# COMPAQ

**Testimonial: Recover-All Service kept the system up and running, even when the roof caved in**

" **Thanks to our DIGITAL\* team, there was no interruption to our business** and no loss of revenue. We were able to continue processing orders and directing warehouse operations as if nothing unusual had happened."

– Ted Rogers, Manager, Information Systems
  VWR Scientific Products

VWR Scientific Products, based in West Chester, Pennsylvania, is an international distributor of laboratory equipment, chemicals, supplies, and cleanroom products. Using traditional sales channels as well as a fast-growing Internet commerce channel, the company resells more than 200,000 products from over 1,500 suppliers.
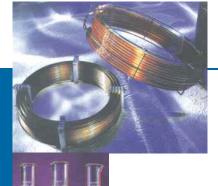
With more than $1billion in annual sales and five major distribution centers across the U.S., VWR Scientific's products meet the performance and productivity needs of university, government, industrial, life science,

pharmaceutical and other laboratories. Customers include such well-known names as Duke University, the University of Southern California, Boston Scientific, and BIO, a national association of Biotech companies.

"Timely delivery is vital to our customers," said Ted Rogers Manager of Information Systems. "One of our competitive advantages is using information technology to deliver excellent service. For example, because our operations are highly automated, we are able to ship the vast majority of orders within 24 hours."

*\*DIGITAL, now owned by Compaq Computer Corporation*

### The heart of the matter

To provide that level of service, VWR Scientific Products relies on the Quality Service System (QSS)[1], a real-time warehouse management application that is installed at each distribution center. When a customer order is sent to QSS, the system allocates inventory, sends detailed picking instructions to the warehouse floor, and coordinates the movement of tote bins on a conveyor system through the facility. It also generates packing instructions and shipping labels, adds freight charges to the manifest, and routes the packaged materials to the correct shipping area.

"Needless to say, if QSS goes down at a site, it has an immediate impact on service quality and revenues, it can also have a negative impact on the success of our customers," said Rogers.

### A close call

That scenario almost became a reality in February 1996 when a weekend snowstorm severely damaged the roof at the company's Bridgeport, New Jersey distribution center. "We were closed over the weekend, as usual, and on Monday, due to the snow emergency," said Rogers. "When our first-shift computer operator, Brenda Fauntleroy, came in early Tuesday morning, she noticed that the ceiling in the data processing area was sagging. You could reach up

[1] QSS is the customized version of a product sold by ADP/GSI.

and touch it. However, she was able to start up the VAX 4000-500 system that runs QSS, and routine operations got under way in the warehouse."

The computer operator didn't realize she was in danger; tons of snow had blown off the warehouse roof and onto the office area roof, causing the lower roof to buckle. "When our facilities engineer removed some ceiling panels, we saw 24-inch steel trusses all twisted and bent like pipe cleaners," said Rogers. That area of the building was condemned, and on Tuesday afternoon, with the QSS system still running, a construction crew began to jack up the ceiling to prevent further collapse, and installed plastic sheeting to protect the equipment from melting snow.

### "Keep the warehouse running"

By Wednesday, the VAX system and servers were still running in the computer room, but it was clear they would also have to be moved while the roof was being rebuilt. Rogers called Al Thorpe, VWR's DIGITAL service representative, and explained the situation. "I told Al that our first priority was to keep the warehouse running, *whatever it takes*. He asked me if we had a Recover-All[SM] contract. I told him we had contracts in place at all five distribution centers. Al said not to

worry; Recover-All would cover all the costs of relocating our computing operations to an alternate site. And DIGITAL would handle the recovery in such a way that the business wouldn't be disrupted."

### Reimbursement for IT recovery costs

Recover-All Service is an add-on to an on-site DIGITAL service agreement. Where a service agreement provides for routine maintenance and repair of multivendor equipment, Recover-All Service provides disaster recovery protection. If covered hardware or software is damaged or destroyed in a disaster, Recover-All repairs or replaces the multivendor hardware and restores the customer's computing environment to working order as quickly as possible.

**Recover-All provides reimbursement for many related IT recovery costs. These include:**

- Replacing off-the-shelf software and media destroyed in a disaster
- Restoring proprietary data and applications from backup media
- Relocating undamaged equipment to a safe location
- Declaration fees and other costs associated with occupying a hot or cold site.

### Working the night shift

Thorpe and Rogers quickly drew up a recovery plan. By 7 p.m. on Wednesday, when the warehouse staff went home for the day, a recovery team was ready to swing into action. Thorpe had called in two additional DIGITAL service engineers, Bob Buzby and Herman Bethea. Rogers was joined by VWR staff members Marty Gufler and Mike Finocchiaro. As Thorpe explained, "Our goal was to de-install the equipment, move it to a space in the warehouse that was 150 yards away, and re-install and test everything before the morning shift arrived for work at the warehouse."

Knowing they would have to extend the existing Ethernet backbone, Thorpe brought along the necessary materials. He also arranged for an uninterruptible power system (UPS) to be delivered to the site; the scaffolding that held up the computer room ceiling made it impossible to move the existing UPS unit.

The team worked all through the night moving and reinstalling equipment: the VAX 4000-500, three terminal servers, and radio frequency (RF) hardware that is used to send picking instructions to the warehouse floor. "The trickiest part was running cable along the warehouse ceiling and up into the new computer area," said Thorpe. "We were working 20 or 30 feet in the air, moving up and down on ladders and the platform cranes from the warehouse."

### Business as usual

The work was completed by 5 a.m. on Thursday, but the DIGITAL team stayed on-site until the morning shift arrived so they could confirm that the system was running smoothly. "The warehouse was fully operational," said Rogers. "On Thursday and Friday, there was restricted access for remote connections, as we knew there would be. But Al and his team came back on Saturday, when the warehouse was shut down, and worked in the communications room to re-establish all those links."

"To us, these guys are heroes," said Rogers. "Because of the great job they did, there was no interruption to our business. We were able to continue processing orders and directing warehouse operations as if everything was normal. In addition, the things I learned working with them helped us out when we did an implementation of QSS at our Atlanta facility. The fact that Recover-All covered the costs of the recovery was an added benefit."

### For more information

To learn more about Recover-All Service and other business continuity services from DIGITAL, we invite you to visit our Web site at: *www.compaq.com/ services*

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**Friday, February 2, 7 p.m.**
*VWR Scientific Products shuts down warehouse operations for the weekend.*

**Saturday–Monday, February 3-5**
*A massive snow storm strikes the East Coast. Non-essential businesses are closed by the state.*

**Tuesday, February 6**
**7 a.m.**: *The QSS warehouse management system is started up. Routine operations resume.*

**9 a.m.**: *Staff members discover extensive damage to the roof over the computer room.*

**Noon**: *A construction crew jacks up the ceiling for safety.*

**4 p.m.**: *Ted Rogers and Jon Herbert of VWR Scientific Products move line printers and the operator terminals out of the DP area, reinstall them in empty office space. DIGITAL is contacted. DIGITAL's account representative Al Thorpe and VWR's IT manager Ted Rogers draw up a recovery plan.*

**Wednesday, February 7**
**7 a.m.**: *The QSS system and warehouse operations are started on schedule. The decision is made to move remaining hardware to the warehouse.*

**7 p.m.–5 a.m.**: *The recovery team de-installs, moves, and re-installs critical equipment.*

**Thursday, February 8**
**7 a.m.**: *QSS, now located in the warehouse, is started up. Warehouse operations are normal although remote sites will be unable to access the system for two days.*

**Saturday, February 10**
*The DIGITAL team returns to re-establish connectivity with remote sites.*

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