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Association pour la Protection des Données au Luxembourg

GDPR-TOOLING FOR DATA RETENTION EU DATA PROTECTION DAY 2021 PARTHER GDPR&CYBER ET MICHAELHOFMANN



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SETTING THE SCENE

- Companies having complex technical infrastructure :
 - Systems on premises/off site/cloud, hubs
 - High number of data bases/applications, data warehouses, data lakes
 - Little control data control over non structured data, mail and files servers
 - With a high level system integration/interfacing
 - Online and batch processing
 - End user computing
- 2. Production systems have not been build with "privacy by design/default"



DATA DELETION CONTEXT

- 1. Two parallel approaches (historical and new data):
 - Clean up historical data (structured and unstructured)
 - Revisit data governance approach for existing systems
- 2. Privacy by design and by default for new systems
- 3. Therefore, companies struggle to implement efficient data retention policies throughout systems



DATA DELETION CONTEXT

1. The need: State of the art tooling/automation for structured and unstructured data:

- Identify personal data cross systems (structured and unstructured) high speed, accuracy and completeness (on premises/off site/cloud infrastructures)
- Map the data flows/systems
- Automated identification of data outside respective retention periods
- Provide deletion/anonymization solution
- Provide assurance for successful deletion/anonymization





REQUIRED UNSTRUCTURED DATA CAPABILITIES

- 1. Files: Microsoft (Word, PowerPoint, Excel, OneNote), Google (Sheets, Slide), Apple (Numbers, Keynote, Pages), Adobe PDF, Zip files
- 2. Communication: Microsoft (Outlook, Exchange), Lotus Notes, Gmail, Slack
- 3. File shares: Microsoft (Office 365, Azure Files, Sharepoint), Google Drive, AWS S3, Box
- 4. Cloud/SAAS: Box, Microsoft Dynamics, AWS (Athena, Aurora, Blob, EMR, Dynamo, File, RDS, Redshift), Google (BigQuery, Drive), ServiceNow





METHODOLOGY AND APPROACH FOR UNSTRUCTURED DATA

- Aligned Data Security Definition
- Automate Data classification
- 3. Align Data Risk Assessment
- 4. Data and Security controls of unstructured data:
 - Automatic discovery
 - Labeling based on data classification
 - Integration with security tooling to enforce data protection policies
 - Alerting on inappropriate classification/usage
 - Detection of unauthorized access
 - Deletion semi-automation
 - Auditability







DATA DISCOVERY & INVENTORY

FIRST STEP IS TO FIND OUT WHERE PERSONAL DATA RESIDES

Discover

- Scale to hundreds of **terabytes** and across structured, unstructured.
- Big data and cloud data sources

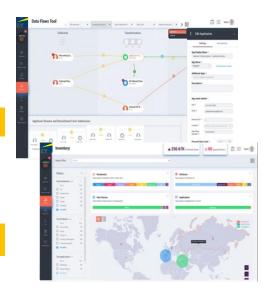
 Maintain dynamic and automated personal data discovery

Correlate by data subject

- Associate personal information to data subject not only personally identifiable information by **locations**
- Identify data and new personal information by proximity, location and frequency

Visualize personal data

- Centralize visibility of personal data by person (data subject), residency, data type and **attribute**
- Create automated, data-driven mapping of processing flows by business process



