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GDPR - 'ONCE IN A GENERATION' OPPORTUNITY FOR TRANSFORMATION OF DATA AND APPLICATION SERVICES GOVERNANCE PRACTICES

Milomir Vojvodic, GTM Team For Oracle Integration Solutions, Oracle EMEA

Agenda

o Oracle Integration Platform

o Introduction To Governance And Software Visualization

o Customer Data And Integration Governance

   o A Group Of GDPR Imposed Governance Activities/Projects

   o B Group Of GDPR Imposed Governance Activities/Projects

   o C Group Of GDPR Imposed Governance Activities/Projects

   o D Group Of GDPR Imposed Governance Activities/Projects

o Next Steps

Oracle Integration Platform
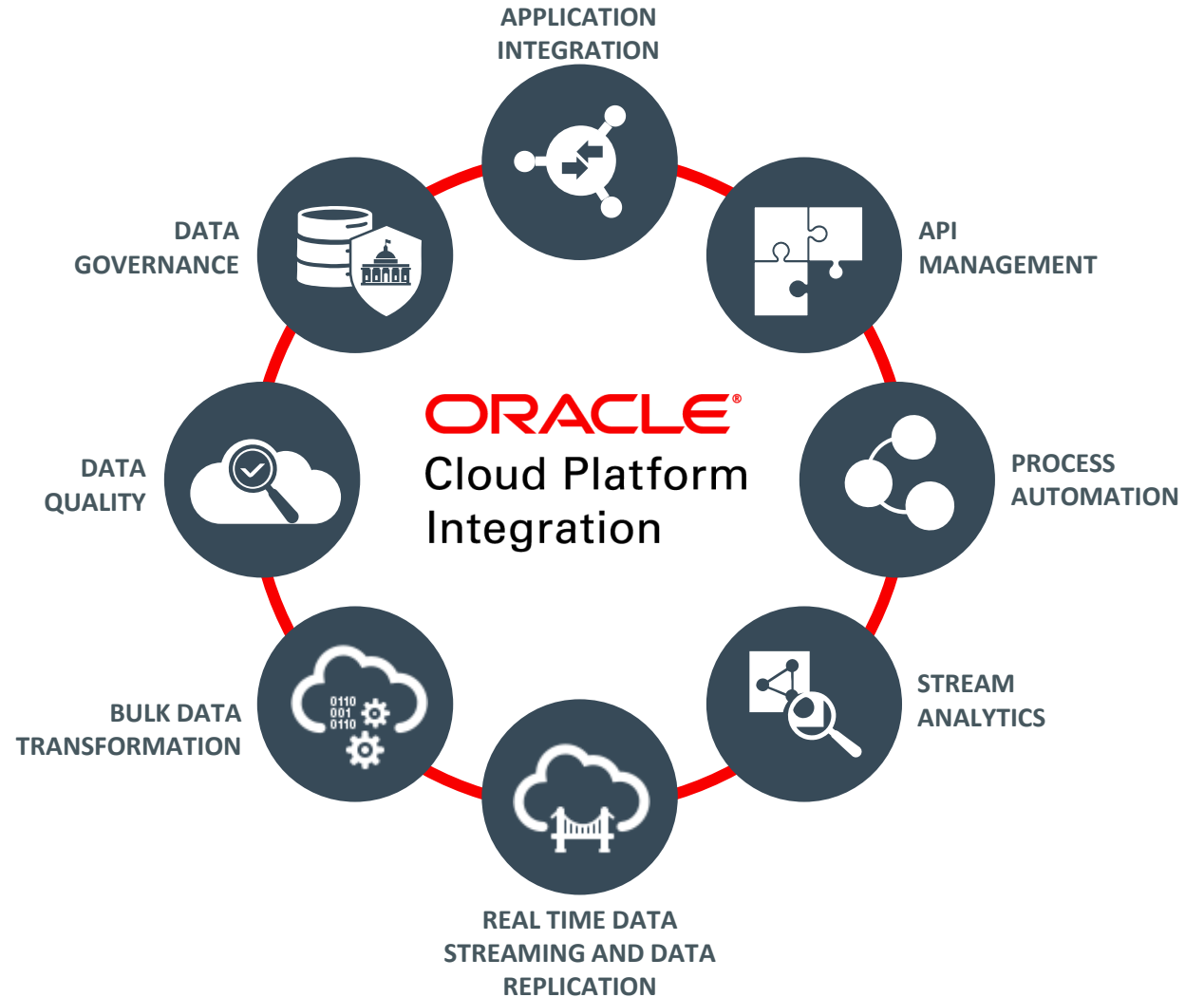
Complete

Simplified

Open

ORACLE®
Cloud Platform
Integration

- APPLICATION INTEGRATION
- API MANAGEMENT
- PROCESS AUTOMATION
- STREAM ANALYTICS
- REAL TIME DATA STREAMING AND DATA REPLICATION
- BULK DATA TRANSFORMATION
- DATA QUALITY
- DATA GOVERNANCE

