



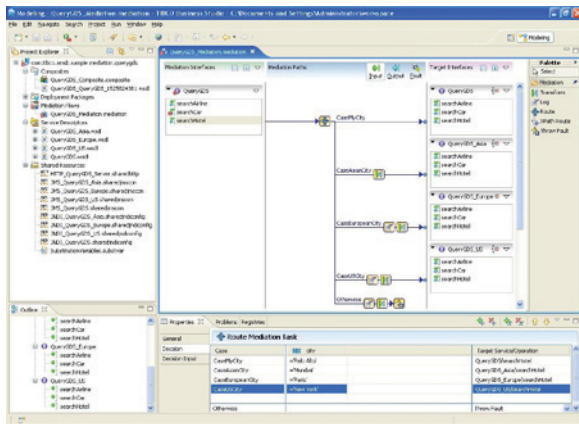
TIBCO ActiveMatrix Service Bus

Service-oriented architecture (SOA) is all about reuse. However, when applications are broken down into services, new problems emerge such as inflexible, hard-coded service interdependencies, where changes cannot be applied dynamically without disruption of operations. A mediation layer, or lightweight enterprise service bus (ESB), provides a robust, event-driven alternative. The mediation layer should provide:

- Communication across disparate data formats and transport protocols.
- An event-driven approach that eliminates the rigidity and fragility associated with point-to-point integration.
- Intelligent routing to ensure scalable, end-to-end control of event flow across a distributed deployment.
- Encapsulation of service level changes to avoid affecting consumers.
- Modular deployment of only the components that are needed, including the mediation layer itself.
- Policy enforcement on mediated services.
- Unified development and runtime environment.

The service bus must support rapid development, near-zero coding, and low maintenance. It must be standards based and technology and platform agnostic. This type of mediation layer is beneficial for any SOA infrastructure and essential to meet scaling and high availability requirements.

TIBCO ActiveMatrix® Service Bus is a lightweight ESB that can help organizations bridge the mediation gap in their SOA infrastructure. It reduces complexity and increases flexibility and reuse by replacing hard-coded service dependencies with configuration, and can be used to quickly onboard services from a third-party environment or a TIBCO-based infrastructure.



TIBCO ActiveMatrix Service Bus mediation flow design environment is part of TIBCO Business Studio, TIBCO's common Eclipse-based environment for TIBCO products.

AT A GLANCE

TIBCO ActiveMatrix Service Bus is an enterprise service bus that enables an organization to mediate services in a flexible and reliable manner in any heterogeneous environment.

BENEFITS

- **Rapid Service Onboarding:** Reduces complexity by enabling quick and easy onboarding of a large number of services with TIBCO AutoMediate™.
- **Low Cost:** Lowers costs by providing an SOA infrastructure that fits into any heterogeneous environment.
- **Manage with Ease:** Saves time and reduces complexity with role-based, easy-to-use, lifecycle management.
- **Govern with Ease:** Simplifies management and prevents security breaches with built-in governance.
- **Configure, NOT Code:** Increases flexibility and service reuse by replacing hard-coded service dependencies and protocols with dynamic configuration and deployment..
- **Modular OSGi-Based Architecture:** Enables deployment of only the components that are used, creating a truly lightweight environment.
- **Custom Mediation:** Simplifies mediation flows and enhances reusability by allowing the creation of custom tasks that can be reused in all mediation flows. Simpler flows reduce the flow error rates, resulting in faster development time.
- **Context Propagation:** Offers a great degree of flexibility to manage security and routing with your mediation flows.
- **Unified Design-Time:** Common IDE for mediation, service creation, adapters, business processes, and orchestrations.





ATTRIBUTES & CAPABILITIES

AutoMediate: Onboard numerous services simultaneously, with a few clicks. There is no requirement for multiple configuration steps or coding. This eliminates point-to-point integration.

Security: Manage secure communication across disparate systems and services. Apply security policies (such as encryption, logging, etc) for specific transaction-based interactions. Security context propagation allows for mediation flows to make in-flow security decisions.

Version management: As partners offer additional functionality via new versions of services, having a service bus enables organizations to quickly route their requests to newer versions of these services without any modification to their current services infrastructure.

Transport bridging: Use one communication protocol internally, such as JMS, and another externally, such as HTTP/HTTPS, without having to change internal communications patterns. ActiveMatrix Service Bus does the transport bridging.

Ease of use: The design environment is based on TIBCO Business Studio™, a unified, Eclipse-based environment for TIBCO products. Mediation creation and debugging is based on a zero-coding environment with minimum configuration.

Extensibility and flow simplification: Features like custom mediation, nested routing, and context propagation allow developers to modularize and abstract custom tasks, unify flow snippets, and make in-flow decisions. This modularization allows for faster development and reduced errors in mediation flows..

Location and transport transparency: Any service hosted on ActiveMatrix Service Bus can change its hosted location or communication protocol in a manner that is transparent to the consumers of the service.

TIBCO Software Inc. (NASDAQ: TIBX) technology digitized Wall Street in the '80s with its event-driven "Information Bus" software, which helped make real-time business a strategic differentiator in the '90s. Today, TIBCO's infrastructure software gives customers the ability to constantly innovate by connecting applications and data in a service-oriented architecture, streamlining activities through business process management, and giving people the information and intelligence tools they need to make faster and smarter decisions, what we call The Power of Now®. TIBCO serves more than 4,000 customers around the world with offices in more than 20 countries and an ecosystem of over 200 partners. Learn more at www.tibco.com.

Monitoring and management: Supports monitoring and management at the infrastructure level as well as at the granular level of a mediation service.

Not limited to web services: Enables onboarding of adapters through a single and common UI, JMS applications – anything that can be represented using WSDL.

ARCHITECTURE

- An underlying grid and OSGi-based architecture makes it possible to scale up (by adding multiple instances of ActiveMatrix Service Bus to the same JVM) and out (by adding multiple instances of ActiveMatrix Service Bus across JVMs, or on different machines) dynamically at runtime and on commodity hardware. The mediation layer can scale to meet high availability and fault tolerance requirements
- Policy enforcement is built in. Rather than having a separate component (proxy agent) bolted on top of the mediation layer, baked-in policy enforcement ensures fewer moving parts to manage, resulting in fewer security loopholes.
- The underlying infrastructure leverages TIBCO's proven JMS-based messaging technology, TIBCO Enterprise Message Service™.
- Separation of transports from services allows the transport bindings (such as JMS or HTTP) to scale independently.
- All ActiveMatrix products are based on a common underlying infrastructure. This makes it easy to add services infrastructure support such as orchestration, business processes, integration through TIBCO Adapters™, hosted services, and governance in a seamless manner, on top of an existing implementation using ActiveMatrix Service Bus. This enables organizations to start small with mediation and grow their SOA infrastructure as needed.

PLATFORM AND STANDARDS

- Web services (SOAP, UDDI, WSDL, JMS, HTTP(S))
- Across the board SSL support
- Eclipse platform
- Numerous WS-*
 - WS-Addressing
 - WS-Eventing
 - WS-Enumeration
 - WS-Reliable Messaging
 - WS-Transfer
 - WS-Security
 - WS-Policy
 - ...and others



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