

Leading Bagel Wholesaler Enhances Stability, Productivity, and Competitive Positioning

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With the help of Microsoft Gold Certified Partner ExtraDev, Fleischer's Bagels has migrated a long-standing Windows NT Server 4.0-based infrastructure to Microsoft Windows Server 2003. Consequently, the company has slashed the time and cost traditionally associated with desktop upgrades, vastly improved overall system stability, boosted employee productivity, outfitted executives with easy and secure system access from home, and enhanced the accuracy and timeliness of crucial product shipments. The company also has deployed a Web site that supports online ordering for smaller customers, helping to position itself to succeed in new markets.

Situation

Based in Rochester, N.Y., Fleischer's Bagels is a leading private-label bagel wholesaler that serves markets throughout the continental United States and Puerto Rico. In the past, Fleischer's relied on the Microsoft® Windows NT® Server operating system version 4.0 for file, print, and mail services and as a platform for third-party applications supporting accounting, inventory tracking, batch monitoring, lot tracing, and machine maintenance scheduling. On the desktop, Fleischer's used the Microsoft Windows® 98 operating system with a Microsoft Access-based front end to the third-party applications.

After a half-dozen years on the Windows NT Server platform, Fleischer's executives decided to boost operational efficiencies, trim administrative overhead, and open new business opportunities by implementing a new software infrastructure. The executives wanted to retain what was working, especially the third-party applications, while modernizing their server and desktop environments and automating a number of essential plant and office processes. They also wanted to improve system stability, streamline the administration of desktop PCs, enable home access into key applications, and deploy an online ordering system for their customers.

Solution

Fleischer's turned to consultants from ExtraDev, a Microsoft Gold Certified Partner, to select and deploy the new infrastructure. Also based in Rochester, N.Y., ExtraDev focuses on the design, deployment, and maintenance of computer networks for schools, businesses, and local government with an emphasis on browser-enabled database applications. After weighing the options, the ExtraDev consultants selected the Microsoft Windows Server™ 2003 operating



Solution Overview

Customer Profile

Fleischer's Bagels is the leading wholesaler of fresh and frozen bagels in the northeastern United States.

Business Situation

Fleischer's needed to upgrade its server infrastructure, automate an inventory application, simplify desktop administration, enable home access, and deploy online ordering for customers.

Solution

Fleischer's turned to ExtraDev, which made the needed infrastructure changes by deploying Microsoft® Windows Server™ 2003 and Windows® XP Professional.

Benefits

- Desktop upgrades for one-tenth of the prior cost
- One administrative workday saved monthly on updates
- Higher productivity from centralized administration
- Reliable and easy-to-deploy home access
- Easier ordering for customers
- Efficient and accurate tracking of freezer inventory

Software and Services

Microsoft Windows Server 2003, including Microsoft Terminal Services and Active Directory® Microsoft Windows XP Professional Microsoft Exchange Server 5.5 Microsoft Office XP Microsoft SQL Server™ 2000 Microsoft Visual Studio® .NET 2003

Hardware

Compaq ProLiant ML350-G3
Compaq EVO D510

Partner

ExtraDev Inc.



system as the centerpiece of the new Fleischer's infrastructure. The choice was based largely on four factors, according to ExtraDev Cofounder and President Tim Trueblood.

"First, we were seeking a seamless migration from Windows NT Server and were confident that our extensive experience with Windows 2000 would help us to do this by retaining existing Windows NT-based user accounts and security group configurations," Trueblood says. "Second, we believed that the enhanced Remote Installation Services and IntelliMirror® services provided by Windows Server 2003 would help to simplify a simultaneous desktop deployment of Windows XP Professional and Office XP Professional. Third, we were impressed by initial testing that showed only minimal tweaking would be required to migrate the third-party applications. Fourth, we appreciated the capability in Windows Server 2003 for connecting virtual private networking (VPN) with the Active Directory® service and user accounts."

In barely a week—and with minimal opportunity to take systems offline in Fleischer's virtually round-the-clock manufacturing environment—a team from ExtraDev deployed Microsoft Windows Server 2003, Standard Edition, to two servers and Microsoft Windows XP Professional and Office XP Professional to 28 desktops. The team also began migrating some Access 97 database functionality to Microsoft SQL Server™ 2000 to support a mobile Web application accessing a freezer-inventory database and an online product-ordering system.

Benefits

According to Director of Operations Jody Fleischer, the company is enjoying a long list of benefits from the Windows Server 2003 deployment. These benefits are showing up throughout the company, from the business office to the plant floor, and boosting productivity for everyone from desktop administrators to executives working from home and from forklift operators loading product pallets to customers seeking a more efficient way of placing their orders.

