Success Story: Infragistics Customer Solution

Verizon Achieves Rapid Recovery Of NYC Phone Service After September 11th Tragedy Using Viper Application

After the September 11th tragedy, New York City was faced with yet another seemingly impossible feat: recovery of communications. Those responsible for the restoration of vital communication services were faced with the decisions of how to best reassemble a mind-boggling collection of hardware and information quickly and efficiently. In order to get to evaluate how to best allocate limited equipment to get the most lines working the soonest, Verizon Communications, a major telecommunications provider in New York City, turned to Ajilon Consulting to create Viper, a software application that could help plan and oversee the restoration.

Situation

After the September 11th tragedy, Verizon was faced with the enormous task of restoring telephone service to thousands of people and businesses in New York City as quickly as possible. Data and equipment had been damaged or destroyed and Verizon managers needed to decide how to best allocate existing equipment, how to help the most customers fastest, and how to impact the fewest customers.

The recovery of communications would be no small feat. In New York City, the infrastructure that carries calls, the switching circuits that route calls, the lines to individual phones, and the support databases that match logical phone numbers to physical phone lines were all destroyed, damaged, or severed from the rest of the system. Those responsible for restoring this vital communication had to decide how to reassemble this mind-boggling collection of hardware and

Customer Profile	Business Situation	Solution	Benefits
A Fortune 10 Company, Verizon Communications is one of the larges providers of wired and wireless telecommunications in the United States, with more than 125 million lines and 28 million wireless customers.	After the September 11th tragedy, Verizon was faced with the enormous task of restoring telephone service to thousands of people and businesses in New York City as quickly as possible. Data and equipment had been damaged or destroyed and Verizon managers needed to decide how to best allocate existing equipment, how to help the most customers fastest, and how to impact the fewest customers.	Verizon Communications turned to Ajilon Consulting to complete a .NET version of an existing Visual Basic 6 and Active Server Pages (ASP) application that was used by Verizon Managers in the planning and analyzing the status of work orders. Using the .NET version would provide a foundation for extensive new features for enhanced user access and logistics planning allowing Verizon Communications to better plan and oversee the restoration of communication services to the city. The new .NET version of this application would be called "Viper".	• Reduction of errors thanks to disconnected operation with real-time validation from ASP.NET controls • Shorter turnaround to and from vendors • Improved contractual compliance • Short implementation time • Dramatic reduction of courier costs

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information quickly and efficiently. They needed to evaluate where to best allocate limited resources to get the most lines working the soonest, and decide what replacement equipment would be necessary where.

Challenges to overcome:
- Managing the rapid restoration of service to customers without impacting other customers.
- Handling thousands of internal users via intranet.
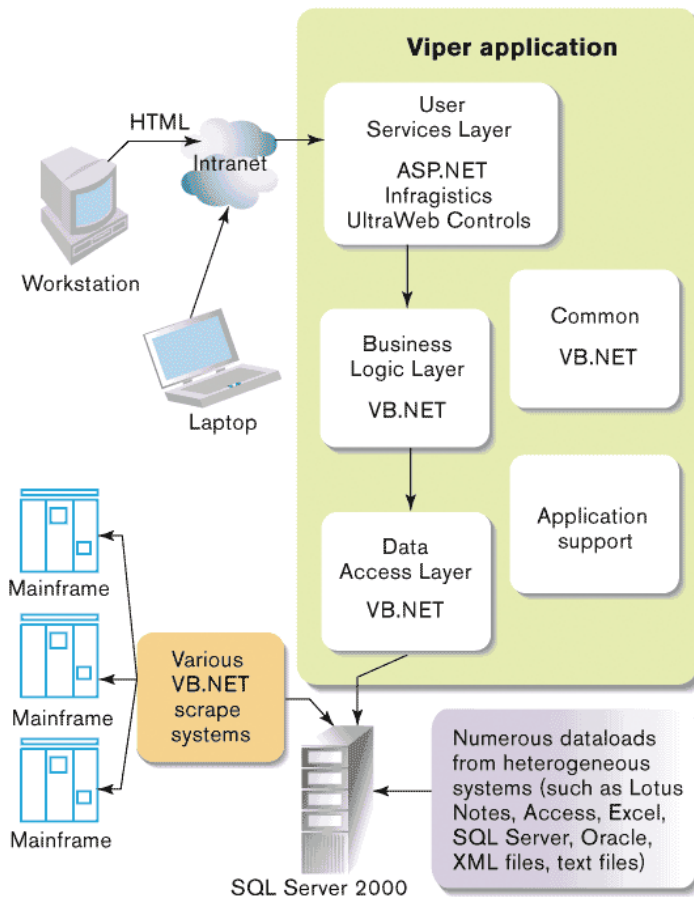- Unpredictable increases in database size.

