

Enable Data Protection and Transparency in Government Agencies



Maximize Public Trust by Safeguarding Data

For government agencies at federal, state, and city levels, the ability to protect data is critical to building and maintaining public trust. Yet threats to data security and privacy are increasing rapidly (see Figure 1).

As always, your organization must guard against data breaches and theft from malicious external actors. But now you also must protect data from insider threats – including user errors and abuses, or inadvertent operational exposure.

Agencies tend to focus primarily on system- and application-level security controls to manage user access to specific confidential data. But today you also must shield growing volumes of sensitive data and personally identifiable information (PII) from abuse and exposure while in use. It's imperative to guard the privacy of this data while in the care of your organization – preventing it from being exploited, misused, or lost to bad actors.

To build and maintain public trust, you must continuously detect fraud and misuse and prevent data leakage. It's also your responsibility to enforce data privacy rights by ensuring that all data is handled in a trustworthy way to demonstrate protection and instill confidence.

Nation States

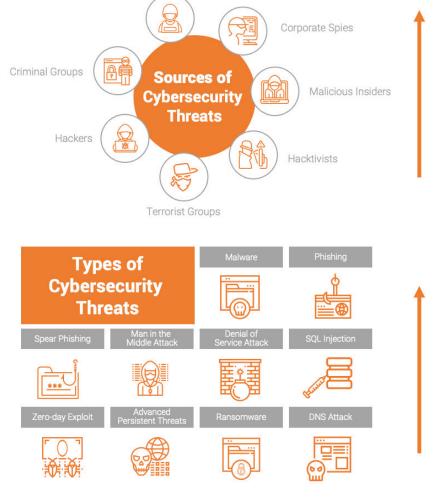


Figure 1. Cybersecurity threats and sources

Take Key Steps to Reduce Security and Privacy Risk Exposure

Facing threats of increasing attacks and abuses, data risk exposure has never been greater for agencies. Without an advanced, automated solution that can discover and classify sensitive data, assess and prioritize risks, and remediate threats with data protection, it's only a matter of time until abuses occur.

As global, federal, and state data protection and privacy mandates for reducing data exposure evolve, you need a consistent, reliable approach that reduces risk and protects data at an enterprise scale. To achieve this requires the right technology to help support and enforce your policies and processes.

Artificial intelligence (AI)-powered solutions can enable automated risk insights into threat vectors to help you govern privacy and security efficiently. With these solutions, you can build a reliable foundation to manage data risk exposure as data use policies and regulatory mandates continue to evolve. You can scale out this foundation to meet increasing demands for transparency from citizens, employees, auditors, and other stakeholders while maintaining a consistent approach with minimized complexity.

"By providing a single place to conveniently and securely access, share, and manage data from computers and mobile devices, our shared human services platform reduces application processing time for our residents who need access to social services."

- Director, State Human Services Provider



Key Data Protection Challenges in Government Agencies

The cost of data privacy abuses can exceed billions of dollars with today's modern laws¹ – a cost in time, money, and citizen trust that agencies can little afford. Following are some of the key challenges your data protection approach must address:



Public Trust

- Quality assurance in citizengovernment relationship
- Decreased trust in government data and analytics
- Mass ingestion of large volumes of disparate data



Risk Assessment

- Manual risk remediation processes and lack of prioritization
- Poor and incomplete data, increasing the risk of bad decisions
- Lengthy processes for finding and preparing data for analytics, delaying time to insights



Compliance

- Inconsistent data privacy operations, compromising reliable controls
- Manual procedures used to operationalize and enforce data privacy policies
- Inability to expose data for safe, trusted use across complex operating environments



Data Scale

- Inability to scale across the enterprise due to manual, documentation-focused data governance approaches
- Difficulty discovering and understanding sensitive data in complex environments, compromising the ability to identify key data elements



Data Use Monitoring

- Inability to identify anomalies in data handling from multiple sources or fix them quickly
- Long delays in deploying data analytics safely into production
- Manual, slow, unreliable orchestration of risk remediation controls



