

# A Compliance Toolkit for GDPR

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*Keeping Private Data Private*



# The GDPR Framework | Effective 25 May 2018

GDPR, or the General Data Protection Regulation, is a data protection law adopted by the European Union.

## Why it Matters to You

Organizations with large-scale processing of personal data **must** appoint a Data Protection Officer (DPO).

If you collect information from EU citizens, you **must** comply with the regulation.

## Personal Data Defined

“Any information related to a natural person or ‘Data Subject,’ that can be used to directly or indirectly identify the person. It can be anything from a name, a photo, an email address, bank details, posts on social networking websites, medical information, or a computer IP address.” | [eugdpr.org](http://eugdpr.org)

## Primary Goals

Return control of personal information to individuals. Facilitate international business by creating an EU-wide standard.

For example, the right of portability, so that a person can transfer their data to another collector.

## The Right to be Forgotten

A critical component of the GDPR is Data Erasure, or the *Right to be Forgotten*, which enables a Data Subject to have his or her personal information erased and free from further dissemination.

# Enforcement and Punishment

GDPR, or the General Data Protection Regulation, is a data protection law adopted by the European Union.

## Enforcement

GDPR enforcement falls on data protection regulators across the EU.

It can range from encouragement to comply with the law to company-crippling fines, depending on the severity of the violation and jurisdiction.

## Penalties for Non-Compliance

An organization can be fined up to 4% of annual global turnover (revenue, not profit) or €20 million, whichever is greater.

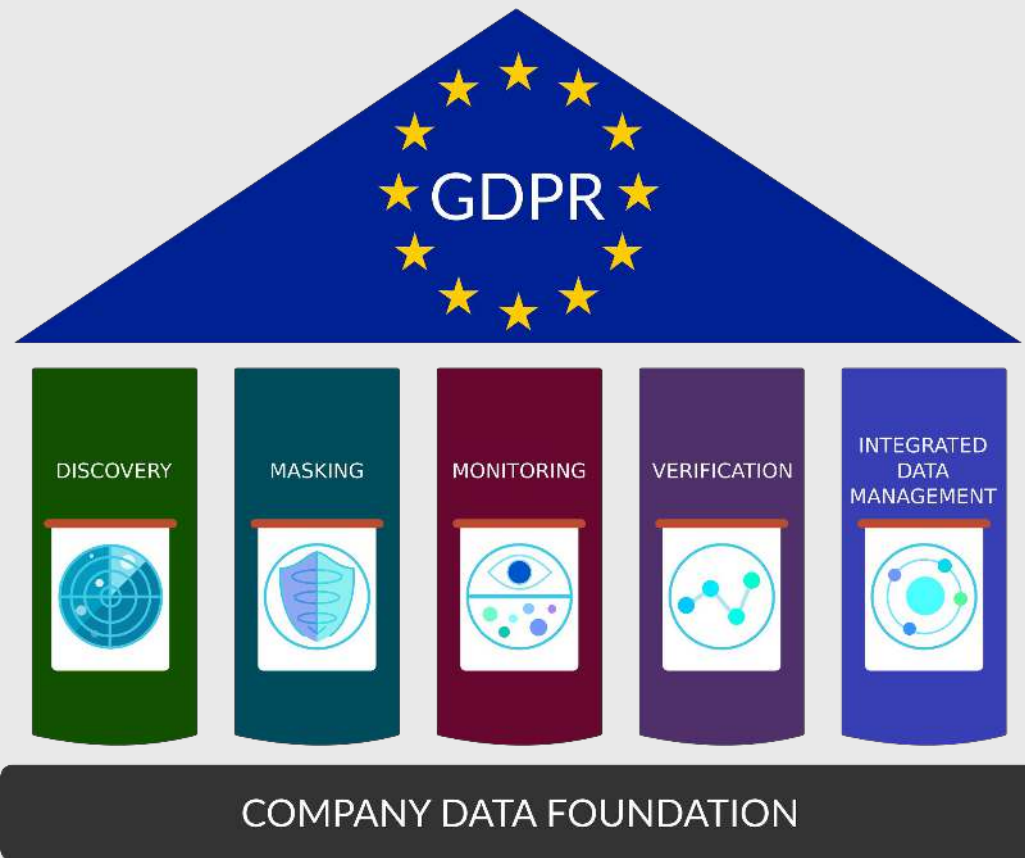
A tiered approach imposes a 2% fine on not having user records in order, failing to notify the governing authority and users in the event of a breach, and not conducting impact assessment.

These rules apply to both data controllers *and* data processors.

# The 5 IRI Pillars of GDPR Compliance

By managing electronic data assets across these five paradigms, you can ensure systematic compliance with the GDPR.

IRI Data Protector Suite software enables you to put the pillars to work in support of your GDPR efforts, and to approach security from a data-centric point of view.