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Oracle Integration Platform

Complete

Simplified

Open

Oracle API Platform Cloud Service (OAPI P CS)

Oracle Enterprise Metadata Manager (OEMM)

APPLICATION INTEGRATION

DATA GOVERNANCE

API MANAGEMENT

ORACLE® Cloud Platform Integration

DATA QUALITY

PROCESS AUTOMATION

STREAM ANALYTICS

BULK DATA TRANSFORMATION

REAL TIME DATA STREAMING AND DATA REPLICATION

Oracle Enterprise Data Quality (OEDQ)

Oracle Data Integration Platform Cloud Governance Edition (ODIPC GE)

Oracle Data Integrator(ODI)

Oracle Data Integrator Cloud Service (ODI CS)

Oracle Data Integration Platform Cloud (ODIPC)

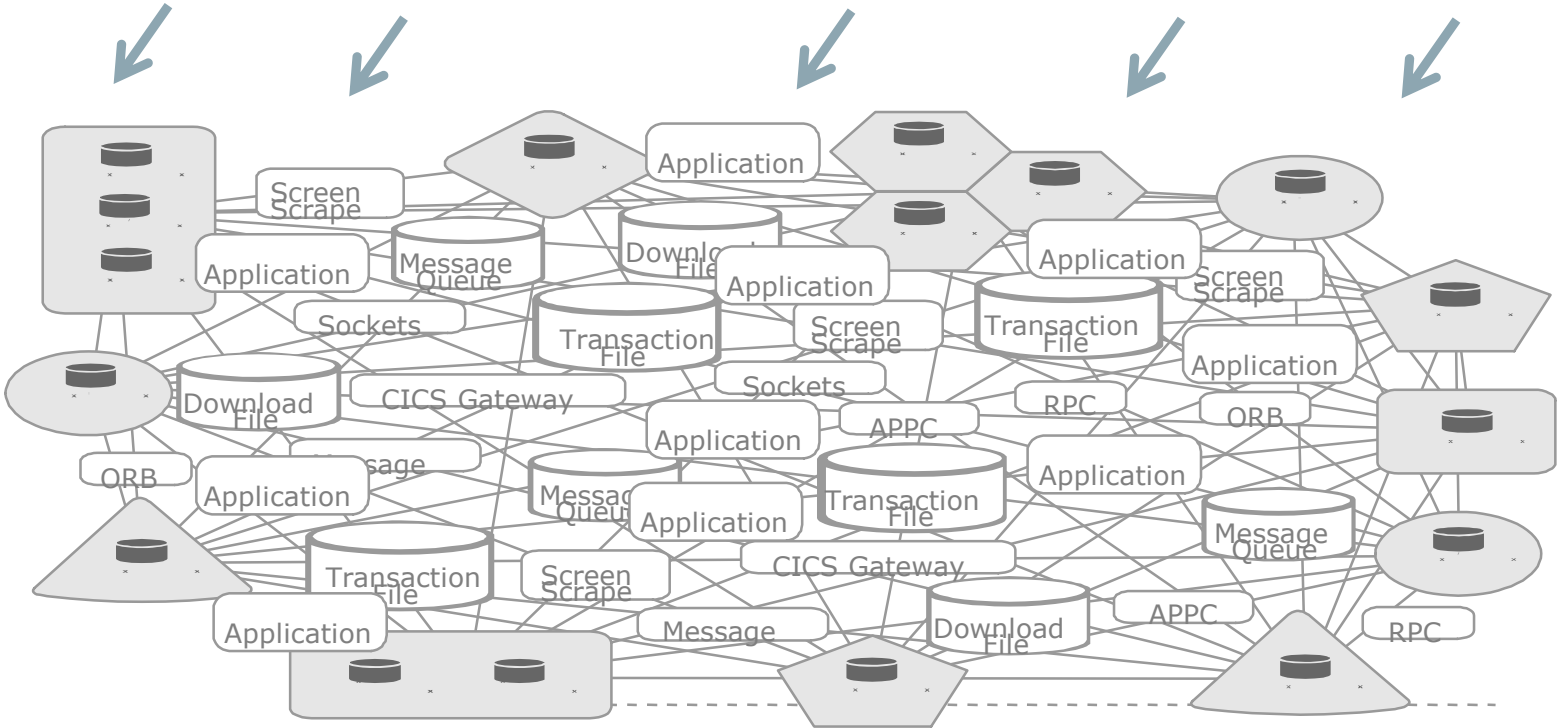**Oracle BPM (OBPM) & Oracle Process Cloud Service (OPCS)**

