

Case Study

Zadara

 zadara

Steve Healey

CTO at Pratum

✔ Review by a Real User

✔ Verified by PeerSpot

What is our primary use case?

We have a significant amount of data that is stored and retained. We have a rolling 365 days' worth of data. There are about 35,000 to 45,000 events per second that come into this solution and then get stored, long-term. That data also needs to be readily accessible, meaning that it can be searched on at any point in time. We have real-time security metrics that are run against that volume of data, so we need the data to not only be persistent and stored long-term, but also on fast storage arrays that can be readily accessed in a minimal amount of time. We've leveraged Zadara to house that storage as well as have it available to us so that we can query it very quickly.

How has it helped my organization?

One of the main benefits is being able to scale up as needed, on-demand, without having to invest in any sort of hardware costs. If we were to get a large client, a Fortune 500 or Fortune 100, that had a significant number of assets or data they were looking to monitor, being able to scale on-demand and increase the drives behind the scenes is something that we can do in a matter of minutes today. If we were to manage that ourselves, it would take time to spin up those drives or to make those purchases and then get them configured and onboarded. We can now do that with the click of a button. Zadara performs proactive monitoring and that includes any alerts or support tickets that are created within the system. For instance, if there is some sort of performance issue due to

increasing ingestion or increasing storage consumption, or there are any other issues behind the scenes, all that is monitored. It creates an automated ticket that also goes to their team and one of their customer support individuals will reach out. We, obviously, have our own security monitoring on top of that, as well as performance monitoring, but we certainly work closely with Zadara and their support team in responding to any events that are generated. But they have the ability to go in and help mitigate any of the items that do come up.

It always helps having additional monitoring capabilities or individuals, especially when their focus is primarily on the data storage and the volumes behind the scenes, to ensure that everything's healthy and functioning. It's always good to have multiple layers there, in terms of visibility. But one of the key benefits that we have received is being able to respond quicker. We can open up a support ticket and ask them to make a change on our behalf, or to add additional storage, or to increase speed somewhere. They leverage their team to perform those things on our behalf and that saves our team from having to do it. They've been able to reduce the management overhead for us because we can offload some of those responsibilities to them.

It's pretty hard to compare performance levels to when we previously managed things ourselves, since we have grown significantly within the last five years and especially year-over-year. But we've probably seen an increase in performance

of at least 100 to 200 percent. We've shifted workloads from SATAs all the way to SSDs. We've been able to go from a single GB to 10 GBs so performance-wise we're in a completely different arena. That being said, we've also doubled and tripled our event ingestion count. That has increased year-over-year with constant growth. So the performance demand has grown significantly. We're not only able to keep up with that but exceed that, year-over-year. We can scale resources, increase the network, decrease latency, increase the speed and the amount of CPUs and the amount of memory on those virtual private storage arrays, as well, as needed. We've also been able to leverage some of the private compute. They're scaling up their compute so that you can actually spin up servers and instances closer to your storage, all within Zadara. That has been a tremendous benefit to us in increasing performance and reducing latency. I've been impressed with all of those features, and that capability is fairly new here. Staying cutting edge and providing additional services is something that's been very helpful to us as well.

In terms of data center footprint, we were able to take everything from our security operations center that was on-premises, and all of our co-located, and move all that into Zadara's management. That was definitely one of our primary objectives. They've been able to take over all the overhead that goes along with managing the backend infrastructure. It has been tremendously helpful in that regard.

Compared to us trying to do this ourselves, we've probably seen about 50 to 60 percent in cost savings over the last five years.

What is most valuable?

One of the most valuable features is its integration with other cloud solutions. We have a presence within Amazon EC2 and we leverage compute instances in there. Being able to integrate with compute, both locally within Zadara, as well as with other cloud vendors such as Amazon, is very helpful, while also being able to maintain extremely low latency between those connections. We have leveraged 10-Gig direct connections between them to be able to hook up the storage element within Zadara with the cloud platforms such as Amazon EC2. That is one of the primary technical driving factors.

The other large one is the partnership and the managed service offering from Zadara. That means they have a vested interest and are able to understand any issues or problems that we have. They are there to help identify and work through them and come to solutions for us. We have a unique workload, so problems that we may have to identify and work through could be unique to us. Other customers that are just looking to manage a smaller amount of data would not ever identify or have to work through the kinds of things we do. Having a partner that is interested in helping to work through those issues, and make recommendations based on their expertise, is very valuable to us.

