VGW - Virtual Gaming Worlds

Case Study

MECHANICAL ROCK

The Client

Virtual Gaming Worlds is an innovative and highly profitable game design workshop. VGW are the pioneers of Social Sweepstake Gaming with tens of thousands of players and multiple product lines including Online Social Casinos and Poker platforms.

Already experiencing rapid growth, VGW's platform had legacy issues that threatened reliability and made deployments cumbersome.

With an uptick expected in their already explosive growth, VGW needed help to ensure their Java/AWS solution could scale to meet projected demand.

They also needed a smoother development pipeline so that effort directed at operations and maintenance could be redirected to introducing new product lines.

The Problem

Mechanical Rock was engaged to deliver a robust and highly scalable production environment.

We were tasked initially to replace the existing VGW AWS production environment with new immutable infrastructure that would position VGW for growth.

We designed and deployed a build pipeline with infrastructure-as-code; meaning deployments were reliable, repeatable and 100% consistent across all environments.

Whilst working to this goal, we were also asked to help tackle stability issues in the the flagship platform. We deployed New Relic into Production and identified and fixed the issue within a single day.

The Mechanical Rock remit was further expanded to guide the delivery team to ensure VGW products would scale with demand.

We continue to work with VGW to refine the tools and processes in their delivery pipeline, making them more efficient and more reliable.

The Solution

Automated, parallel build & deployment pipelines in Jenkins based on a pull model to support increased throughout;

Embedded use of monitoring in Production and Load Test environments using New Relic;

Improved security, via network topology & security groups separating public and private resources;

Improved service reliability by replicating servers across multiple AWS Availability Zones;

Behaviour Driven Infrastructure – allowing servers to be deployed via code and their configuration validated before applications are deployed.

A database migration to an autoscaling MongoDB
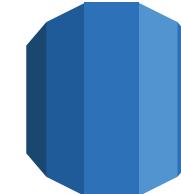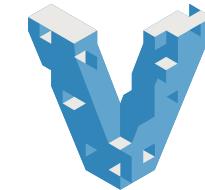
**Lambda**   **RDS**   **Vagrant**
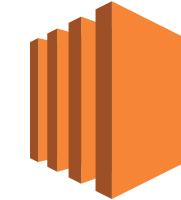
Cloud Formation   **EC2**   **Ansible**
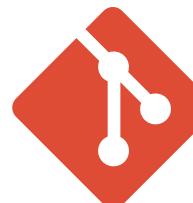
Git   **Jenkins**   **New Relic**

The Benefits

- Behaviour Driven Infrastructure (BDI) and continuous delivery pipelines mean production releases are seamless, from the application down to the network.

- The Blue/Green release mechanism enabled a zero downtime release and rollback.

- Rollbacks can be performed within 30 minutes of a problem being identified with minimal impact.

- This enabled major system upgrades across fleets of up to 300 EC2 servers with zero downtime.

The Mechanical Rock delivery model means that we equip our clients with not only the tools and technology required but also the processes and capability to leverage those tools and grow their business at the limit of their capability.

Think we can help with your project?

Get in touch so we can chat about your plans over a coffee

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