



# Microsoft ESB Guidance

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## Overview

The term Enterprise Service Bus (ESB) is widely used in the context of implementing the messaging capabilities of a service oriented infrastructure. An ESB is one of many building blocks that make up a comprehensive service oriented infrastructure. The messaging capabilities required in a service oriented infrastructure extend the functions of traditional Enterprise Application Integration (EAI) and Message Oriented Middleware (MOM) to include first class support for Web Service standards and integration with other service infrastructure components such as policy management, metadata registry, and operational and business monitoring frameworks. Given the heterogeneous nature of most enterprise infrastructures and the significant investments already made in EAI and MOM assets, it is also important that your ESB enhance your ability to leverage those existing assets in a service oriented world.

## Capabilities

Microsoft provides a comprehensive ESB offering through its Application Platform including Windows Server® 2003, the .NET Framework, and BizTalk® Server 2006 R2. The Application Platform provides an infrastructure that enables the flexible and secure reuse of infrastructure and business services and the ability to orchestrate existing services into new end-to-end business processes. At the core of this solution is BizTalk Server 2006 R2 which provides a basis for common ESB capabilities including:

- WS-\* Support
- Intelligent Routing
- Message Transformation
- Itinerary Processing
- Legacy and LOB Application Adaptation
- Service Orchestration
- Metadata Lookup
- Exception Management
- Distributed Deployment
- Centralized Management
- Business Rules Engine
- Business Activity Monitoring

The Microsoft ESB Guidance provides architectural guidance, patterns and practices, and a set of BizTalk

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Server and .NET Framework components to simplify the development of large and small-scale ESB solutions on the Microsoft platform. It also provides capabilities that help developers to extend existing messaging and integration solutions. Some of the services and components include:

- Itinerary Processing Service
- Transformation Service
- Exception Publishing Service
- Metadata Resolution Service
- UDDI Lookup Service
- BizTalk Query Service
- SOA Software Integration
- AmberPoint Integration
- JMS Pipeline Components
- Namespace Pipeline Components
- Dispatcher Pipeline Components
- Transform Pipeline Components
- BAM Tracker Pipeline Component
- Exception Management Framework
- ESB Management Portal

For more information and to download the latest version, go to [www.codeplex.com/esb](http://www.codeplex.com/esb).