# LEADING U.S. TELCO KEEPS INSTANT MESSAGING INSTANT WITH ZADARA PUBLIC CLOUD STORAGE

The zStorage single tenant experience removes obstacles between telecommunications providers and public cloud.

For the past six years, one of the largest communications service providers (CSPs) in the United States has depended on Zadara to provide consistent storage infrastructure performance for its instant messaging services.

But at the start of this now-long-standing relationship, the customer made a request that most other cloud storage providers still cannot meet today. They asked: "Can you isolate our physical storage drives from the ones used by other storage tenants?"

What this telecommunications leader wanted was a single-tenant experience in a multi-tenant architecture. "They had asked many other cloud providers, but each one had said no," recalls Doug Jury, VP Partner Marketing, Zadara. "Our answer was an emphatic Yes."

"Where other cloud providers said no, Zadara's answer was an emphatic Yes."

#### **Doug Jury**

VP Partner Marketing, Zadara

In cloud storage, multi-tenancy generally means customers share their storage drives with many other users. Cloud providers typically create pools of hundreds or thousands of physical drives, and allocate resources from whichever drives have space. It is impossible to know exactly which drive your data is on. And drives could hold data owned by several customers. This creates challenges for CSPs, which Zadara is uniquely positioned to solve.

#### HIGHLIGHTS

- Single-tenant
   experience provides
   ability to locate and
   securely dispose of the
   customer's physical drives
- Dedicated resources
   ensure consistent storage
   performance to power
   low-latency CSP services
- Cloud-adjacent storage with AWS Direct Connect provides consistent lowlatency data access for AWS workloads
- Superior public cloud benefits including zero data transport fees and a single platform for every storage type and protocol

### SINGLE-TENANT MEANS CONTROL AND CONSISTENCY

Multi-tenancy is an absence of hardware isolation. Storage drives are used and re-used by many different customers.

This can mean a **data compliance issue** for some CSPs. "Our customer's policy is that when a drive fails, it needs to be shipped back to them and physically shredded — or reduced to dust, as they put it," explains Doug Jury, VP Partner Marketing, Zadara. "This is simply not possible with large multi-tenant pools, because the data is striped across many drives."

Multi-tenant environments are also prone to **unexpected performance dips**. "There are lots of noisy neighbors impacting your performance," explains Doug. "It's like driving on a busy freeway, where other cars are competing for space on the road and slowing you down."

"Multi-tenancy is like driving on a busy freeway, where other cars are competing for space on the road."

**Doug Jury** 

#### **BUILDING THE FUTURE OF TELECOMMUNICATIONS INFRASTRUCTURE**

Zadara also offers zCompute, an enterprise edge computing service for any workload. zCompute offers easy provisioning and management, AWS-compatible APIs, and the same simple, 100%-OpEx pricing as zStorage.

Some of the world's largest CPSs have partnered with Zadara to deliver fully-managed Infrastructure-as-a-Service (laaS) solutions from a single edge cloud provider. Together, we are developing infrastructure for the future of global communications, enabling CSPs to innovate new services and realize new revenue streams faster.

Learn more at https://www.zadara.com/solutions/zstorage/

#### DELIVERING THE MESSAGE ON TIME, EVERY TIME

Consistent performance is vital for CSPs because of the unique nature of their services. In almost any other industry, from finance to life sciences, infrastructure usually "talks" to other machinery – be it a robot surgeon or a trading platform. What makes telecommunications services different is how frequently human beings interact with them. We expect services like instant messaging and voicemail to be highly responsive and reliable. When a call fails to connect, or a message is not delivered on time, it can mean a broken date or a missed connection. For the provider, that can means lost customers.

"Telco providers need that consistency of performance to retain customers," says Doug. "Services like instant messaging are unique in how often they touch humans. And when delivery isn't instant, when we experience latency, customers are put off and might look for another provider."

This is why some CSPs remain hesitant about public cloud - even though the two are largely a natural fit. Major CSPs can benefit from the national coverage, rapid scalability, relatively high I/O performance, and robust disaster recovery that public cloud offers. OpEx-based financial models also enable CSPs to operate more flexibly and align costs with business needs. However, our CSP customer required the control of a single-tenant experience to make public cloud storage infrastructure a viable solution.

"When delivery isn't instant, when we experience latency, customers are put off and might look for another provider."

**Doug Jury** 



## PRIVATE STORAGE IN A PUBLIC CLOUD WORLD

The Zadara zStorage solution to these challenges is the Virtual Private Storage Array (VPSA), which provides a single-tenant experience in a multi-tenant architecture. The customer is allocated a dedicated set of hardware resources, including storage drives, storage controller processor cores, and memory.

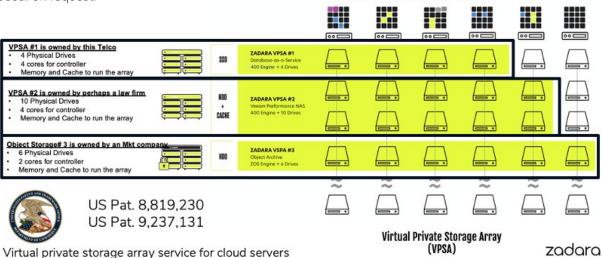
### A SINGLE-TENANT EXPERIENCE WITH DEDICATED RESOURCES

Zadara's CSP customer benefits from:

- Consistent, predictable performance with no "noisy neighbors", providing a foundation for instant messaging services its own end-users can depend on.
- Full control over physical drives, which Zadara locates and ships back to the customer for secure disposal on request.

zStorage also leverages AWS Direct Connect, a direct fiber-optic network link between Zadara data centers and AWS Regions, to provide ultra-low latency data access for the customer's AWS compute workloads. This cloud-adjacent offering enables CSPs to integrate AWS services with their Zadara zStorage and ZCompute infrastructure, with consistent high performance.

These benefits are in addition to public cloud advantages that go beyond those of other major providers. zStorage provides a single, unified storage platform for any data type, protocol, and location, simplifying management and development. As well as requiring no up-front investment and no long-term commitment, Zadara's 100% OpEx financial model also eliminates hidden data transport fees. Both ingress and egress are free.



MANUARIE CORES

ACTIVE CORES III STANDBY CORES

Zadara Virtual Private Storage Arrays (VPSAs) offer a single-tenant experience in a multi-tenant architecture.

Each customer has dedicated CPUs, cores, memory, drives, and SSD cache.

#### **IN SUMMARY**

Communications service providers and public cloud infrastructure are in many ways a great fit. For those CSPs that require the control and consistent performance of single-tenancy to ensure quality of service and meet data disposal needs. Zadara zStorage meets these requirements for a leading US-based CSP, providing dedicated resources with no competing noisy neighbors and the ability to locate and ship drives to the customer when required. In addition, the customer benefits from fast data access for AWS workloads, simplified management with the unified zStorage platform, and simplified pricing with no data transport fees.

Learn more at https://www.zadara.com/industry/telecommunications/

