



How Zalando Reliably Reduces Costs with Spot Instances and Elastigroup

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Amit Bar Oz

Solutions Architect

Spotinst



Luis Mineiro

Site Reliability Engineer

Zalando



Spotinst Elastigroup

Cluster Orchestration Software for any Cloud

The market leader in **Compute Orchestration**

Reliably leverages **AWS EC2 Spot Instances** for production and mission-critical applications



elastigroup

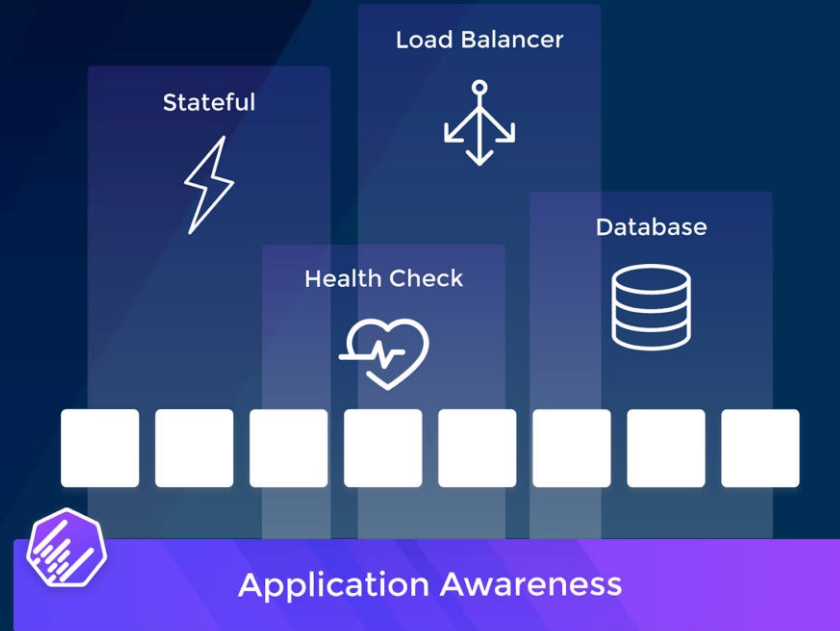
Application Awareness

Smart Provisioning



Spotinst Elastigroup | Application Awareness

- Optimizes performance and cost in real-time
- Satisfying business constraints & SLA
 - High Availability
 - Predictive Auto Scaling
 - Auto Healing
 - Rolling Updates





Spotinst Elastigroup | Smart Provisioning

Learn, determine & enforce optimal **Instance Size, Type & Lifecycle** in real time



Smart Provisioning



Terraform



Anisble



Cloudformation

Site Reliability @ Zalando

- SRE drives operational excellence empowering developers to focus on the things that matter
- **Efficiency** is an important dimension of operational excellence
- We care a lot about our **Reliability**

Spot Automation - The Challenge

- Spot Instances offer great savings but...
- Stack can be left unavailable when capacity is terminated
- Reliably managing Spot Instance is a massive automation challenge

Spot Automation - The Solution

Elastigroup allows the Zalando team to:

- Predict the loss of capacity earlier
- Fall back to On-Demand when Spot is unavailable
- Automatically optimize for high availability at low cost

The Spotinst Journey

- Proof of Concept with a Cassandra cluster
- Tooling integration, including Single Sign-On
- Rolling out, keeping it simple

Bring your own Stack to Spotinst



Rancher



EKS



ECS



EMR



Beanstalk



OpsWorks



Stateful



ELB

Containers
Autoscaling

Instance
Autoscaling

Autohealing

Rolling
Updates

Multi Region
Deployment

Load
Balancing



Elastigroup



On Demand



Spot



Reserved Instances



Terraform



Cloudformation



Anisble



API

Use Cases



elastigroup

Spotinst enables companies to run on Spot :

- ◆ Mission-critical applications & production environments
- ◆ Stateful applications

Web Services



AutoScaling Group



AWS Elastic Beanstalk



AWS Load Balancer



OpsWorks

Containers & Microservices



Amazon ECS



Nomad



Docker Swarm



Mesosphere



Rancher

CI/CD



GitLab



Jenkins



CodeDeploy



Chef

Kubernetes



Kubernetes Operations



EKS

Provision Tools



Ansible



Terraform



CloudFormation

Big Data & DB



EMR



Hadoop



Cassandra



mongoDB



Elastic.co



Stateful



Thank you!

amit.baroz@spotinst.com

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