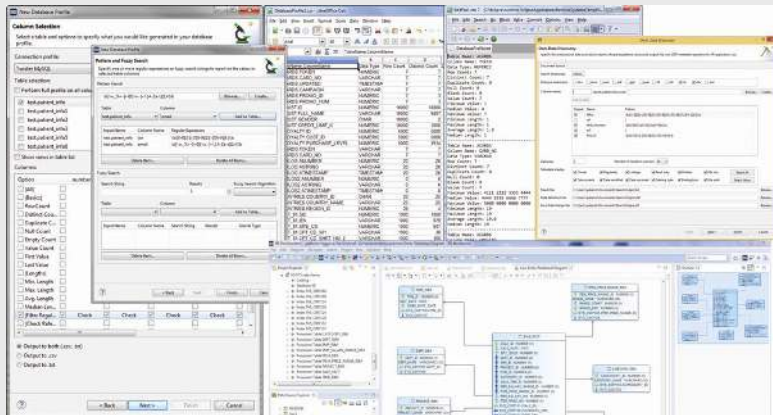




# Data Discovery

## Finding PII

GDPR effectively requires you to be in 100% control of your information. To control them, you have to know where they are. The ability to rapidly search and classify the PII you're looking for are thus essential first steps.



## The Right to be Forgotten & to Data Portability

To remove and provide PII and requested data associated with it, you have to know where it is.

Data discovery tools should enable you to find individual records wherever they exist, redact them as needed, and prove it.

In addition, the PII and attendant transactional data must be able to be extracted and provided in a common EDI format.

Added bonuses are automatic source data storage, lineage and file metadata reports.



# Data Masking & Role-Based Access Control

## *Static Data Masking (SDM)*

Protects data elements at rest via encryption, pseudonymization, hashing, redaction, etc. These elements typically include DB column or flat-file field values that are considered sensitive.

## *Dynamic Data Masking (DDM)*

Works on a policy basis so that applications which query RDB tables reveal unmasked data only to authorized users, while masking results for all others. The source data remains unchanged.

☒ Use predefined masks

Predefined Masks

Mask Example: 745812/5554 => \*4\*8\*2/\*554

Czech PIN



## Role-Based Access Control

Role-Based Access Control (RBAC) limits system and database access to authorized users only.

Roles are created for specific job functions, and users are assigned to these roles. Permissions to perform certain operations within the system and architecture are assigned to roles.

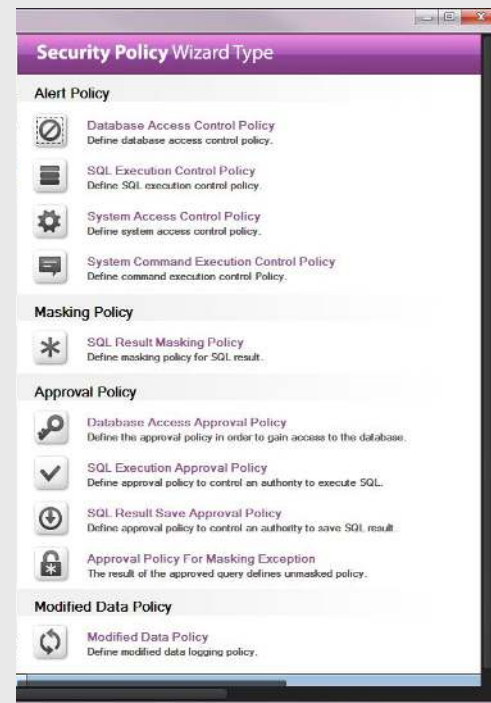
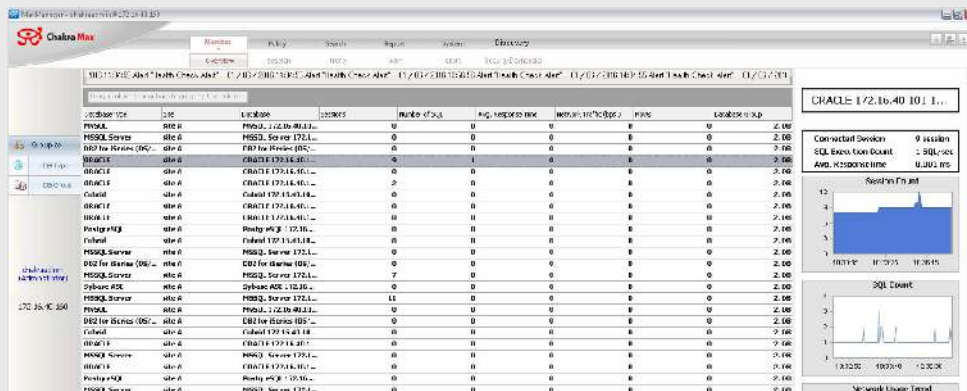
By implementing an RBAC system, you prevent data breaches by restricting the power any one user has to what he or she can see or do with data. This is part of keeping PII secure and GDPR-compliant.



