Market-Leading Technology Business Management Provider Optimizes SaaS Platform with Virtuozzo

Apptio's solutions enable organizations across the globe to make business-critical decisions with data driven intelligence. Our business has grown rapidly, and now includes 60 percent of Fortune 100 companies. Virtuozzo provided the most efficient solution to support this growth. Virtuozzo enables us to successfully optimize our SaaS platform by meeting our needs for performance, scalability and data security, all of which are critical to the success of our customers and our own business.

— Wayne Gallegos, Senior Manager, Operations

About Apptio:

Based in Bellevue, WA, with offices throughout the world, Apptio fuels digital business transformation. Technology leaders use Apptio's machine learning to analyze and plan their technology spend so they can invest in products that increase the speed of business and deliver innovation. With Apptio, they translate raw costs, utilization, and billing data into business-centric views that help their organization optimize spending, plan strategically, and drive digital strategy that funds growth of the business. Technology leaders can gather instant recommendations that result in 30% saving on cloud services.

RESOURCE CONGESTION

ISOLATION & OPTIMIZATION

Executive Summary

Apptio optimizes its software-as-a-service (SaaS) platform with Virtuozzo's container and software-defined storage solutions, delivering powerful IT asset and cost-savings analysis to its customers worldwide.

Apptio, Inc. is a leading provider of Software-as-a-Service (SaaS) solutions that help organizations analyze, plan, and optimize technology investments. During a period of rapid growth, Apptio needed a new software solution to ensure its platform could keep up with customer demand. By leveraging Virtuozzo's proven and secure OS container technology and software-defined storage solution, Apptio's SaaS platform now delivers maximum performance while minimizing costs.
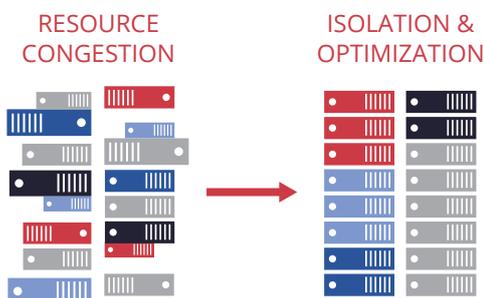
Challenge

Improve business critical application performance and capacity.

Apptio's application suite includes large, in-memory dataset calculations, which result in multiple tiers of cache in memory and are accessed from high performance storage. As Apptio's business grew, its team needed a way to stay on top of that growth by maximizing server performance, while securely isolating customer workloads. To solve the problem, Apptio evaluated commercial virtualization solutions and open source hypervisor solutions alongside Virtuozzo.
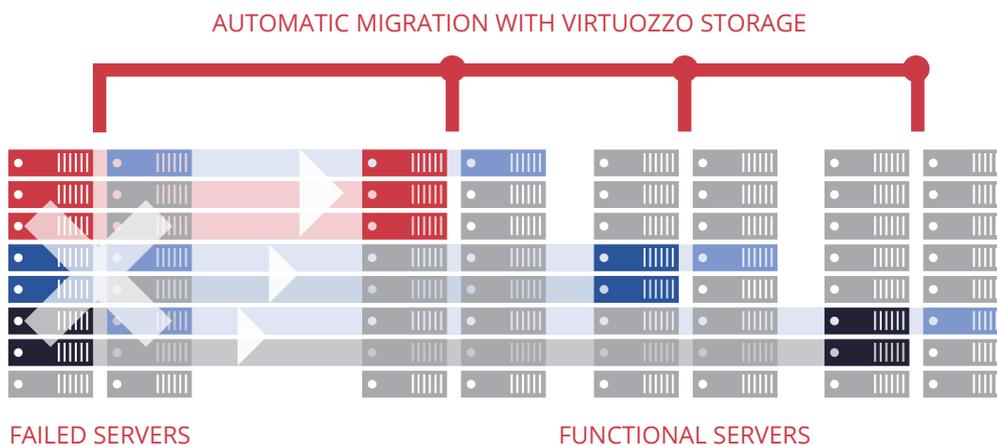
Solution

Virtuozzo Containers and Storage

Virtuozzo offered the level of performance that Apptio's business required. During phase I, Apptio deployed Virtuozzo across the global Apptio server fleet. Virtuozzo provided a secure, high performing virtualization platform with containers that could securely isolate workloads, while increasing server density and performance.

With ever-increasing storage demands, a Phase II deployment of Virtuozzo Storage allowed Apptio to untether from the storage constraints of local server storage without the significant overhead and investment in a costly and difficult to support Storage Area Network (SAN). Another advantage of Virtuozzo Storage included a dramatic reduction in the time needed to migrate containers with very large storage footprints between servers. The addition of Virtuozzo cluster technologies included with Virtuozzo Storage also automated container failover in the event of server hardware failure.

Apptio also leveraged several advanced features found in Virtuozzo Storage which are not commonly found on distributed storage platforms sold by competitors or availible in the Open Source community. These include support for multiple tiers of disk pools within the cluster, advanced and elegant automation to collocate data with compute that uses it most often, and automatically moving data replicas around to optimize disk performance and remove performance hot spots.

AUTOMATIC MIGRATION WITH VIRTUOZZO STORAGE

FAILED SERVERS   FUNCTIONAL SERVERS

Results

Optimizing Infrastructure to Fuel Rapid Business Growth

Apptio first deployed Virtuozzo Storage in 2015, and within one year the company had deployed 15 clusters supporting thousands of containers and several petabytes of storage across three continents.

Now, Apptio uses Virtuozzo to run its custom business intelligence application, customer databases, and front-end interfaces. Apptio's business continues to grow, and with Virtuozzo supporting its business-critical applications, the company is well-positioned to meet the needs of its growing customer base, now and in the future.

High-performance and high-availability infrastructure drive Apptio's business-critical applications.

Data encryption and built-in replication ensures Apptio's data is always secure.

Scalability on-demand efficiently supports Apptio's growing business.

FOR MORE INFORMATION
Visit Virtuozzo:
www.virtuozzo.com

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April 2020