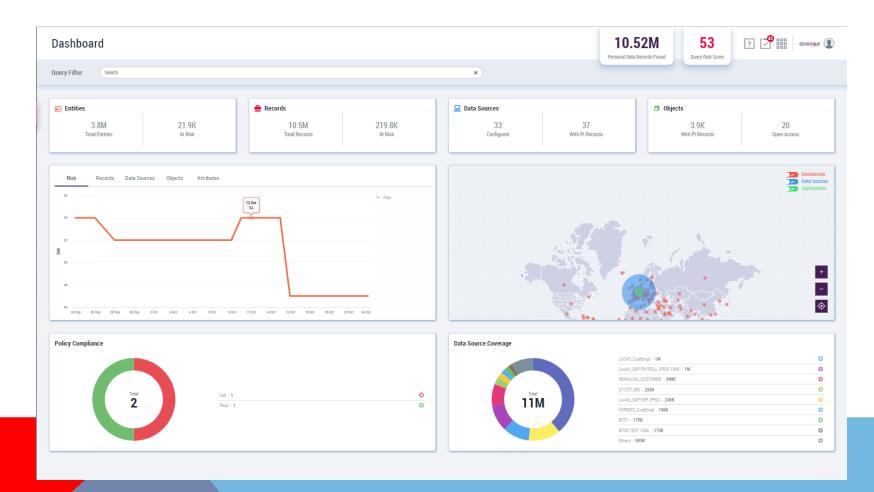
Automated Data Discovery and Inventory

- Automated Personal Data Discovery
 - Structured
 - Unstructured
 - Semi-Structured
- Personal Data Correlation
- Data Context Awareness
- Record of Processing Activities
- Data Inventory
- Data Lineage and Mapping
- Data Subject Rights Orchestration
- Data Privacy Intelligence and Risk Determination
- Continuous Data Scanning and Compliance



DATA DISCOVERY & INVENTORY

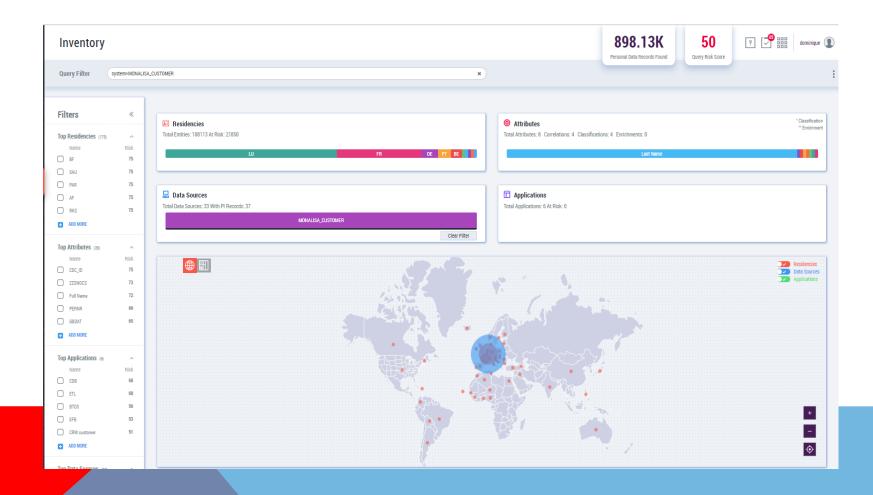
WHEN DATA STARTS BEING DISCOVERED DATA IS PRESENTED IN THE DASHBOARD





DATA DISCOVERY & INVENTORY

THE SYSTEM ALLOWS TO ANALYZE DATA BY SYSTEM OR BY TYPE OF DATA, INCLUDING NATIONALITIES OF THE DATA SUBJECTS





DATA FLOW MAPPING

ONCE DATA IS KNOWN, IT IS POSSIBLE TO KNOW HOW DATA FLOWS ACROSS YOUR ORGANIZATION

Data flow maps

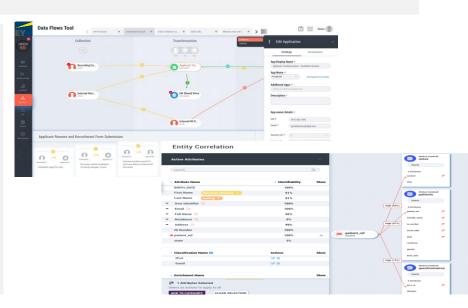
▶ Data flow maps are developed on key processing activities on the basis of interactions between processes and technologies in order to detect and reduce privacy risks. The data flow maps are automated and represented through a graphical interface as shown below:

Advanced correlation plus classification algorithms allow to map:

- ► Relationships across applications/systems
- ► Catalogue of personal data moving among the business applications preserving the integrity of data

