

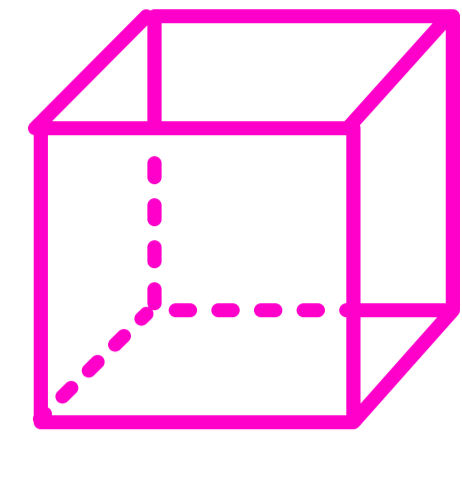


More cloud. Less cost.

Prior to NetApp acquiring Spot.io, two of its IT teams had adopted Spot in their operations: Product Engineering for Cloud Volumes ONTAP test automation and NetApp IT for corporate business applications. Check out the results below.

The Product Engineering Use Case

THE CHALLENGE



COMMON TEST LAB

The Common Test Lab is a shared resource that provides test infrastructure for NetApp quality assurance and product development teams. CTL's mission is to provide a common framework and workflow through shared infrastructure to enable efficient testing of NetApp technology, including Cloud Volumes ONTAP Automation.

USERS

- Product Ops
- System Test
- QA

85

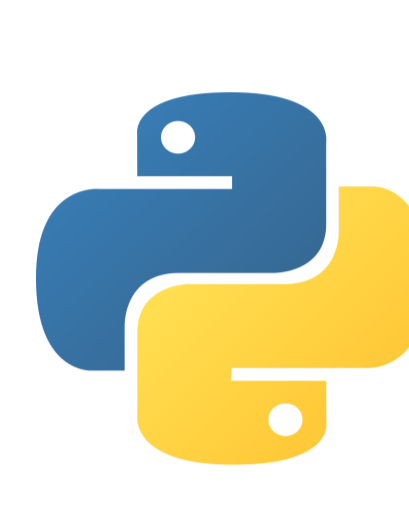
"How can we reduce cloud spend for 85 compute instances on average daily without reducing efficiency?"

SPOT INTEGRATION

A SIMPLE CHANGE

The Common Test Lab was able to integrate Spot into its robust legacy testing environment without a redesign or rewrite.

By redirecting AWS CloudFormation native calls with Spot REST APIs, the CTL team was able to turn simple changes into a large impact in compute savings.