Data Transparency

- Lack of an automated data protection and privacy plan to serve citizens and consumers
- Increased risk exposure from role-based deficiencies and inability to apply contextual access and use policy
- Inability to enable visibility into high-priority risks through assessment of personal and other sensitive data

¹ "FTC Imposes \$5 Billion Penalty and Sweeping New Privacy Restrictions on Facebook," Federal Trade Commision, July 24, 2019



39%

Year-over-year increase in GDPR fines issued in 2020.2

Ensure Data Protection and Privacy Governance Is a Team Effort

The focus on data privacy and protection must extend across your organization, and personnel must cooperate and collaborate to achieve your goals. Key roles and responsibilities in this effort include:



Chief Data Officer/ Head of Data

- Safeguarding of digital transformation with policies and mandates
- Integration of data governance and security
- · Alignment of data stakeholders



Chief Information Security Officer

- · Data discovery and classification
- · Intelligence and automation of protection and monitoring
- · Seamless integration and environment support



Mission or Line-of-Business Owner

- · Business optimization issues, return on investment
- Timely data access
- · Data accuracy and completeness
- Data trust



Privacy/Compliance Officer

- · Intelligence on personal data and identities
- · Continual assessment of data use compliance risks
- Efficient response to data subject requests

² "European Regulators Have Imposed £245.3 Million in GDPR Fines To Date: 39% More Issued in 2020," CPO Magazine, January 25, 2021

Evaluate Your Data Protection Maturity

Developing your agency's ability to protect sensitive data is a journey. See Figure 2 to better understand your data protection maturity.



Figure 2. Data Protection Maturity Journey

Key Data Protection Issues

Public sector organizations are under extreme pressure to deliver better services, more responsive citizen interactions, and greater transparency. But making data more available within the organization for use requires a balance to protect citizen privacy. You must provide access responsibly to protect sensitive and personal data from inadvertent risk exposure.

Now is the right time to look beyond system and application access controls to protect against data breaches, and focus on policies and procedures to govern the privacy of sensitive data when enabled for use by appropriate personnel. By applying automated technologies – which may include AI and machine learning, and analytics that predict abuses, such as anomaly detection – you can detect abuses, monitor how data flows across the enterprise with data lineage, and remediate risks in data management policies, such as inappropriate access.

The following sections discuss three key data protection minefields and the recommended approach and essential capabilities you need to address these challenges.

Build Trust by Ensuring Sensitive and Personal Data Is Handled Appropriately

Agencies can build trust by ensuring that they carefully and effectively manage sensitive data. Democratizing the safe use of data benefits both your agency and the public.

Data Minefields

- Sensitive data stored in untrusted environments
- Sensitive data used in test and demo environments
- Sensitive data available to unauthorized users
- Difficulty identifying where important data is stored
- Inability to identify which data set is accurate
- Rapidly increasing data access and data threats
- New data assets with different names for the same data
- Inability to safely share citizen data

The Approach

Agencies must protect sensitive data internally, while simultaneously ensuring safe and trusted data access and use by employees and the public. To deliver these capabilities, you need to strike a balance between internal stakeholders who may want to maximize data utility for insights and value creation, and those who want to deploy controls that enable confidence in its protection.

Aligning the approaches of these two groups can be done with a focus on:

- Defining sensitive data and establishing control policies to include identity mapping and access rights
- Performing continuous data discovery, classification, and risk analysis
- Ensuring timely responses to data requests while maintaining security and privacy compliance requirements

Essential Capabilities

Data governance functionality supports policy enforcement by: enabling proactive policy alerts; giving compliance stakeholders the ability to track critical policy violations; and offering insights into how many systems are affected by each policy.

