

CASE STUDY

DEVOPS AND CONTAINERS



Make Better Decisions, Faster.

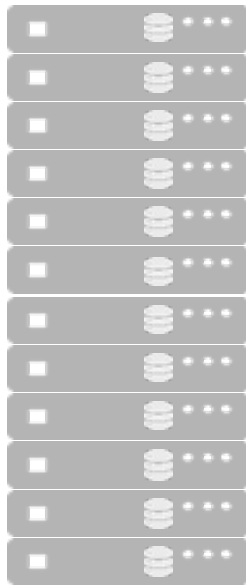
INTRODUCTION

Containers bring a range of capabilities to DevOps teams. Given the charter of rapid deployment, agile redeployment and need for new applications like NoSQL databases, a leading provider of consumer online services was unable to react quickly using traditional Rack-Scale Design with NVMe SSDs inside of their servers.

CHALLENGE

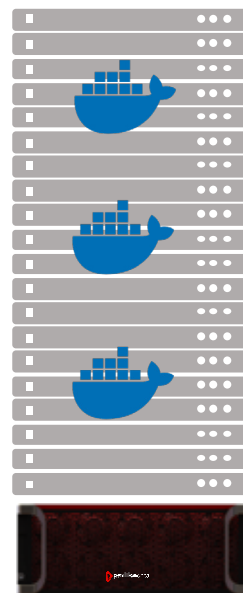
Server-side SSDs delivered great performance and low latency, but after clusters were deployed for various workloads, the DevOps team could not quickly repurpose the systems to achieve their charter of agility for the organization. With a requirement to “try” modern databases across various teams, DevOps was faced with a mounting crisis of cost containment. Suddenly, the idea of offering a private cloud with Containers-As-A-Service to the company became the best approach

AS BUILT (TRADITIONAL DAS)



- Minimal agility for reuse
- Under-utilized storage assets
- Over-provisioning required for capacity planning

DENSE CONTAINER CLUSTER



- Standard's-based NVMe-Over-Fabrics
- Dramatic improvement in time-to-deployment
- Thin provisioning and optimal storage utilization

COMPOSED BY PAVILION

This DevOps team became heroes. Time-to-deployment for new applications was reduced by 50%. Improvements in storage utilization were immediately obvious as Pavilion's GUI allowed easy storage allocation, re-allocation and sizing. By implementing Thin Provisioning, the team could assure user groups that capacity was available in an “elastic” fashion previously not possible with DAS. To the surprise of the DevOps team, performance verses DAS did not change.

SUMMARY

Pavilion brought agility back to a DevOps team that was becoming a target of the CFO due to a constant need to procure more hardware. Now the group can add/change/remove clusters and applications as needed while continuing the reap the performance benefits of Rack-Scale Flash.