Ibexlabs

S'well Bottle
Case Study

S'well Overview

S'well is revolutionizing the way the world drinks water. The environmentally-conscious company is keen to reduce the excess consumption and disposal of disposable water bottles by producing beautiful, reusable, and, most importantly, eco-friendly drinking bottles

Challenge

As part of an E-Commerce platform redesign, Swell required a highly scalable, automated hosting set up which scales up to peak demand during peak holiday traffic. This set-up also required industry best practices such as automated infrastructure deployments and CI/CD.

Why match S'well with AWS?

E-Commerce applications gain many benefits from hosting Magento 2 on AWS, including:

- A flexible and powerful e-commerce platform which runs in a scalable, cost-effective manner
- High-performance server setup
- A robust global infrastructure with redundant data centers
- High availability scaling and performance (thanks to AWS' 42 Availability Zones across 16 global geographical regions)
- Security that complies with the American PCI security standards through the VPC (credit card data management regulators)

> AWS has both great capabilities and great complexities. We needed partner that would help us achieve superior performance, security, and administration. Ibex Labs has been indispensable as our web services expert. They are our critical-path AWS partner.
>
> Jeff Peck, CTO, S'well

Key Facts

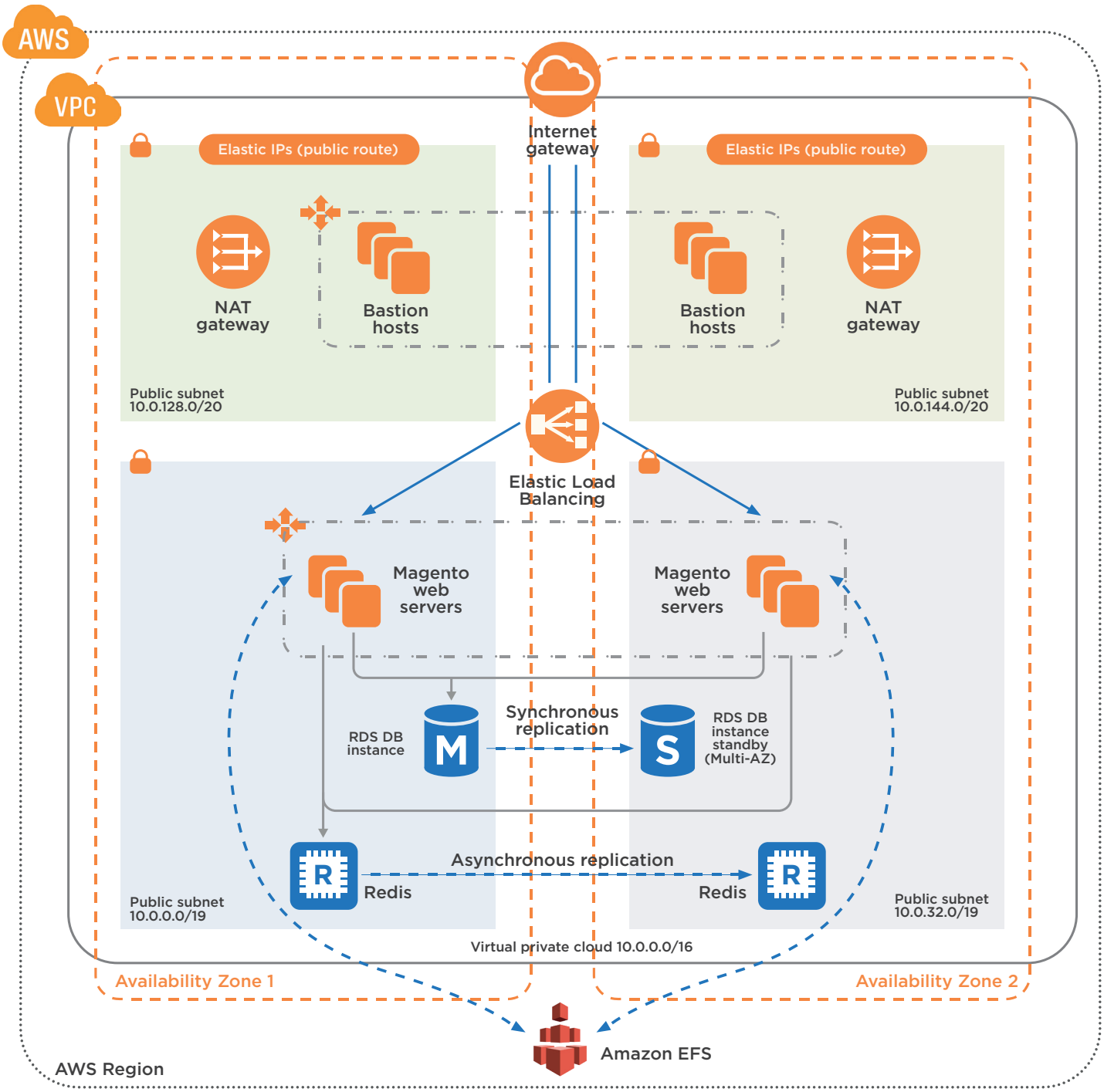
S'well

A consumer goods company, based in New York, USA

Aim

To set up a new E-Commerce hosting environment as part of their migration to Magento 2 Enterprise Edition.

Ibexlabs constructed the AWS environment in accordance with the below diagram:



https://docs.aws.amazon.com/quickstart/latest/magento/architecture.html

AWS Services Employed

Ibexlabs leveraged the following AWS Services to setup a scalable cloud infrastructure within an AWS environment for a Magento 2 migration, using the following AWS services:

Amazon VPC

To enhance S'well's security and compliance and result in improved data governance and system access.

NAT Gateway Access

Provides high availability, better bandwidth, and requires minimal administrative effort for the VPC. Enabling a network address translation (NAT) gateway in multiple Availability Zones also ensures zone-independent architecture.

Multi-AZ Deployment

Provides a hot-standby replica of the MySQL RDS in a different Availability Zone. In case of maintenance, failure or Availability Zone failure, the service automatically substitutes the master/primary database.

Amazon Relational Database Service (RDS) for MySQL:

Makes it easy to setup, run, and scale relational databases.

Elastic Load Balancing

For automatic incoming traffic distribution across multiple EC2 instances.

Amazon EC2 Web Servers

Launching instances within a VPC helps avoid Distributed Denial of Service (DDoS) attacks and security issues for improved flexibility, reliability, and data protection.

Amazon Elastic File Service

Provides highly scalable, secure file storage of common media assets for the web server instances.

Amazon ElastiCache clusters

Improves web application performance thanks to quick, managed, in-memory stores based on the cloud.

Other Leveraged Technologies

Fastly.com

To integrate the CDN Fastly with the Magento 2 installation smoothly with the use of the Fastly_Cdn module.

Terraform.io

Ibexlabs opted to use the open source Terraform tool for its multi-cloud orchestration capabilities and smooth integration with New Relic and Fastly.

NewRelic

For optimized application performance monitoring.

About Ibexlabs

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

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