

Leveraging information management in the insurance industry



IBM Information Management software



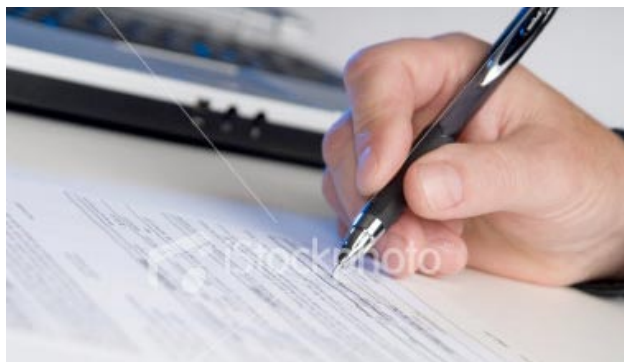
## IBM DB2 pureXML data server

DB2 pureXML helps insurers deliver information on demand



“Our development time when using IBM DB2 9 data server is a radical improvement over existing XML shred technology. We are now able to make schema changes in minutes rather than days and will be able to dramatically improve our customer response time.”

– Thore Thomassen, Senior Enterprise Architect, Storebrand Group



As insurers pursue global growth, they face unprecedented commoditization and competition from both within and outside the insurance industry. To remain competitive, companies must adapt more rapidly than ever before—which means that they must align their IT environments with their business goals and deliver information on demand, when and where it is needed.

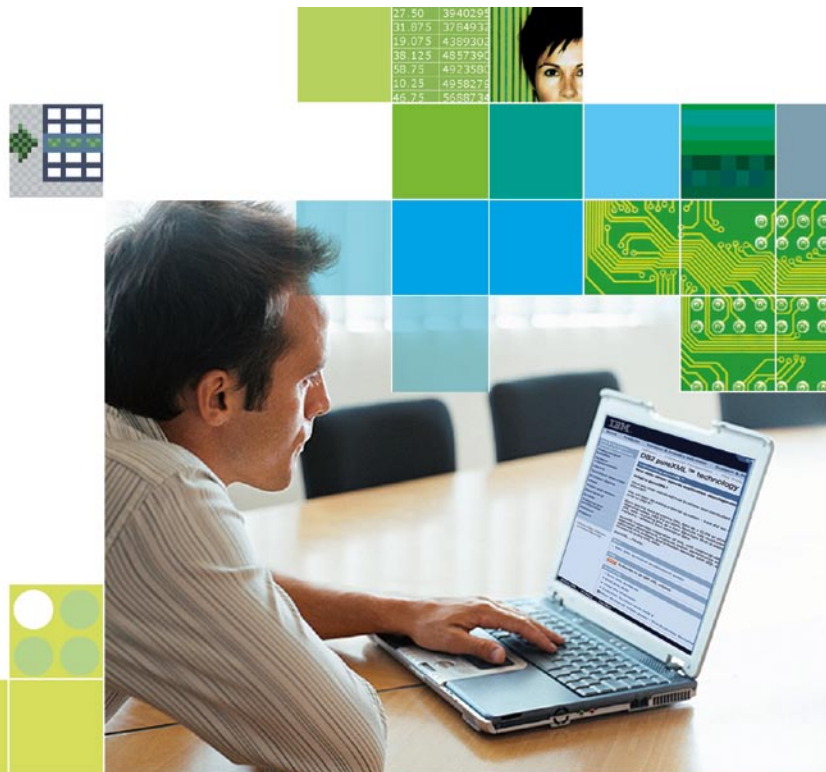
Shifting customer needs and expectations are a primary force driving these trends. Erosion of traditional value propositions, including the emphasis on value delivered through personal relationships, means that companies must find innovative new ways to connect with their customer base. Customers are also increasingly willing to deal with multiple insurers and to change insurers frequently. Growing demand for self-insurance and unbundled services is pressuring insurers to meet new standards of convenience and service, including mass-customized offerings.

Changing competitive dynamics are also exerting pressure on the industry. Products and services are being commoditized through competitive actions and informational transparency. Emerging lower-cost distribution options potentially favor new competitors by dramatically lowering customer acquisition costs—testing the ability of established insurers to capitalize on existing trust-based or transaction-based relationships.

A shifting global economic and business environment affects insurers as well. Continuing global deregulation is fueling competition, threatening revenue streams and eroding market shares. Insurers must fight growing customer turnover in increasingly saturated markets, requiring higher customer acquisition rates simply to maintain market share.

