Market Insight Report Reprint

Coverage Initiation: Cyral seeks simplicity for securing data access in the cloud

August 9 2021

by Paige Bartley

Security and governance for data in the cloud are more pressing than ever as an expanded population of workers within businesses seek to access and leverage data within their daily roles. Cyral is using an identity-federated methodology to help businesses pursue secure, policy-controlled data access governance for cloud-based data sources.

451 Research

S&P Global
Market Intelligence

Introduction

The overall enterprise motion toward cloud adoption has been undeniable, but some common concerns remain with cloud security. According to 451 Research's Voice of the Enterprise: Information Security, Budgets & Outlook 2021 survey, 'loss of control of sensitive data' is reported as a top three potential issue with cloud solutions (e.g., hosted private cloud, IaaS or PaaS) by 25.9% of survey respondents – outranking even the common concern for cloud provider lock-in. Loss of control can manifest in several ways, with one example being loss of data control to the cloud provider itself. Another example is loss of control to potential users and consumers of data within the organization, especially as cloud environments become more complex and difficult to consistently administer.

Cyral, which adapted its namesake from the Hindi word for 'simple,' is seeking to offer cloud data visibility, access control, and protection leveraging an identity federation model that maps local accounts to an existing identity provider service. Offering a policy engine and granular controls for data access in the cloud, the company is looking to streamline appropriate data access and use in a world increasingly dependent on cloud-based repositories and infrastructure.

THE 451 TAKE

The market for data access governance (DAG) technology has continued to evolve since we initially wrote about the rapidly coalescing segment last year. Organizational data security and governance practices continue to converge, with some jostling from vendors for visibility. In this space, there is often a distinction between providers in terms of variety or types of data that are protected via dedicated technology offerings: Most either specialize in structured/semi-structured or unstructured/content sources (rarely both equally). Cyral is primarily in the former camp, focusing on structured and semi-structured data in native cloud environments, positioning to help support and streamline initiatives such as self-service BI and analytics.

This is a functional distinction that, eventually, will need to be resolved as organizations set their sights on imposing more global and refined access control settings across data sources. However, most data workloads and use cases today are still realistically distinguished by data type. By focusing on data sources existing in cloud and leveraging an identity-bound model, Cyral is addressing a large functional swath of the data that realistically needs to be deployed in modern insight initiatives. Other data types and compatibility could be an area of eventual development and growth.

Context

Cyral was founded in 2018. When we initially wrote about the evolving DAG market in May 2020, the company had just come out of stealth and did not yet have a generally available (GA) product. The last year has seen the company mature significantly, as the GA offering rolled out in mid-2020 and Cyral gained traction with several Fortune 1000 and other highly data-intensive, publicly referenceable customers such as Informatica, Hims and Hers (men's and women's telehealth services, respectively), and Turo (a car-sharing network and marketplace).

The vendor's cofounders are Manav Mital (CEO) and Srini Vadlamani (CTO). The duo saw a business pain point to be addressed in the market: The modern data layer – particularly via diversified cloud architecture -- has gradually become more accessible to enterprise technology end users and data consumers, with businesses struggling to appropriately control data access and monitor activity. For purposes such as compliance stance and proactive data security strategy, organizations need more sophisticated control of individual data sources residing in cloud repositories. This value proposition isn't purely responsive in nature, designed just to meet externally imposed requirements. The overarching concept is that finer-grained access control for cloud data sources can indeed accelerate data-driven initiatives such as self-service analytic models by ensuring that appropriate data access is more fluid and automated, with less reliance on cumbersome manual workflows such as disjointed approval requests via multiple tools.

To date, institutional funding for Cyral has reached $41.1m over three rounds, with the most recent being a $26m addition from existing investors in May. Recent VC participants include Silicon Valley CISO Investments, Redpoint Ventures, Costanoa Ventures and A.Capital Ventures.

The company implements a remote-first work model, but is headquartered in Milpitas, California. Currently, about 50 employees work for the Cyral team, although headcount continues to grow at a steady pace.

Technology

Cyral provides its namesake technology platform to specifically moderate and monitor enterprise end-user data access rights and responsibilities in the cloud, without requiring any specific changes to data-dependent downstream applications within the organization. With 20 patents pending, the platform itself performs a stateless interception service for data sources in the cloud, moderating individual data access, not directly bound to specific data types or data repositories. Interception is low-latency in nature, with minimal impact on the performance of dependent systems. From a practical business perspective, the company's architectural model generally enables it to quickly roll out compatibility with new cloud-based data sources as they evolve with minimal product development investment.