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INTRODUCTION TO GOVERNANCE AND GOVERNANCE SOFTWARE VISUALIZATION

Oracle EMEA Integration Team
2017

Governance Layer

Oracle Enterprise Data Quality (OEDQ)

Oracle Data Integration Platform Cloud Governance Edition (ODIPC GE)

Oracle Enterprise Metadata Manager (OEMM)

CUSTOMER DATA AND INTEGRATION GOVERNANCE

Oracle EMEA Integration Team
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Selected GDPR Requirements

○ Allows individuals to request from organizations to show them all data that they have and keep about them (subject access right – Article 15) and to request all data about them deleted (right to be forgotten – Article 17). Allows individuals to request their data profile to be passed to another processor (data portability right – Article 20). The data subject shall have the right to obtain from the controller without undue delay the rectification of inaccurate personal data (Article 16).

○ Keeping records of processing activities (Article 30). Calls for identification where there might be higher risks of security breaches (data protection impact assessments – Article 35). Requires privacy to be embedded into the design specifications of technologies not just at the point of delivery (privacy by design - Article 25) and necessitates showing to auditors compliance with the data protection of personal data (responsibility of controller - accountability principle – Article 24)

# ▼	Chapter ▼	▼	Section ▼	Article ▼	Name ▼
05	Chapter 02 – Principles			Article 05	Principles relating to processing of personal data
15	Chapter 03 – Rights of the data s		Section 2 - Information and acc	Article 15	Right of access by the data subject
16	Chapter 03 – Rights of the data s		Section 3 - Rectification and er	Article 16	Right to rectification
17	Chapter 03 – Rights of the data s		Section 3 - Rectification and er	Article 17	Right to erasure ('right to be forgotten')
20	Chapter 03 – Rights of the data s		Section 3 - Rectification and er	Article 20	Right to data portability
24	Chapter 04 – Controller and proc		Section 1 - General obligations	Article 24	Responsibility of the controller
25	Chapter 04 – Controller and proc		Section 1 - General obligations	Article 25	Data protection by design and by default
35	Chapter 04 – Controller and proc		Section 3 - Data protection imp	Article 35	Data protection impact assessment

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A Group Of GDPR Related Governance Activities/Projects

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A1 - Finding Data

- o Many different formats, many different locations, many different types

- o Knowledge of the locations of ALL relevant personal data (e.g., subject access right, the right to be forgotten)

- o Organizations need flexible platforms to dynamically handle large number of these requests and with a level of automation

- o OEMM metadata harvesting and exploration of metadata with high level of visualization

- o Oracle data governance tool will further link process of data identification with the OEDQ engine to immediately profile and/or validate data through the identification process or to perform on-the-spot root cause analysis into identified data issues
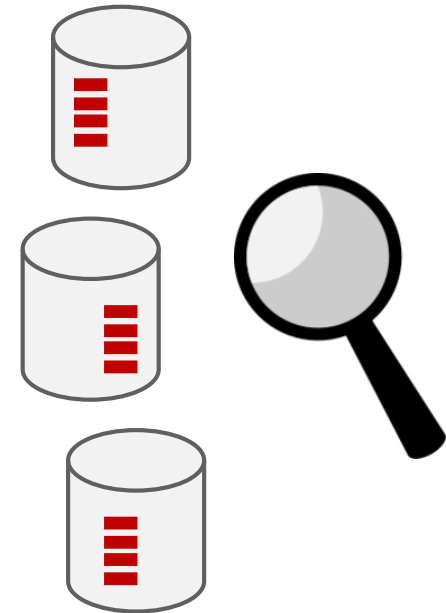
A2 - Deleting Data

o   Constant ad-hoc remove of data held in multiple different systems is very expensive exercise. Data quality issues like duplicates are challenging this process

o   OEMM supports process of identification of these data and their policy control and OEDQ de-duplication

