Normalyze®

Normalyze

Data Security Posture Management

Securing your data ... **wherever it is.**

Content

Gen AI is leading to more sophisticated social engineering attacks, with deepfake attacks becoming increasingly prevalent.

$10.5T the cost of cyberattacks on the global economy, by the end of 2024

83% of organizations have experienced at least one breach related to access issues.

Source: https://www.pingsafe.com/blog/cloud-security-statistics/

$4.35M Is the average cost of a data breach... with public cloud breaches being more expensive than hybrid cloud breaches.

Overview

We are witnessing an **unprecedented explosion in data** driven by the advent of Generative AI, expansive data lakes, and the widespread adoption of cloud technologies. This surge in data volume and complexity has resulted in a loss of visibility and control for enterprises. Even with thousands of security tools in the market, **data breaches continue to occur daily**. Compounding the challenge, the traditional data security approaches struggle to keep pace with the evolving landscape.

To solve these issues, Normalyze takes a **data-first approach** to security. Normalyze is the pioneer of Data Security Posture Management (DSPM), helping enterprises secure their data across SaaS, PaaS, public or multi-cloud, on-prem and hybrid environments. With Normalyze, security and data teams can improve their overall security and compliance efforts while empowering the business to leverage their most precious asset: data.

The Normalyze DSPM platform helps to discover and classify data stores, prioritize what's important, identify risky and excessive access, detect and remediate exposure risks, and improve compliance and auditing processes.

Recognition as a 2024 Gartner Cool Vendor™ in Data Security underscores Normalyze's commitment to addressing the unique risks of AI-driven environments and showcases our innovative approach to securing data pipelines connected to LLMs like ChatGPT, Microsoft Copilot, and Amazon Bedrock.

At the heart of the Normalyze platform is the patented One-Pass Scanner™, which leverages AI to accurately identify and classify valuable and sensitive data at scale, across different environments.

Scanned results appear in multiple visualizations to help teams prioritize risk. The Data Risk Navigator™ shows attack paths that can lead to data breaches or loss. Data Access Graphs™ show how people and resources access data. Visualizations are generated and updated in real time, providing visibility as changes to customer infrastructure or environments take place. The proprietary DataValuator™ assigns monetary value to data to assess the relative business impact of potential data loss.

Normalyze continuously identifies and highlights gaps against regulatory compliance benchmarks, so analysts know right away the impact on compliance posture.

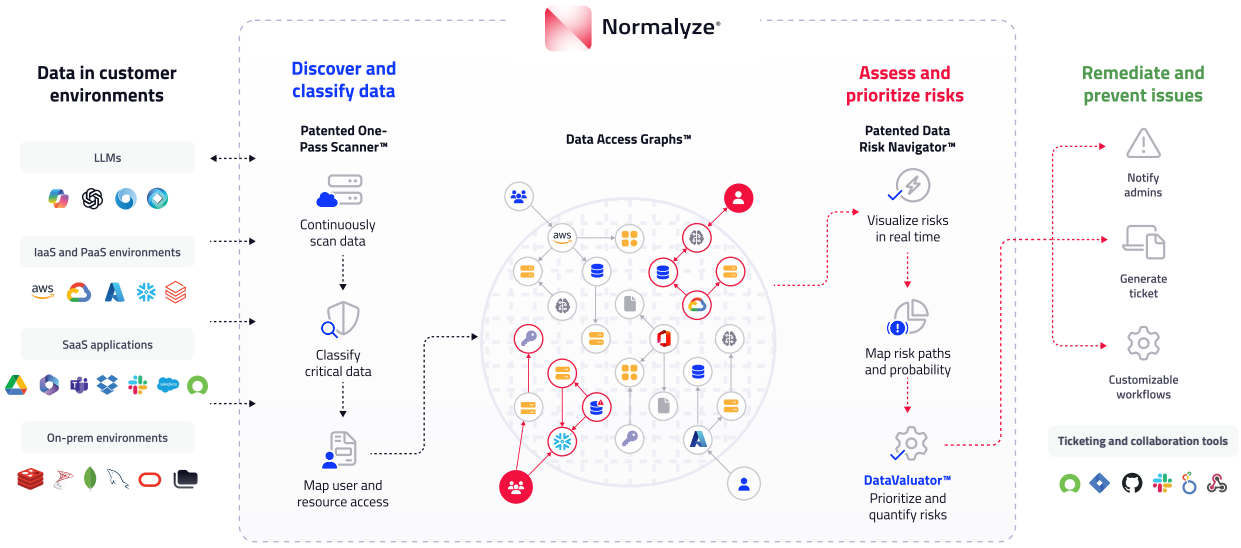
AI-powered querying and remediation workflows make the Normalyze user experience intuitive and efficient. Delivering insights into data, access, and risk in one place, IT teams can understand their overall data security posture, and collaborate on effective security measures and action plans.

