



# Talend ESB Standard Edition

**Easily integrate distributed systems across functional, enterprise, and geographic boundaries.**

Powered by Apache CXF, Apache Camel and Apache ActiveMQ, Talend ESB SE allows organizations to address any integration challenge – from simple departmental projects to complex, heterogeneous IT environments.

Powered by the leading Apache open source integration projects, Talend ESB Standard Edition (SE) is a versatile and flexible, enterprise service bus (ESB) that allows organizations to address any integration challenge – from simple departmental projects to complex, heterogeneous IT environments. Talend ESB makes enterprise-class integration accessible by delivering a cost-effective and easy-to-use way to integrate and expand systems and applications.

Talend ESB SE is a standards-based connectivity layer used to integrate distributed systems across functional, enterprise, and geographic boundaries. Capabilities include messaging, Web services, intelligent routing, and data transformation.

Talend provides professional training, documentation and support around Talend ESB SE to help build robust enterprise software. As part of its support offerings, Talend includes legal guarantees of intellectual property protection (IP indemnification) to safeguard mission-critical IT systems.

## Versatile and Flexible Web Services

Talend ESB SE allows Java developers to quickly create RESTful and SOAP Web services as part of a SOA. Architected around a modular, lightweight architecture, it allows users to build composite applications for reuse across multiple projects.

Talend ESB SE offers a comprehensive set of features for building secure Web service applications using established industry standards for XML encryption, authentication and authorization. Developers can configure and setup these features to allow consumers to be configured for automatic access. Talend ESB SE comes pre-configured to run on any Java container used in the vast majority of IT environments today. Streamlined

deployment container setup and configuration-not-code increase developer productivity, allowing programmers to focus on business logic instead of IT complexity.

## Dynamic Mediation and Intelligent Routing

Integrated business operations involve many complex relationships among various systems and applications. The decision on what to process, when and where, can change rapidly. Talend ESB provides dynamic mediation and routing capabilities based on enterprise integration patterns (EIPs) to meet the demands of these ever-changing systems. Mediation and routing decisions are based on architecture, business rules, and deployed enterprise integration patterns. Talend ESB SE enables routing decisions at the endpoint. This eliminates bottlenecks and results in a scalable, high performance solution.

## Enterprise Messaging

Powered by Apache ActiveMQ, the most popular open source messaging provider, Talend ESB SE minimizes hardware and software costs by making efficient use of computing resources. Each message broker can handle myriad connections while processing thousands of persistent messages per second with minimal latency. ActiveMQ

supports native clients in Java, C#, and C++ for connectivity to all of your enterprise systems. It can be deployed as a stand-alone broker or embedded with applications for peer-to-peer architectures.

## Best-in-Class Data Services

Talend's data management solutions – including data integration, data quality and master data management –

### KEY BENEFITS

#### Versatile and Flexible

*Supports both REST and SOAP Web services in a high performance, lightweight and embeddable package that can be configured for any application topology*

#### Dynamic Mediation

*Use Enterprise Integration Patterns to mediate messages between services without knowledge of deployment or container configuration details*

#### High Performance

*Delivers high throughput combined with transparent failover and load balancing to ensure that SLAs are met*

#### Easy to Deploy

*Preconfigured out-of-the-box to work in all popular Java environments*

#### Enterprise Ready

*Built, tested, and certified using Talend's real world experience deploying into large scale enterprise IT environments*

allow organizations to integrate, transform, improve, and deliver trusted data that supports critical business processes and enables sound decisions.

Talend's data services solution frees data management processes, whether they reside as structured or unstructured data, Edifact, SAP connectors, or event-based ETL. Data services takes such processes that are traditionally bound to specific applications and often batch in nature, and abstracts them as standards-based services that can be reused by other applications.

Talend ESB SE is supported by the same unified platform that underlies Talend's data management products. The unified platform provides a common environment for users to manage the entire lifecycle of a data service, making it easier to synchronize data between operational applications and across enterprise boundaries.

### Powered by the Leading Apache Open Source Integration Projects

Talend invests, promotes and nurtures the underlying technology of Talend ESB through its participation in the Apache Software Foundation (ASF), a leading open source community recognized for its transparency and for delivering enterprise-grade, freely available software products that are designed and built from a diverse community of users.