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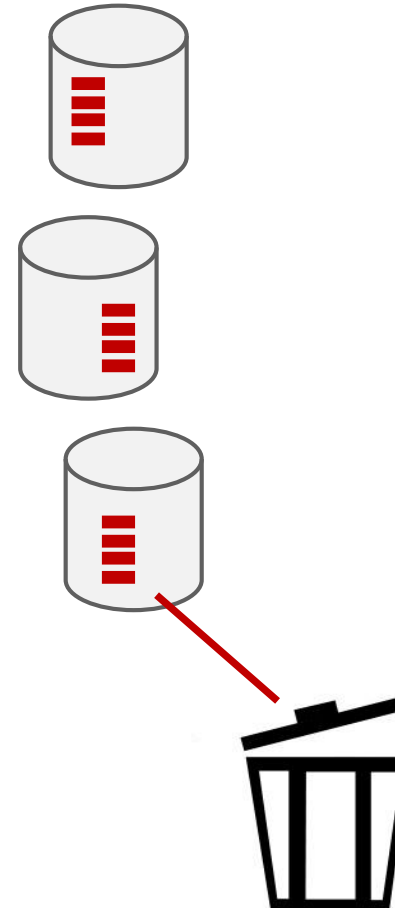
A3 - Sharing Data

○ If customer information is going outside the organization, it can require additional security considerations and can be a costly exercise to achieve if done manually. If the organization has missed to provide something that belongs to the customer it could be an indication that they do not have their data under control and could lead to DPA enforcement actions.

○ Oracle data governance tools can implement policies and rules to govern this process. OEDQ can profile, audit, cleanse, parse, standardize, transform and de-duplicate all these data

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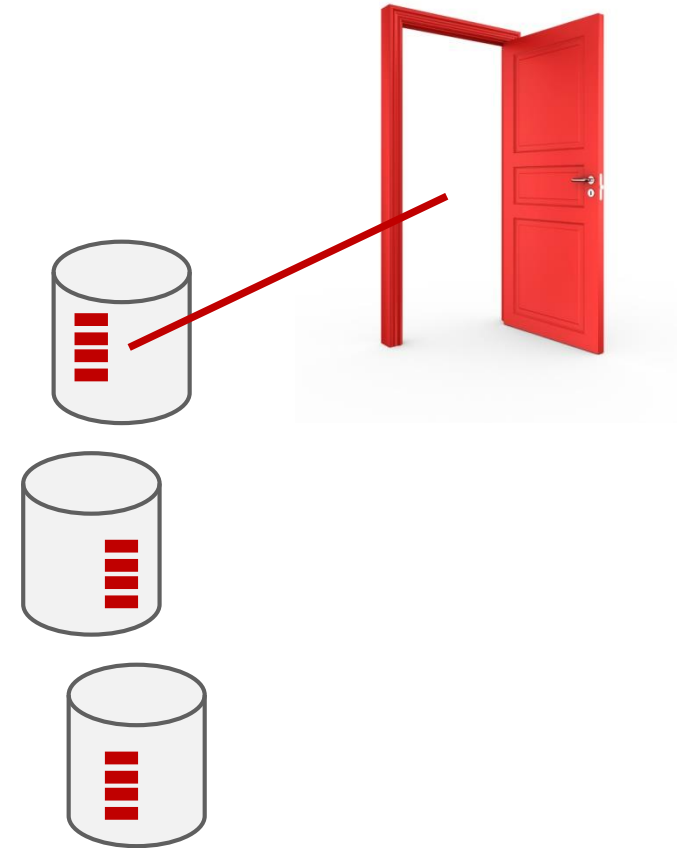
A4 – Creating Single View Of Customers

- Operational Data Store can help reducing the risks associated with not being able to find the data by a given deadline

- Such ODS can be complemented with customer data lake.

- OEMM metadata harvesting and exploration of metadata with high level of visualization

- OEDQ can profile, audit, parse, standardize, cleanse , merge, maintain consistent data in real time.

