IBM

MQSeries Adapters

All the adapters you'll ever need

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It's a multicultural, multilingual world – and computer applications are no different. But now applications have an advantage over people: the IBM MQSeries[*] Adapters Offering (MQAO) gives applications the equivalent of their own common language, so they can talk easily to each other, creating standard MQSeries messages to send around your network.

The productive toolkit that is part of the MQAO means you can have any adapter you want, when you want it. With MQSeries adapters, you really can have all the adapters you'll ever need.

Moving to an integrated world

Today's top business challenges – such as e-commerce, enterprise resource planning, supply chain optimization, customer relationship management, and corporate mergers – are all dependent on IT to make them work, especially when they're implemented globally.

It's integrating the IT applications that's been the real challenge. Application developers, working with different applications written in both traditional and new programming languages, needed a way to build interfaces more effectively.

Connecting with MQSeries adapters

Now MQSeries adapters, together with MQSeries messaging, make it easier and quicker to manage the integration of your business processes. With any integration solution, the first priority is to connect applications that must share information. With MQSeries adapters to organize the data and MQSeries messaging to deliver it, connecting applications can be simple and quick.

MQSeries adapters reduce the risk, complexity and cost of managing point-to-point application integration. They

provide a safe and predictable migration path, starting with a few connections.

Unlike many of today's adapter solutions, MQSeries adapters don't need a transformation engine to get started. As the number of your connections grows and becomes less easy to manage, or your routing requirements grow in complexity, then you can introduce a message broker (which includes a transformation engine) when it suits you.

Adapters with a message broker

For large-scale integration, a message broker is of real benefit for managing the network. Adapters make running a broker simpler because using standard BOD messages means there are fewer definitions to maintain in the broker.

In addition, adapters reduce the coupling between the applications and the rest of the infrastructure so changes are simpler.

Industry-standard interface

One of the factors preventing applications from connecting cleanly to each other is formatting differences in the data that each requires.

In the past, extensive coding was needed to resolve format differences. It's as if each application talks only its own language, and an expensive translator is commissioned specially to interpret between the two – and for every other link between dissimilar applications. As more and more applications work with each other, translation becomes a real overhead.

MQSeries adapters provide a much simpler solution. Instead of trying to cater for every combination of data format, they work with a single standard format, that every adapter can understand.

It's like having a universal language as an interface, a standard interface that remains stable even though the application changes. The interface is based on the message format standards called Business Object Documents (BODs), defined by the Open Applications Group Inc (OAG). The OAG is a nonprofit industry consortium, comprising many of the most prominent stakeholders in worldwide business software interoperability.

The BOD message formats eliminate the need for mappings between proprietary message formats. An adapter on a sending application marshals the relevant data from the application and formats it into a BOD; an adapter on the corresponding receiving application(s) reformats the data in the BOD appropriately for the application.

An adapter translates application data into the standard format. Every other application with an adapter can understand it. End of story.

Getting to the core business logic

As well as the business process logic, an application typically contains other code so that it can perform in its IT environment. Some of this code is for marshaling data for other applications to use. It's the business logic code that has real value for the enterprise – the rest is 'superstructure'. Because the MQSeries adapters eliminate more of the incidental code, you'll need substantially less effort to integrate different applications.

When you remove the code which handles this sort of logic, two things happen. First, the original application becomes very much simpler and easier to change. Second, different applications become much easier to link together and to change later. The overall application becomes a supremely flexible asset that can be adapted easily to real business objectives.

Any adapter you want

Although IBM is offering a number of adapters for use with packaged applications such as SAP R/3**, the concept of business integration depends on being able to connect any application to any other when you need it. For this reason, an important part of the adapters offering is the MQSeries Adapter Builder (MQAB) a tool that helps build your MQSeries Adapters.

With the MQAB, you can have any adapter that you want. It uses a visual interface to help you build an adapter for virtually any application. And because you build an adapter just once, it's much easier and more economical than having to recode data communications every time there's a change.

Adapters for system integrators

If you're a system integrator, or other service provider, MQSeries adapters can reduce risk and provide improved customer service for your customers. Integration between applications will be built to an industry-standard model and won't suffer from unexpected issues arising from unique solutions.

Adapters for ISVs

If you're an ISV developing and selling your own packaged applications, MQSeries adapters provide an integration capability that gives you an immediate competitive advantage over other vendors.

Not only does MQSeries set the standard for message transport, but the BOD format is the industry standard too. Your applications will automatically be standards compliant, and you can assure your customers they can use your product in conjunction with any other packaged application they may have.

Alternatively, you can develop adapters for specific applications, where adapters do not yet exist. The range of applications in different versions and platforms means that the potential market for adapters is huge – and that means profit potential too.

Adapters for enterprise customers

If you're an enterprise customer, adapters make small-scale and large-scale application integration much easier and more economical.

You can start with a few applications, at your own speed, and without having to invest in a transformation engine. Later, as you extend your connectivity, you can seamlessly incorporate a message broker and, because there are fewer definitions to maintain, management of the broker will be easier.
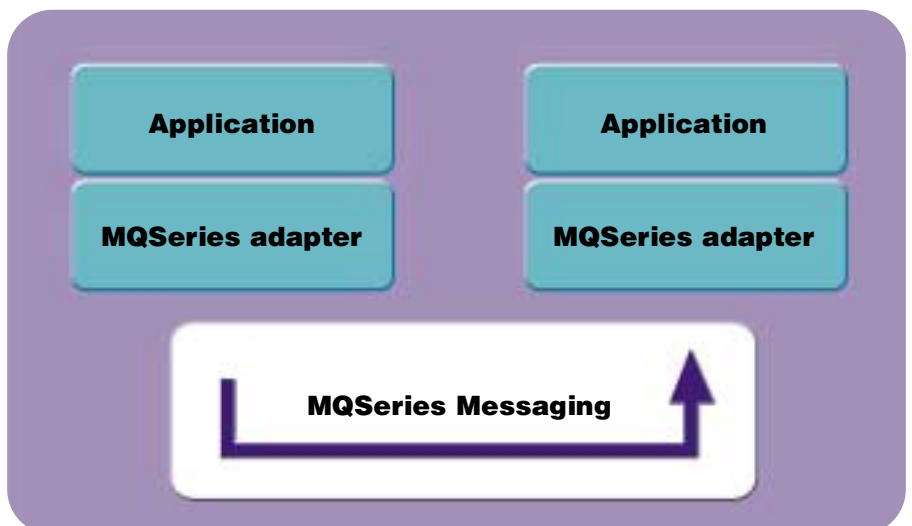
You'll have an easier, less risky transition from existing applications to new applications, with near plug'n'play integration. And because of the industry-standard interface, you'll benefit from a model that requires reduced time, cost and risk to integrate legacy or purchased applications – the interfaces will be exposed, documented, and commonly supported.

IBM solutions for business integration

IBM solutions for business integration are built to the specifications of the IBM Application Framework for e-business, and include the MQSeries messaging software family. MQSeries addresses the major challenge for IT in business integration: diversity.

Applications run on different platforms and are written in different languages. The same information is processed in different formats in different systems. And networks use a mix of different protocols, user interfaces and workstations.

MQSeries can handle this diversity: the MQSeries family provides an open, scalable, industrial-strength messaging and information structure, enabling enterprises and beyond to integrate their business processes.

| Application | Application |
| MQSeries adapter | MQSeries adapter |

MQSeries Messaging

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**Additional information can
be found at:**

www.ibm.com/software/mqseries/