

Diskeeper Keeps the Food Coming at Ruby Tuesday

To keep its corporate IT help desk from boiling over, Ruby Tuesday serves up disk-defragmentation software on back-office computers in its restaurants

By Joel Shore
May 2007

THE ORGANIZATION

With more than 900 restaurants and 40,000 team members worldwide, Ruby Tuesday® has come a long way from the opening of its first restaurant near the campus of the University of Tennessee in Knoxville in 1972. In 2006, the Maryville, Tenn. company reported revenue from company-owned restaurants of \$1.2 billion, representing more than 109 million meals served. Extending its uncompromising commitment to quality and gracious hospitality, Ruby Tuesday is opening nearly 100 new company-owned and franchised restaurants annually, further enhancing its reputation as a premier destination for simple, fresh American dining.

THE CHALLENGE

Restaurant managers take on a daunting, multifaceted, non-stop responsibility every day. The frenzy of kitchen operations, customer wait-staff, order entry, seating, and table cleansing and recycling all must run with near-military precision to assure that guests enjoy a satisfying dining ex-

perience in a relaxed atmosphere. In addition to these dining-related operations, managers also schedule and hire staff, order supplies, submit payroll reports, arrange for building maintenance, and perform other business-oriented administrative tasks.

Choreographing these activities requires computers in each establishment that run reliably and continuously while maintaining peak levels of performance. Avoiding gradual performance erosion over time, common as a computer's hard drive fills up or as data continually is added and deleted, is essential to Ruby Tuesday.

"Keeping our managers focused on running a disciplined operation is essential in providing a great dining experience," says Michael A. Thomas, Ruby Tuesday's Director of IT Infrastructure. "These food-service professionals are not IT experts and the last thing they should be concerned with is a problematic computer."

To assure that its restaurants operate at the highest possible levels of efficiency, Ruby Tuesday relies on technology from two leading developers of restaurant management solutions linked through a small on-premises local-area network and server. Any slowdown in performance of that server slows every aspect of restaurant operation, administration, food-preparation, and customer facing.

They use sophisticated software solutions that run every aspect of restaurant operation, including point-of-sale order-entry, staff scheduling, menu and inventory control, kitchen order routing, payment processing, and more. A touch-screen application is used by waitstaff order-entry terminals, which communicates through a controller and the server to dispatch food orders to ruggedized kitchen video display screens where chefs prepare each meal.

Thomas's staff recognized that a key to maintaining high levels of performance and speeding file open and save times was to minimize file fragmentation on its hundreds of distributed systems. Fragmentation, where files are

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Director, IT Infrastructure
Ruby Tuesday, Inc.**

stored as small chunks of data scattered throughout a hard drive instead of as a unified whole occupying a single contiguous area, is a natural occurrence in all modern operating systems that leads to performance degradation that worsens over time.

As deleted files open up areas of a hard drive for re-use, portions of new and modified files are saved to the first available open areas, resulting in fragmentation. As files grow and are edited, they become increasingly fragmented. Access times lengthen as the drive's heads shuttle back and forth across the disk platters, reading file fragments in the correct order so they can be re-assembled in the computer's memory. The continual creation, modification, and deletion of temporary files add to fragmentation. Files often are broken into dozens, hundreds, and sometimes even thousands of pieces.

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Disk defragmentation is not just a technical issue; it is a core business issue, an enormous robber of productivity. Performance erosion is easily quantified, demonstrating the clear benefits of disk defragmentation.

A productivity loss of just 30 seconds per hour due to a slowdown in computer or server performance in a restaurant open 12 hours daily year-round is equivalent to 36.5 hours, or 47.5 forty-five-minute customer visits. For 900 locations with parties of three people spending an average of \$15 apiece, the potential total revenue loss can be \$2,137,000 a year, an enormous amount in the restaurant industry, where profit margins already are razor thin.

The Ruby Tuesday IT infrastructure team adopted a proactive strategy of installing a defragmentation solution on every new back office computer, instead of a reactive posture of servicing PCs in the field after performance difficulties appeared. The team established three requirements for choosing a defragmentation solution. “It had to be completely automated, use minimal system resources, and operate invisibly,” says Thomas.

THE SOLUTION

After investigating several disk-defragmentation solutions, Ruby Tuesday chose Diskeeper® Professional from Diskeeper Corp.

“We investigated another defragmenter and found that it did not meet all three of our requirements,” says Thomas. “It was not designed to run automatically or invisibly.” To use it, the restaurant manager or laptop user would have to remember to start it on a regular schedule and wait for it to finish. That, Thomas explains, is not a good use of Ruby Tuesday’s managers’ time and turns them into IT staffer, an area in which they are not trained. “Every minute a manager spends maintaining a PC is time taken away from running a restaurant,” says Thomas.

Ruby Tuesday found the answer in Diskeeper’s Invisi-Tasking™ Technology, a technology breakthrough that enables Diskeeper 2007 to leverage idle system resources, working in real time to provide truly transparent system maintenance. The result is enhanced file system performance, achieved automatically and invisibly.

Diskeeper’s automatic defragmenter is completely transparent. Diskeeper also includes FragShield™, an exclusive technology that guards against the fragmentation of critical operating system files.

Diskeeper runs as a service under the Microsoft Management Console and supports all 32- and 64-bit editions of Microsoft Windows Vista®, Windows XP®, along with Windows 2000™ Professional. Diskeeper server editions support all versions of Windows Server 2003 and Windows 2000 Server. Depending on the edition of Diskeeper chosen, logical volumes up to 2 terabytes or more are fully supported. The separate Diskeeper Administrator Edition provides complete centralized management of Diskeeper operations for all machines on the network, including installation, configuration, monitoring, updating, and alerts.

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THE RESULTS

Before shipping back office computers to new restaurants, the Ruby Tuesday IT infrastructure team installs Diskeeper. The program is configured to run in full automatic mode and to run invisibly, without displaying information on the screen. Users never see it.

Since a defragmented hard drive significantly reduces the movement of its sensitive head assembly, Diskeeper can extend the working lifetime of a typical workstation to five years or longer.

With Diskeeper running in the background and leveraging idle systems resources on Ruby Tuesday's back office computers, scheduling and resource conflicts are eliminated. In addition, since a defragmented hard drive significantly reduces the movement of its sensitive head assembly, Diskeeper can extend the working lifetime of a typical workstation to five years or longer.

The best possible scenario, Thomas says, is for no one in the field to know the names of staffers in the IT infrastructure department. "If they know our names, it means they're calling us, and that means we aren't doing our job.

In the hectic restaurant business, no one has time to perform system maintenance, and sending a qualified outside IT service company to fix an avoidable problem is an expensive proposition. "It's essential that we install a system and don't have to think about it again," says Thomas.

ABOUT THE AUTHOR

Joel Shore has been writing about technology for 20 years. He is editor-in-chief of Reference Guide, a professional services firm that provides marketing consulting, product testing, and editorial services to manufacturers of technology products. He was the editor-in-chief of ITworld.com and co-founding editor and director of the *Computer Reseller News* Test Center, has published hundreds of product reviews and frequently moderates tradeshow and Web panels.

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