

EsperTech's Complex Event Processing and Streaming Analytics software turns large volume of disparate event series or streams into actionable intelligence.

Complex Event Processing can provide the simplicity, scalability and level of abstraction required to turn disparate event series or streams into a sustainable competitive advantage.

Esper, NEsper - Event Processing for Java & .Net

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 is SQL-standard compliant. Esper is pure Java, as is NEsper for .Net, and can run standalone or embedded into existing systems (distributed stream processing engines, application servers, services bus, in-house systems). This ensures optimal end to end latency and flexible architecture.

Esper Enterprise Edition bundles the core Esper CEP engine with enterprise abilities that cover development, test, production deployment and monitoring lifecycles.

- Linear horizontal scalability
- Elastic scaling
- Dynamic node discovery
- Fault tolerance
- Web-based user interface
- EPL editor with syntax highlight
- EPL debugger
- Detailed memory use reporting
- Inward-facing JDBC; JMX support
- Real-time data displays (*Eventlets*) that are configurable, interactive, extensible and easy to compose into a dashboard and present historical and event data from multiple sources.

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

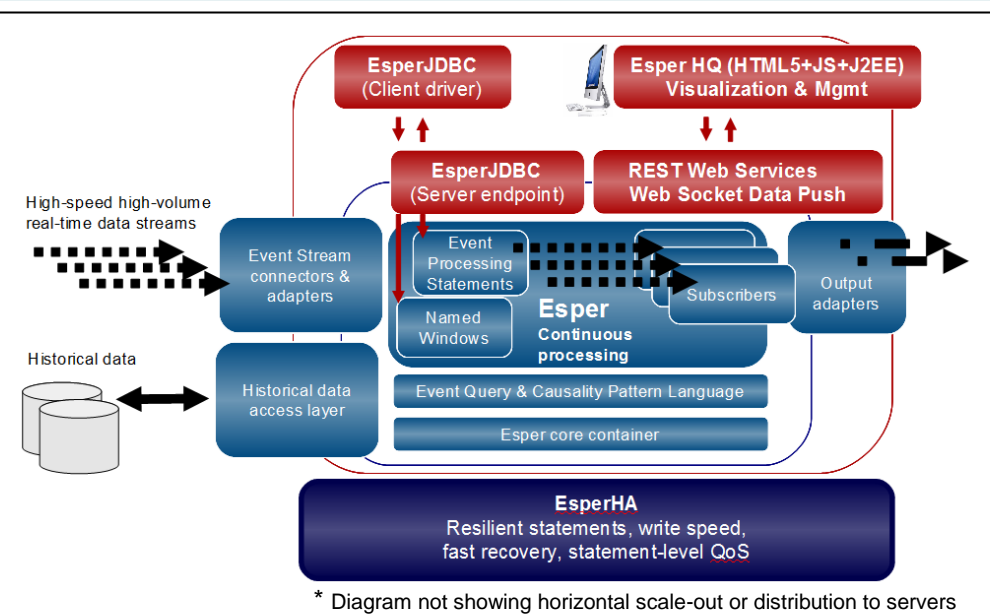
- Java, .Net, Array, Map or XML events
- Runtime query management
- API or configuration driven
- Plug-in SDK for functions, aggregations, views and pattern detection extensions
- Adapters: CSV, JMS in/out, API, DB, Socket, HTTP
- Runtime management, operational visibility, interoperability
- REST Services and data push
- Provides a JDBC client and server endpoints for third party tools interoperability

Rich Web-Based User Interface

- Real-time event displays: Eventlet technology allows customizable and interactive continuous displays
- CEP engine management
- Design and debug EPL Statements
- Drill-down and browser script integration
- Hot deployment

HA enabled (EsperHA)

- Per statement configuration
- Transient combinable with fully resilient behaviour
- Hot standby API, hot backup
- Highly optimized and fast data storage technology
- Engine state RDBMS storage option



EsperHA - High-Availability for Event Processing

Resiliency – EsperHA provides resilience and thus turns any Esper application (distributed and master-less or stand-alone) into a zero-downtime event processor with just declarative configuration and limited operational requirements suitable for both standalone and embedded deployments. EsperHA manages heap memory and largely removes the chance for out-of-memory errors.