HOW CLOUD HELPS PUBLIC AGENCIES BOUNCE BACK FROM CYBERATTACKS

Fast and efficient data recovery is pivotal for public sector agencies responding to ransomware and other cyber threats. In this Q&A, Malcolm Brown, Global IT Manager at Geoactive Ltd, who is experienced in secure, cloud-based storage and recovery, talks about what agency leaders need to get right in their backup-and-recovery strategies.

Why is speed so important when recovering from a cyberattack?

If you have a team of, say, 100 people who lose access to their data, you're shedding money because those employees are not being productive. Recovering quickly from a cyberattack reduces your agency's financial burden.

What's the main thing that delays a public agency's recovery of lost data?

Traditionally, it's been the design complexity of their IT infrastructure. The more pieces you have going into that infrastructure, the more attack vectors there are. The simplicity of infrastructure design reduces that footprint, which allows a faster turnaround in recovering lost data.

How does shortening the pathway to stored data accelerate recovery?

Imagine a field employee's device gets hit by ransomware, which starts writing back to your file storage. You wouldn't want the malware going through several layers of the infrastructure. Another example could be writing things to a flash drive, which has the potential to be stolen, lost, or corrupted. Either way, you want to reduce the possibility of data loss. This means you need the shortest path from the point of ingesting your data to putting it into your file data repository.

Why do public agencies need immutable snapshots of their data?

Immutable means that once an object is written, it cannot be deleted, overwritten, or modified in any way. In the past, tape drives and hard disks could provide immutable storage, although they weren't truly immutable because a storm or fire could take them out.

Today, we can create many immutable snapshots of storage objects in the cloud. We can continuously version them rather than wait for a nightly backup. This provides much better granularity, as file changes create new versions stored in snapshots as often as every few minutes.

Then, if something happens to your data, you can rewind the clock a few minutes and instantly retrieve it from that immutable store — because you know the object hasn't been changed.

Why should agencies implement cloud-native object storage?

Cloud-native object storage provides scalability and flexibility. For example, suppose your agency has a multisite environment. In that case, you can put everything in a single storage bucket in the cloud and then present that data back to these locations simultaneously. You can have a shared context, where everybody sees the same file shares, or a more secure context, where each department has files and attributes that only they can see.

You're not limited to file sizes or total storage availability because the cloud is infinitely scalable. With traditional storage, you buy a file server with limited capacity. Once it fills up, you must buy more. You don't have that anymore in the cloud. You can grow, expand, and stay flexible through cloud services and fast storage. However, agencies should watch for vendors that call their solution a "cloud" but are simply running the same limited technology in the cloud. If it's limited, it's not a true cloud solution.