

## Cancer research body protects invaluable data

The National Cancer Registry of Ireland slashes backup windows, speeds data recovery and ensures enterprise disaster recovery with Quest® data protection.



“I'd happily rate Rapid Recovery a ten out of ten and recommend it without hesitation.”

*Alan Gibson, IT Systems Administrator, National Cancer Registry of Ireland*

### CUSTOMER PROFILE



<b>Company</b>	National Cancer Registry of Ireland
<b>Industry</b>	Healthcare
<b>Country</b>	Ireland
<b>Website</b>	<a href="http://ncri.ie">ncri.ie</a>

### BUSINESS NEED

To better protect its invaluable data on cancer incidence and treatment, the National Cancer Registry of Ireland needed to rethink its approach to backup and recovery, which required juggling four different backup solutions. Long data backup windows prevented frequent backups, putting research data at risk, and recovery of data stored off site on tape could take days, slowing research work.

### SOLUTION

With Rapid Recovery in place, the Registry can now back up data every 15 minutes instead of once a day, minimizing the risk of data loss, and recovering a file for a user is now nearly instantaneous. Moreover, thanks to advanced de-duplication and compression, the entire site can now be replicated to ensure quick disaster recovery.

### BENEFITS

- Protects valuable data by enabling backups every 15 minutes instead of only once a day
- Slashed recovery time from hours or days to just seconds
- Delivered true disaster recovery by enabling replication of the entire site, thanks to advanced deduplication and compression
- Reduced administrative burden by replacing four separate tools with one comprehensive solution

### SOLUTIONS AT A GLANCE

- Data protection

Cancer touches nearly everyone on the planet today, either directly or through a loved one. To help win the war against this pervasive disease, the National Cancer Registry of Ireland collects and analyzes data on cancer incidence, treatment and survival in Ireland. Government agencies, independent organizations and healthcare providers alike rely on the results to shape decision-making and build more effective strategies to fight cancer. Protecting that priceless data is a responsibility the IT team at the Registry takes very seriously, and that's why they rely on Quest® Rapid Recovery.

“With the mount recovery point feature of Rapid Recovery, we can restore a user's network data very, very quickly — it's almost instantaneous.”

*Alan Gibson, IT Systems Administrator,  
National Cancer Registry of Ireland*

Established in 1991, the National Cancer Registry is a publicly appointed body charged with collecting, classifying, analyzing and reporting information on all cancer cases in Ireland. Its work has helped the world achieve major advances in the fight against cancer, including improvements in both the effectiveness of treatment and reductions in the risk of developing some common cancers.

In part because of the sensitive nature of the data it stores, the Registry keeps all its IT systems in house at the head office in Cork, though there are remote users who connect in from their laptops using a VPN. The IT team has recently hypervised nearly the entire environment, with one physical domain controller and 22 virtual servers on two Hyper-V clusters. In all, the infrastructure stores just over 4TB of data.

#### **A COMPLEX, MULTI-PRODUCT APPROACH INCREASES BOTH ADMIN OVERHEAD AND RISK**

The Registry's old approach to backup and recovery was complex, to say the least. Their main solution was Symantec Backup Exec. Backups were made to tape on site, and the tapes were sent offsite with Iron Mountain on weekly and monthly rotations. Some systems were backed up to disk on site, with copies to tape. And for certain other data, the IT team used yet another product, Peer Sync, to sync the onsite folders each night with the folders stored on servers hosted by their disaster recovery partner, Cork Internet Exchange (CIX). In addition, the team was using Hyper-V's internal replication to replicate the most critical servers to CIX.

“We had a lot of moving parts in place,” recalls Alan Gibson, IT systems administrator, National Cancer Registry of Ireland. “There were multiple different solutions: backup to tape, backup to disk, system recovery, the system image product, and the Peer Sync product. That's a lot of tools to manage, and any of them could break. We hadn't suffered a tape failure in a live situation but I had some corruption during one of the regular tests we do, so we were looking to move away from tape.”

#### **SLOW TAPE-BASED BACKUPS PUT CRITICAL DATA AT RISK AND PREVENT FAST RESTORES**

However, the complexity of the setup wasn't the Registry's most pressing concern. Their most important goal was to ensure that the data collected by researchers was backed up promptly and could be quickly restored in the event of accidental deletion or a disaster. With the tape-based solution, the IT team could take backups only once a day. If you're lucky, that can be enough; for example, the Registry was hit with a ransomware attack early one morning, so restoring from backup meant losing only an hour and a half of data. But the team knew they would not always be so fortunate. “If the attack had come later in the day, when more users had done more

#### **PRODUCTS & SERVICES**

##### **SOFTWARE**

Rapid Recovery

work, we would have lost a lot more data,” notes Gibson.

Moreover, some of the data the Registry stores would be very difficult to collect again. “We have remote staff members who cover a number of hospitals, visiting each one to access medical charts, therapy records or other information,” explains Gibson. “If a mistake, attack or disaster caused that data to be deleted or encrypted before we had a chance to run the nightly backup, it would be lost. That would be quite problematic because the remote users would have to arrange to visit all the hospitals again. They may be scheduled to go to each one only once a month or once every couple of months, so there could be significant delays in making the information available to the cancer researchers who depend on us.”

### **MOVING TO A MORE EFFECTIVE AND RESILIENT APPROACH TO DATA PROTECTION**

The IT team’s goals were clear: They wanted a more effective and resilient data protection solution that would enable better recovery point objectives (RPOs) and recovery time objectives (RTOs), as well as be easier to manage. When they learned that their disaster recovery partner CIX was in the process of deploying Rapid Recovery, they decided to investigate the solution as well.

