Company Overview

HealthBridge is an Insuretech company that unites all parties with a stake in healthcare payments.

Challenge

Ibexlabs were engaged to set up an AWS environment according to the following requirements:

- HIPAA compliance.
- Continuous Integration & Continuous Delivery Pipelines.
- Cost effective and Highly scalable.
- Central logging and monitoring.
- Fully auditable and documented environment.
- Highly secure with data encryption at rest and in transit.

The Solution

Widely published, the National Institute of Standards and Technology (NIST) based frameworks on AWS allow you to build secure and reliable architecture with ease through automation. These architecture solutions adhere to strict compliance, security, and risk management controls—a crucial factor for HealthBridge working in the healthcare insurance technology sector. In addition, these templates allow for tailored expansion and customization.
Ibexlabs extended the NIST accelerator VPC model with segregated accounts and IAM Roles, adhering to principles of least privilege, while enabling developer productivity through automation and CI/CD.

Ibexlabs worked with HealthBridge to leverage Elastic Beanstalk for hosting the backend platform and Cloudfront, S3 for hosting the front end application.

Also, Ibexlabs leveraged Ansible which is an industry standard configuration management tool and developed playbooks to quickly and safely maintain all the infrastructure for HealthBridge.

For SIEM and vulnerability assessment, Ibexlabs deployed AlienVault Sensor which gives a unified dashboard for all security events within the platform.
AWS Services Employed

Ibexlabs leveraged the below AWS Services during the set up to streamline, automate, and implement a secure baseline for HealthBridge’s infrastructure:

**AWS Organizations**
A centrally-controlled policy-based management service designed for configuring access for multiple AWS accounts according to each accounts’ needs.

**AWS Elastic Beanstalk**
A managed service which is designed for deploying and scaling web applications and services. Application deployment with Java through convention over configuration (though tailored adjustments can be made as necessary).

**AWS Redshift**
A fully managed data warehouse service that makes it simple and cost-effective to analyze all your data using standard SQL and your existing Business Intelligence (BI) tools.

**AWS SQS**
A distributed message queuing service which supports programmatic sending of messages via web service applications as a way to communicate over the Internet.

**Amazon Elasticsearch**
A central logging tool with full-text search, analysis, and time series data visualization capabilities that helps get the most out of a growing data set.

**AWS Key Management Service (KMS)**
A service for the creation and control of encryption keys needed to encrypt data. KMS also facilitates responsibility separation and remote logging/auditing of key access requests.

**Amazon Aurora**
A hosted relational database engine compatible with MySQL and PostgreSQL which is highly-available, durable, and fault tolerant.

**S3**
Highly scalable object storage.

Other Leveraged Technologies

**Terraform**
To safely and predictably create, change, and improve infrastructure.

**LoadImpact**
Performance testing service that lets you test your website, web-app, mobile app or API over the Internet.

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

**Jenkins**
A continuous Integration (CI) server or tool which is written in java. It provides Continuous Integration services for software development.

**SonarQube**
A service for continuous inspection of code quality to perform automatic reviews with static analysis of code to detect bugs, code smells and security vulnerabilities.

**Dell Boomi**
Via the AtomSphere Platform, Dell Boomi delivers HIPAA compliant integrations between various EMR providers.

**Okta**
It is the tool used for single sign-on, allowing active members to access various applications without being prompted to login multiple times.

**HyperLedger**
Distributed ledger framework which support business transactions.

**Ansible**
Configuration Management and orchestration.

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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