

# Hewlett Packard Enterprise



## Objective

Improve spotty virtual desktop performance, and reduce clutter in data center.

## Approach

Deploy HPE hyperconverged solution.

## IT Matters

- Improved virtual desktop performance and user experience
- Reduced help desk calls
- Reduced time spent resizing storage

## Business Matters

- Lowered power costs
- Improved user satisfaction

# Guelph Hydro modernizes data center with HPE SimpliVity hyperconverged solution

## Canadian electric company decreases data center footprint and power cost



## Harnessing the Power of Hyperconvergence

One Canadian electric company can measure its hyperconvergence success with a particularly notable metric: user happiness. Guelph Hydro's systems analyst, Adam Borecki, says that the IT team used to field lots of calls from users complaining about their virtual desktops—60-70 in total. Users were often disconnected, or their systems were running slowly. IT was working on incremental improvements every three to six months, but they weren't always obvious. "It's a night and day difference" since implementing Hewlett Packard Enterprise (HPE) SimpliVity, Borecki said. "We were able

to reduce our data center footprint, reduce power costs, and, most importantly, our users are finally happy with our VDI performance."

Borecki and the other five IT team members at Guelph Hydro have saved huge amounts of time since they deployed the HPE SimpliVity hyperconverged solution in the summer of 2015. They used to spend many hours helping their 80-90 total end users and managing their infrastructure. The decision to move to HPE SimpliVity came from the company's goal to be on the leading edge of technology. Previously, they'd used SANs to run 60-70 VMware hosts on two networks, and the resulting "spaghetti" effect meant the data center was cluttered. Guelph Hydro's IT team

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— Adam Borecki, systems analyst, Guelph Hydro

wanted to make the company’s data center footprint smaller and improve performance as they also started pushing VDI out to their AutoCAD users. The SAN took up half to three-quarters of a rack in the space the company had. But adding flash processors and hybrid flash arrays, then ESX hosts with NVIDIA cards, still didn’t solve the problem. “There was something missing,” Borecki said.

Guelph Hydro’s mission to reduce its carbon footprint and be on the forefront of saving power led Borecki and his team to look at hyperconverged infrastructure. HPE SimpliVity’s ease of integration, support for NVIDIA Grid cards and competitive cost won the team over, and the simplicity and reduced footprint have made a huge impact for Guelph Hydro. Since deploying the HPE SimpliVity hyperconverged solution, they’ve cut out two switches and the SAN, reducing space, power, and cooling as they consolidate. “Only two devices as opposed to five is huge,” Borecki said. “One thing leads to another, and another. As an electric company, we want to reduce the electricity we use.”

## **Saving Storage, Speeding Performance**

Creating new data stores is one of the many tasks that’s dramatically faster to complete, Borecki said. Pre-HPE SimpliVity, he’d spent about 45 minutes to an hour just on setting up a LUN on the EqualLogic or NetApp array, including attaching the LUN to a host and resizing to the SAN, all during off-peak hours. “One of us would be in here on a weekend just resizing storage,” Borecki said. “Now we right-click, resize, and within five minutes we have more space from the data store.”

He also assigns the backup policy at that point, and Guelph Hydro has eliminated the need for their current backup tool they used before, further reducing costs. The IT team has saved 49TB worth of storage on backups alone, and they are now backing up virtual desktops, which they did not have the storage to do previously, Borecki said. They’ve also been able to double and sometimes triple server backups using less space, and have seen efficiency rates of 39:1.

## Customer at a glance

### Hyperconverged Solutions

- HPE SimpliVity

Guelph Hydro's IT team also had to spend time off hours on maintaining the back-end of the web-based outage map system. When there's an electric outage, Guelph Hydro's site gets 20,000-30,000 hits, and the IT department had to buy more memory when they needed to resize. They sometimes had to shut down the system while waiting for the special-order RAM to come in. "Now, we shut down, give the server 10 more gigs, and in three to five minutes we're live again," Borecki said. "The HPE SimpliVity system doesn't crumble under pressure."

Guelph Hydro now has much more data center space, though Borecki said they haven't really needed it with their newfound data efficiency. He's been able to use the company's old servers as compute nodes – a method unique to the HPE SimpliVity hyperconverged solution, allowing pre-existing servers to supply compute power for an HPE SimpliVity cluster – for disaster recovery planning. He's building out a remote location, where one HPE SimpliVity node is

housed now, and will add two more nodes later in 2016. Other projects he now has the time and infrastructure for are upgrading the View environment using app volumes and thin applications hosted on HPE SimpliVity. That will push thin apps directly to users' PCs for faster access, rather than the current method of using Citrix to connect to the server to download the app.

HPE SimpliVity's technology, plus the support that Borecki praises, has brought Guelph Hydro a modern data center with fast VDI performance, improved server backups, and reduced space. HPE SimpliVity's implementation has also saved tons of IT time, and the organization is poised for growth and market leadership.

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