Unique Platform Capabilities

AI-powered data discovery and classification

Patented data attack path detection

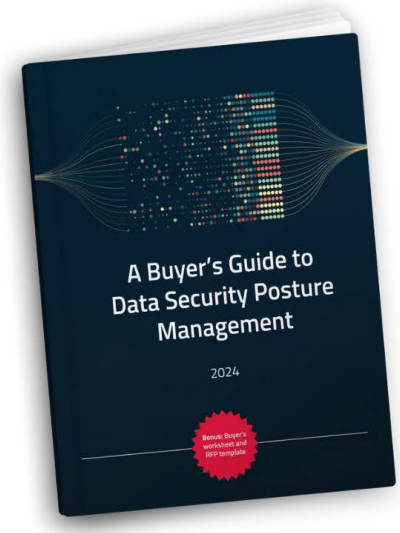
Prioritized risks with AI-guided remediation



The 2024 DSPM Buyer's Guide is here

Evaluating DSPM?
This vendor-neutral guide and vendor evaluation toolkit will come in handy.

www.normalyze.ai/buyers-guide-2024



Discover and access data wherever it is

Normalyze continuously discovers new data stores as they are instantiated in your ever-changing data environments. Our unique cloud orchestration architecture scans all entities in a single pass, making it 20x more efficient than other tools.

Using the patented One-Pass Scanner™, Normalyze delivers the most accurate classification of data in the market, employing a hybrid approach of regular expressions, natural language processing and large language models that optimizes performance and minimizes resource usage. Optical Character Recognition (OCR) ensures that non-digital assets like PDFs are properly classified before being stored and used.

Support for Microsoft Information Protection (MIP) sensitivity labels enables seamless management and protection of sensitive and valuable data within Microsoft environments. Teams can zoom in on areas they care about, without delays or manual iterations.

Achieve least privilege access to data stores with ease

By analyzing IAM roles, permissions, database grants and other access controls for user and machine identities, Normalyze can quickly identify who has what type of access to a given data store and visualize those insights in Data Access Graphs™. By analyzing access logs, Normalyze can conclude who is and who isn't making use of the permissions they have. Security and data teams can then quickly determine a large portion of user and machine identities that have permissions to access valuable or sensitive data but don't really need it. By removing those accesses, teams can achieve least privilege access to data and reduce potential attack surface.

Additionally, Normalyze flags under-protected users and accounts across SaaS and PaaS apps, such as users with access to sensitive data who don't have MFA enabled or have been inactive more than 90 days; and accounts with more than 10 admin users.

Prioritize data stores

Data security teams constantly grapple with the huge number of data stores that they need to protect while realizing that not all data stores are created equal. Using unique DataValuator technology, Normalyze can estimate the cost of breach for each data store helping teams prioritize their security efforts around what matters most. Combined with insights about access and exposure risks, the robust risk matrix allows teams to focus on data stores that carry both a higher likelihood of risk and higher financial impact to the organization if breached.

Normalyze identifies abandoned or stale data stores, including backups and snapshots, that should ideally be eliminated or offloaded to an archive, reducing attack surface and data storage costs.

Leverage attack path detection and AI-guided remediation

Normalyze collects information about all compute resources, networking resources, and PaaS and SaaS services within the cloud provider and detects misconfigurations and vulnerabilities present in each of these resources. This information is organized as a graph within the Normalyze platform, which allows users to understand the paths a potential attacker could take to access sensitive data. This is done on a continuous near real-time basis, ensuring quick detection of changes to your cloud environments that increase exposure of your data.

Normalyze provides AI-guided remediation steps for each of the risks identified, making it easy for the appropriate team to take action quickly. Teams can eliminate risky links in SaaS apps with the ability to remove public access links, organization-wide shares, and domain-wide access for Google Workspace and Microsoft 365.

Compliance mapping and reporting

Normalyze continuously identifies and highlights data privacy gaps against over 500 regulatory compliance benchmarks including GDPR, HIPAA, NIST, CMMC, SOC2, and others. Compliance violations are tagged with both the applicable compliance framework and the individual control that has been violated, so analysts know right away the impact on their compliance posture.

Normalyze's compliance reporting features allow organizations to view and report their compliance status across their entire infrastructure, offering detailed views by account, resource, and compliance framework. This enables teams to proactively address vulnerabilities and maintain continuous compliance, effectively preparing them for audits and ensuring ongoing data security.

