

AT•A•GLANCE

> CLIENT SpyFu

> LOCATION Scottsdale, Arizona, United States

> BUSINESS FOCUS

Web app development for SEO and PPC competitive research and AI-powered marketing analytics.

> ISSUE

- High costs of AWS cloud services.
- Suboptimal performance and high complexity of public cloud services.
- Difficulties finding a cost-effective environment for large-scale data processing.
- AWS's lack of support for NVMe storage.
- High overhead of running clusters inside containerized environments.

> SOLUTION

phoenixNAP's Bare Metal Cloud

> RESULT

- On-demand access to cost-effective, highperformance IT infrastructure.
- Improved data processing speed by running clusters on bare metal.
- Increased flexibility and ease of use via cloud-init scripts and VM-like provisioning.
- Simple access to local NVMe storage and scale-out storage options.
- Optimized performance, flexibility, and cloud costs.



Case Study

Bare Metal Cloud Helps SpyFu Eliminate AI Performance Bottlenecks and Cut Cloud Costs by 50%

Creator of popular AI-powered marketing revenue engine boosts performance and cuts cloud bills in half by moving mission-critical workloads to phoenixNAP's API-driven bare metal.

SpyFu is a mid-sized company based in Scottsdale. Their flagship product, SpyFu, is a web application focusing on competitive and keyword research for SEO and PPC, providing smaller businesses with enterprise-grade marketing resources. Their new tool, RivalFlow, leverages AI to help content marketers improve existing content, rank higher, and bring in more traffic to their websites. They strive to empower smaller companies and individuals, building tools that can help anyone succeed in the business.



"We try to be flexible, honest, and to embody the golden ideals of what a small company should be - dedicated to the customers. phoenixNAP's Bare Metal Cloud helped us take this a step further and bring AI into our tools to elevate the quality of services we offer to our clients."

Mike Roberts, Founder, SpyFu

CHALLENGES

SpyFu's applications and workloads rely on the entirety of the internet, combing through billions of keywords and search results to find the information their clients require. They initially used hyperscale cloud provider services like AWS OpenSearch to obtain the resources needed to accomplish their business goals. However, these services quickly became cost-prohibitive and difficult to work with. This left them struggling to find cost-effective alternatives capable of performing large-scale data analytics and processing that fuels their projects.

With the launch of RivalFlow fast approaching, SpyFu needed a flexible, opex-modeled IT infrastructure solution that would provide the raw horsepower capable of driving their Al-powered initiatives.

Noting that the price of high-performance, all-flash storage was becoming more affordable, they were looking for an NVMe-based storage solution to accelerate their workloads. However, AWS did not support it. As a result, the SpyFu team moved to large ElasticSearch clusters and started scouting for alternative cloud service providers that could cater to their compute, network, and storage needs.

phoenixNAP's Bare Metal Cloud turned out to be the perfect fit for SpyFu. The platform offered them powerful, API-driven bare metal featuring highcapacity local NVMe storage and easy access to allflash Network File Storage (NFS). Using Bare Metal Cloud, SpyFu gained the ability to deploy workloadoptimized dedicated servers in minutes.



"Obviously, you can do a lot if you have an unlimited budget, but that can only be profitable to huge corporations, which we are not. We moved to using large ElasticSearch clusters for data processing and decided to try to roll over to an NFS storage solution, which AWS did not support. Looking around, we found phoenixNAP's Bare Metal Cloud. It ended up being extremely flexible and easy to work with. Also, it provided a unique opportunity to launch and configure high-performance bare metal machines instead of putting up with the increased overhead of running our clusters inside containerized environments".

Dennett Ingram, Senior Architect, SpyFu

SOLUTION

phoenixNAP's Bare Metal Cloud provided SpyFu with access to powerful dedicated servers that are provisioned in minutes and managed as code. These capabilities simplified their migration process, while the raw power of bare metal helped SpyFu optimize performance for their data-intensive workloads.



The hourly billing option gave SpyFu the liberty to test Bare Metal Cloud and make sure it was the right fit for their workloads. Once the platform met and exceeded their expectations, they were able to further optimize their IT spend by opting for a longterm reservation.

SpyFu chose **s3.c3.medium** server instances powered by the latest and fastest Intel[®] Core[™] i9 14900K processors. Boasting 24 cores and 32 threads, these CPUs reach 6.0 GHz Max Turbo frequency with 8 Performance cores. Paired with DDR5 RAM and all-NVMe storage on a 20 Gbps DDoS-protected network, the infrastructure helped them process even the most demanding computational tasks with maximum efficiency.

