event stores and distributed caches.