Easy Desktop Installation, Vastly Simplified Desktop Management

Chief among the short- and long-term benefits of the Windows Server 2003 deployment is a dramatic improvement in the ease of installation and maintenance of the company's desktop PCs. In the prior, Windows NT Server infrastructure, a high-level staff person, such as the head of operations, was responsible for routine hardware or software upgrades. A major upgrade of the company's 28 desktops, for example, took three to four hours apiece at a cost of roughly U.S.\$95 per hour—for a total of over \$9,000.

Now, with the PXE Boot Disk, Remote Installation Services, and IntelliMirror management technologies of Windows Server 2003, upgrading the desktop is a far simpler matter. In the recent deployment of Microsoft Office XP, for example, installers coupled those capabilities with the Office XP Custom Installation Wizard to initialize the mail server and match user logons with Microsoft Outlook® mailboxes. "This capability is especially handy in the manufacturing environment, where multiple employees may access a single PC, and a single employee may access multiple PCs," Trueblood explains.

Consequently, the installation and configuration of Office XP on Fleischer's 28 desktop PCs took just over a half hour per PC, with up to ten concurrent installations per network segment. "In addition to dramatically cutting the time required to do this job, the simplicity of the Windows Server 2003-based approach means that it can be handled by a junior-level engineer, working at an hourly rate of say, \$65—for a total of roughly one-tenth of what the job used to cost," Trueblood says. "Better yet, future desktop maintenance will often be done without human

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Cofounder and President
ExtraDev Inc.

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intervention, thanks to the Windows Server 2003 Software Update Service, which automatically sends security patches and other upgrades from the server to the desktops. On application updates alone, Software Update Service will save us roughly one administrative workday per month. Finally, Windows Server 2003 tools such as Manage Your Server, used in combination with Active Directory, can vastly simplify the addition and removal of users as well as the setup of home access, file shares, printers, and other server features.”

Centralized Administration Boosts Employee Productivity

The centralized desktop administration provided by Windows Server 2003 also is helping Fleischer’s to raise employee productivity. “In the past, managers wasted time trying to solve problems that users unknowingly created by installing nonstandard software, including viruses,” reports Plant Manager Eric Kestenblatt. “Productivity was further compromised when employees would surf the Internet. This occurred despite our spending months of effort and thousands of dollars in consulting fees trying to limit Internet access through fixed IP addresses and configuration changes at the firewall level.”

Now, as ExtraDev Cofounder and Vice President Greg Nesbitt points out, Fleischer’s administrators can easily implement overall desktop management and control Internet access with the Windows Server 2003 Group Policy Management Console. “With a couple of mouse clicks, administrators can determine what desktop software can be installed, limit Internet capabilities to select machines, and restrict the Web sites that can be accessed,” he says. “For these reasons and others, I find Group Policy Management Console to be an indispensable tool.”

Seamless Application Compatibility and Stability

As for the third-party applications that Fleischer’s depends on to conduct its day-to-day business, the company is benefiting considerably from what turned out to be a transparent porting of the applications from the Windows NT Server environment to the Windows Server 2003 environment. “With the application compatibility available through Windows Server 2003, we had all the applications back on track and running smoothly in less than a day’s work,” Nesbitt says.

Better yet, employees will enjoy unprecedented access to those applications and others, thanks to the stability of Windows Server 2003. In the past, Fleischer’s had to restart its Windows NT–based servers two to four times monthly, a process that prevented front-office and production personnel from accessing vital applications and data for up to an hour at a time. Not any more, according to Nesbitt. “It’s common knowledge that Windows Server 2003 deals with processes in a more stable way than Windows NT Server 4.0 did,” he says. “So with the deployment of Windows Server 2003, we fully expect to eliminate stability problems.”

Reliable Access from Home

Because of the 24-hour nature of the manufacturing environment, Fleischer’s executives traditionally found themselves called to the plant at odd hours to deal with an unexpected problem. For this reason, the executives long needed a reliable way to access the company’s network from home. Until now, however, the only solution they had was bandwidth-intensive, slow, and frequently unresponsive. “Even after spending \$1,200 on a VPN solution for my home, it still took me five minutes just to open a Microsoft Excel file,” Kestenblatt says.

