

# NEXT-GEN AML

## riskCanvas & Cloudera

Deploy a next generation AML platform that reduces false positive rates, investigation costs, technology sprawl, and regulatory risk.

### Industry

Financial Services

### Website

boozallen.com/financialcrimes

### Company Overview

riskCanvas is a division of Booz Allen Hamilton, which provides management and technology consulting and engineering services to leading Fortune 500 corporations, governments, and not-for-profits across the globe. Booz Allen Hamilton partners with public and private sector clients to solve their most difficult challenges through a combination of consulting, analytics, mission operations, technology, systems delivery, cybersecurity, engineering and innovation expertise.

### Product Overview

riskCanvas is an end-to-end financial crime software suite with anti-money laundering, fraud detection, and trade surveillance capabilities. riskCanvas is built upon the most cutting edge big data technology and addresses the need to improve detection, drive efficiency, and enable compliance in the Financial Services industry.

riskCanvas has been independently assessed by the RiskTech 100 as a leading solution.

### Why do you need a next generation AML solution

Anti-Money Laundering (AML) has witnessed several significant turning points over the past 40 years that have led us to where we are today. The most recent shift in AML has been the prioritization and emphasis on transaction-monitoring technology. Is this approach working?

From a technology perspective, current systems are plagued with architectural deficiencies including: data management in relational databases, processing within “n-tier” style business layers, and lack of elastic resourcing.

In many cases, hundreds of thousands of transaction alerts are being generated which require investigation. The resources needed to support these investigations require an army of analysts, investigators, and auditors, and represent the largest expense of AML programs within most financial institutions.

The next big shift in the fight against financial crime and money laundering is advanced machine learning and sophisticated data science.

Rapid advances in technology have enabled us to create smarter systems which can detect patterns across enormous data sets and generate less false positives.

These advances in technology can improve the way that we do transaction monitoring, KYC, and other AML activities.

### What Machine Learning and Data Science can do for AML

Machine learning can transform the way that transaction monitoring technologies identify suspicious activity. Machine Learning can be used to:

- \_ Learn transaction behavior for similar customers
- \_ Discover transaction activity of customers with similar traits (business type, geographic location, age, etc.)
- \_ Pinpoint customers with similar transactions behavior
- \_ Identify outlier transactions and outlier customers
- \_ Learn money laundering typologies and identify typology specific risks
- \_ Dynamically learn correlations between alerts which produced verified suspicious activities
- \_ Continuously analyze false-positive alerts and learn common predictors

## Solution Highlights

Cloudera + riskCanvas solution allows financial institutions to drive compliance and efficiency through automation and data consolidation.

### riskCanvas Core Capabilities

Customer Due Diligence Module

- \_ Customer onboarding
- \_ KYC/CDD/EDO automation
- \_ Customer risk scoring

Transaction Monitoring Module

- \_ Transaction monitoring
- \_ Automated alert triaging
- \_ Sanctions

Investigation Management Module

- \_ Investigation acceleration
- \_ Case management

### Machine Learning and Data Science

Cloudera Data Science Workbench (CDSW) is a secure, self-service enterprise data science platform that lets data scientists manage their own analytics pipelines, thus accelerating machine learning projects from exploration to production. It allows data scientists to bring their existing skills and tools, such as R, Python, and Scala, to securely run computations on data in Cloudera clusters.

### About Cloudera

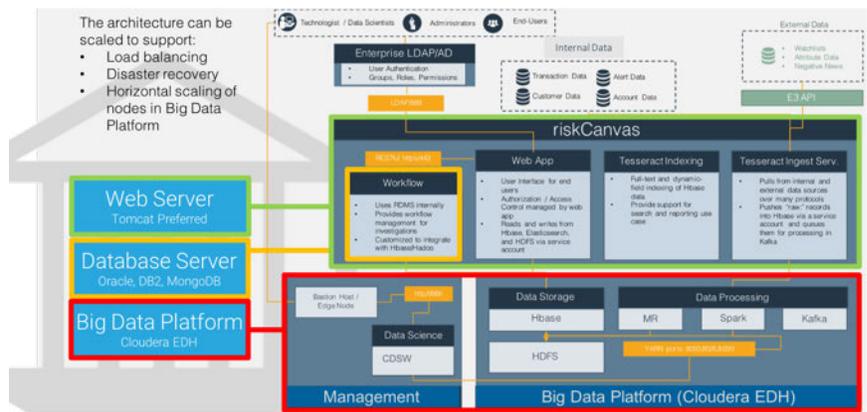
At Cloudera, we believe that data can make what is impossible today, possible tomorrow. We empower people to transform complex data into clear and actionable insights. We are the leading platform provider for machine learning, analytics and data management built for the cloud. The world's largest enterprises trust Cloudera to help solve their most challenging business problems.

[Learn more at cloudera.com](http://cloudera.com)

## Solution Architecture

The riskCanvas solution currently contains three modules: Customer Due Diligence, Transaction Monitoring, and Investigation Management. The Customer Due Diligence module enriches entity data, scores for potential risks, and assists in understanding the comprehensive network and relationships of the entity. The Transaction Monitoring module detects suspicious behavior in real-time and generates alerts on transactions as well as provides advanced analytics and machine learning to detect larger suspicious trends and behavior. The Investigation Management module offers workflow/case management which provides an intuitive interface for investigating suspicious activity.

Cloudera Enterprise is the base platform for riskCanvas. Cloudera provides scale-out storage and processing that allows riskCanvas to economically manage several years worth of party, account, transaction, and other AML data. The Cloudera platform includes Apache HBase, used by riskCanvas as the primary storage engine, Apache Spark for data processing and analytics, Cloudera Data Science Workbench (CDSW) for model development.



## Implementation

The riskCanvas and Cloudera teams have experience in implementing a joint solution and will leverage from previous experiences to provide the most effective process for each institution. The riskCanvas implementation team can rapidly deploy in an on-premises or hosted environment and the implementation is typically completed within a 6-month timeline. As part of the implementation process, the team will conduct requirements gathering, source data system identification, data integration, tuning and testing, infrastructure provisioning (if necessary), and more to ensure a seamless process for each client. Each implementation plan is tailored to meet client needs based on its specific requirements.