The National Cancer Registry liked what they saw. Rapid Recovery enables organizations to protect anything — systems, apps and data — anywhere, whether it’s physical, virtual or in the cloud. Fast incremental snapshots capture an entire application and its relevant state as often as every five minutes, for complete application and system recovery with near-zero RTOs and aggressive RPOs. In addition, Rapid Recovery can continually send updates to a virtual standby machine that can be activated in the event there’s an issue with the primary machine, ensuring fast disaster recovery.

After finding all these capabilities in a single admin-friendly solution, the Registry leapt at the chance to be the first client at CIX to go live with Rapid Recovery.

### **MORE FREQUENT BACKUPS MEAN BETTER DATA PROTECTION**

With Rapid Recovery in place, the IT team can now protect the National Cancer Registry’s data the way they want to. Backups are so quick and easy that the team is now backing up the main database server every 15 minutes, rather than just once a day, dramatically reducing the risk of data loss — without degrading server performance.

“Before, I was doing backups only once a day because of the impact on the machines,” notes Gibson. “With Rapid Recovery, I’m now down to every 15 minutes on the main database server, and we haven’t noticed any impact on performance. That means I’ve got a 15-minute potential loss of data as compared to potentially a whole day’s loss of data. Some of the other servers are not running as fast on the main network, so I’m running backups on them each hour, so I could lose an hour’s worth of data. Again, that’s compared to possibly losing a whole day’s data.”

### **RESTORES ARE NOW ALMOST INSTANTANEOUS, INSTEAD OF TAKING HOURS OR DAYS**

Restores are also dramatically faster and easier, which keeps users happy while saving valuable IT time and reducing costs. “With the mount recovery point feature of Rapid Recovery, we can restore a user’s network data very, very quickly — it’s almost instantaneous,” Gibson reports. “Before, even a basic restore from last night’s backup was clunky and could take hours. We had to turn off replication, bring up the data at the CIX site where the folders had been copied, and change the user’s network sharing to point to that other folder on a different subnet, so that wasn’t straightforward. Then the user would be working on remote data, and we’d have to do a replication back.”

Restoring files that were not on the previous night’s backup, of course, took even longer. “If we had to request a tape from Iron Mountain, they would provide it — but the faster we needed it, the more it cost,” explains Gibson. “So we had to ask: How important is the data? Is it important enough for us to request an overnight shipment from Iron Mountain and incur

“Before, I was doing backups only once a day because of the impact on the machines. With Rapid Recovery, I’m now down to every 15 minutes on the main database server, and we haven’t noticed any impact on performance.”

*Alan Gibson, IT Systems Administrator,  
National Cancer Registry of Ireland*



the extra cost? Or can I wait for a couple of days for the medium-cost return? Or do I wait for the next weekly return and ask for an extra tape to be put in the box with the regular scheduled tapes? Depending on the answers, the user could potentially have to wait many days to get their data back. Now, I can just mount the appropriate recovery point and copy the file.”

The Registry also uses Rapid Recovery’s virtual standby feature to ensure additional data protection for its valuable email data. “At the moment, we are using virtual standby for our two email servers,” notes Gibson. “If something goes wrong with one of those servers, we would lose only a few minutes of mail because we can just failover to the virtual standby. It works so well that soon we’ll be using virtual standby with our live database system and our backup database system as well.”

### **REPLICATION, COMPRESSION AND DEDUPLICATION ENABLE TRUE DISASTER RECOVERY**

In addition to ensuring reliable backup and quick restores, the National Cancer Registry of Ireland has also been able to achieve its goal of true disaster recovery by using Rapid Recovery to replicate its entire site to CIX on a continuous basis.

“Previously, we replicated only five or six of our Hyper-V machines to CIX because the disk space requirements made it too costly to replicate all of them,” Gibson says. “Although Hyper-V replication provides some compression, it’s nothing compared to what we’re getting with Rapid Recovery. The compression and deduplication Rapid Recovery provides is making a big difference in the amount of disk space we need, so now we can have

all our servers replicated to the secondary site. That’s a big advantage in case of a major catastrophe — if we lost our primary site, we’ve got our whole site over at CIX.”

### **A SINGLE, COST-EFFECTIVE SOLUTION THAT MINIMIZES ADMINISTRATIVE OVERHEAD RATES A 10 OUT OF 10**

On top of all the data protection benefits, Rapid Recovery is also helping the IT team accomplish more with existing resources. “From the point of view of IT administration, it’s a great tool,” comments Gibson. “Rapid Recovery has reduced my administrative overhead by providing not only a better product, but also a single product, instead of me having to cobble together a solution with four different moving parts to it. Plus, we were able to get it at the same cost as our four previous solutions put together, which was another big advantage in getting the board and management to agree to it — it was a no-brainer.”

When asked what he’d tell colleagues looking for a data protection solution, Gibson responded, “I’d happily rate Rapid Recovery a ten out of ten and recommend it without hesitation.”

### **ABOUT QUEST**

At Quest, our purpose is to solve complex problems with simple solutions. We accomplish this with a philosophy focused on great products, great service and an overall goal of being simple to do business with. Our vision is to deliver technology that eliminates the need to choose between efficiency and effectiveness, which means you and your organization can spend less time on IT administration and more time on business innovation.

[View more case studies at Quest.com/Case-Studies](https://www.quest.com/Case-Studies)