In response, ExtraDev deployed a VPN server running Terminal Services, part of Windows Server 2003. The difference, says Kestenblatt, is startling. “Going through Terminal Services is so fast, it’s like working directly at your office PC,” he says. “Further, the VPN capabilities of

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Windows Server 2003 are excellent for ensuring secure connections, and the solution was easy to set up and highly cost-effective. Moreover, the overall cost of the solution is a fraction of what we would pay for a leased line.”

Empowering Customers with Online Ordering

In addition to housing the Terminal Services–based solution for home access, the VPN server acts as a host platform for a system that Fleischer’s executives had wanted for a very long time: an e-commerce application enabling customers to place orders over the Web.

Based on an e-commerce engine developed by ExtraDev in Microsoft Active Server Pages, the application was ported to the Microsoft .NET Framework version 1.1 format in less than a day. “It was so easy to build this application that you could forget what a big impact it’s going to have on Fleischer’s,” Nesbitt says. “The company will be able to eliminate a largely manual, labor-intensive ordering process and reach more customers as well.”

Fleischer explains. “For years, our larger customers, such as the nationwide grocery chains, have been able to do their ordering through an offsite EDI [electronic data interchange] solution, but for smaller customers that’s just not financially practical,” he says. “Now, by offering a way to place and track orders over a Web site, we can satisfy our current small and medium-sized customers and reach new ones, too. This will enable us to expand our product offerings and the markets we serve.”

When Reputations Are on the Line

On the plant floor, Fleischer’s is also enjoying significant benefits from the Windows Server 2003 deployment. This is largely because of a new Pocket PC–based application that ExtraDev created with the help of the secure wireless capabilities of Windows Server 2003, the Microsoft Visual Studio® .NET 2003 development system, and the Microsoft .NET Framework version 1.1.

As Kestenblatt explains, for many years Fleischer’s depended on a mixed, paper-and-PC approach to freezer inventory. “This is vital information for forklift operators, who must efficiently transfer pallets containing customer orders from temporary storage to the freezer and ultimately to the loading dock, and for managers, who must routinely monitor the status of those orders,” he says. “But because of its reliance on manual data entry and re-entry, the traditional approach was error-prone, time-consuming, and incapable of providing order-status information in a timely fashion.”

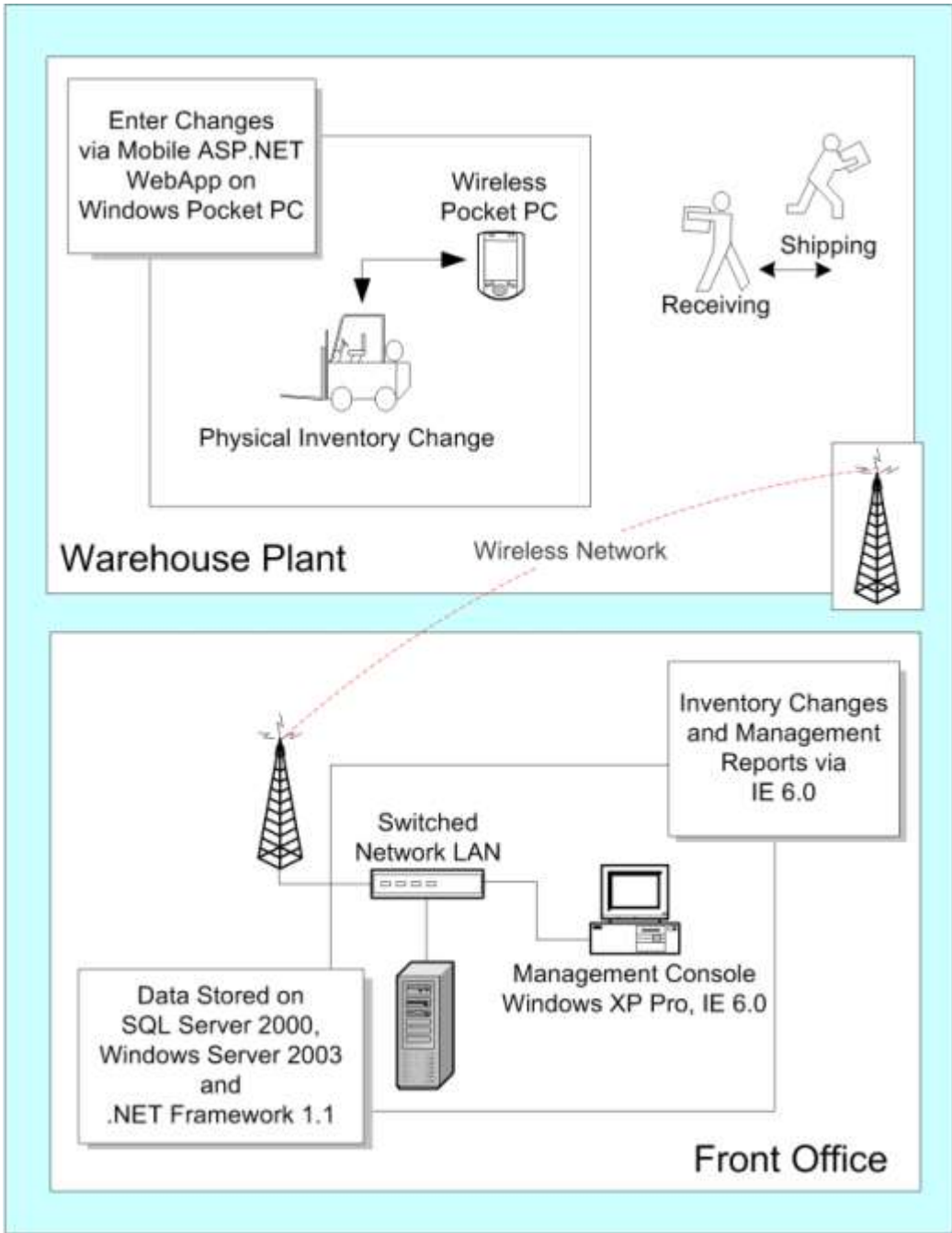
Now, with Pocket PCs mounted on their vehicles, forklift operators can instantly access and update the new freezer-inventory application as they transfer the pallets, saving time, reducing errors, and providing managers with real-time order status. As Kestenblatt goes on to say, “All this adds up to a far greater likelihood of delivering correct shipments, which is essential for Fleischer’s and the customer alike. Because we ship product under our customers’ labels, both our reputations are on the line.”

