The Application Integration and Middleware Focus Area looks at the technologies, effective organizational strategies, IT architecture and planning management policies, and comprehensive application integration and middleware trends that provide some of the foundation for the integrated enterprise and provide building blocks for zero-latency enterprise models will allow enterprises to approach a real-time enterprise business strategy.

Scope of Coverage

Valuable newer technologies and approaches – as well as more cost-effective externally sourced applications – continue to emerge and attract enterprise investment. But most enterprises also have a legacy of sometimes, dated and often discrete, internally developed applications. The need for integration and a focus on architecture and IT “city planning” has become critical. Data and transactions are constantly transferred among different systems within an enterprise (A2A) and outside with its trading partners (B2B). Enterprises need to connect systems for business benefit and to add new life to existing systems.

Traditionally, middleware was engineered and deployed to meet the requirements of business applications (such as scalability, availability, interoperability and security). In recent years, the opposite process has become apparent: The emergence of several new technologies and architectures has created a fertile ground for business innovation and has inspired leading-edge enterprises to develop new information-processing models and new business models using middleware as a fundamental driving force.

Core Topics

Application Integration

Many IT solutions now span the entire virtual enterprise, encompassing B2B and internal enterprise applications. Developers must link multiple, independently designed systems, including new software, purchased applications and/or older applications being reused in new ways. This core topic provides an overview of successful integration strategies, summarizing the role of integration brokers, business activity monitoring, message warehouses and architecture, and “city planning” design concepts.

Enterprise Software Platforms and Middleware

The evolution of software platforms and other forms of middleware (e.g., message-oriented middleware) continues unabated.
Enterprise application developers face a wide range of alternatives (e.g., CICS, Tuxedo, DBMS stored procedures, COM, CORBA, Java and .NET. We analyze the relevant systems software products, architectures and strategies, consider the growing influence of mobile and Web-oriented technologies, evaluate how established vendors will react to evolving requirements and review the business and technical trends driving message-based solutions.

**DBMS Market Trends and Major Vendors**

Focuses on the process of selecting, buying, building and deploying database management systems, covering business and market dynamics within the constantly shifting DBMS market and focusing on the strategies and plans of a number of important market players, such as Oracle, Microsoft and IBM. Also focuses on the evolution of DBMS technologies to support complex data, DBMS extensibility and interfaces.

**Recent Spotlights**

Vendor Magic Quadrants: Application Integration and Friends
13 June 2002

EDI: A Mature Yet Enduring Technology
22 May 2002

A Community’s Growth: Case Studies and Lessons Learned
1 May 2002

Business Activity Monitoring: Calm Before the Storm
1 April 2002

Metadata for Application Integration: Issues and Approaches
1 March 2002