Talend ESB SE is powered by the leading Apache open source integration projects, including:

- **Apache CXF** – an open source services framework, CXF helps you build and develop services using front-end programming APIs like JAX-WS and JAX-RS.

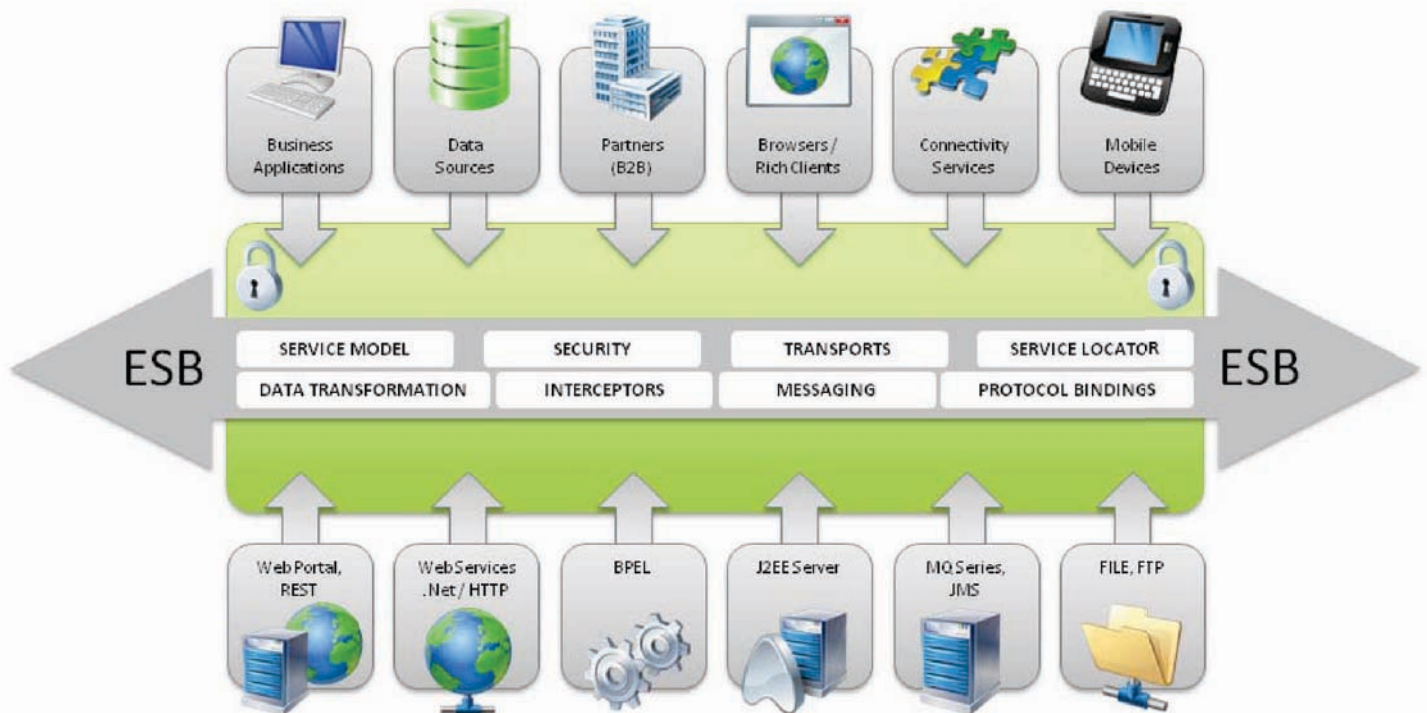
- **Apache Camel** – a powerful open source integration framework, Camel lets you create Enterprise Integration Patterns to implement routing and mediation rules.
- **Apache ActiveMQ** – the most popular and powerful open source messaging provider, ActiveMQ is fast and fully compliant with the JMS standard. It supports many Cross Language Clients and Protocols, supports EIPs and many advanced features.
- **Apache Karaf** – a small footprint, OSGi-based runtime, Karaf provides a lightweight container onto which various components and applications can be deployed.

These integration projects are deployed widely in many major global enterprises and provide application integration capabilities for multiple industry-leading middleware solutions today.

### Enterprise Ready

Talend ESB SE is built, tested, QA'd and certified using Talend's real world experience deploying large-scale enterprise IT environments. Talend ESB is available as a single package pre-configured and ready to run – right out-of-the-box – and Talend provides documented examples to reduce the learning curve, so developers can get started quickly.

