### Hewlett Packard Enterprise



### Industry

Pharmaceutical

#### Objective

Ensure a reliable, always-on network to ensure mission-critical highly personalized care

### Approach

Deploy HPE ProLiant DL360 Gen10 server to support critical pharmacy services

#### IT matters

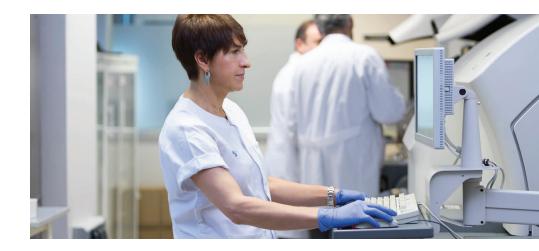
- Replace old, outdated servers
- Consolidate servers
- Ensure business will continue as normal in case of a server failure
- Minimize maintenance

### **Business matters**

- Modernize antiquated servers
- · Head off network outages
- Deliver reliable performance
- Ensure the network is accessible when workers need it
- Get the most bang for their investment buck

### **Astrup Drug**

Pharmacy chain finds a prescription for reliability with HPE ProLiant DL360 Gen10 server



Astrup Drug is a family-owned business that provides pharmaceutical services for independent pharmacies and long-term care facilities. Founded in 1952, the company has more than 600 members and operates its own 20 pharmacies—all united by the goal of providing personalized, high-quality patient care. To support its mission, Astrup Drug needs to be able to count on its technology infrastructure to be affordable, secure, and reliable. After all, a system outage can have dire consequences for patient care.

In fact, the importance of reliability was recently driven home at Astrup Drug in Austin, Minnesota when one of their servers decided it just wasn't going to work anymore. Although it was unexpected, the server failure wasn't a total surprise, says the company's server/network administrator,

Shon Olson; like other organizations, the company only has so much money to invest in IT infrastructure, and little of that money had gone into the servers for years. So, many of the servers they relied on were in their twilight years. "We're definitely dealing with some pretty antiquated hardware," Olson says.

Astrup Drug's environment is set up so that it can lose one server and hobble by with operations at less than maximum capacity. "Some guys just won't be able to work," Olson says. And some patients could suffer.

Olson was able to get the failing server partially back up, but not completely. And what would happen if more of the aged servers went down? It was time to take action.

"The HPE ProLiant DL360 Gen10 server keeps everything running smoother, which at the end of the day is more profitable. People can get more work done because we're not having freeze-ups."

- Shon Olson, Server/Network Administrator, Astrup Drug

# A strategy to head off impending disaster

Astrup Drug focuses on giving its independent pharmacy owners the tools they need to thrive, while still allowing them to remain completely independent. From a technology standpoint, the company provides a wide range of cloud-based services to support its members nationwide.

The company runs VMware ESXi™ on its servers, backed by HPE Nimble Storage. The virtualized environment enables Astrup Drug to make the most efficient use of its hardware, while increasing performance, security, and savings for its pharmaceutical services. The company also recently moved it accounting systems to the cloud, and moved to Office 365. That made keeping the network up and running even more imperative.

The failed server alerted the management in the organization to the need to replace the aging servers, says Olson, who, as part of a five-person IT team, handles everything from purchasing equipment and deploying printers to managing servers and rolling out software to end-user machines. "When older servers start flaking out, that pushes me toward the front of the line for purchasing new equipment."

Olson wanted to get a server that could run the company's entire environment as part of a new three-host cluster. That way, even if they lost two hosts, the business would keep running, and continue serving customers that count on Astrup Drug without interruption.

About 90 percent of Astrup Drug's IT environment is HPE equipment—the exceptions being some of those older servers. The environment includes HPE ProLiant DL360 Gen7 and HPE ProLiant DL380 Gen8 servers that are out of date but still doing their job well. "And we push them hard," Olson says. "They've earned every dollar we paid for them."

So, returning to **HPE ProLiant** for the new servers made sense.

# Don't forget the benefits of lots of memory

The Intel® Xeon® Scalable processors and core capacity in the HPE ProLiant DL360 Gen10 server caught Olson's attention. Besides the older HPE ProLiant Gen7s and Gen8s, Astrup Drug is also using an HPE ProLiant DL360 Gen9 with a logical processor core count of 24. The Gen10 server can take up to 28 Intel Xeon processor cores.