This catalogue and Inventory can be further used to

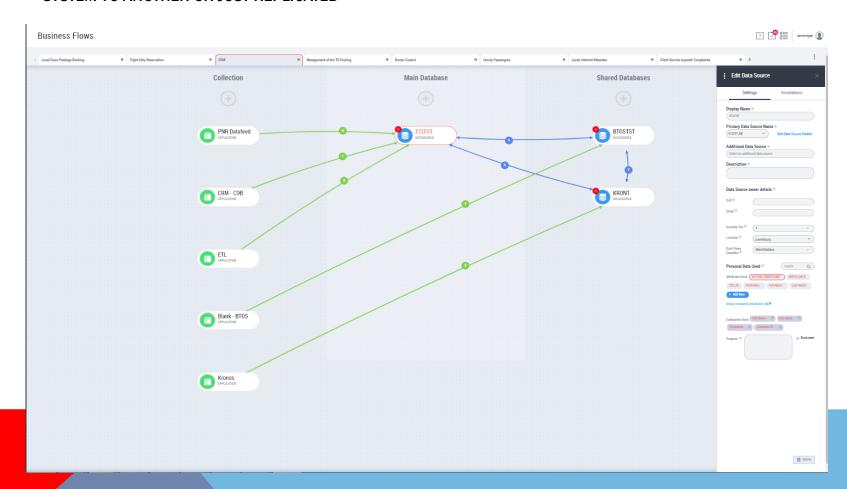
- ► Auto-generate workflow maps
- ► Create new business data flows
- ► Map the flow of data between applications and data sources
- Automatically identify data attributes accessed by applications
- ► Generate reports





DATA FLOW MAPPING

FROM SYSTEM LEVEL TO DATABASES, IT IS POSSIBLE TO KNOW HOW DATA IS CONSUMED, IF IT IS COPIED FROM ONE SYSTEM TO ANOTHER OR JUST REPLICATED







EY INTELLIGENT PRIVACY AUTOMATION COMPONENTS











Record of processing

Manage data collection reviews, approvals, record-keeping and certification of "record of processing activities" for both business processes and application

Privacy impact assessment

Conduct risk assessments and manage impact, risk acceptance, track remediation items and monitor risks

Data subject rights

Enable data subjects (employees, customers, former employees, etc.) to exercise their data rights and respond in a timely manner

Consent management

Allow data subjects to provide specific consent for personal data usage and manage their choices

Data privacy governance

Enforce "data privacy by design" by conducting regular audits, assessments for processors including vendors to protect the rights and freedoms of data subjects

Breach response

Manage major breaches that pose a high risk to the rights and freedoms of data subjects and notify privacy authority and subjects

Data flow maps

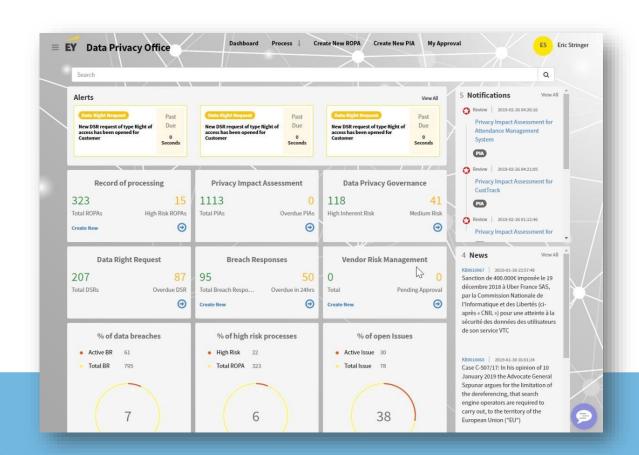
Manage a record of data flows for sensitive PI data of data subjects



IPA - SUPPORTING TECHNOLOGY

DATA PRIVACY ANALYST PORTAL - USER ALERTS AND DASHBOARD

- Data Privacy
 Analysts use a
 consolidated
 dashboard that
 allows them to work
 across the various
 data privacy
 operations
 management
 workflows
- Centralized visibility into service level alerts, new requests and status







CONTACT



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Useful links:

Demo of Retention tooling 2021: Michael. Hofmann@lu.ey.com

EDPS/EDPB SCC 2021: EDPB-EDPS Joint Opinion 1/2021 on standard contractual clauses between controllers and processors | European Data Protection Board (europa.eu)

EDPB Data Breach 2021: <u>Guidelines 01/2021 on Examples regarding Data Breach Notification | European Data Protection Board (europa.eu)</u>

EDPS Cloud 2020: Outcome of own-initiative investigation into EU institutions' use of Microsoft products and services (europa.eu)

EY Customer Privacy Report 2021: EY Global Consumer Privacy Survey | EY - Global

EDOB Brexit 2021: edpb_informationnote_20201215_transferstoukaftertransitionperiod_updated20210113_en.pdf (europa.eu)

APDL Working Groups 2021: (Français) Devenir Membre de l'APDL | APDL