Washington State drives service improvements for transport users

HPE Synergy supports business with resilient, high-performance platform

Objective
Create a resilient, high-performance IT infrastructure to better support business demands

Approach
In order to future-proof the agency’s technology, HPE Synergy was the next step for WSDOT and part of an evolutionary journey in composable infrastructure.

IT Matters
- Completed installation within hours rather than weeks, freeing IT resources
- Improved network bandwidth by 400%
- Effortless reconfiguration capability and ability to change functions quickly saves administration time and improves efficiency

Business Matters
- Established a resilient, high-performance infrastructure, better able to support the business
- Reduced downtime, improving the availability of customer-facing applications
- Maximized investment in IT resources, saving ongoing capital budgets

Washington State Department of Transportation is a sprawling government agency, overseeing 18,600 miles of state highway, 3,300 bridges, bike paths and the largest ferry system in the U.S. HPE Synergy established an IT platform that is responsive, resilient, and better able to support the business as it drives service innovation.

Challenge
Smart management of critical infrastructure
As the name suggests, Washington State Department of Transportation (WSDOT) is responsible for transport matters in the U.S. State of Washington. It oversees 18,600 miles of state highway, maintains 3,300 bridges, and the largest ferry system in the U.S. In partnership with 31 public transport networks WSDOT provides 220 million passenger trips each year.

It is a huge and sprawling government agency. And, like many public sector organizations, WSDOT is being asked to do more for less.

The IT function is no exception. A team of 12 supports more than 1,200 servers, maintaining simple file servers to public facing applications to database back-ends.
“HPE Synergy provides end-to-end, fault tolerance and reliability. In the old days, we basically had one server connected over a single cable going back to a single switch. All of those components are now redundant. We’re faster and more resilient. Better speeds and feeds are excellent benefits.”

– Wayne Holland, operations team supervisor, Washington State Department of Transportation

It does so against a backdrop of budget shortfalls, and at a time when CCTV and IoT solutions offer the possibility of simplifying the job of remote monitoring. The organization is making greater demands on IT; the public will not tolerate downtime in services.

“Where possible we want to automate many of our processes, removing the risk of human-error,” says Wayne Holland, operations team supervisor, WSDOT. “We need to replace aging HPE equipment and we want to be better at supporting the business. Any investment in IT has to be as future-proofed as possible.”

**Solution**

**An evolving relationship**

WSDOT is a long-term customer of Hewlett Packard Enterprise servers and storage. Its current emphasis is ‘virtualization first, blade first’.

“We want to be faster to spin up services, and that includes shortening the procurement process,” says Holland.

WSDOT had been using c-Class BladeSystem. Holland says the natural evolution was to discuss HPE Synergy. “The next step for us was composable infrastructure,” he says. “HPE Synergy just made sense. The systems were familiar, they’re just more advanced.”

He says the evolutionary approach built confidence. “HPE Synergy appears to be new technology, but it’s really just the fourth generation of tried and tested technology. It’s not a brand-new product. In my mind, there was no risk.”

**Future-proofed investment**

The HPE solution is based on HPE Synergy with 21 compute modules. In addition, **HPE 3PAR** provides high-performance, fail tolerant enterprise class storage; **HPE OneView** software simplifies the management of the estate.
"The choice was an easy one," says Holland. "The HPE Synergy solution was simpler than our previous HPE c-class systems, less complex, easier to install, had fewer points of management and delivered better throughput. It is a platform we can leverage in the future."

**Benefit**

**Flawless installation**

If the choice of HPE Synergy was a simple one, there remained the challenge of getting the solution up and running swiftly. Holland brought in HPE Pointnext to help plan the installation, along with HPE Factory Express Services.

"HPE Factory Express was awesome," he says. "In the past, we'd buy all the pieces and parts, they'd be shipped to us, and we'd put them together. We'd have to figure out how to make things work. It was like building something with Lego."

While Holland admits there is a certain techie appeal to this, he recognizes it does not always best suit the business: "We could be slow and uncertain. With HPE Factory Express everything arrived pre-configured and ready to go. The HPE Pointnext team came onsite to check everything and walk us through the changes. It took hours versus weeks, which again speaks to efficiency. We had more time for training and knowledge transfer."

The HPE Pointnext support continues post-install with HPE Foundation Care giving WSDOT help when there is an issue. "Partnering with HPE Pointnext means we have less downtime. For instance, we had a bad stick of RAM. I called HPE and had a replacement delivered within two hours. Bottom line, we're more reliable and more available."

**Resiliency and speed**

The HPE Synergy solution answers WSDOT's concerns around speed and resiliency. It creates an infrastructure better able to support the business today, and in the future.

"HPE Synergy provides end-to-end, fault tolerance and reliability," says Holland. "In the old days, we basically had one server connected over a single cable going back to a single switch. All of those components are now redundant. We're faster and more resilient. Better speeds and feeds are excellent benefits."

Overall bandwidth, he continues, has risen 400%. "We're now able to rapidly deploy workloads with the HPE Synergy composable infrastructure," says Holland. "This is saving us days and weeks."
Customer at a glance

Hardware
• HPE Synergy
• HPE 3PAR

Software
• HPE OneView

HPE Pointnext services
• HPE Factory Express Services
• HPE Installation Services
• HPE Education Services for HPE OneView Administration and HPE Synergy Administration
• HPE Foundation Care

“With HPE Factory Express everything arrived pre-configured and ready to go. It took hours versus weeks. We had more time for training and knowledge transfer.”

– Wayne Holland, operations team supervisor, Washington State Department of Transportation

For an over-stretched team of 12 (a high server-to-tech ratio, in Holland’s words) this means less time managing infrastructure and more time to spend supporting new projects.

“The HPE OneView modern interface is cleaner, easier to navigate and lets us manage both HPE Synergy and HPE 3PAR, so our administrators can work faster and more efficiently,” he says.

Operational and reputational lift
Streamlined IT services have a direct impact on WSDOT’s operations and reputation.

“How the agency is seen by the public is very important to us,” says Holland. “We’re now better able to get services online that serve the public.”

For instance, this might mean online traffic cameras showing congestion, or real-time weather updates. Holland says the public’s appetite for more information, and the means to view this information from anywhere at any time, means WSDOT will inevitably develop new apps: “We can help the public make better travel choices.”

Learn more at hpe.com/Synergy

© Copyright 2017 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.