Zadara's dedicated cores and memory provide us with a single-tenant experience. We are multi-tenant in that we manage multiple organizations and customers within our environment. We send all of that data to that single-tenant management aspect within Zadara. We have a couple of different virtual, private storage arrays, a couple of them in high-availability. The I/O engine type we're leveraging is the 2400s.

We also have disaster recovery set up on the other side of the U.S. for replication and remote mirroring. Being able to manage that within the platform allows us to add additional storage ourselves, to change the configuration of the VPSA to scale up or scale down, and to make any changes to meet budgetary needs. It truly allows us to manage things from a performance standpoint as well. We can also rely upon Zadara, as a managed-services provider, to manage those requests on our behalf. In the event that we needed to submit a ticket and say, "Hey, can you add additional storage or volumes?" it's very helpful to have them leverage their time and expertise to perform that on our behalf.

It is also very important that Zadara provides drive options such as SSD, NL-SAS, and SSD cache, for our workload in particular. We require our data to not only be accessible, but to be fast. Typically, most stored data that is hotter or more active is pushed onto faster storage, something like flash cache. The flash cache we began with during our first year with Zadara worked pretty well initially. But our workload being a little

unique, after that, the volume of data exceeded the kind of logic that can be used in that type of cache. It just looks at what data is most frequently accessed. Usually the "first in" is on that hot flash cache, and our workload was a little bit more random than that, so we weren't getting as much of the benefit from that flash cache.

The fact that Zadara provides us with the ability to actually add a hybrid of both SSDs and SATA allows us to specifically designate what volumes and what data should be on those faster drives, while still taking into account budget constraints. That way, we can manage that hybrid and reduce the performance on some of the drives that are housing data that is really being stored long-term and not accessed. Having that hybrid capability has tremendously helped with the flexibility to manage our needs from a performance standpoint as well as a cost perspective.

As far as I know, they also have solid support for the major cloud vendors out there, in addition to some others that I hadn't heard of. But they certainly support Amazon EC2 and Google and Rackspace, among others. Those integrations are very important. Most organizations have some sort of a cloud presence today, whether they're hosting certain servers or compute instances or some other workload out in the cloud. Being able to integrate with the cloud and obtain data and store data, especially with all these next-

generation threats and things like ransomware out there, is important. Having backups and storage locations that you can push data to, offsite, or integrate with, is definitely key.

What needs improvement?

I would like to see them be a little bit more proactive in terms of the patches and updates that are available. I would like to see more disclosure and information around what fixes or what enhancements are available within a patch, and help in coordinating and scheduling that. Right now, it's driven more by the customer in reaching out via a support ticket. It would help if they were more proactive in identifying what changes are available.

For how long have I used the solution?

We've been using Zadara Storage Cloud for about five years.

What do I think about the stability of the solution?

Overall, I'm satisfied with the stability. We have high-availability set up. We have multiple VPSAs that not only help distribute the load but, in the event that there's some sort of failover, the reaction has been just about instantaneous. There has been no event loss as a result of that. Everything has real-time monitoring and

automatic failover occurs. I've been extremely satisfied with the failover capabilities within it, as well as being able to replicate storage volumes to different VPSAs or to move things around as necessary.

How are customer service and technical support?

Their support is excellent. We've had a terrific experience in terms of the speed at which they've been able to respond to inquiries from us, as well as their ability to work with us and identify any recommendations for issues or performance concerns that have come up. They've even been able to escalate to the engineering teams to provide recommendations. They've been very involved with us and very committed to ensuring that we would be, and have been, successful with them.

They've been able to check all the boxes that we've needed. We've been extremely satisfied with their customer support and involvement.

Which solution did I use previously and why did I switch?

This was a new implementation. We did have some Synology NAS's that we were running many years ago, where we were managing our own volumes. We were managing our own disks and the SSD cache and the SATA or the SAS drives that were connected to them. Being able

to scale on demand, and being able to get out of our security operation center, and not having to purchase hardware upfront, has drastically reduced the overhead that was required to maintain our information. We have also gained additional capabilities in terms of speed of replicating that information. This has been a tremendous help.

How was the initial setup?

