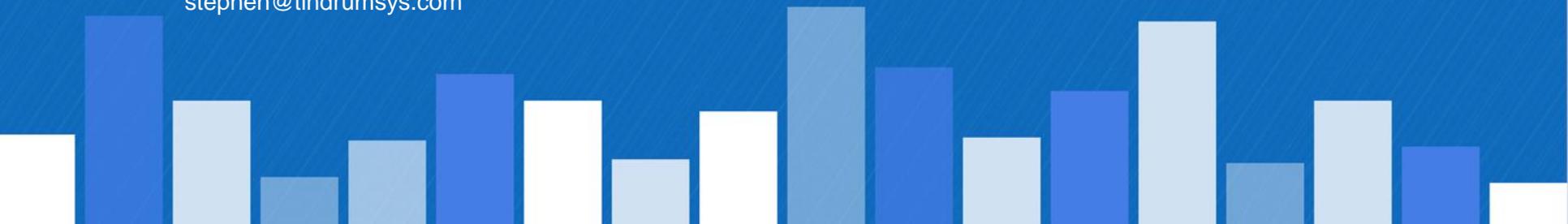




EC2 Spot Instances for Production Workloads

Customer Success Story

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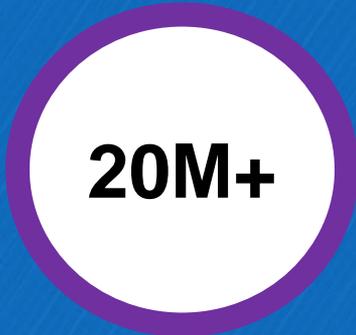


Spotinst in Numbers (June 2017)



600+

Customers connected to AWS



20M+

Monthly EC2 Instance hours



25k+

Managed EC2 Instances



\$100M+

Already saved for our customers

Trust the numbers! Spotinst has launched over 27 Million servers saving over 600 customers an excess of \$100M since 2015



Hewlett Packard
Enterprise

ticketmaster®



Chegg®

cādence™



“It’s amazing, Spotinst helps us to save around 70% of our AWS environments expenses.”

Dan Adika, CEO, WalkMe San Francisco, USA

START/APP

cellebrite
delivering mobile expertise



YODLEE

Vungle



ISSUU



“With Spotinst we were able to expand both test and production environments while significantly lowering the costs and increasing performance. Works great and easy to use service.”

Roman Noze, DevOps Engineer, ClicksMob, NY, USA



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Front Gate Tickets



Front Gate Tickets™

Front Gate Tickets started in 2003 as an alternative ticketing service in Texas that included end to end ticketing, fulfillment, RFID powered access control marketing and cashless POS systems and more.

To date Front Gate Tickets has sold over 20 million festival tickets and performs million of transactions on a daily basis

In 2015 Front Gate Tickets was acquired by ticketmaster

The Challenge – How to preserve Availability while Cutting expenses?

Front Gate is running a several big Kubernetes deployments on AWS using Amazon EC2 Compute Optimise instances.

- The cost of these workloads became a challenge along with their rapid growth.
- Another challenge was to find ways to ensure Front Gates mission critical applications such as online ticketing platform and interfaces with Ticketmaster absolute availability, since downtime or a service interruption is not an option

Front Gate Tickets



Why Spotinst Elastigroup?

- Advanced AI algorithms that automates the use of Spot instances and can reduce the cost
- Spotinst guarantees AWS On Demand SLAs and ensure availability
- Native Autoscaling support
 - Elastigroup integrates with k8s Cluster Autoscaler project ([Github](#)) that enables automatic and dynamic scaling across all scheduled pods. If the cluster doesn't have enough capacity, a new node is added and underutilization is handled by the Autoscaler. If all pods are removed from a node, the node enters an un-utilized state and will eventually be terminated.

“After looking into Spotinst and evaluating the product we understood that Spotinst Elastigroup was the nirvana we were looking for in managing our complex EC2 Kubernetes environments”

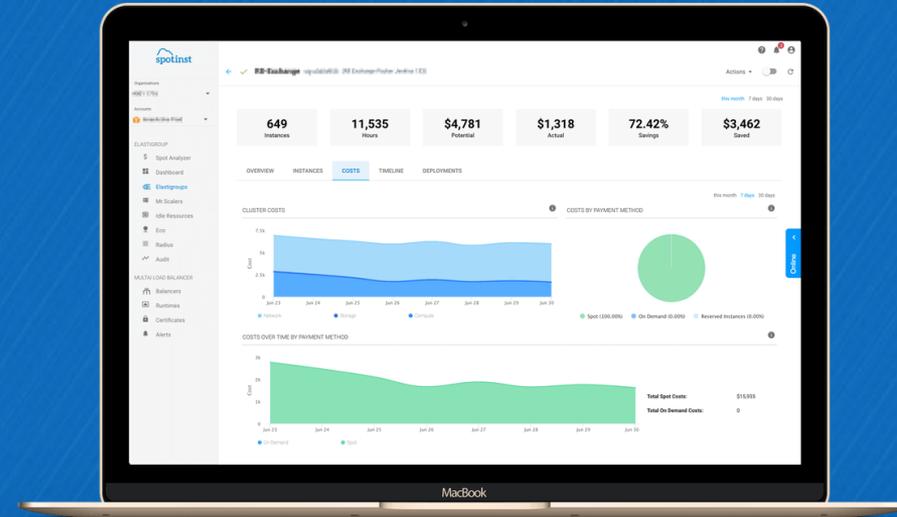
Shane Savoie, Chief Architect at Front Gate Tickets.

