Association for Information Systems AIS Electronic Library (AISeL)

AMCIS 1999 Proceedings

Americas Conference on Information Systems (AMCIS)

December 1999

Migrating Data between Distributed Legacy Databases with IBM's MQSeries

B. Samuel Blanchard Ball State University

Neil Styczynski IBM Corporation

Follow this and additional works at: http://aisel.aisnet.org/amcis1999

Recommended Citation

Blanchard, B. Samuel and Styczynski, Neil, "Migrating Data between Distributed Legacy Databases with IBM's MQSeries" (1999). AMCIS 1999 Proceedings. 287.

http://aisel.aisnet.org/amcis1999/287

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 1999 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Migrating Data between Distributed Legacy Databases with IBM's MQSeries

B. Samuel Blanchard, Ball State University, sam@bsu.edu Neil Styczynski, IBM Corporation, nrstycz@us.ibm.com

Abstract

IBM's MQSeries provides a robust middle tier technology applicable to a broad range of management information problems. MQSeries is a messaging server that can exchange messages between diverse systems such as legacy databases, client/server systems and web pages. The demonstration will start by explaining MQSeries' messaging middle tier functionality, common applications and generalized solutions. We will then examine a practical MQSeries solution that bridges distributed legacy databases using a web front-end interface.

Middle Tier Software

Systems integration continues to be a major concern of management information systems. The ability to integrate distributed, diverse databases requires a guarantee that business-defined units of work are either completed entirely or rolled back. Asynchronous communications, such as Internet web pages, can effectively use messaging software to submit business-defined units of work even when the systems involved are not immediately available.

MOSeries Messaging Middleware

Transaction servers, such as IBM's CICS and Microsoft Transaction Server, provide only synchronous connectivity to corporate data. Unless a separate facility, such as MQSeries, is employed, business processes can only occur when all involved systems are up and running.

MQSeries supports a customer ordering merchandise through machines that are off-line when the order is placed. This allows future verification and confirmation without forcing the customer to return. There are obvious advantages to accepting an order at the customer's convenience.

MQSeries Integrator

The MQSeries Integrator is an additional component of the MQSeries tool set. Although MQSeries has and can continue to stand on its own, its value is greatly extended and more universally applicable with the MQSeries Integrator in the picture. We will demonstrate the

functionality and configuration necessary for MQSeries to exchange information through MQSeries Integrator.

Practitioner Perspective

The presentation will include a brief overview of general real-world considerations along with the real-world solution presentation. Although time will not permit a complete discussion of this example, attention will be given to important integration and implementation concerns. Additional questions are welcome and can also be followed up after the presentation.

Academic Applications

MQSeries provides a robust messaging system that can be applied in any academic computing environment and can easily mimic complex real-world configurations. Although any number of middleware products can be studied, the MQSeries tool set provides both leading edge and legacy integration beyond the range of most middle tier products.

Management information systems frequently include legacy data on distributed systems. These systems typically represent the core knowledge and core processes of a business. It is important that graduates understand the technical requirements of connecting to distributed legacy systems.

Messaging middleware provides one of the best methods of integrating distributed database systems. IBM's MQSeries tool set is one of the most flexible messaging systems both in terms of functionality and platform support. Faculty will be encouraged to re-use presentation material in their own courses to familiarize students with practical applications of messaging middleware.

References

This presentation was developed through a partnership between Ball State University and IBM Corporation. Some material is derived from IBM technical references and marketing material. The presentation itself derived from meetings between the presenters and from a visit to IBM's Hursley Labs in England. Detailed references available upon request.