

OKERA HELPS FORTUNE 500 HEALTHCARE PROVIDER SECURE ITS DATA LAKE AND PROTECT SENSITIVE DATA

Executive Summary

This Fortune 500 Company is a leader in healthcare, managing the fastest growing and most complex areas of health, from special populations to complete pharmacy benefits. They support innovative ways of accessing better health through technology while staying focused on the personal relationships that are necessary to achieve a healthy, vibrant life.

The company deployed Okera's Active Data Access Platform (ODAP) as it migrated from on-premise Cloudera to an AWS S3-based data lake. In the process, they were able to reap the following benefits.

OKERA BENEFITS

- Fine-grained data access control to secure their data lake
- Dynamic obfuscation to protect sensitive data and comply with regulatory requirements
- Accelerated migration from on-premise Cloudera to Amazon S3

Background

Strategic migration to cloud-based data lake to reduce cost and increase flexibility

The company operates in a hyper-competitive environment and is highly conscious of data security due to government regulations. Their executive management team laid out an aggressive multi-year margin improvement plan, in which one of the key items was a move away from their costly Cloudera on-premises data lake. In doing so, they would become more efficient and also more innovative, using advanced analytics to achieve predictive healthcare.

Amazon Web Services (AWS) offered both efficiency and agility, so they migrated their on-premises data lake away from Cloudera to the cloud, with storage onto Amazon S3 and compute onto Amazon EMR.

Challenge

Lack of robust access control in IAM roles

One major challenge blocking a faster migration to AWS was the lack of a robust data access control mechanism. The company required the ability to apply and enforce sophisticated data access policies to secure their data lake. They needed to anonymize and redact data for the analytics team—not just for AWS EMR, but also for other analytic engines and frameworks that their data science teams might use in the future.

While AWS—including Amazon S3 and Amazon EMR—provided agility and allowed for the separation of storage and compute, the data access control with IAM roles was unwieldy and insufficient for the company's needs. Neither AWS Lake Formation nor Apache Ranger could deliver what it required.

Solution

Unified data access control for all analytic engines and sensitive data protection

Okera was selected after a two-month trial period. With Okera, the company's data access control now goes beyond what it had with Cloudera Sentry or anything it could have had with Ranger and IAM roles.

In all, the company achieved the following:

- * Fine-grained access control at the column, row, and cell level
- * Dynamic data policy applied on the fly
- * Data obfuscation: pseudonymization, tokenization, redaction, and masking
- * Unified access control for both AWS and non-AWS analytic engines and frameworks, including their currently installed Amazon EMR and future plans for Python and other engines
- * Active Directory integration

"We were very impressed with the support Okera provided in the evaluation phase and how quickly they helped us migrate to a production environment. Now we can expand our data lake without worrying about access control or meeting any governance and regulatory challenges."

VP OF IT, F500 HEALTHCARE COMPANY

Results

Faster migration from on-premise Cloudera to AWS S3

Okera enabled the company to accelerate their migration from Cloudera to Amazon S3 and Amazon EMR, realizing the promise of cost-savings with Amazon. It also opened up analytics possibilities far beyond what they could achieve with Cloudera. The company is currently exploring Python for advanced analytics and expects to easily plug in Okera via [PyOkera](#).

ABOUT OKERA

Okera enables the management of data access and governance at scale for today's modern cloud data lakes. Built on the belief that companies can do more with their data, Okera's Active Data Access Platform (ODAP) enables scalable fine-grained data protection and visibility on data lakes for both structured and unstructured data. This allows agility and governance to co-exist, giving data consumers, owners, and stewards the confidence to unlock the power of their data for innovation and growth. ODAP can be implemented and deployed in less than a day, creating immediate value for enterprise organizations. Okera is headquartered in San Francisco and is backed by Bessemer Venture Partners, Felicis Ventures, and Capital One Growth Ventures. Learn more at www.okera.com or contact us at info@okera.com

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