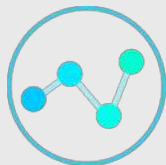
# Activity Monitoring & Protection

## DAM/DAP (DCAP) Technology

A database firewall offers several additional layers of PII security. It blocks unauthorized table access and SQL executions, sends alerts, masks data dynamically, and logs all activity into an audit log. Granular queries on reports on log data help verify compliance.







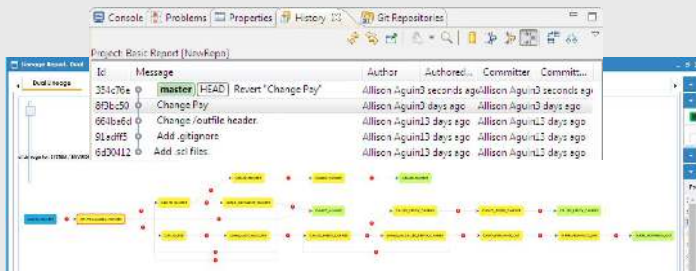
# Verification

## Lineage

Show the complete history of data including:

- Where it originated
- Where it moved
- How it changed over time

Tracking how data exists and moves enables you to monitor the key interactions with it. Data and metadata lineage can reveal who altered information, when, where, and how.



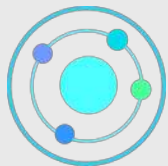
## Reporting & Auditing

Comprehensive source data profiling reports, data and metadata extracts, and after-action audit logs allow you to *prove* to regulatory bodies that you know where your data is, who accessed it, what's been done to protect it, and how you handled "Right to Be Forgotten" and Data Portability requests.

## Re-ID Risk Scoring

Determine the risk of PII being re-identified through automatic statistical analysis of the quasi-identifiers. Use the report to select and apply blurring and generalization functions to harden the data while preserving its utility.





# Integrated Data Management

## Data Integration (ETL)

GDPR requires you to have proof of consent to use PII. ETL processes can automate the work of acquiring disparate data, checking for a consent condition, deleting outdated or incorrect data, and joining/transforming key elements into a central store for use.



## Test Data

Don't use production data for prototyping ops or stress-testing apps when you can auto-generate smart, safe test data instead. Realistic, referentially-correct test data lets you simulate production data *and* comply with the GDPR without sacrificing realism.

## Data Discovery, Cleansing, and Masking

*Article 5* of GDPR requires inaccurate data to be removed or fixed without delay. Being able to validate, change, and unify data -- and producing an audit log indicating the source, target and changes made -- helps you both *achieve and verify* GDPR compliance.

## Data Wrangling

Preparing data for BI and analytic applications require that data be filtered, transformed, cleansed, and de-identified appropriately.

*Doing all this at once* is possible.

# IRI | 40 Years of Data Management

Innovating in high-performance data movement and manipulation since 1978 and data security since 2007.

## Who We Are

Innovative Routines International (IRI), Inc. is an independent software vendor (ISV) famed for creating CoSort, an engine for DW transformation, DB loads, BI data preparation, and application acceleration.

Today IRI is also renown for data-centric protection technology from its provision of award-winning data-masking and DCAP products and rapid-response support teams.

## How We Help

IRI features a modular approach to data protection and management.

Our products provide the exact degree of specificity you need to achieve your goals and GDPR compliance. Together they form the Data Protector and the Data Manager Suites and the Voracity platform.

IRI also provides data masking as a service, and partners with GDPR consultancies, and both statistical and legal experts for HIPAA security rule compliance.



# IRI Product Offerings Stack



## IRI Voracity

An Insatiable Appetite for Data

Consolidate tools and tasks to process, protect, prototype, present



### IRI CoSort

Sort, Transform & Report

Speed or replace batch, BI, ETL, sort, and SQL programs



### IRI NextForm

Data, File & Database Migration

Unlock data and move between apps, databases, and platforms



### IRI RowGen

Smart Test Data Generation

Prototype DBs and ETL, stress-test, outsource, and benchmark



### IRI FACT

Fast Extract for DBs

Speed RDBMS unloads for archival, migration, reorg, and ETL

## DATA MANAGER SUITE



### IRI FieldShield

PII / PHI Classification & Masking

Comply with privacy laws, nullify breaches, govern data



### IRI CellShield

PII / PHI Search & Mask in Excel

Profile and de-identify PAN/PHI/PII in Excel® spreadsheets



### IRI DarkShield

Unstructured Data Search & Security

Discover, deliver, and delete PII in dark data file formats



### IRI Chakra Max

DB Firewall & Dynamic Data Masking

Define, monitor, block, and audit DB activity using RBAC

## DATA PROTECTOR SUITE



CELEBRATING  
**40** YEARS  
2018  
The CoSort Company

*Trusted Solutions for GDPR Compliance and More*

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