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Plant Manager
Fleischer’s Bagels

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Jody Fleischer
Director of Operations
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With a Pocket PC–based application developed using Visual Studio .NET 2003 and the Microsoft .NET Framework version 1.1, and running on the Windows Server 2003 platform, Fleischer’s Bagels is streamlining the way it tracks freezer inventory and customer orders.

Remaining Competitive in a Tough Market

As much as the ExtraDev consultants have accomplished already with the Fleischer’s Windows Server 2003 deployment, they have even bigger plans in mind for the future. Continuing the migration of data from the desktop to SQL Server–based systems, they will eventually connect the Windows Server 2003–based infrastructure directly to the company’s manufacturing equipment for tracking dough-batch and product-packaging processes. They will create many of the supporting applications with the help of the .NET Framework. They also will upgrade the



current Microsoft Exchange Server version 5.5 mail platform to Exchange Server 2003 when that product is released.

For Fleischer's executives, such projects will play a key role in helping the company to remain competitive in a tough market. "With an uncertain economy and the continued consolidation of supermarket chains, it's essential for us to be as efficient and productive as we can," Fleischer points out. "Having a powerful, versatile, and stable foundation for applications and data—which is what we are seeing with Windows Server 2003—is absolutely fundamental."

Strategic Positioning with Windows Server 2003

As for ExtraDev, Windows Server 2003 is a "perfect fit" with that company's strategic positioning, according to Trueblood. "Because of the economy, small and medium-sized businesses are waiting longer between software upgrades, so we're just now seeing a number of customers that are ready for a transition from Windows NT Server. Projects like the one we are doing for Fleischer's give us the experience to manage that transition for other customers."

"Windows Server 2003 is the most ready-to-implement of any operating system that Microsoft has come out with to date," Nesbitt says. "Just consider the powerful tools that it gives you for managing desktops, like the enhanced Active Directory service and Group Policy Management Console. Or the fact that Active Directory integrates tightly with desktop platforms like Windows 2000 or Windows XP, so there's no additional cost for desktop maintenance and management. Or that the product is just exceptionally easy to install—and I can say that the Fleischer's project was by far the easiest upgrade I've ever done. All of which enables us to offer all our customers more functionality in a given budget. That benefits them enormously, and it makes us look good, too."

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Microsoft Windows Server 2003 enables you to create a highly productive platform for powering connected applications, networks, and Web services. Windows Server 2003:

- Enables you to deliver a reliable, secure, scalable platform for applications and network services
- Makes it easy for you to deploy, manage, and use
- Empowers you with a complete server platform to quickly build connected solutions
- Enables you to maximize business value by leveraging the largest partner solution ecosystem

For more information about Windows Server 2003, please visit:
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