The initial setup process was straightforward. They jump on a phone call or a remote meeting with you to help walk you through and configure the environment. That process is about as simplified as you can get. Certainly, additional documentation is always helpful and they have documentation available. The support team is definitely available to answer any questions, even if they have to do with integrating with third-party cloud providers and setting up and configuring direct connects with Amazon EC2. They assisted us with recommendations on that to help ensure that all of those tunnels were built correctly.

We got things connected within a single day. It was about an hour of prep and another hour or hour and a half in a meeting to get it configured and hooked up. At that point, the data was spun up, we had access to it, and we began tuning configurations. It was a very quick process, probably an hour or two in total.

Our implementation was based on our core business requirements for setting up the access

that our systems needed. Those were the primary driving factors. Zadara assisted in provisioning the environment and in configuring the connectivity. At that point, we were able to leverage our workload as needed to be able to access and store that information.

We have three people who work with Zadara, including me. One is a security engineer who has primarily been customizing some workloads on our side to be able to increase efficiency. He has worked on accessing some of those management features via an API. Our SOC manager is typically the one who would assist me in ensuring that things are configured properly, if we need to add storage or to monitor storage or increase the size of the VPSAs.

Having Zadara as that managed service provider has helped us in not having to retain additional staffing to help manage this. It's very easy and efficient for us to reach out with a support ticket to Zadara to ask them to make some type of change on our behalf. We have that down to between one to two people, with our SOC manager driving the majority of changes and making those requests to Zadara.

Which other solutions did I evaluate?

We looked at other providers as well. I was impressed with Zadara from day one. I still remember to this day, filling out their online form when seeking additional information. We had a couple of specific business requirements at the

time, around our workload requirements and we needed a single NFS mount point and a single volume that could retain a significant amount of data, but also grow substantially over the years. We had performance requirements for that. We put that request into their online form and my phone rang within about seven minutes of hitting that submit button.

Since then, the experience has been the same throughout, which is pretty hard when they had set the bar that high with that quick of a response. We've had similar experiences with them when we've opened support tickets, or we've had some sort of a technical question or some sort of urgent requests. We've been able to get a hold of them every single time. Their escalation points are available to us as well, but their support team and engineers are very efficient, very quick, and more than happy to provide their expertise and recommendations to us whenever necessary.

It's been quite some time since we went through the evaluation process, but the others were different NFS providers. We were looking for ones that integrated with Amazon. One might be called SoftNAS and there was another vendor out there that was at the top of the list when you searched for "NFS and Amazon". We also looked at how to manage things directly within Amazon itself. One of the factors that ruled out several providers was cost. They were way too expensive for the volume of data that we needed and the speed at which we needed to be able to manage it. There aren't a lot of

providers that can do that.

What other advice do I have?

Be upfront with all of the specific requirements and needs that you're looking for, and really think about the future. Think about what growth is going to look like and what performance is going to look like; not just right now, but in a year, three years, five years, and 10 years from now. Zadara has a significant number of capabilities as well as services.

Knowing your strategy when you build that environment, and knowing what that strategy could be for increasing the size of not only the volumes but also the virtual private storage arrays—knowing how easy that is—was something that was very beneficial for us. We knew that our workload was going to grow substantially every year, and even every month. Having that plan was truly helpful for us, not only because we knew what our storage requirements were going to be, but because we knew how we would be able to satisfy them with Zadara. How would we upgrade those VPSAs? What does that upgrade process look like? In our experience, we have been able to upgrade those very efficiently. And in almost all cases it resulted in no downtime. We were able to do most of those migrations and transitions behind the scenes. Knowing what those capabilities are, how that would work, and being able to have those conversations upfront, reduced a significant amount of the stress that would

typically be associated with trying to manage the amount of data that we do.

They have support for multiple protocols. We primarily leverage NFS support. We've been very happy with the level of support with that. There are multiple versions that we've leveraged in testing to see what additional performance we can gain from going from NFS version 3 to 4 to 4.1. Zadara has been on the cutting edge with the availability of those additional versions and support for them. They offer CIFS as well as the iSCSI support but we typically don't leverage that.

The on-premises configuration is less important to us. One of our main, driving factors was getting away from on-premises equipment and the management and overhead costs associated with having to purchase that type of hardware. One of the benefits of working with the Zadara is that they handle all of those upfront costs and that they have the hardware and can scale on demand. Similarly we have typically moved away from co-lo facilities as well. Leveraging the disaster recovery by having multiple locations hosted by Zadara was a much greater driving factor for us.

Read 9 reviews of Zadara

[See All Reviews](#)