Traditionally, file-based backups have been stored on tape at the end of each day, and then physically archived. Assuming the backup takes place only at night when the system is idle, the recovery point is set at, say, 10pm the previous day. If staff had worked a full day before the disaster event, all that data might be lost. With 10 staff working 8 hours each, up to 80 hours' worth of data might be at risk.

and then replicated to a cloud storage facility, for near instant cloud-based disaster recovery without the library having to own or invest in its own cloud infrastructure. This solution delivers the ability to restore files and folders to be restored locally or remotely in a fraction of the time of a traditional backup product. An entire computer infrastructure can be spun up to full production in minutes.

THERE ARE TWO SORTS OF USERS IN THE WORLD – THOSE WHO HAVE LOST DATA AND THOSE WHO WILL LOSE DATA.

In a worst-case scenario, backups from the previous night might not have worked, or might have stored only part of the data, so the system can be restored only partially. Days, weeks or even months of data might be lost, which would result in a library in chaos.

Today's fourth generation disk-based real-time recovery (RTR) technologies change dramatically the RTO and RPO for any size of facility. A server of almost any size can be restored in as little as three to five minutes, back to the state it was in 15 minutes before the crash. And all this with just a few mouse clicks that even a novice can master quickly.

"Using virtual boot technology, RTR software creates an almost instant temporary disaster recovery environment based on virtualisation," says Greg. "The whole system operates in this temporary environment while the physical hardware problem is being dealt with."

The software can be set to capture an image of a library's system every 15 minutes, so data need never exposed to more than 15 minutes of risk. Software then uses the captured image to migrate data back to the same piece of hardware, providing that machine is operational, otherwise to a new server once one has been sourced. Using RTR technology, it only takes about ten minutes to migrate the old data to a new server, regardless of size.

Solutions also exist to help with early detection of possible problems. Software now allows an IT manager to view a server's performance from a remote location, to ensure that the library's hardware is running well and backups are being performed on schedule.

But what happens if a fire or flood destroys a library's premises as well as its computers? Local backups would be rendered useless as they would most likely be destroyed as well.

New solutions enable servers (physical or virtual) to be backed up locally (at the physical site of the library)

With affordable and readily available solutions, there is no reason to be operating a library that has no disaster recovery plan in place. A system can be restored fully from any point, at any time, and fourth generation real-time recovery technology makes it fast, simple and rock-solid.