

Data Recovery From The Cloud: Make It Part Of A Cloud Storage Strategy

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18 June 2010

Processor.com

Although sophisticated technology at cloud providers can serve up high levels of storage optimization, hardware is still at the root of the tech, and humans still run the environments, which means that clouds aren't exempt from data loss. While shopping around for a cloud provider, it's imperative to understand what processes are in place for data recovery so that any technology issues don't turn into downtime.

Discussion Point

Pinning down the different types of data loss scenarios with a cloud provider beforehand can be valuable for preventing or addressing issues, notes Charles Buck, COO at infrastructure management firm Independence IT (www.independenceit.com).

For instance, discussing what might happen when there's a need to restore individual files vs. doing a system-wide restore can yield information on how data is backed up in the cloud. "If you've selected a cloud backup service that's only copying your data and constantly overwriting changes as you make them, you will find yourself entirely out of luck when you need to restore individual files as they existed at a certain point," says Buck. "At best, you'll have to reconstruct whatever data you're missing, and at worst, the earlier data you'd hoped to recover can never be recreated."

It's important to ask how systems are managed for redundancy and protection against data loss and to fully understand the process for restoring data, Buck says, adding: "Develop a process chart that follows the data management path from original creation all the way through to restoration. When you understand the process, test it with sample data. Then test the process once a month. When the time comes that you really need to recover lost or erroneously changed data, you'll be thankful you know the steps by heart and have confidence earned by your testing."

Combining Efforts

For some data centers, switching to a cloud may involve bringing along a third-party data recovery firm that's done consulting or recovery for the enterprise in the past. This can sometimes require more effort in terms of coordination, but it provides yet another level of protection, says Jeff Pederson, manager of Ontrack Data Recovery operations at Kroll Ontrack (www.krollontrack.com).

Pederson notes that with a service provider, the data center isn't in possession of the hardware, and cloud providers may be reticent to hand over their equipment. However, as long as they grant the recovery firm some level of access, they can do recovery work.

One tricky area when it comes to an outside recovery firm doing work on behalf of a client can be interruption of a preset backup schedule, Pederson adds. "We need to have exclusive access to that media, so nothing is written to it behind our backs," he says. "It's a couple extra hoops to jump through, but nothing extraordinary. The provider shouldn't be surprised by requests like that."

Because backup processes may have to be tweaked, sharing data with other companies is less than ideal, notes David Logue, Ontrack's remote data recovery lead engineer. He says, "Dedicating disks to just your data makes recovery a lot easier."

From Loss To Fixed

If a company already has data storage at a cloud provider and then suffers a data loss event, it's still possible to get back up and running, depending on the type of data and the severity of the loss.

"The reason many enterprises use clouds is that they want an easy backup solution but don't want to use in-house resources to do it," says Eric Burgener, senior vice president of marketing of disaster recovery firm InMage (www.inmage.com). "Depending on the scenario, cloud providers should give you options for what can be done for recovery."

If it's just individual files, for example, they can be recovered over the network, he says. But when large amounts of data must be recovered, it is sometimes more efficient to employ a "data shuttle"—basically, a copy of the data is made at the cloud provider on removable media (disk or tape) and then sent to the client.

In general, simply building more awareness about data recovery into the cloud management process can be helpful, notes Pederson. He says, "Physical disks fail, and there's always a chance that people will mess up and delete something accidentally. . . . Just because you're using a provider for data storage doesn't mean data recovery is out of your hands."