

Automate Access & Privacy Controls across Your Cloud Data Ecosystem

Author policies once, get consistent enforcement everywhere.

Immuta is the modern data access and control solution for cloud data ecosystems, enabling data engineering and DataOps teams to automate cloud data access and privacy controls using sensitive data discovery and classification to accelerate data delivery, simplify administration, reduce risk and safely unlock more data use in the cloud.

Immuta governs production cloud analytics for organizations that compete with data and must move quickly while preserving security and privacy: global banks and insurance companies, digital health organizations, government agencies, technology companies, and consumer brands.

What are the Key Challenges?



No Central Data Access Control

Cloud data ecosystems have a distributed data access governance model. As cloud adoption accelerates, architects face a proliferation of rules that need to be centralized to safely process sensitive data.



Manual Steps to Provision Data for Users

Because of sensitive data rules, the process of provisioning cloud data is often manual and can take anywhere from weeks to months. New data sources, real-time data updates and adding more users and rules complicate this problem.

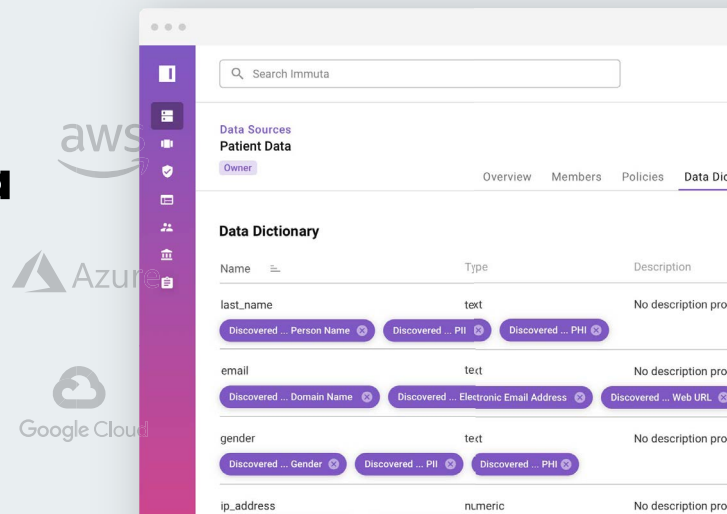


Disparate Data Privacy Controls

Each cloud service has different capabilities for protecting data which results in inconsistent enforcement of data masking policies for safe data use.

Safely Unlock More Data Use in the Cloud with Immuta

Immuta is the modern data access and control solution for data teams looking to centralize data access governance across multiple cloud data platforms.



Centralized Data Access Governance

Immuta's policy builder and automated enforcement lets data teams centralize data access and security across multiple cloud data platforms through modern, fine-grained, attribute-based access controls (ABAC).



Data Discovery and Classification

Immuta's active data catalog provides auto detection of sensitive data to generate standard tagging of data across multiple cloud data platforms to get consistent policy enforcement for all data consumers – from BI analysts to data scientists.



Consistent Data Privacy

Immuta's powerful data masking capabilities help data teams scale data access protection with masking and anonymization techniques – backed by math and centrally enforced across the cloud data ecosystem, without copying data.

RESULTS FOR DATA TEAMS

↑
25% 90%

Increase in permitted use cases for cloud analytics by safely unlocking sensitive data.

How does Immuta work?

01 Catalog, tag and understand your data

NAME	TYPE	DESCRIPTION
last_name	Text	Customer Last Name
Discovered ... Person Name (PII) Discovered ... PII (PII) Discovered ... PHI (PHI)		
email	Text	Customer Email
Discovered ... Domain Name (PII) Discovered ... Electronic Email Address (PII)		
gender	Text	Customer Gender
Discovered ... Gender (PII) Discovered ... PII (PII) Discovered ... PHI (PHI)		
date_of_birth	Numeric	Customer Birth Date

02 Author access control policies using natural language

New Policy
DATA SOURCE: CUSTOMER EMAILS

Mask using hashing
the value in the column(s) select columns
for everyone except select condition