"With just the Gen10 server alone," Olson says, "if we wanted to, we could run our entire infrastructure at that location."

Designed for diverse workloads in space-constrained environments, the **HPE ProLiant DL360** Gen10 server is packed in a dense 1U rack design. When equipped with HPE Persistent Memory, a technology pioneered by HPE, the HPE ProLiant Gen10 server restarts a database 20 times faster compared to Gen9. It can support a wide range of storage options, including up to 192 GB of NVDIMMs and 12 GB SAS, per system; and up to 10 small form factor drives and four large form factor drives, with an option to support up to 10 NVMe PCle SSDs.



"The Gen10 server really jumped forward as far as capabilities," Olson says. "To me, it's a no-brainer to make a jump to something like this." With some tweaking, it could be the centerpiece of that three-host cluster Olson wants to build, creating more reliability network-wide.

Another selling point, he says, is that the Gen10 server could take up to 3 TB of 2666 MT/s HPE DDR4 SmartMemory, significantly more memory than the Gen9 he's using. Olson ordered 256 GB of RAM and increased the total NIC port count to eight with the addition of a stand-up NIC card.

Astrup Drug is using its Gen10 server HPE ProLiant DL360 for Active Directory, file sharing, email management, file/print services, virtualization, and multiple line-of-business applications—really, a bit of everything, Olson says. The server also provides a solid foundation for essential pharmaceutical services.

"It's nice having a failover environment when you're dealing with VMware®," Olson says. "Not that it happens a lot, but sometimes things go wrong, and more than one server could go down."

The company also invested in **HPE Foundation Care**, which provides remote diagnosis and support, and on-site hardware repair if necessary, to resolve hardware and software problems with HPE and selected third-party products.

# Reliability and simplicity in a small package

Astrup Drug is an HPE shop because HPE equipment is reliable, Olson says.

"It's a set-it-and-forget-it thing," he says.
"Once you get them set up and going, you really don't have to do much unless there's a fluke brownout or power outage. I can count on one hand the number of times I've had to physically go in to any of our HPE servers and directly access them."

"They're just very reliable. It's wonderful."

Setting up the Gen10 server was surprisingly easy, he says. "Some of the older servers I've pulled out of the colocation site to use at our corporate location have taken a little more massaging to get back up and into production in a different role. But with the HPE ProLiant DL360, the actual install time was half a day. That was racking it, setting up iLO, getting the adapters set up, and getting it joined to our VMware vCenter®."

"It just went extremely fast and didn't give me any problems," he says. "The Gen10 server really jumped forward as far as capabilities. To me, it's a no brainer to make a jump to something like this."

- Shon Olson, Server/Network Administrator, Astrup Drug







### **Customer at a glance**

A latest-gen server can handle all IT needs at a single location, so if other servers go down, pharmacy services can still be delivered without missing a beat

#### Hardware

HPE ProLiant DL360 Gen10 server

#### **HPE Pointnext**

HPF Foundation Care

### What really matters: Performance for patient care

To really stress test the new HPE ProLiant DL360 Gen10 server, Olson dumped one location's entire IT environment onto it. "It didn't have a single problem," he says. "No one noticed any slowdown. And that's everything from file sharing to our Exchange, to specialized stuff for our long-term care environment. Literally everything was over onto that one server, and it didn't miss a beat."

With the older servers, that couldn't be said—even during routine tasks.

"We had some lag with some of our older servers, and while our stuff wasn't overprovisioned at all, once a server reaches max performance level, things start slowing down," Olson says. "Now that we put our crucial heavy load stuff on our Gen10 server, we don't get those slowdowns. It keeps everything running smoother, which at the end of the day is more profitable. People can get more work done because we're not having freeze-ups."

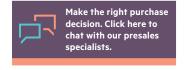
Ultimately, the HPE ProLiant DL360 Gen10 server ensures Astrup Drug will always be there for its customers to provide what really matters—patient care. As Olson sums up, "It's been one of the best server hardware purchases we've ever made."

### About HPE

Hewlett Packard Enterprise is a global technology leader focused on developing intelligent solutions that allow customers to capture, analyze, and act upon data seamlessly from edge to core to cloud. HPE enables customers to accelerate business outcomes by driving new business models, creating new customer and employee experiences, and increasing operational efficiency today and into the future.

HPE ProLiant rack and tower servers deliver the innovation, reliability, and forward-looking compute design that business is built on.

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