- ODI populates customers data attributes derived by the analytical processing in the DW, keep dimension tables in synch with the DW fact tables and support joins across these two domains
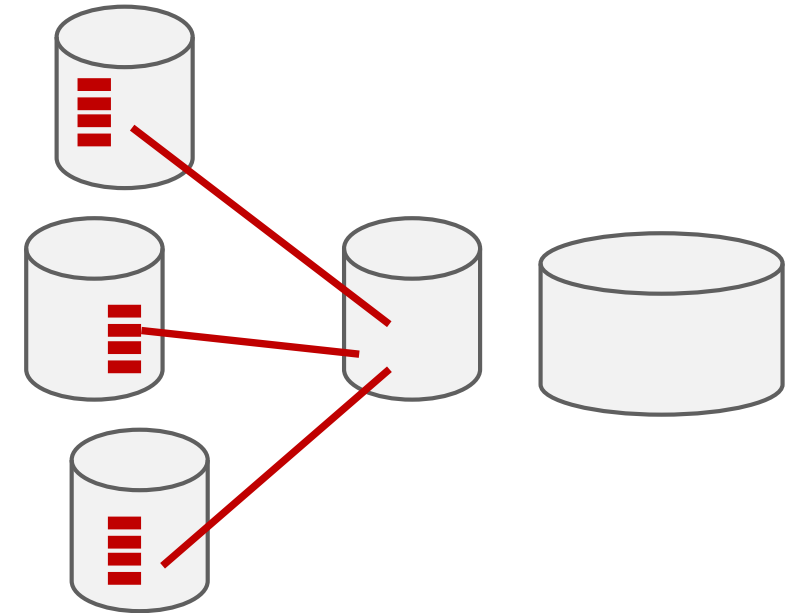
B Group Of GDPR Related Governance Activities/Projects

Oracle Data Integration Team
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B1 - Classification Of Data And Linking To Data Processes

- Assuming an organization has found all relevant customer data and their data flows, next step is to understand what needs to be done with that data.

- Metadata about relevant identified data elements can be loaded into DG platform and classified with assignment of additional metadata attributes.

- If data flows are identified and managed and the data elements are identified and governed, they can be linked together and easily traced to which exact data element are used in which business (data) process.

- OEMM describes the structure of a piece of data, definition, its relationship to other data, origin, with a pool of definitions one may search through and report on. OEMM can organize terms and/or domains by category. OEMM can define and/or document data processes.

Data Element	Category	Attribute 1	Attribute 2

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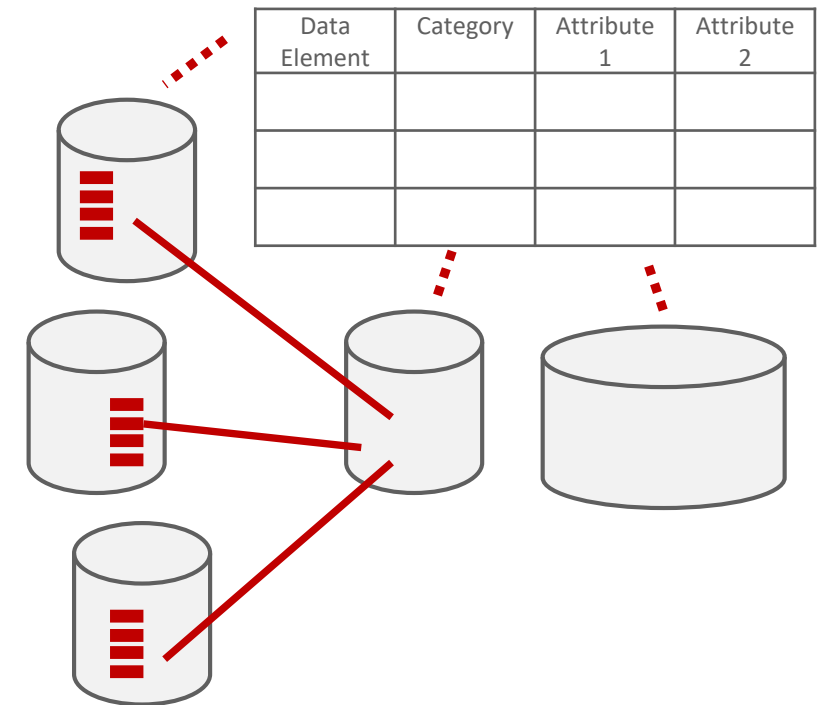
B2 - Risk Assessment Of Data Elements And Data Processes

- After identification and categorization, it is necessary to risk assess data flows and implement and describe control measures.

- As remediation takes place the high risk assessment will start to drop, so tracking the risk assessment history highlights how much progress is actually being made over time.