DSPM for Snowflake

Normalyze helps Snowflake customers tackle data challenges including overprivileged access, inefficient or inaccurate data classification, rapid data growth and complexity, data governance, and inadequate risk management tools. Security and data teams can automate continuous data discovery and classification of massive amounts of data, along with precise access management using a customized Data Access Graph.

Native integration with the Snowflake Data Cloud enables customers to seamlessly secure their data using Snowflake Horizon's security and compliance capabilities in conjunction with Normalyze's DSPM capabilities, available on the Snowflake Marketplace.

Data detection and response (DDR)

Normalyze provides real-time monitoring and advanced threat detection in AWS, Azure and GCP for risks such as unauthorized access, misconfigurations, and privilege escalations. Anomaly detection identifies suspicious activity outside of normal baseline user behavior, including data exfiltration and potential account takeover. The integration of these capabilities speeds up threat responses and provides unified visibility across multi-cloud environments, simplifying security operations and helping prevent security incidents before they escalate.

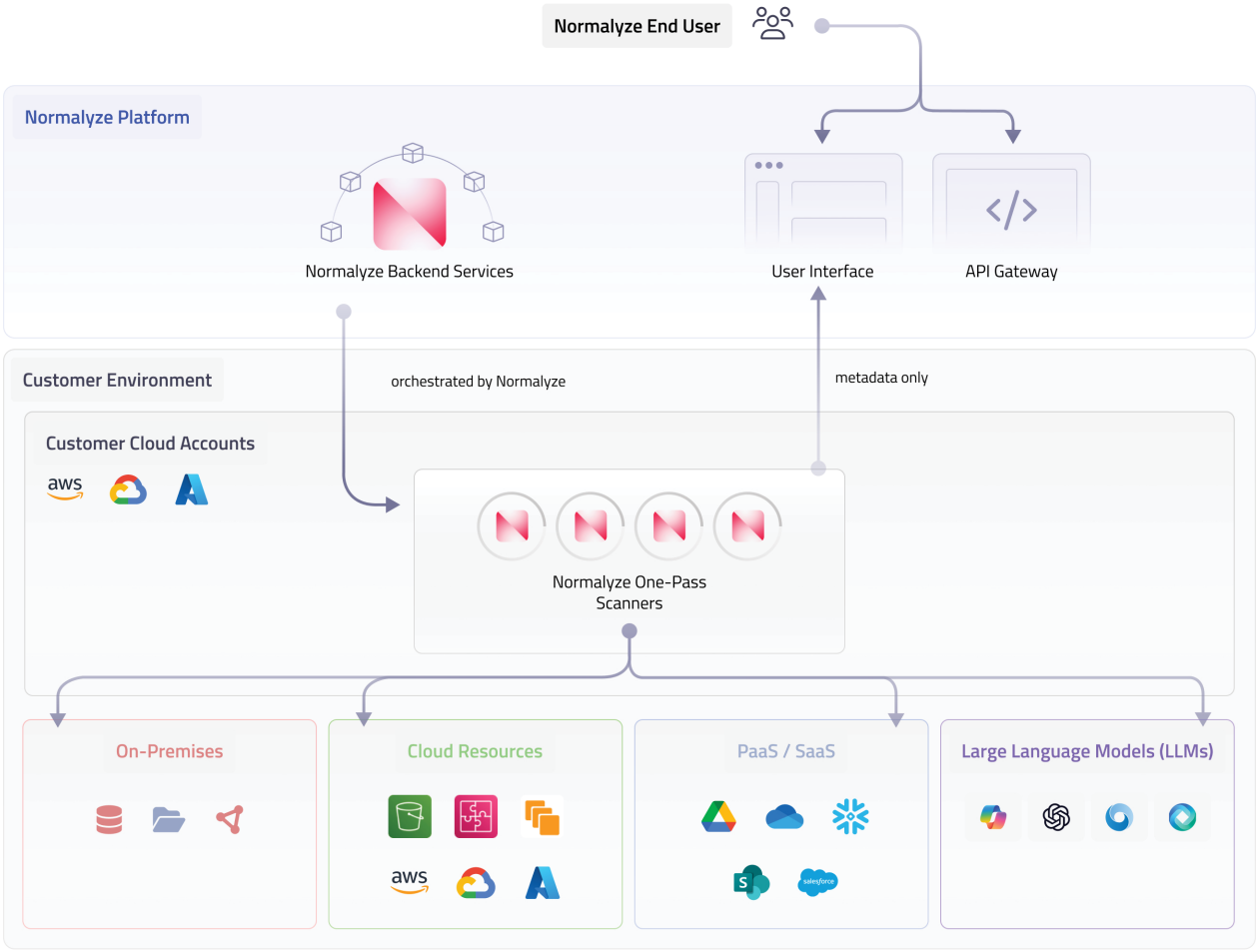
DSPM for AI

Normalyze scanning also identifies sensitive data being used in Large Language Models (LLMs) like Microsoft Copilot, ChatGPT, and Amazon Bedrock to ensure that AI-generated content does not expose sensitive company information. In addition, Normalyze helps secure cloud-based AI deployments in AWS Bedrock and Azure OpenAI by detecting any sensitive data being fed into the foundational or custom models.

Normalyze offers specialized APIs for LLM security that can be used to conduct real-time sensitivity analysis of data going into and out of LLMs, providing full governance and visibility into your data usage. These APIs can be easily integrated into existing customer workflows, helping keep costs down and increasing security for services like Microsoft Copilot.

The platform was designed around an architecture that scans in place, so data never leaves the location where it resides. This approach keeps data under IT control, supports compliance with stringent data protection regulations and enhances operational efficiency.

Normalyze Architecture



Using the permissions provided during onboarding, the Normalyze platform deploys the One-Pass Scanner™ cloud functions and VMs within your cloud environment. The spin up, scale out, scale down and tear down are all managed by the Normalyze platform. The scanners have read-only access to perform these inspections only when they are deployed within your environment. Data within your environment is accessed using a variety of methods including API-based access and snapshotting within the environment to recreate data stores. Once scanning is complete, the scanner sends only the relevant metadata back to Normalyze for further processing and then safely terminates. This process, facilitated by scalable cloud-native technologies, ensures that all data scanning activities are confined to internal resources, thereby preserving the privacy and integrity of your data.

