



GCI, the largest communications provider in Alaska, provides data, mobile, video, voice and managed services throughout the state. A subsidiary of Liberty Broadband Corporation, it serves consumer, business, government and carrier customers with Alaska's most advanced network.

#### Industry

Telecommunications

#### VMware footprint

- VMware® Cloud Foundation®
- VMware vDefend™ Distributed Firewall
- VMware Security Intelligence
- VMware Tanzu® Data Services

# GCI Closes the Digital Divide in Alaska with VMware and Tanzu Solutions

Alaska-based communications provider GCI provides consumers and businesses in the state with equitable access to broadband internet, mobile phone and TV services. As the company expanded its service offerings, it needed IT infrastructure to support greater efficiency and agility. GCI turned to solutions from Broadcom, deploying VMware Cloud Foundation and VMware Tanzu Data Services for a scalable, unified platform enabling standardization, simplification and automation for its private cloud and database-as-a-service offerings. The environment helps GCI developers deliver new capabilities faster and cost-effectively, driving value for the business.

### Connecting Alaska with high-speed digital services

Over the past 40 years, GCI has invested more than USD \$4 billion to deliver connectivity across Alaska, which covers a geographic area larger than California, Texas and Montana combined. The company serves urban areas such as Anchorage, Fairbanks and Juneau, as well as 240 rural communities, some with fewer than 100 residents.

GCI's fiber, microwave and satellite services help connect Alaska and the Arctic region. Spanning more than 10,000 miles, GCI's network enables everything from telemedicine to online education, transforming communications to improve the quality of life for Alaskans.

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Jeremy Mayfield, Senior Solutions Architect, GCI





#### Eliminating long provisioning lead times

As GCI worked to enhance services, it needed to modernize its IT infrastructure and organize people and processes to deliver value back to the company faster and more efficiently. In the past, siloed processes for compute, storage and database provisioning required request tickets, coordination across team members and long lead times.

"We wanted to equip our development teams to quickly develop code for solutions that our business teams need, without worrying about storage capacity, how many database nodes per cluster and other infrastructure requirements," says Roger Joys, VP, Enterprise Cloud Platform, GCI. The company sought a shift to a private cloud for a scalable, unified environment with a more favorable cost structure.

## Greater resiliency and automation in a private cloud

GCI chose to deploy VMware Cloud Foundation to provide a unified platform experience for development teams. "Instead of treating everything like small projects, we took a platform engineering services approach and started treating our services as a product," says Joys. "We built roadmaps and engaged our internal customers proactively to learn what they need to be effective, aligning ourselves to deliver more responsively."

The solution supports the IT team's strategy to automate where possible, standardize and simplify. "The simpler you make your solutions, the easier they are to scale. The more standard, the more you're able to automate," Joys says.

VMware Cloud Foundation supported the company as it scaled its footprint from 450 VMs in 2020 to 4,500 VMs today. When the company needed to deploy hundreds of virtual desktops for its call center, the IT team was able to respond quickly with an integrated solution secured by policy automations using VMware vDefend Distributed Firewall and VMware Security Intelligence.

"With Security Intelligence for vDefend, we were able to streamline connections from our network to host and destinations, so we can know what's going on within those sources and plan accordingly," says Talon Keitt, architect for cloud platform solutions, GCI.

"With VMware we've gained unified observability and resiliency with automation across our data centers in Anchorage and Seattle," says Jeremy Mayfield, senior solutions architect, GCI.

GCI selected VMware Tanzu Data Services on top of VMware Cloud Foundation to enable its internal database-as-a-service offerings. The platform allows the company to streamline provisioning and management of data resources for its developers.

In the past, GCI's development teams often built database servers individually and they became customized, tuned to a specific application. The company ended up with an array of bespoke database servers that were difficult to manage. "VMware Tanzu Data Services provides a central platform to make deployment and management more efficient," says Joys.

The integrated VMware environment allows GCI's applications to run close to its data stores. This mitigates latency for services that rely on real-time data—which are becoming increasingly important—such as for managing policies for customers or checking quality-of-service.





# Favorable cloud operating model economics

GCI's cost-effective private cloud helps the company control operating expenses to keep its services priced reasonably for customers.

"If our 4,500 VMs were running as unique, handcrafted instances of virtual machines, we would not be able to do automated patching," says Joys. "VMware Cloud Foundation has cut our patching cycles down from months to days. We've been able to keep our IT staffing levels flat while scaling our environment 10x."

The IT department has evolved from being seen purely as a cost center to more of an enabling partner for the business. "By using VMware Cloud Foundation, we were able to deploy our new data center in a matter of months," says Mayfield. "With automation we're deploying applications, services and monitoring capabilities faster. With Tanzu Data Services, we can now focus on the developer experience, providing new capabilities like on-demand data services to enable innovation and bring value to our internal and external customers."

#### Unlocking opportunities in private Al

Joys sees opportunity in leveraging GCI's cloud environment to develop private AI capabilities. "Private AI solves many of the concerns about security and data protection that exist with public AI offerings," he says.

Joys is enthusiastic about the complementary products and strategies that Broadcom has brought to VMware. "Broadcom's strategies align with our vision of what a private cloud needs to look like," says Joys. "VMware solutions have been important to our success enhancing connectivity offerings for Alaskan businesses and residents."

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