### Information on Demand: a key differentiator in the insurance industry

Information is at the core of the insurance industry. In this information-centric environment, insurers face two imperatives: they must develop a more specific customer focus as products, channels, brands and competitors multiply, and they must quickly respond to markets with tailored products and services designed to meet individualized customer needs. For these reasons, innovation in the way information is handled within the enterprise is a key differentiator for insurers.



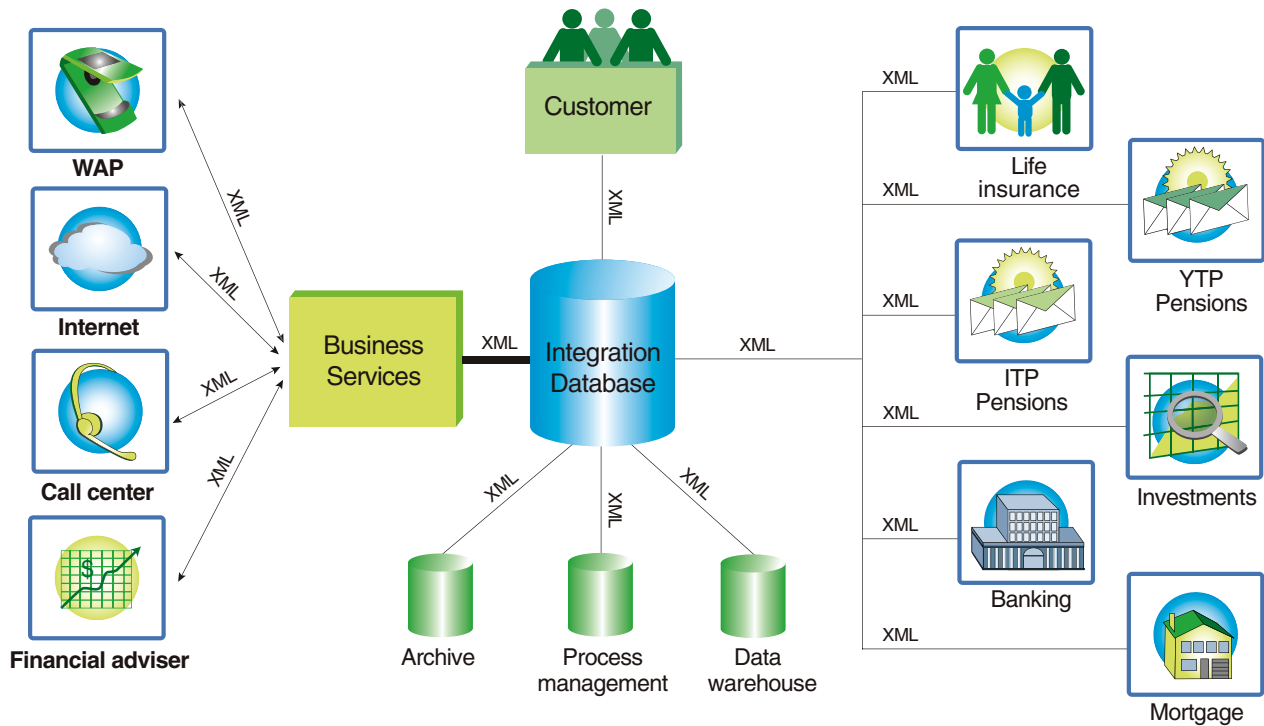
Today, information and business processes are often captive to applications and aligned to organizational silos. This lack of a single, reliable, consolidated view of the enterprise frequently causes multiple instances of inconsistent information to exist within a single insurer's IT infrastructure, which can inhibit flexibility and diminish customer satisfaction.

Instead, insurers need a unified repository of master information governed by an infrastructure that makes data available across the enterprise when and where it is needed. This Information on Demand approach can give insurers the power to better leverage critical information—helping to enforce customer centricity, provide operational intelligence, mitigate risk, simplify compliance and optimize business processes.

### ACORD XML helps insurers use information in new ways

XML can be a key enabler of Information on Demand for insurers. XML documents allow organizations in the insurance industry to capture data once and then share it—or even process it—while retaining the integrity of the original data source. In an industry with no lack of forms, the self-describing nature of XML documents makes them an ideal electronic vehicle for handling claims and customer records. Today, ACORD standards for XML enable insurance companies to transact business electronically with agents, brokers and other parties. The self-describing nature of XML also makes it easy for companies to write software to understand what is being sent to them as XML messages, either with simple parsing programs or more complex forms and analytical tools.