Key components of your solution should include:

- Data governance Helps you define business terms, processes, and policies plus critical data elements to align data stakeholders on purpose
- Enterprise data catalog –
 Helps you catalog technical metadata,
 report on data lineage, and assess
 change impacts
- Data quality Implements data quality rule design and measures quality metrics
- Data privacy management Identifies and classifies personal and sensitive data, and tracks data lineage, while measuring and assessing risk and prioritizing protection planning with automation
- Data masking Defines masking rules and executes data protection workflows



"Good offense is almost always based on the foundations of good defense, and that is what Informatica gives us: a strong foundation to deliver a rock-solid value proposition and keep people safe on the roads."

 Kris Marshall, Head of Data, Driver and Vehicle Standards Agency, United Kingdom

Protect Data While Moving to the Cloud

Data governance and privacy management capabilities help protect sensitive data while you are moving to the cloud – and once you are operating there.

Data Minefields

- Incomplete visibility of sensitive data during cloud migration
- Inconsistent sensitive data policy application during cloud migration
- Data proliferation risk across remote workers and extended networks
- Orchestration of data protection and minimization in a hybrid cloud environment
- Availability of sensitive data to unauthorized users
- Time-consuming, manual discovery of sensitive data
- Balance of sensitive data risk exposure with mission and business continuity
- Need for alerts to pinpoint user behavior anomalies

The Approach

Agencies must protect sensitive data throughout the initial cloud migration. In addition, you must support continuous orchestration of this protection after the move.

You can reach these goals by ensuring you choose an approach that allows you to:

- Ingest structured and unstructured raw data from any source
- · Integrate, cleanse, and prepare data
- Define sensitive data, discover it, and manage it before it is used in any applications

Essential Capabilities

Data privacy management functionality supports the orchestration of risk remediation during cloud workload migration. Automated workflows help you remediate risks using privacy control tasks, such as alerts, reports, masking, and encryption.

Choose a solution that allows you to:

- · Ingest worldwide data sources
- Clean, curate, and normalize raw data
- · Govern and protect the data
- Democratize use with trusted data

Improve Mission Outcomes by Better Managing Risk

By monitoring data use, enforcing compliance, and remediating misuse, you can better manage your data risk and improve mission outcomes.

Data Minefields

- Understanding of data handling and sharing processes
- Sensitive data used in test and demo environments
- Need for rapid response to data inquiries from public and internal users
- Identification of exposure to gaps in controls
- Automation of data anonymization
- Trust ensured by understanding data lineage
- Failure to map data users to data use
- Alerts to identify user behavior anomalies

The Approach

Agencies must respond to consumer rights with mandated transparency. They also must mitigate risk exposure and monitor data movement.

To help manage compliance, limit data misuse, and control proliferation, look for a solution that allows you to:

- Operationalize data governance policies to protect data
- Prioritize sensitive data types and orchestrate automated risk remediation
- Report on data lineage to understand sensitive data sharing activity

Essential Capabilities

Agencies need to put risk in the rearview mirror to help improve mission outcomes.

Choose a solution that helps you:

- Ingest enterprise-wide data sources
- Curate and normalize clean raw data
- Govern and protect data through a reliable governance framework
- Support safe data democratization, consumption, and appropriate use

Ensure Data Protection and Transparency with Informatica

Informatica helps organizations reduce risk by monitoring data use and movement and enforcing protection across global, highly complex environments.

As a leader for five years in the 2020 Gartner's Magic Quadrant™ report for Metadata Management Solutions, Informatica helps you scale out your data protection plans and align data governance policies.³

Informatica helps enable the data privacy and protection needed to govern appropriate data use. With our solutions, you can respond to data subject requests with intelligent insights and reporting to enforce citizen rights. We also enable the safe use of data for applications that drive value.

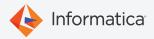
Learn More

Find out about Informatica® solutions for data privacy and protection at www.informatica.com/products/data-security.

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Informatica as a Leader in Magic Quadrant for Metadata Management Solutions 2016-2020



³ Gartner®, Magic Quadrant™ for Metadata Management Solutions, Guido De Simoni, Mark Beyer, Ankush Jain, Alan Dayley, 11 November 2020