TIBCO FTL

AT A GLANCE:

TIBCO FTL® is a robust, high performance messaging platform for real-time enterprise communications that provides high throughput data distribution to virtually any device. Optimized to leverage the latest advancements in hardware, networking, and web technologies, TIBCO FTL can handle higher message throughput with lower latencies—and a greater number of concurrent connections—than other messaging products. All this capability is delivered with a peer-to-peer architecture and API libraries that run on commodity general-purpose systems with no specialized hardware or servers required.

THE NEXT STEP IN HIGH PERFORMANCE MESSAGING

To achieve a competitive edge in a demanding business environment, you need real-time data distribution provided with as little delay as possible. TIBCO FTL lets you meet the challenges of ever increasing amounts of data and events and decreasing time to react to opportunities and threats contained within that data. TIBCO's fully distributed peer-to-peer messaging architecture delivers extremely low latency, high throughput, reliability, consistency, and predictability for every application's data distribution needs.

DESIGNED FOR THE MOST DEMANDING CHALLENGES

Designed from the ground up to address the increasing demands of high-performance computing and data distribution, TIBCO FTL is the foundation of the TIBCO enterprise messaging portfolio and Fast Data platform. Unlike other offerings, it has been built with the latest technology in mind and designed to provide the flexibility needed to leverage new technology designs as they are developed. TIBCO FTL is highly optimized software that does not require application developers to understand how data distribution happens. Instead, system administrators can define and manage how data distribution occurs, allowing developers to focus on sending, receiving, and processing messages.

Event processing doesn't wait for situations to materialize before taking action. Processing massive streams of data in real time requires messaging middleware that can deal with these volumes. TIBCO FTL provides the foundation for any application's data distribution needs from periodic updates and distributed logging to high-speed event processing.

ATTRIBUTES & CAPABILITIES

A COMMON PLATFORM

TIBCO FTL is the common communications infrastructure for all your messaging needs. Data distribution needs to be seamless and transparent to end-user applications, making a common model for communication a necessity. TIBCO FTL provides the ability to develop, deploy, and manage all your application communication needs regardless of the system, language, or deployment model.

Whether you need a traditional on-premises communications infrastructure for your data center or next-generation data communications in the cloud, TIBCO FTL provides the flexibility to deploy without concern for the physical infrastructure supporting it. With TIBCO FTL, application developers can build applications for on-premises, cloud, or hybrid approaches without requiring any third-party integration or support.

FINE-GRAINED SERVICE CONTROL

TIBCO FTL provides multiple service protocols, qualities of service, and physical distribution models, providing one of the broadest sets of messaging semantics and options to optimize performance and service levels. It provides:

- Synchronous and asynchronous messaging, request/reply, and publish/ subscribe interactions through peer-to-peer architecture, allowing ultimate flexibility for data distribution
- Different levels of messaging communications with both reliable and persistent communication
- A decoupled architecture, giving administrators dynamic control over how data distribution occurs, how persistence is applied, and what streams of information are available to developer applications

PROVEN PERFORMANCE, RELIABILITY, AND SCALABILITY

TIBCO FTL is the backbone for some of the largest mission-critical systems in production today, delivering leading performance and scalability. It:

- Avoids introduction of a single-point-of-failure with a distributed, peer-to-peer architecture
- Supports load-balancing, application fault-tolerance, disaster recovery, and global cross-WAN messaging
- Allows for dynamic transport allocation and content-based addressing for more flexible data distribution patterns using a sophisticated virtualized distribution model

SECURE COMMUNICATION

TIBCO FTL delivers a secure messaging communications environment that provides support for security standards including:

- Fully encrypted communications using TLS
- Fine-grained control over authentication and authorization permissions
- JAAS support for pluggable security models including external LDAP authentication

EXTENSIBLE AS PART OF TIBCO'S PLATFORM

TIBCO FTL is the messaging backbone for Digital Business. An event-enabled enterprise has the ability to anticipate, understand, and act on opportunities before the competition—and on threats before they become reality. The ability to unlock this information from all your data requires efficient synchronous and asynchronous system-to-system communications. TIBCO FTL provides this connectivity with a flexible, scalable architecture that decouples message distribution and management from the application, easing application development and deployment.

With native support in TIBCO's product stack, TIBCO FTL is the foundation for enterprise communication in the cloud era.

PLATFORMS, LANGUAGES & TRANSPORTS

- Platforms: Windows 7, 8; Server 2008, 2012 (x86-64); RH 5, 6, 7; SUSE 11 (x86-64), MacOS X

- Languages: C, Java, .NET

- Communication Transport Support: thread-to-thread, shared memory, RDMA (InfiniBand, 10GbE), TCP, Reliable UDP (multicast and point-to-point), secure communications using TLS

BUILT FOR PERFORMANCE

With digital information doubling every two years, and the time you have to react to opportunities and threats narrowing every day, you need messaging infrastructure that can handle ever increasing volumes. TIBCO FTL provides both reliable and persistent data distribution for all your application needs. Its distributed, in-memory persistence engine maximizes performance, supplying the ability for reliable delivery of over six million messages per second and guaranteed delivery of over one million messages per second for a single publisher to a single subscriber.

For real-time event processing, data distribution must be timely and predictable. TIBCO FTL provides the lowest latency of any messaging middleware, allowing for response times as low two microseconds for network communications and as low as 60 nanoseconds for thread-to-thread communications. These speeds allow developers to process more events and meet their application SLA requirements in real time.

CLOUD READY

Without the requirements for specialized hardware, storage systems, or databases, TIBCO FTL provides easy deployment into cloud, on premises, or hybrid environments. Easily build TIBCO FTL into microservices with container deployment products such as Docker.

TIBCO Software empowers executives, developers, and business users with Fast Data solutions that make the right data available in real time for faster answers, better decisions, and smarter action. Over the past 15 years, thousands of businesses across the globe have relied on TIBCO technology to integrate their applications and ecosystems, analyze their data, and create real-time solutions. Learn how TIBCO turns data—big or small—into differentiation at www.tibco.com.