



## Solution Overview

### **Profile**

Since 1993, LiveVault has been a leader in providing on-premise backup and restore services for server-based data, and since late 2000 it has been providing those services over the Internet.

### **Business Need**

LiveVault needed a more convenient and compelling way for its customers to access backup and restore information and to be notified of backup or restore status.

### **Benefits**

Microsoft Passport allows for automatic authentication into the LiveVault Web site – eliminating the need to remember passwords or endure redundant log-on procedures. Notification service is allowing for automatic, customizable notification of LiveVault activity, supplying the information to a particular computer or other device at a specified time of day. This has led to the reduction or elimination of costs associated with phone or e-mail notifications. It has also added value for customers by providing the ability to integrate services with those of other XML-enabled partners.

### **Microsoft Technologies/Products**

Microsoft® .NET Services

- Passport
- Notification

Microsoft .NET Framework

- Common Language Runtime

Microsoft Visual Studio.NET

Microsoft Windows® 2000 Server

Microsoft Windows 2000 Advanced Server

- Microsoft Internet Information Services 5.0
- COM+

Microsoft SQL Server™ 2000

Microsoft Exchange Server 2000

# LiveVault Enhances Customer Service and Partnership Opportunities with XML Web Services and Microsoft .NET

Published: June 2001

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***By implementing Microsoft® Passport and Notification service (two components of the Microsoft services currently code-named “HailStorm”), LiveVault Corporation has made it easier for customers to take advantage of the company’s Web-based services. Microsoft XML Web services have provided LiveVault’s customers with hassle-free, flexible access to important and timely information regarding their accounts. The implementation of XML Web services is also helping to reduce LiveVault’s own administrative costs. Additionally, .NET is allowing LiveVault to integrate its services with those of other Web-based providers - offering customers a comprehensive solution that will further differentiate LiveVault from its competitors.***

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## Company Overview

LiveVault Corporation is focused on developing technologies and delivering services that eliminate the burden of traditional backup and data vaulting for customers in the SMB (Small and Medium Business) and RBO (Remote/ Branch Offices) markets. As a longtime leader in the database backup and recovery industry, LiveVault has always provided their customers with not only the most innovative and effective technical solutions, but the highest level of customer service.

## Business Challenge

Chris Midgley, Chief Technical Officer for LiveVault Corporation, explains that in August 2000 LiveVault began making its backup and restore services available over the Internet, with an “always connected” architecture that captures database changes as they occur. Even though sales grew steadily in response to the new approach, Midgley and his colleagues immediately recognized the opportunity to expand and enhance their new offering by utilizing XML Web services. LiveVault was also looking for a way to easily integrate with business partners and utilize the increasing number of XML Web services offered by other companies.



## **Solution**

Only a few months after migrating their patented technology from their on-premise architecture to the Web, they began using the Microsoft .NET platform to implement a solution that is bringing a new level of immediacy to their customers. Using Microsoft Passport and Notification service, LiveVault is providing its customers with a backup and restore solution that is more consistent, convenient, and comprehensive. Microsoft Passport's single sign-in service eliminates redundant log-on procedures, improving Web-site accessibility for LiveVault's customers. Passport automatically authenticates the customer and then LiveVault's system sends the customer to their company's customized site, without the need for additional login. With Microsoft Notification service, users have greater control of the way they want to be informed of backup, restoration or vaulting events. Notification of such events can be sent to a particular PC's desktop via instant message, or delivered to other devices such as cell phones.

In addition to utilizing Microsoft .NET services, LiveVault is exposing their own XML Web services, as well as looking to consume XML Web services for their partners. LiveVault can publicize its XML Web services using UDDI (Universal Discovery Description and Integration), which is a standard for web-based registries of XML Web services – akin to a yellow pages for Web services. UDDI allows LiveVault to publish its own XML Web services so that broader base of Application Service Providers can find and access them.

## **Benefits**

As Midgley points out, the Passport enhancement vastly simplifies access to the LiveVault Web site. The most crucial benefit for customers is not having to remember an additional password specifically for LiveVault's Web site. "This is important, since most accesses are made to request a restore, which happens infrequently for any given user," he says. Midgley goes on to explain that this automatic authentication is of particular benefit for the small and mid-size businesses and branch offices. "At such businesses it is often ordinary users - rather than a dedicated administration staff - who oversee database restores. They've got enough responsibilities without having to keep track of yet one more password."

In a similar way, Microsoft Notification service provides a significant benefit for mid-size business customers who might have a single administrator using multiple computers at different locations or multiple employees who act as part-time database or system administrators and must share a computer. With Notification service, such users can be informed of the completion of a restore on the computer they are currently using. For further convenience, users can also receive notifications on a cell phone or other device instead of, or in addition to their computer.

"This blend of automatic, 'anywhere, anytime' notification is a necessity for customers in a fast-paced production environment," says Midgley. "Internally, it also will reduce or eliminate the cost of LiveVault staff having to phone or e-mail such notifications to customers." LiveVault's use of Microsoft Notification service is just one example of how XML Web services can benefit companies and customers alike. Traditionally, these services of notifying customers were provided by customer service representatives. By using Microsoft .NET LiveVault is not only providing a new level of customer service with anytime, anywhere notifications, they are decreasing their administrative costs of providing those services.

Microsoft .NET is allowing LiveVault to access other companies' published XML Web services, providing added value to their customers. For example, LiveVault can now integrate with

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**David Ryter,**  
Vice President of Business  
Development  
LiveVault

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Chief Technical Officer  
LiveVault

companies that deliver the CD-ROMs or Network Attached Storage devices used for database restores. Increasingly, these companies are using XML Web services to offer delivery options, tracking information and notification of delivery to shippers and recipients. "Being able to consume the XML Web services of a delivery company will help to ensure that LiveVault can automatically arrange for such media to be available to customers when they request it, providing additional value to the services we can offer," Midgley says.

By exposing their services as XML Web services, LiveVault is able to create partnerships with a wider variety of companies and increasing their exposure to potential customers. "By integrating our services with those of other online providers, we can become the company that enables customers to 'own' their data no matter where it resides," David Ryter, Vice President of Business Development for LiveVault says. "At a time when customers are especially concerned about management and security issues surrounding distributed data, this will be a compelling differentiator for us."

As Ryter sees it, by committing to open standards, such as XML, Microsoft .NET has strengthened the idea of the Internet as a highly effective medium for companies offering business services. Midgley sees Passport and Notification services as "the tip of the iceberg" when considering the future of LiveVault's services. LiveVault intends to continue with their commitment to Microsoft .NET - consuming and providing XML Web services. "The Microsoft .NET platform is not only enabling us to provide customers with improved customer service, it is also showing us a powerful way to integrate our services with our partners." Ryter concludes, "The industry is clearly moving to the idea of XML Web services, and as both a consumer and provider of such services, LiveVault is playing fully into that theme."

## ***For More Information***

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