Solution

Verizon Communications already had a tool at hand that could take on the monumental task of assisting in the allocation of the limited resources now available. As with many others who were yanked from their usual routines to assist in recovery from this crisis, this existing tool, known as Mustang, was drafted from its original purpose of assisting Verizon managers in planning and analyzing the status of work orders, to handle a far more urgent assignment.

"Mustang was one of a variety of projects we worked on for Verizon over several years," said John Keefauver, senior account manager for Ajilon. Ajilon originally designed Mustang to handle several related tasks. It could be used as a day-to-day project management tool, to keep an eye on various orders and projects. The application also had the ability to provide a historical overview of completed projects and orders - offering analysts insight into obstacles faced in past projects and enabling decisions in

pending projects to predict the outcome of different approaches. For example, if Verizon replaced unit A instead of Unit B, Mustang could anticipate if that decision would result in faster service to customer and how it would impact current service.

As with previous projects for Verizon, Mustang involved Microsoft products, such as Visual Basic (VB6) and SQL Server. In the weeks preceding September 11th , Ajilon was already in the process of migrating this existing Visual Basic 6 and Active Server Pages (ASP) application to .NET technology. Approximately 80 percent of the .NET version was completed by September 11.

When Verizon approached Ajilon with an urgent need for new features, Ajilon realized that, although the VB version of Mustang was complete, it would be faster to finish the rest of the .NET version and use it as the basis for the new features. This application, code-named Viper, was completed over the course of a weekend.

Viper's .NET technology was able to easily handle the new features, including the new user interface which is feature rich and required less development then the original.

Benefits

Rapid Development and Short implementation time

Ajilon developers appreciated the object-oriented features of VB.NET, particularly inheritance which allowed them to write objects and inherit from them, saving

development time and effort. As an example, All of the ASP.NET pages of the Viper application have a menu across the top, which were developed using a beta version of Infragistics WebNavigator element. Ajilon developers created a base class, and all other pages inherit from the class-allowing code reuse over hundreds of pages. The menus change automatically, depending on the specific page attributes and the user. In addition, changes can be added to the base class as Verizon requires and those changes propagate automatically through all inheriting pages.

Rapidly handle and scale large volume of data

Viper has the ability to scale rapidly to handle a large volume of data, coping with unpredictable, ad hoc increases automatically. The .NET technology satisfied that requirement handily. "The database grew by 6 gigabytes within a week," observed McCabe. "Verizon was pleased with the performance, which required no special optimization. Surprisingly, despite all of the new features, the .NET code base was about 15 percent smaller than the original VB application.

The rapidity with which Ajilon was able to accommodate new features has impressed Verizon, and it has expressed confidence in Viper as a basis for new features.

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Software (Infragistics)

NetAdvantage Toolset

• WebNavigator

Software (Microsoft)

Windows 2000
SQL Server 2000
ASP.NET
Visual Basic .NET
Visual Studio .NET

Hardware

Toshiba Tablet PC
Compaq DL80 Server

For more information about Infragistics NetAdvantage go to:
http://www.infragistics.com/products/netadvantage_portal.asp

NetAdvantage is a complete presentation layer toolset ideal for building commercial class interfaces for Microsoft® Windows®-based applications, XML Web Services, and Web Solutions.

For more information on Infragistics Presentation Layer Framework go to:
http://www.infragistics.com/products/dotnet/netwinformsplf.asp

For information regarding the increasing importance of presentation layer development within the application development lifecycle go to:
http://www.infragistics.com/gartner/gartner.asp

About Infragistics

Infragistics is the market leader in providing a broad range of presentation layer development tools and services for building applications utilizing Microsoft .NET, COM, and Java environments. Over the past 15 years, Infragistics has received over 220 product awards and industry vendor of the year awards from market-leading publications and resellers. Infragistics' diverse product line for Windows Forms, ASP.NET, Tablet PC, COM, and Java environments are used worldwide in nearly every Fortune 2000 Company. For more information on Infragistics development tools, please visit www.infragistics.com or call us at 1-800-231-8588.

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