Cloud Volumes ONTAP

Perl

Python

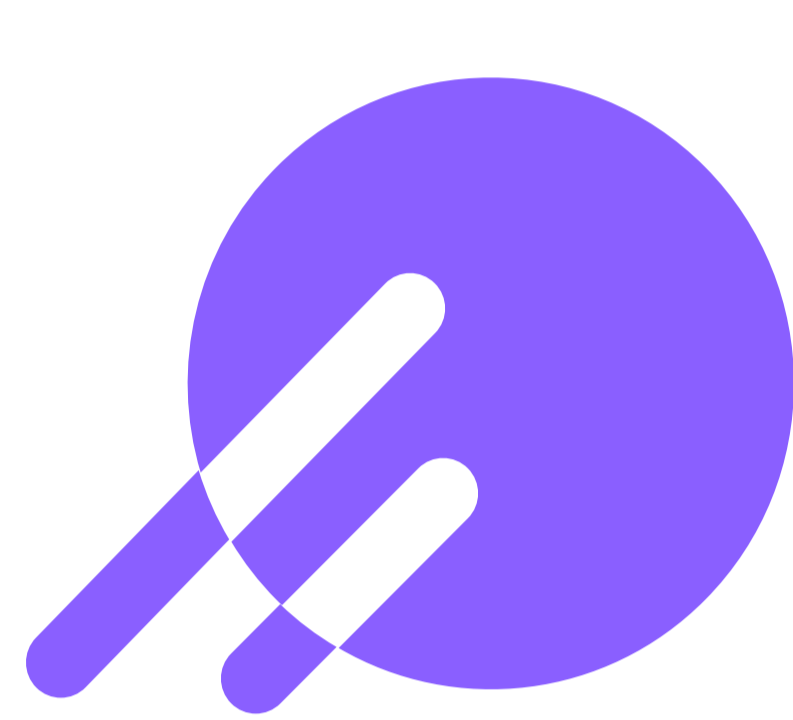


RHEL 7+

Cloud-native CLI invocations

SDK

NO RETOOLING REQUIRED

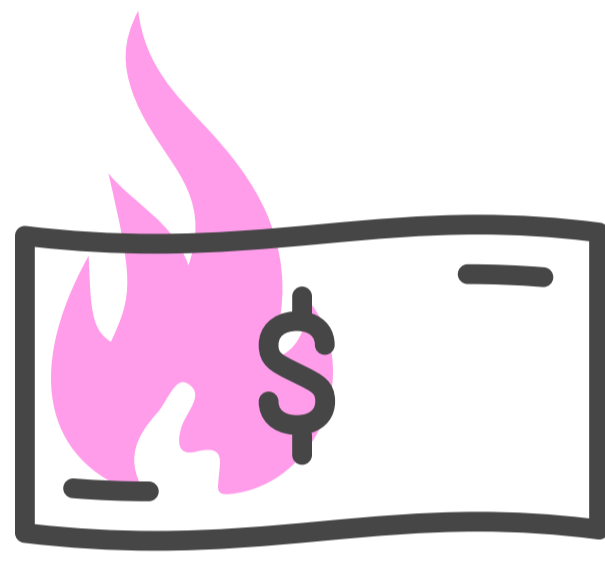


They found [Spot Elastigroup](#) ideal for configurations requiring less than 24-hour execution and currently support AWS Cloud Volumes ONTAP with Google Cloud Platforms within scope.

THE RESULTS

11 compute instances running Spot

1,495 Spot hours



\$128.71 potential cost per instance

\$78.40 cost saved per instance

\$50.31 actual cost per instance

We expect to save around **60%** for all workflows successfully migrated to Spot, helping us save money while maintaining the quality of our testing.

- MEKKA WILLIAMS, PRINCIPAL ENGINEER, NETAPP

The NetApp IT Use Case

THE IT CHALLENGE

Public cloud is great, but often more expensive than IT data centers



REASONS FOR PUBLIC CLOUD

- Develop and deploy business applications without hardware constraints
- Service business apps with on-demand cloud services
- Downsize data center footprint

BARRIERS TO PUBLIC CLOUD

- Public cloud infrastructure is expensive compared to capitalized data centers
- Unacceptable risk of services being terminated with a 2-minute notification with Amazon EC2 Spot instances
- Interruptions to compute services not viable for production apps running 24/7

PoC EVALUATION

NetApp IT conducted a proof of concept evaluation for Amazon EC2 Spot computing (VM instances) using Spot.io based on three important criteria



1. Identify cost savings, requirement for data center displacement



2. Minimal or no interruption of service, requirement for 24/7 production workloads



3. Minimal or no user involvement, requirement for operational efficiency and staffing

PoC RESULTS

RESULTS

- Five applications moved to Spot, realized 49-75% drop in costs compared to On-Demand
- Noticed a few pending interruptions, but experienced no disruptions
- No disruptions resulted in no user involvement

NEXT STEPS

- Migrate container worker nodes in CloudOne DevOps platform by mid-August 2020
- Migrating 38 apps over next 6 months
- Spot.io will be a key enabler of our 3-year DC strategy (moving one traditional DC and DR to public cloud)
- Active IQ team working with us to consider moving to Spot.io

49-75%
COST SAVINGS

Spot makes public cloud cost possible for enterprises like ours.

-MICHAEL MORRIS, SR. DIRECTOR, NETAPP IT

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