CDW helps C&R make the move to AWS

C&R not only moved their premise-based infrastructure to AWS, they also upgraded their customers: From Monolith to Cloud

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Customer Overview

C&R, a Fairfax Virginia-based software company, helps organizations streamline their collections and recovery operations in ways that also help support their customers in times of financial difficulty. C&R, a global entity and established industry leader, has 38 years of experience helping hundreds of blue-chip companies.

The Challenge

With a limited IT staff and plans to migrate both their own and their customers infrastructure to AWS, C&R knew they needed assistance. C&R, having recently spun off from their parent organization, had a mandate to move their global infrastructure to multiple AWS regions while simultaneously moving their customers from a monolithic, data center-based service to cloud. They also knew that automation would be key to providing their customers with the level of service they had become accustomed to. C&R knew that having multiple contractors working on different pieces of the overall solution would only serve to put the initial migration at risk as well as making it much more difficult to ensure consistency for future upgrades and improvements as their product continues to evolve.

The Solution

Teamwork was the key to success. Once engaged, CDW immediately began to establish clear and open communication with the customer, listening to understand goals, creating a collaborative environment in which to gather the data needed tackle not only the current needs of C&R, but to act as part of their team, setting them up for future success as they grew.

The team streamlined their processes from flat files and single region deployments to dynamic lookups, multiple regions, and created a single pane of glass using Jenkins, Groovy, and CloudFormation templates. The work continued with the implementation of error handling and parameter validation, allowing C&R's customers to use Jenkins as an input source rather than files in Git.
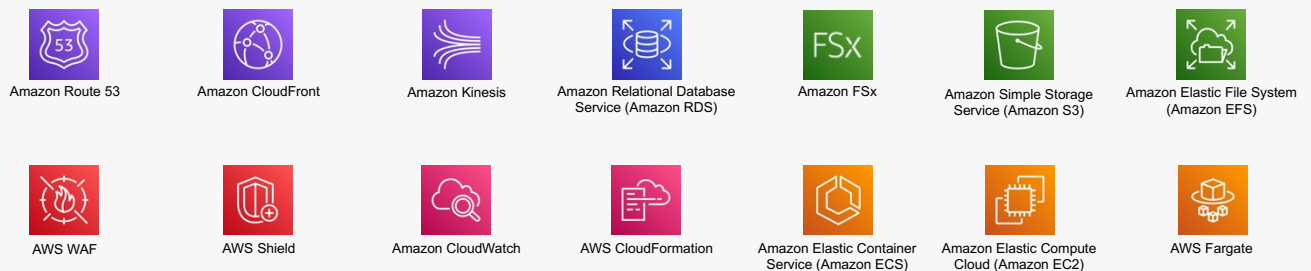
The Solution (continued)

CDW also provided better revisioning of CloudFormation stacks tracked in DynamoDB in order to improve audit trails while simultaneously streamlining the RFC filing process to allow customers a far simpler and more intuitive way to look for updates to their stacks. This had the added benefit of improving streamline drift in their environment, as AMS is very particular about drift not being evident in their stacks.

There are 4 basic elements of the C&R infrastructure, they include:
- Jenkinsfiles and CloudFormation templates revisioned in BitBucket
- Jenkins Server that runs on ECS with Agents that are provisioned on-demand via ECS
- AMS accounts across three regions:
    - 4 in US-East-1 (2 pre-production and 2 post-production)
    - 2 Production accounts in EU-Central-1
    - 2 Production accounts in EU-West-2
- CloudFormation stacks
    - Controlled through Request for Changes in the AWS Managed Services Console
    - IAM roles that allow Jenkins to submit RFCs to AMS console using CLI as CloudFormation Templates

Here are just a few of the AWS services CDW helped C&R deploy:

Amazon Route 53	Amazon CloudFront	Amazon Kinesis	Amazon Relational Database Service (Amazon RDS)	Amazon FSx	Amazon Simple Storage Service (Amazon S3)	Amazon Elastic File System (Amazon EFS)
AWS WAF	AWS Shield	Amazon CloudWatch	AWS CloudFormation	Amazon Elastic Container Service (Amazon ECS)	Amazon Elastic Compute Cloud (Amazon EC2)	AWS Fargate

The Benefits

C&R considers this initial engagement an unqualified success, so much so that they have several more projects with CDW in the funnel. Among the outcomes C&R realized are:

- *A reduction in EC2 costs of almost 40%* – CDW's thorough analysis and implementation of automated processes has right-sized C&R, reducing cost and improving performance.

- *All timelines met or exceeded* – C&R's complex, multi-faceted, global project was up-and-running within the strict and aggressive timelines they needed to meet.

- *Reduction in end-customer resolution timeframes*– Due to CDW's training 1st tier resources to use the automation now implemented, most customers are up and running with just one call.