- OEMM supports metadata driven approach to achieve this with attributes assignment

Data Element	Category	Attribute 1	Attribute 2

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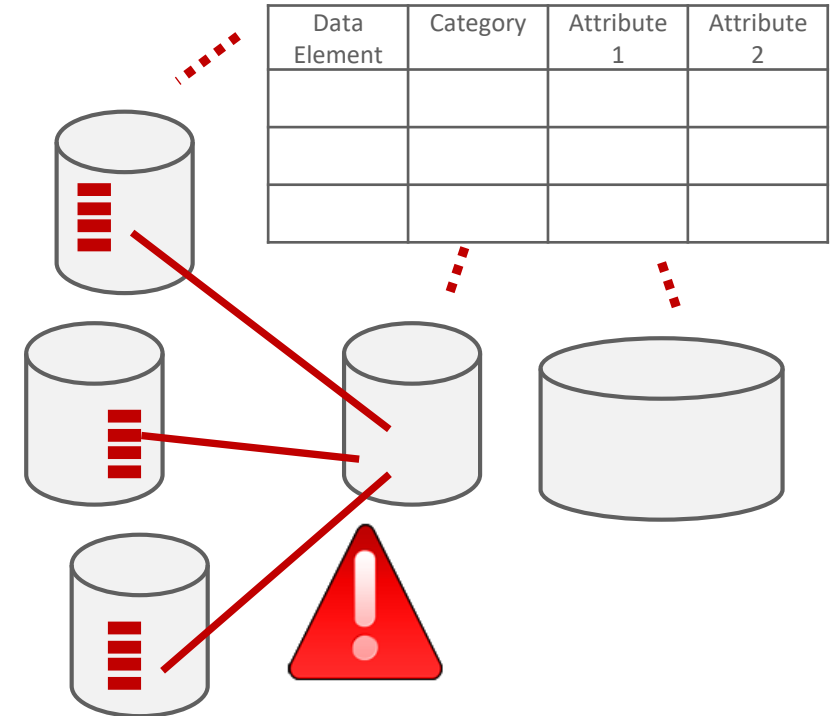
B3 - Identification And Management Of Data Flows

- Show purpose of data: from which sources into which targets, which columns are <u>used</u>, which ones are <u>deleted</u>, which ones <u>should not be there</u> (if they <u>do not fit with the purpose</u>). Therefore, an organization must analyze the data processes and catalog and maintain these processes.

- OEMM straightforward data flow and lineage analyzer
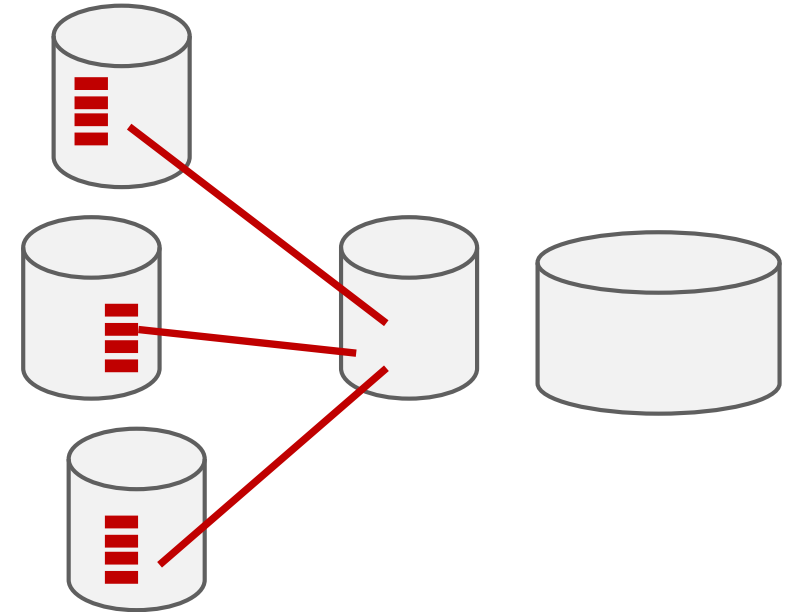
# C Group Of GDPR Related Governance Activities/Projects

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C1 - Building Glossary Of Critical Data

o Establishing a PI glossary to align business and IT with definition of business terms, can provide a clear overview of responsibilities and mapping to objects, such as tables and columns in a data model

o OEMM supports business glossary of data and validation rules with descriptions, inter-relationships, code sets, etc. to. Building it - dragging in an existing well documented data model (import from CSV) populate directly via the user interface.

o Directed down to the raw data age, intensive data quality calls are to be applied and OEDQ can easily be integrated profile, audit, parse, standardize, case, transform these data.