Front Gate Tickets



Outcomes

- Front Gate's are running 100% of their Kubernetes minions (workers) on Elastigroup at ~80% Saving on average
- Spotinst became an integral part of Front Gate's DevOps! Elastigroup became such an integral part of their infrastructure that they have developed several interfaces and built custom code and solutions around it.
- Spotinst Elastigroup k8 Dashboard - Elastigroup provides a dashboard that allows DevOps and Software engineers to monitor and track their complex heterogeneous k8s clusters and gain confidence with regards to any provisioning activity.



“As of today, 100% of our k8s workers are running on Spotinst Elastigroup. We are not thinking about cost anymore, Elastigroup does that for us.”

Shane Savoie, Chief architect at Front Gate Tickets



INNERACTIVE



Inneractive is a mobile ad exchange that provides technologies for the buying and selling of mobile advertising space.

The company provides mobile app developers with access to an international portfolio of advertising networks, connecting brands to applications. Inneractive servers content to more than 450 million unique users a month.

The Challenge – Million of requests per minute, 100% uptime

- “The load on servers is very high, Providing this many ads creates a few billion requests on our servers each day – around three to five million per minute. We handle tens of millions of transactions per minute and aggregate roughly 15–20 terabytes of raw data each day. Analysing this data helps improve performance and generate revenue for our app publishers.” Gal Aviv, VP R&D Inneractive
- Uptime is absolutely key for Inneractive. “We can’t allow services to be disrupted even for a second. Serving up a black square in place of an ad would make for a terrible user experience,” says Aviv. “We can’t go over 200 milliseconds, on average, to serve an ad,” says Aviv. “Most of the time it’s about 100–150 milliseconds. That’s a big ask when you’re dealing with tens of thousands of incoming requests per second.”

INNERACTIVE



Why Spotinst Elastigroup?

- Spotinst reduces 50% to 80% of cloud computing costs with 100% availability

Outcomes

- **Saving 20% to 30% of our total monthly AWS costs** - By partnering with Spotinst and using Spot instances, Inneractive has saved money while maintaining performance of its platform. *“The company has saved tens of thousands of dollars. That’s between 20% – 30% of our total monthly AWS bill.”*
- **Using Spotinst made Board members Happy** - *“I was able to maintain good performance more easily, while further reducing infrastructure costs. Our board is very happy.”* Gal Aviv, VP R&D Inneractive
- **Quick deployment!** - It took the DevOps team at Inneractive just two days to configure its infrastructure to run on Spotinst. *“Our setup is complicated because we have a lot of different Auto Scaling groups,”* says Aviv, *“but the Spotinst dashboard is very easy to work with and we get a good overview of stats.”*

Campanja www.247-inc.com



High frequency bidding platform for Google AdWords

Based in Stockholm, Sweden, [24]7 Predictive Search Bidding (formerly known as Campanja) provides a predictive bidding engine for online advertising allowing their customers to maximize each dollar spent on search advertising (Google AdWords and Bing Ads).

[24]7 Predictive Bidding utilizes Real Time Tracking, Predictive Modelling, and High Frequency Bidding to harness the power of online advertising for their clients.

[24]7 was an early adapter of Kubernetes (they have been using Kubernetes since version 1.0) and has been pushing forward with their usage of Kubernetes with Spot instances.

The Challenge – How to reduce costs and ensure capacity?

Using Spotinst

- **Cutting costs** - We run over 66% of our instances (Prod and DevOps) as Spot via Spotinst Elastigroups.
- **Blended cluster provisioning** - these Elastigroup clusters are all provisioned with Terraform as well and when we need to make a change like an AMI or User Data scripts. For example, we can easily make this change with Terraform. If we need to launch MySQL pods, these will be provisioned on instances labelled On-Demand.
- **Quick scale up and down with advanced policies** - Most of our services are spikey, this is why it makes more sense for us to scale our Kubernetes nodes running on Spot via memory rather than CPU.
- **Flexible integrations** - We also have a separate GPU Kubernetes nodes specifically for Data Science. These are less time critical and typically run as batches at night. We also built a Erlang program called PodMon that just collects all our Kubernetes reservations into CloudWatch. We can then scale the number of Kubernetes nodes with Spotinst via the custom CloudWatch metric created by PodMon.





Outcomes

- Campanja is saving at least 80% of Kubernetes Infrastructure cost
- 0% annual Spot interruption rate
- Strong API integration provides seamless transition from expensive spot to cheaper spot

“The Spotinst Terraform Provider makes it simple to provision EC2 clusters on Spot Instances. We simply define the configuration and Spotinst takes care of the rest. We can easily save 80% or more on our EC2 costs”

Thank you!

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Start your free trial
www.Spotinst.com
and click

GET STARTED FOR FREE