A fundamental advantage of Normalyze's DSPM platform lies in its ability to perform security scans within the native data environment. That means valuable and sensitive data does not need to be moved or copied outside its original location for security analysis, significantly minimizing potential exposure to threats and vulnerabilities that could arise during data transfer. This provides customers with a highly cost-effective approach compared to other data scanning approaches that require either snapshotting or egressing the data to external vendor locations.

By keeping data within its native ecosystem, Normalyze also helps organizations reduce their overall attack surface and streamline compliance efforts.

Supported Platforms and Technologies

Normalyze's data discovery capabilities are engineered to operate seamlessly across a diverse range of platforms and services. By supporting an extensive array of data stores, from traditional relational databases to modern NoSQL and key-value stores, Normalyze ensures comprehensive visibility into all structured, unstructured, and semi-structured data. This integration extends across major cloud providers and SaaS platforms, including but not limited to AWS, Azure, Google Cloud Platform (GCP), and various enterprise applications like Snowflake, Salesforce, ServiceNow, and Workday.

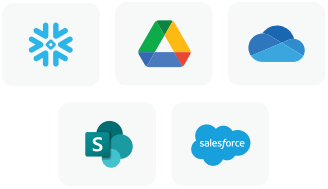
Normalyze's common data discovery and classification framework enables adding support for new data store technologies quickly. Supported technologies include but are not limited to:

S3 Buckets, EBS, RDS, Redshift, DocumentDB, MemoryDB. DynamoDB, Keyspaces, Elasticache, EC2 DBs

Buckets, CloudSQL, MemoryStore, BigQuery, BigTable

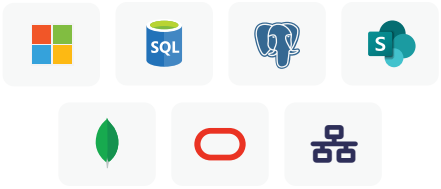
Blob Store, File Share, SQL Server, MYSQL Server, PostgreSQL Server, Azure Cache, CosmosDB, Synapse Analytics, MariaDB, NetApp Files

PaaS + SaaS Platforms



Snowflake, Google Drive, OneDrive, Sharepoint, Salesforce

On-Premises



Windows File Share, MySQL, Postgres, MSSQL, MongoDB, Oracle DB, Network File Share

Conclusion

The Normalyze DSPM platform offers a transformative approach to data security, addressing the critical needs of today's dynamic IT environments.

Normalyze not only offers a sophisticated technical solution but also facilitates an environment for security and data teams to collaborate on data security action plans.

Let us help secure your data ... wherever it is.

See Normalyze in action. Request a demo or take advantage of our Security Risk Assessment to understand how our platform can make a significant difference in managing and securing your organization's most valuable data assets.

Visit www.normalyze.ai to get started.