GLossary			

Data Element	Category	Attribute 1	Attribute 2

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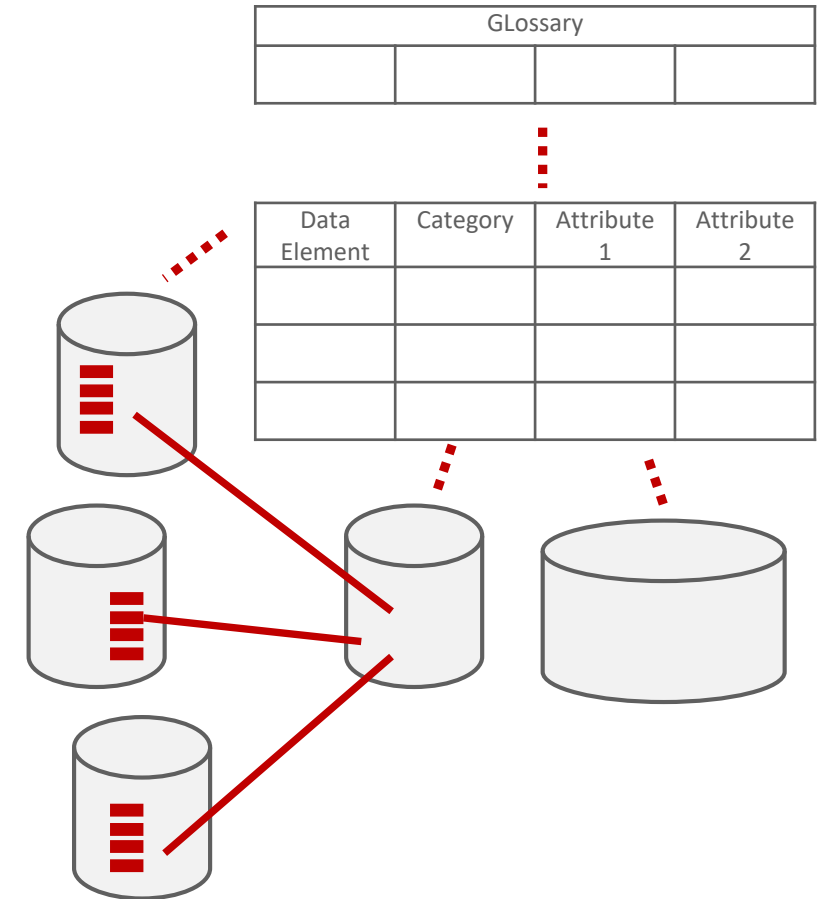
C2 - Establishing Control With Policies And Rules

- Proof of data protection principles by having effective policies in place.

- OEMM can be used to implement business rules and link them to the rest of the metadata. Policy can be created through one or more combined rules and through explanation of the policy by adding new metadata associated with the rules.

