



# Amazing happens when security and compliance are verified automatically.

A consumer credit reporting agency encountered challenges with developing and managing security groups, including a lack of standardized templates, incomplete review processes, enforcement gaps, decentralization, manual approval processes, and process delays.

## Opportunity and priorities

The customer wanted help enhancing Infrastructure as Code (IaC) deployments with a focus on security groups and compliance for AWS (Amazon Web Services).

## Solutions and services

CDW engineers and architects worked together with key stakeholders to develop an automated solution for validating security group deployments in infrastructure as code (IaC) continuous integration/continuous deployment (CI/CD) environments. They utilized verified base modules from Artifactory, a binary repository manager by JFrog, to ensure that security guidelines are enforced. The validation activities and collection of relevant USP policies were carried out using Airbag scans and USP Python with Lambda functions. A single IAM (Identity and Access Management) role was used to manage SCPs and security groups, while other activities were restricted. If the changes were compliant, the resources were deployed through the CI/CD pipeline. Additionally, all compliance issues were logged to S3, a CloudWatch alert was set up for notification, and an SNS (ServiceNow Solutions) topic was created for escalation.

For more information on our Cloud Solutions and Services, visit [CDW.com/Cloud](https://www.cdw.com/Cloud).

## Outcomes

CDW helped the client streamline resource creation and security group management in AWS (Amazon Web Services) by developing intelligent automation to compile and deploy new resources with smart security groups. By eliminating manual processes and automating compliance within security groups, resource provisioning through Infrastructure as Code (IaC) enhanced innovation and secure provisioning at scale.

*By implementing Terraform for IaC and automating security group deployments and compliance verification, the customer can leverage the full value of their AWS environment with a robust cloud security posture.*

### Mike Wiseley

CDW Principal Consultant, Digital Velocity - Professional Services, AWS – Delivery Cloud Native

