

STAIRWAY TO THE CLOUD



Pete Tannish, SBFE's Director of Information Security and Risk, interviews Dan Dubowski, Equifax's VP Business Information Security Officer, about Equifax's transformation to the cloud and how instrumental security has been throughout the entire journey.

1 A lot of things have happened at Equifax over the last few years, including a massive transformation to cloud services. Can you talk about the scope of this effort and how you determined which services were included?

Over the past three years, we've invested over \$1.5 billion to rebuild our security and technology environment in the cloud. The Equifax Cloud is our unique implementation on the Google and Amazon cloud platforms and is the foundation of our business. We built the Equifax Cloud in a manner that allows our products, services and solutions to take full advantage of the benefits of hyperscale cloud, becoming "cloud native." While many companies name their systems "cloud" by lifting and shifting an application and data layer into a virtual machine, the Equifax Cloud employs a rebuilt IT infrastructure in a cloud environment. We have reimaged and reengineered our tools, technology, and assets in the cloud for optimal performance and customer benefit. The Equifax Cloud enables capabilities to scale as needed, without the overhead of traditional relational databases or heavy online transaction processing constraints.

We also moved 100 siloed data exchanges into a cloud-native enterprise data management platform that is deployed regionally in 24 global markets, including the US, Australia, the UK and Canada, which we refer to as "data fabric." Our data fabric has redefined how data is ingested, governed, provisioned and produced through a nearly infinitely scalable, purpose-built big data platform. This data fabric also delivers the ability to powerfully ingest, key and link, and enrich multiple sources of data with advanced analytics, including artificial intelligence and machine learning.

We understand that in order for our customers to be successful — and achieve repeatable, profitable, and sustainable growth — they need to be able to make predictive, and informed decisions. To make these decisions, they need a provider that enables rapid innovation to meet their timelines and get to market faster. The Equifax Cloud is built on the understanding that more data drives better solutions. We've created a unique environment that fosters sustained innovation at scale, always-on stability, standardized frameworks and rapid response times. And, security is built into our systems, not bolted on. Our cloud-native technology stack exceeds an on-premise security posture when combined with the implementation of our industry leading security controls.

2 Can you talk a little about how you decided on a multi-CSP environment?

While we currently support a multi-cloud environment, we have a strong partnership with Google. From a security perspective, we have been able to fully design and integrate the necessary security controls and processes into Google Cloud prior to migrating any applications or customers. This has resulted in a "built-in" security model driven by infrastructure and policy as code, rather than an afterthought. We are also creating an "above the cloud" model that supports the three major cloud providers to help ensure we are positioned to manage any clouds that come via mergers and acquisitions.

3 Can you talk about the controls you've implemented and how cloud security is better now than it was?

Many people are familiar with the model of "security in the cloud, and security of the cloud." While some controls have shifted to the cloud provider, there is still a significant responsibility for any company operating in the cloud to make sure that workloads and data are properly secured. We have focused on access management, data encryption and key management, as well as cloud security posture management. Additionally we have focused on CI/CD pipeline integration to assure that security is included in the build process rather than after production deployment. We are making careful, thoughtful decisions to use both native and industry-leading solutions to build a robust control plane. As a result of our partnership with Google, we have also collaborated on many improvements in cloud-native controls which have resulted in a couple of whitepapers being co-authored between Equifax and Google.

4 Can you tell me about CloudControl and how that's working for Equifax?

Our migration to the cloud has created an opportunity to exceed traditional on-prem security. Real-time policy enforcement and visibility into the status of more than 150 security checks across our cloud environments is used by our teams to validate compliance, monitor changes, and manage risk.

5 What were some of the biggest concerns from your banking customers and how did you/Equifax help them get through those?

A primary concern for our customers was the ability to secure data in public clouds. This required demonstrating our ability to not only secure data from potentially malicious actors. We have demonstrated thought-leadership in this space and ultimately have seen customers seek our guidance on their own cloud transformations. The cloud provides much greater flexibility, visibility, and automation. Combined with fully upgraded and transformed applications, these capabilities and integrations have created a very sustainable security program.

6 What kind of evolution or innovation do you see with cloud security in the near term (3-5 years)?

We have just scratched the surface of cloud security posture management. Combined with policy-as-code automation there is a significant opportunity to ensure that environments are provisioned securely and stay secure and in many cases consistently across multiple clouds. The continued use of containers and serverless technologies will usher a stronger focus on agentless security programs. Data protection is going to continue to mature as technologies such as trusted execution environments and homomorphic encryption move from theoretical into practical realms.