Trust can be difficult to establish within IT domains. Talend ESB SE provides a Security Token Service (STS) Framework, which allows 'trust' to be established between parties using the latest Security standards for Web Services. Through the STS Framework, clients and services to securely and transparently authenticate during connections – without custom coding. STS Framework



supports Security Assertion Markup Language 2.0 (SAML 2.0) to federate security credentials and can be extended to create custom STS, tailored to meet the needs of existing security environments.

All hardware and software – no matter how reliable – eventually fail. Through the Service Locator, Talend ESB SE provides automatic and transparent failover and load balancing via dynamic endpoint registration and lookup through Apache Zookeeper. Service Locator maintains the availability of the service to help meet demands and service level agreements (SLAs). Talend ESB also supports the management of services through its Service Activity Monitoring functionality. Service Activity Monitoring captures events and stores this information to facilitate in-depth analysis of service activity and track-and-trace of messages throughout a business transaction. This can be used to analyze service response times, identify traffic patterns, perform determine root cause analysis and more.

### Supported by Key Apache Committers

Talend ESB SE provides a fully certified and tested solution with support from the same key Apache developers that build the software. Talend employs Project Management Committee (PMC) chairs and members for Apache CXF, Apache Camel, Apache Karaf, and Apache ActiveMQ. By

registering with the Talend Community, developers can collaborate with peers, submit feedback or issues through JIRA and interact with Talend engineers to gain valuable advice.

### Open Source License

Talend ESB SE is licensed under Apache License v2.0, granting users with the openness and flexibility to get started quickly without the large upfront costs of enterprise software.

No longer restricted to large enterprise IT, Talend continues to democratize the integration market by making the ESB more affordable, accessible and easier to use. Open source enables enterprises to leverage a more open and affordable integration platform to reduce complexity. Talend provides users of open source with documentation, training and other services to help build robust enterprise software that can be trusted to run mission-critical IT systems – all backed by professional support when needed.

### Start Today

Talend ESB SE is free to download and use, for as long as you want. No budget battles or endless delays – just faster, easier application integration starting today.

## SPECIFICATIONS

### Support for Standards

- JAX-WS - Java API for XML-Based Web Services (JAX-WS) 2.1 - JSR-224
- Web Services Metadata for the Java Platform - JSR-181
- JAX-RS 1.1 - The Java API for RESTful Web Services - JSR-311
- SAAJ - SOAP with Attachments API for Java (SAAJ) - JSR-67
- Basic support: WS-I Basic Profile 1.1
- Quality of Service: WS-Reliable Messaging 1.0
- Metadata: WS-Policy, WSDL 1.1 - Web Service Definition Language
- Communication Security: WS-Security, WS-SecurityPolicy, WS-SecureConversation, WS-Trust (partial support)
- Messaging Support: WS-Addressing, SOAP 1.1, SOAP 1.2, Message Transmission Optimization Mechanism (MTOM)

### Support for Transports, Bindings, Data Bindings and Formats

- Bindings: SOAP, REST/HTTP
- Data bindings: Aegis, JAXB 2.1, SDO, XMLBeans
- Formats: XML, JSON
- Transports: HTTP, Servlet, JMS, and Jabber transports
- Extensibility API allows additional bindings for CXF, enabling additional message format support such as CSV and fixed record length

### Flexible Deployment

- Lightweight containers: deploy services in OSGi, Tomcat or Spring-based containers
- J2EE integration: deploy services in J2EE application servers such as Apache Geronimo, JOnAS, JBoss, WebLogic, and WebSphere
- Stand-alone Java client/server

### Support for Programming Languages

- JAX-WS 2.1
- JAX-RS for RESTful clients
- XML messaging API
- CORBA
- Scala DSL, XQuery, SQL, XPath
- Scripting languages: Groovy, JavaScript, ECMAScript, PHP, and Ruby

### Enterprise Integration Patterns

Talend Integration Factory supports the key Enterprise Integration Patterns (EIP) for:

- Messaging Systems
- Messaging Channels
- Messaging Construction
- Messaging Routing
- Messaging Transformation
- Messaging Routing
- Messaging Endpoints
- System Management