



CASE STUDY



OVFRVIFW AND CHALLENGE

Sigma Designs is a leader in the system-on-chip (SoC) market, providing products that power the world's leading set-top boxes, smart TVs and Internet of Things (IoT) devices. Like many semiconductor businesses, Sigma Designs competes in a world of shortening design cycles. Loss of development productivity due to infrastructure downtime or delays in provisioning computational resources can adversely impact the bottom-line.

Sigma Designs IT organization's objective was to standardize and consolidate DevOps practices to both deliver high performance for development teams and drive consistent, rapid and flexible provisioning of new environments. Server sprawl was ramping up operational cost and infrequent backup practices put the organization at risk of downtime and productivity loss. Sigma was looking for a single solution that would simplify and centralize control of its operations while increasing IT elasticity and performance.

SOLUTION

Sigma evaluated different options from traditional network storage to appliance-based systems, however the cost/performance numbers were not aligning. Bringing in systems that would require training of staff on new management environments was not appealing. Sigma evaluated Springpath Data Platform while it was in the Beta stage.

Springpath's software based approach was extremely appealing. The data platform, based on HALO (Hardware Agnostic Log-structured Objects) architecture, allowed Sigma Designs to deploy a single hyper-converged infrastructure solution that turns compute and storage into a single pool of resources and scales performance linearly.

Sigma Design's IT group first did a POC of the Springpath Data Platform performance by running IOMETER tests and discovered outstanding performance that significantly outperformed their legacy storage systems. The IT team then started providing VMs using the Springpath Platform. Users were quickly impressed with performance since compile speeds from virtual resources powered by Springpath now surpassed their fastest servers.

USE CASE

Development and Test

INDUSTRY

Hi-Tech - Semiconductor

CHALLENGES

- Long DevOps provisioning time
- Poor storage performance
- Lack of backups

SOLUTION

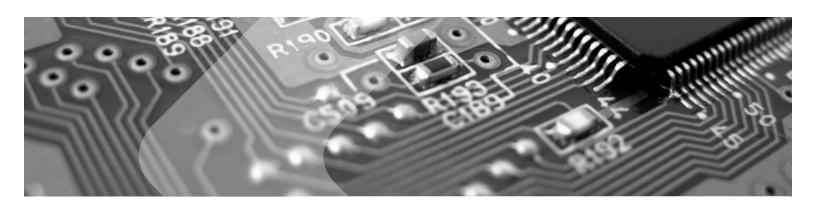
- Two 4-node cluster with 256GB memory and 4TB HDD per node
- Springpath Data Platform

BENEFITS

- Instant VM provisioning and cloning
- Daily snapshots for data protection
- Consistent high storage performance
- Dramatic improvement in engineering productivity

DevOps PROVISIONING TIME





New Service Levels For Users

At Sigma Designs, developer groups look to rapidly compile and build multiple OS instances for development and testing purposes. The IT team traditionally provisioned in-office user dedicated servers to meet these demanding performance requirements. This approach resulted in server sprawl that was unmanageable and prone to failures.

The Springpath Data Platform not only brought costs under control, but also enabled users to experience new service levels. Springpath HALO was built for the ground-up to provide advanced data services without performance impact. As a result, Sigma Design is now able to use Springpath ReadyClones to generate space efficient copies instantly. New workloads and test environments are now provisioned within minutes instead of multiple days, dramatically streamlining engineering productivity.

With Springpath's Data Platform we are able to rapidly provision high-performance virtual machines that meet the demanding needs of our users and significantly accelerate time-to-market for our products.

 Scott Anderson, Director of IT Infrastructure and Operations at Sigma Designs we love that with Springpath we manage worry-free infrastructure. The platform makes sure resources are always available and Springpath's cloud monitoring will help us watch for local failures

- Scott Anderson

Proactive, Always On Infrastructure

Sigma Designs was looking to eliminate downtime and minimize the amount of effort put into solving issues with individual servers. Springpath Data Platform is always-on, self-healing, platform that distributes data across physical resources and automatically rebalances the load in case of a hardware failure to ensure ongoing operations. The HALO platform also monitors all infrastructure resources for performance and hardware issues, so Sigma Design IT team is alerted when hardware fails. The team can then replace any component non-disruptively so that developer productivity isn't impacted.

From data protection perspective, Sigma Designs wasn't regularly backing up engineering stations' data leaving the environment vulnerable. Since Springpath enables unlimited space efficient snapshots, Sigma Designs now snaps a copy daily without impacting workload performance.

Lower TCO and OPEX

One of the key reasons Sigma Designs was excited to try Springpath is the dramatic operational improvement in deploying, maintaining and scaling infrastructure. Sigma Designs IT team was able to immediately start using the platform given the seamless integration with the familiar vCenter interface. With no legacy storage constructs such as LUNs and Volumes, provisioning VMs is done instantly, with Springpath platform taking care of capacity and compute resource allocations, vastly streamlining internal IT processes for spinning up new VMs for developers.

Sigma Designs continues to ramp-up the number of users on the platform and is currently planning to install incremental nodes. Springpath truly allows Sigma Designs to scale as they grow and achieve optimal TCO, since the platform allows for independent scaling of compute, performance or capacity, based on changing business needs in the environment.

Provisioning is fast and simple because a lot of the work happens behind the scenes and we don't have to think about resource allocation and management.

Everything is done by Springpath so we can focus on deploying VMs and running applications.

 Edmund Lee, Virtualization IT Manager/ Administrator at Sigma Designs