- Account Type
- Country
- Customer
- Education
- Employment Status
- State

03 Rules are dynamically enforced on read, without data replication.

NAME	TECHNOLOGY	USERS	ACTIONS
Taxi Pickups/Dropoffs Pickup and dropoff locations from the NY Taxi Commission	Snowflake	13	Get Access
Toll License Plate Images Images of license plates from New York toll booths	Amazon S3	21	Get Access
Traffic Signal Activity Traffic signal activity across Northeastern US corridor	Google BigQuery	45	Get Access
Emergency Services Deployments	Amazon Redshift	11	Get Access

04 Prove compliance in plain english using detailed audit logs at the data-level

Audit

Audit Record 3e8840-0c7c-11ea-ac5d-258eca8bb

```
{
  "id": "3e884f20-0c7c-11ea-ac5d-258f9beca8bb",
  "dateTime": "1574353835281",
  "userId": "jhenderson@demo.immuta.com",
  "dataSourceName": "Patient Data",
  "projectName": "Emergency Department Analytics",
  "accessType": "query",
  "query": "select * from patient_data limit 10;"
}
```

RESULTS FOR DATA TEAMS

40%

Increase in data engineering productivity when managing sensitive data.

Immuta Capabilities

	CAPABILITY	DESCRIPTION	BENEFITS
ACCESS CONTROL	Explainable Policy Builder	Author data policies in plain english that are easy to understand for compliance and legal stakeholders.	DE CL
	Row-Level Security	Use Explainable Policy Builder to create dynamic rules to restrict data access on a row-by-row basis to govern what a given user is authorized to see.	DE
	Column-Level Security	Use Explainable Policy Builder to create dynamic rules to mask data in sensitive columns to govern what a given user is authorized to see.	DE
	Conditional Policies	Restrict access to data using time-based windows, geographies, data in adjacent cells or reference tables, data minimization to a percentage of available data and more.	DE
	Attribute-Based Access Controls (ABAC)	Use data attributes to write and scale ABAC policies across hundreds of roles, without the limitations of RBAC and such tools as Apache Ranger.	DE CL DC
	Purpose-Based Access Controls (PBAC)	Limit data use to specific purposes with PBAC policies, ensuring that all data use is compliant with data protection laws.	DE CL
DATA GOVERNANCE	Active Data Catalog	Provision authorized, self-service user access to sensitive data using a streamlined data request workflow to reduce manual approvals.	DE CL DC
	External Metadata	Leverage investments in existing discovery and cataloging tools such as Alation, Collibra or BigID to create new enforcement policies based on existing metadata.	DE
	Data Collaboration	Create Immuta projects with appropriate access to read and write derivative data sets for safe collaboration for data teams in the data platform.	DE
	External Data Sharing	Build data-as-a-service products faster by automating data pipelines using Immuta-powered access controls, enforced natively on queries using customer attributes.	DE
	Certification Workflow	Create certification workflows that enable human inspection of automated discovery and tagging to ensure compliance with internal and external rules and regulations.	DE
	Sensitive Data Discovery	Automatically identify and classify sensitive attributes within your data sets to enforce policies for internal or regulatory compliance at scale.	DE
	Regulatory Starter Policies	Reduce risk of non-compliance with consumer data privacy laws, such as CCPA, HIPAA and others, using global Starter Policies that automate the manual steps of sensitive data discovery, data de-identification and tracking purpose and consent for use.	DE
DATA SECURITY AND PRIVACY	Dynamic Data Masking	Apply data policies to mask data across hundreds of tables, without copying data, using hashing, regular expression, rounding, conditional masking, k-anonymization and replacing with null or constant, with reversibility or with format preserving masking.	DE
	Dynamic Anonymization	Apply advanced anonymization techniques (e.g. k-anonymization) to protect direct and indirect identifiers, as well as sensitive information- dynamically enforced on queries, without copying any data.	DE DC
	Dynamic Randomization	Apply advanced randomization techniques (e.g. differential privacy) to protect direct and indirect identifiers, as well as sensitive information- dynamically enforced on queries, without copying any data.	DE DC

Data Engineer: **DE** Compliance/Legal: **CL** Data Consumer (Scientist/Analyst): **DC**



We invite you to spend 14 days exploring a fully-functional instance of Immuta, for free.

www.immuta.com/try

