



Grey County, ON, Protects Essential Services with Cloud-based Disaster Recovery

CLIENT	Grey County
PROJECT	Cloud-based Disaster Recovery
INDUSTRY	Public Sector
CDW Practice	Cloud





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Grey County, Ontario, has a lot on its plate in providing residents with essential services, some of which run around-the-clock. Delivering timely, responsive services requires an IT system that's resilient to natural disasters, cyberattacks and other threats that can put operations and data at risk. Evan Davis, Grey County's Technology and Infrastructure Manager, says, "We have many services that rely on us to be running all the time, such as Provincial Offences and Paramedic Services. Long-term care is a big one where systems have to be running 24/7."

A recent business continuity assessment commissioned by Grey County revealed gaps in its disaster recovery (DR) capabilities, putting critical workloads and crucial County services at risk. While the County was running daily backups, it didn't have the ability to restore data quickly in the event of a disaster. Davis says recovering from a minor disaster could take up to a week with the possibility of losing up to 24 hours of data. "If we have downtime or if we lose data, for example, in Financial Services, the embarrassment is quite large," he says, "and the risk of losing data for some of our more critical systems could be a matter of life and death, depending on the department. Even if it's a minor loss, losing a full day's work for 500 employees is a lot of wasted time and expense."

In the event of a full-scale disaster, Davis continues, "Recovery would have taken a lot longer. For example, if we had an environmental disaster, we don't have extra hardware available to restore the data. For a ransomware disaster, where an investigation was ongoing, we wouldn't be able to touch the hardware. So, it would potentially be weeks to get new hardware, build it up, restore the data and hope that the data was good."

With workloads exposed to data loss in the event of a disaster, Grey County needed a DR solution with continuous replication, instant recovery of critical workloads and near-zero data loss. The County first considered a separate data centre for DR but demurred due to the significant expense.





“Any time I need a solution for something, I bring it up to CDW and they're very eager to work with me and find something that works based on my requirements and budgets. They've been very good at helping us keep costs down.” – Evan Davis, Grey County's Technology and Infrastructure Manager

THE CLOUD FOR COST AND RESILIENCE

In looking for an affordable and resilient solution, the Grey County IT team reached out to CDW, who has been working with the County for many years. The teams discussed options for a solution where the County could get critical data and applications on its many virtual machines back in service in hours rather than days or weeks.

CDW's deep technical expertise in designing and implementing proven DR systems in the cloud turned out to be a boon for Grey County. By considering a cloud option for DR, and working with CDW as a trusted advisor, Grey County was intrigued with the possibility of meeting its DR goals without investing in a separate data centre.

CDW recommended Microsoft Azure to host the DR system and Zerto IT Resilience Platform to automate and orchestrate the mirroring and recovery activities between the County's data centre and Azure. After digging deeper into solution possibilities with Azure and Zerto—including sending its IT team to Microsoft's Mississauga office for certification training on Zerto and Azure—the County determined that it was the best solution in terms of its recovery capabilities and cost.

The only barrier to moving forward was Grey County's lack of in-house cloud expertise to set up Azure as a recovery platform. Grey County again called on CDW to arrange a professional services contract to build out the system.

Building the solution was a team effort. CDW set up the Azure infrastructure, including storage and supporting services, and created a networking infrastructure to mirror the County's production environment. Zerto implemented its solution on Azure with the Grey County IT team testing the results. After running a successful proof of concept with a small group of VMs to test failover capabilities and the ability to bring up the VMs in Azure, the system was implemented for all VMs.

OBJECTIVE

- Restore critical workloads in four hours or less to ensure continuity of essential services
- A solution that fits the budgetary constraints of municipal government



REPLICATE IN REAL-TIME, RESTORE IN HOURS

Grey County now has an end-to-end DR solution that replicates all of its VMs in real time to Azure, and can instantly spin up its cloud-based VMs with confidence that it has a complete, up-to-date image of its production workloads. The solution also gives the County the ability to run applications in Azure, isolated from the production environment, as a way to do testing or to experiment with application modernization. And, the County is in a position to perform DR tests on critical workloads during business hours without impacting production workloads.

Grey County can now recover from any disaster within hours, with little or no data loss. Davis says, "Not having to maintain on-premises hardware saves us a lot of time and effort." And, he says, the system requires minimal attention. "I barely have to touch it," he says. "I don't have to worry about the hardware or the infrastructure. If I need more resources, I just add more resources." And, he says, "Reports and tools in Azure make it easy to track cost, so it makes budgeting easier," especially as the County grows and consumes more data.

TRUSTING IN CDW

Davis also appreciates how CDW made a difference. "The sales team was fantastic," he says. "We wouldn't have this solution without the sales and pre-sales engineers that we worked with. We needed an easy-to-use system that could be up and running 24/7, with the ability to recover from a disaster in minutes or hours, including systems that needed to be up and running almost instantly with no more than four hours downtime. That's a pretty tall ask."

Grey County leans on CDW for many needs. "Any time I need a solution for something," Davis says, "I bring it up to CDW and they're very eager to work with me and find something that works based on my requirements and budgets. They've been very good at helping us keep costs down."

HIGHLIGHTS:

- DR solution in Azure with continuous replication, instant recovery of critical workloads and near-zero data loss
- Recovery time now measured in hours rather than days or weeks

TECHNOLOGY USED

- Microsoft Azure
- Zerto IT Resilience Platform
- Next-Generation Firewall



**For more information, contact your CDW account team
at 800.972.3922 or visit [CDW.ca](https://www.cdw.ca)**



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