*XML has become the electronic format of choice for conducting business in the insurance industry*





XML can solve problems that are challenging with other technologies. Metadata within XML documents provides instructions on how to interpret and use the data, as well as the hierarchical relationships between data elements. By providing a neutral, vendor-independent formatting standard, these capabilities facilitate highly efficient incorporation of XML documents across business boundaries.

### XML defines data in a format meaningful to your business

In the past, relational database management systems were unable to perform efficient operations on XML documents. Instead, database vendors provided tools to map or “shred” an XML document into data types that are supported by the data server. However, this approach adds complexity to the application and loses much of the flexibility—and possibly some of the context of the information.

XML documents already define data in a way that is meaningful to your business. Since standards groups like ACORD have specifically designed these records to serve the insurance industry, it is much more cost-effective to use XML than to map this data to another format. Simply store the data “as is”, eliminate the complex mapping and let the data server deliver the information you need, using simple queries instead of complex parsing built into your applications.

### IBM DB2 9 supports flexible information management

With DB2 9, IBM introduced an optimized structure for XML data in which XML documents are a supported data type and stored in their natural, hierarchical XML format. This capability, called IBM pureXML™, makes managing XML data as familiar, robust and cost-effective as the relational data that has been used by the industry for decades.

Now hierarchical XML data can coexist with the relational data. DB2 9 provides the same levels of robust data management, scalability and functionality for operations on XML documents that are available for relational data. In addition, programmers and database administrators can leverage their existing DB2 skills with IBM DB2 9, so training needs are minimal for pureXML. Because XML data is a supported DB2 data type, it requires no special treatment. DB2 9 also implemented the industry-standard query languages for XML, SQL/XML and XQuery, so database access occurs through well defined and understood means rather than through complex, proprietary interfaces.



### pureXML in action: Storebrand Group

When Storebrand Group—one of Norway's largest financial services and insurance firms—found itself facing a dramatically changing business environment, the company realized it had to dramatically improve its agility to respond to the market and to provide better customer service.

At the time, all Storebrand offerings were stored as XML documents in the form of binary objects, which were time-consuming to shred and analyze. Now, after a move to IBM DB2 9 data server, these XML documents are stored intact—eliminating the labor and computing resources necessary to support shredding, boosting query performance and providing greater flexibility for managing the documents.

The ability to query data rapidly has improved Storebrand's responsiveness to customers. "Until DB2 9, it was impossible to comprehensively query product and customer data because of the way the information had to be stored," says Thore Thomassen, senior enterprise architect with the Storebrand Group. "With DB2 9, we can, for example, easily and quickly respond to a corporate customer's request for order and status information on products purchased by one of its subsidiaries."

The move to the DB2 9 data server also directly affected competitiveness. Faster queries and enhanced reporting capabilities help Storebrand management make better decisions about trends in the market. After completing the deployment, the company captured a new emerging market, generating more business in June 2006 than in all of 2005.

By using XML effectively, insurers can:

- **Increase productivity** by accessing both relational and XML data within a single request
- **Preserve the integrity** of XML documents by removing the need to shred or decompose XML data
- **Improve search performance** with highly optimized XML indexes
- **Scale the application** with a database proven to manage terabytes of data
- **Reduce costs** by utilizing existing IT skills familiar with either SQL or XQuery
- **Protect XML data** with the same mature and reliable disciplines as other data to administer security, recoverability and high availability
- **Reduce code complexity** by eliminating the need to shred and reconstruct XML data or parse complex XML documents in application code

### DB2 offers proven data protection and scalability

Customer records and claim information is mission-critical—which is why it is so important that pureXML is built into DB2, the most trusted database software in the world. Proven to manage terabytes of data, DB2 data server is precisely the right platform for integrating XML into the operations of the insurance industry.

Within DB2, XML documents are protected by the same mature and reliable techniques used to provide security, recoverability and high availability for relational data—the same backup and recovery processes, the same database administrative capabilities, the same high-availability features and the same support for grid infrastructures.





© Copyright IBM Corporation 2007

IBM Software Group  
Route 100  
Somers, NY 10589

Printed in the United States of America  
April 2007  
All Rights Reserved

IBM, the IBM logo, DB2 and pureXML are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries or both.

Other company, product or service names may be trademarks or service marks of others.

References in this publication to IBM products or services do not imply that IBM intends to make them available in all countries in which IBM operates. All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only.

IBM hardware products are manufactured from new parts, or new and used parts. In some cases, the hardware product may not be new and may have been previously installed. Regardless, IBM warranty terms apply.

**TAKE BACK CONTROL WITH** **Information Management**

IMB11829-USEN-00