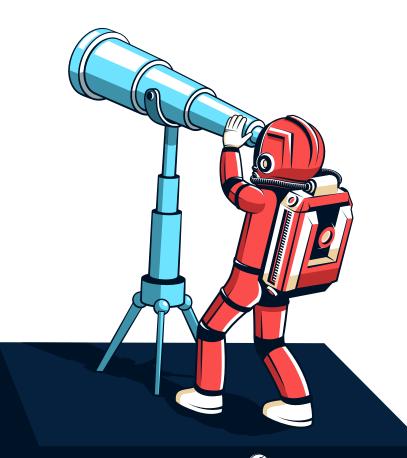
They combined Bare Metal Cloud network fabric with their own infrastructure hosted at phoenixNAP's flagship data center facility in Phoenix. Doing so enabled them to effectively network any number of physical machines to a dedicated backend. Through better performance, flexibility, and cost-effectiveness, SpyFu built a unique infrastructure that ensured optimal user experience for their clients and dramatically lowered their IT costs.

"Migrating to phoenixNAP's Bare Metal Cloud yielded a 50% monthly cloud cost reduction compared to our previous home-rolled solution in AWS. And our in-house solution was already 40% cheaper than the AWS-managed OpenSearch! We were able to leverage consistent speeds of over 20 Gbps between Bare Metal Cloud and multiple dedicated storage servers simultaneously, allowing us to separate the processing and data storage aspects of our infrastructure to optimize both speed and costs." **BENEFITS**

Bare Metal Cloud granted SpyFu access to over 50 pre-configured dedicated servers. Through transparent configurations and pricing, they were able to find the resources they required at a billing model suitable to them and consume cutting-edge servers as a service.

As a versatile laaS solution, the platform provided the SpyFu team with the freedom to test various deployment scenarios and find the one offering the highest cost-to-performance ratio. They were able to compare the performance of the local NVMe storage against the platform's scale-out Network File Storage option and their own dedicated cabinet of storage servers.

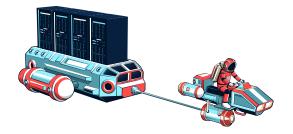
By finding the right combination for their particular use case, SpyFu managed to cut their cloud spend in half while improving performance and leaving plenty of room for future growth.



Ryan McLaughlin, Senior DBA, SpyFu Key Bare Metal Cloud Benefits for SpyFu include:

- Better Cost-to-Performance Ratio 50% savings over previously used AWS services and higher performance of their clusters on bare metal.
- Automated Provisioning Deployment of preconfigured dedicated servers in 3 to 10 minutes.
- **Easier Scalability** Ensured high availability and performance by globally scaling bare metal servers with a single POST request.
- Access to Scale-Out Storage Easy deployment of terabytes of all-NVMe Network File Storage and S3-compatible Object Storage.
- Next-Gen Technologies Ability to consume future-ready CPU, RAM, storage, and network technologies on an opex model.
- Flexible Billing Models Additional cost optimization with around 40% discount for longterm server reservations.
- Reduced Infrastructure Overhead Provisioning via API, CLI, WebUI, or IaC modules allow for automated resource management at scale.
- More Headroom for Growth Reliable performance and freedom to burst resources based on fluctuating requirements.

Choosing Bare Metal Cloud as an alternative to popular hyperscale cloud service providers helped SpyFu overcome its IT challenges and improve performance while maximizing ROI. The raw performance of bare metal powered by blazingfast Intel CPUs allowed them to break through AI performance bottlenecks. With the possibility to choose from multiple easy-to-deploy storage options, SpyFu managed to find the most effective storage solution and seamlessly interconnect it with its hosted infrastructure. Finally, relying on phoenixNAP's broad product portfolio, SpyFu can continue to grow and build out, leveraging new hardware as it becomes available. This ensures SpyFu stays true to its ideals and continues to provide outstanding products to anyone not just big corporations.



"The combination of bare metal machines configurable via cloud-init scripts and launched like VMs gave us an easy way to streamline the provisioning of our AI-focused infrastructure. With unique flexibility, freedom, and support, phoenixNAP empowered us to build a better-performing, futureproof IT solution at a fraction of the price of popular public cloud services."

Dave Fiske, Sr. Founding Partner, SpyFu

ABOUT phoenixNAP

phoenixNAP is a global IT services provider offering progressive Infrastructure-as-a-Service solutions from locations worldwide. Our bare metal server, cloud, hardware leasing and colocation options are built to meet the evolving technology demands businesses require without sacrificing performance. Scalable OpEx solutions to support with the systems and staff to assist; phoenixNAP global IT services.



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