Central to Cyral's architectural value proposition is that the platform directly supports identity federation, integrating and working with existing identity supplier's IT assets. Local accounts that are used to access data in the various databases, data lakes, etc. are mapped directly onto rights and responsibilities as defined by common enterprise identity management providers such as Okta. Core identity federation capabilities via product integration enable higher-level product functionality such as data access control, ongoing data activity monitoring, and a granular policy engine that can be employed to orchestrate appropriate file-level data access for specific users based on several dynamic attributes.

Cyral's platform can largely be thought of as an invisible layer of cloud data security, at least from the perspective of enterprise data consumers and data end users themselves. The product itself – data access policies in particular -- may have any number of enterprise roles involved in administration and configuration. So those that directly interact with the vendor's product interface to designate cloud data access policy rules are often individuals in traditional GRC roles, information security roles, or even DevOps roles.

The Cyral policy engine specifically can be consumed technologically using external dashboards, and there are options for direct integration with CI/CD DevOps workflows via compatibility with popular code repositories such as GitHub (owned by Microsoft) and GitLab. Flexibility in the firm's platform administration options and modes of access for product functionality are designed to assist organizations in their diverse data security approaches: 451 Research's contemporary survey data indicates that there is often not a clear 'winner' in terms of organizational leadership responsibility for data privacy and protection efforts. Often, data protection tasks are realistically delegated to an array of internal enterprise roles. Multiple modes of Cyral's product access and consumption allow for flexibility.

Regardless of what enterprise role or responsibility is administering data access policies in the vendor's platform, the goal is to offer consistent user access policies to cloud-based data sources, federated based on existing identity management architecture and investments.

Competition

To understand Cyral's realistic competitive landscape, it is important to note that current product capabilities for data access governance are often delineated by what type of data is functionally being protected – there are vendors that specialize more in unstructured data and file content, and there are providers that work with more traditional structured data formats from sources such as data warehouses. Cyral can be considered a member of the latter group, with an emphasis on cloud repositories and architecture. In this sense, the company does not realistically vie directly with unstructured data protection incumbents like Varonis, or relative newcomers to the space such as Concentric.ai and SPHERE Technology Solutions.

Where the competition may come from, however, is providers that offer a mixed approach or specialize in structured cloud data sources themselves. One such provider with a diversified approach to administering data access across diverse data sources would be Okera. PlainID promotes an attribute-based model for policy control and data access. Satori Cyber is another relative newcomer to the market that builds in behavioral awareness and analysis to its data access controls. Immuta is largely invested in governed access and use of data for data engineering and organizational data 'supply chain' use cases. Dasera focuses on data lifecycle security, and can directly integrate with identity management suppliers. Privitar provides a data provisioning platform, with data privacy as a leading use case.

Other key players in this sector, often with capabilities around structured or cloud data, range from very large existing data management and security incumbents all the way down to newer, upstart specialists. It should be noted that there are open source options for moderating data access, as well, with Apache Ranger being the most notable project. Commercial providers that contend in this space include (but are not limited to) Broadcom, Cloudera, IBM, Micro Focus, Microsoft, Netwrix (including STEALTHbits assets), Privacera, SailPoint and Saviynt.

SWOT Analysis

STRENGTHS

Cyral is homed in on moderating end-user access to contemporary cloud data sources, which represents a very real vector for security risk in the modern IT environment. The company provides a product that tightly integrates with existing identity management IT investments, streamlining the coordination of highly consistent data policies.

WEAKNESSES

Cyral doesn't claim to be a data access governance provider for primarily unstructured data sources, such as file or content systems. Organizations that are looking for a more comprehensive data access management approach for the full spectrum of enterprise data sources will likely need to supplement with other supporting technology options.

OPPORTUNITIES

New enterprise cloud data sources are rapid in their evolution, and Cyral's stateless technology model allows it to adapt relatively quickly to incorporate new data types into its data access governance model. Proliferating jurisdictional data protection regulations are bearing down with increased legal pressure. Enterprises are actively seeking products/technology that can help manage compliance.

THREATS

Providers from a diverse array of technical and architectural heritages are entering the fray for DAG functionality. They are largely all claiming the same things. With such noise in the market, there is always the risk that a smaller vendor such as Cyral might be overlooked from a visibility perspective, or that the company might be considered an acquisition target because of its cloud data specialization.

CONTACTS

The Americas
+1 877 863 1306
market.intelligence@spglobal.com

Europe, Middle East & Africa
+44 20 7176 1234
market.intelligence@spglobal.com

Asia-Pacific
+852 2533 3565
market.intelligence@spglobal.com

www.spglobal.com/marketintelligence