

Company Overview

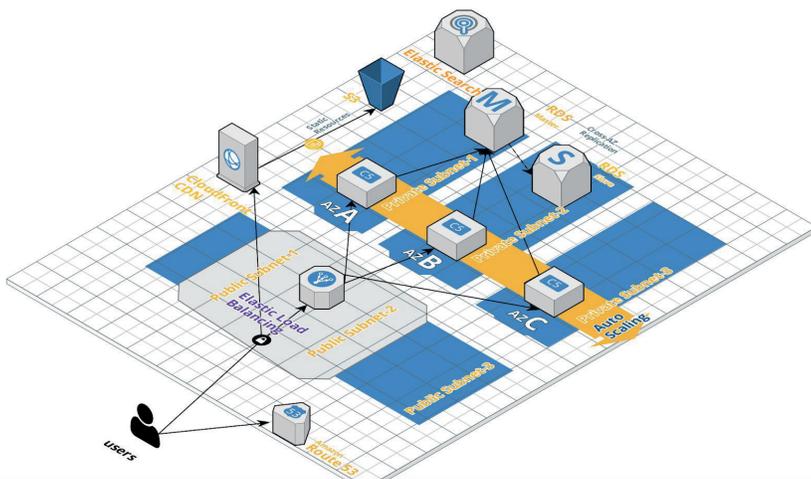
An all-in-one service provider for tens of thousands of E-Commerce websites across the world. Designed for post-checkout process management including order management, multi-channel inventory, warehousing, and more.

Challenge

Skubana required a highly available AWS Set up which would allow applications to scale up and down automatically during peak and off-peak times. The company also wanted to quickly deploy and manage applications in the cloud without worrying about the infrastructure needed to run those applications.

E-Commerce sites work particularly well on AWS thanks to Amazon's huge global infrastructure which is comprised of many multinational data centers and 42 Availability Zones across 16 global geographical regions. As well as increased security measurements which are compliant with American PCI security standards, AWS architecture is also flexible and high-performance.

Ibexlabs has been providing DevOps Consulting Services for Skubana by assisting the company in re-architecting their hosting environment in accordance with the following architecture.



Aim

To design a highly available application in line with CI/CD best practices, as well as providing serverless automation for regular tasks and monitoring for application performance insights.

Project Dates

01 / 2018
 05 / 2018

“Ibexlabs was instrumental in providing expertise necessary for Skubana to build the next generation commerce platform. From scoping to implementing to advising on best practices, Ibexlabs ensured Skubana's infrastructure can scale on demand seamlessly, and is prepared for all future business and technology requirements.”
 DJ Kunovac, CIO, Skubana



AWS Services Employed

The following AWS Services were leveraged to setup a highly available, scalable architecture within an AWS environment:



Amazon VPC

To launch instances on a private, isolated network and gain the benefits from AWS's scalable infrastructure and automatic failover from the provisioned virtual private gateway.



Amazon S3

For its strength as a simple and intuitive web interface capable of storing and retrieving any amount of data.



NAT Gateway Access

To allow the resources in Skubana's private subnet to access the internet with high-availability, better bandwidth, and minimal administrative effort by the VPC, while at the same time protecting those private resources from outside access. An AWS NAT gateway also ensures zone-independent architecture even across multiple Availability Zones.



AWS Elastic Beanstalk

To swiftly deploy and manage applications in the Cloud without worrying about the infrastructure needed to support them.



AWS Lambda

An event-driven platform for running code without provisioning or managing servers which scales automatically.



Amazon Relational Database Service (RDS)

For setting up, running, and scaling highly available relational databases on MySQL and PostgreSQL.



Amazon Elasticsearch Service

For its log metrics, full-text search, application monitoring, easy-to-use APIs, and real-time analytic capabilities which are provisioned alongside the availability, scalability, and security that the Skubana production workloads need. The service also offers built-in integrations with Kibana and Logstash.



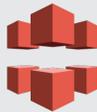
Amazon Elastic Compute Cloud (EC2)s

For scalable computing capacity which launches as many or as few servers as needed according to application demand.



Amazon Route53

For its highly available and scalable Domain Name System (DNS) service. This service creates a reliable and cost-effective way to route end users to internet applications by translating human readable names into numeric IP addresses.



AWS CloudFront

Chosen to be Skubana's content delivery service, given that the E-Commerce company's user base is geographically distributed across the world. CloudFront optimizes the use of a global network of data centers called edge locations to deliver content securely and ensure low latency. Designed to speed up the distribution of large-scale web resources, CloudFront delivers dynamic material via high data transfer speeds to international users according to their nearest edge location. The service also acts as a proxy for S3 (where static assets are stored) and EC2 instances.

Other Leveraged Technologies



New Relic

For performance and application analysis on servers, server-side code, client-side code, and native apps, etc.



Jenkins

For its CI/CD environment and capability of working in many different programming languages and with different source code repositories. Jenkins also automates many routine development tasks.

About Ibexlabs

Ibexlabs LLC, is a DevOps & Managed Services provider and an AWS consulting partner. Our AWS certified AWS experts evaluate your infrastructure requirements and make recommendations based on your individual business or personal requirements.

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