- Oracle data governance tools will further link process of policies control with the OEDQ engine and measure consumer data trust, and generate issues to appropriate users, link multiple customers data assets to policies that define their expected level of data quality, trigger the automatic creation of an issue by measuring published data quality results against a defined policy
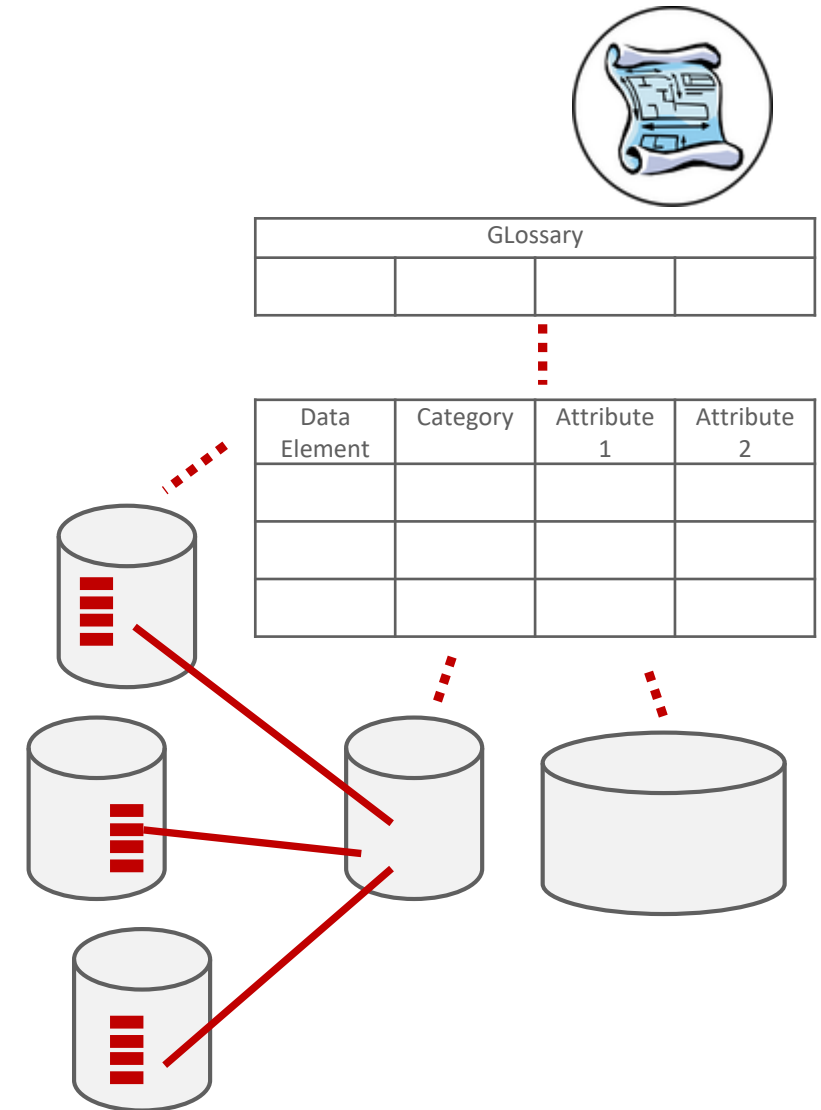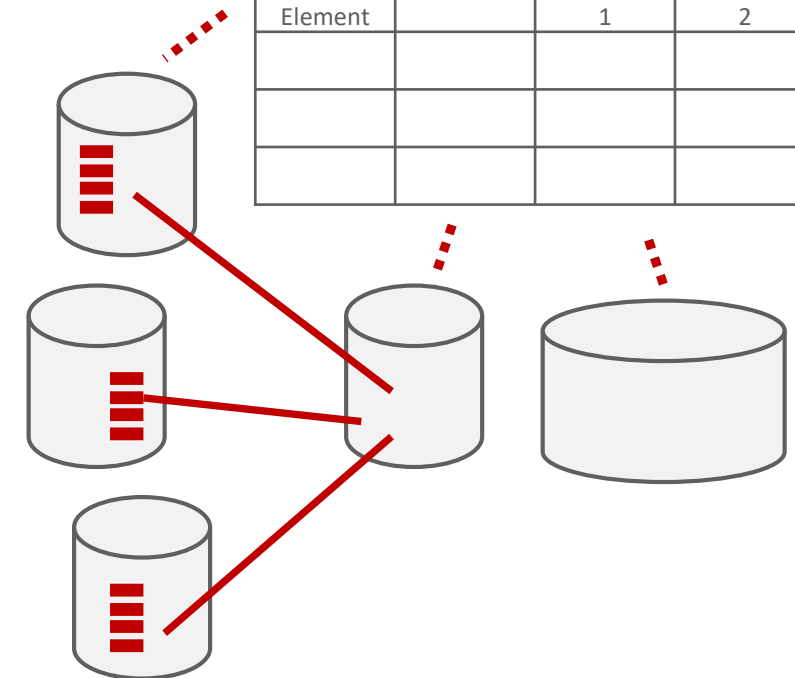
C3 - Monitoring Data Proliferation And Establishing Control With Workflow

o PI may get moved from a known source location to another new location. The fact that this has happened would be missed unless continual monitoring is taking place.

o OEMM policy definition, automated discovery and classification all become important as together they will help bring clarity on whether this newly generated source really does contain relevant customer data and if so, what is the risk associated with it is. OEMM business glossary provides a very flexible workflow achieved by collaboration features in OEMM.

o Oracle data governance tools will further track any changes to business glossaries, policies and rules, and reference data and ensure any changes are approved or that their data quality is checked

GLossary			

| Data Element	Category	Attribute 1	Attribute 2

C3 - Monitoring Data Proliferation And Establishing Control With Workflow

o Workflow can be used for requesting pseudonymisation, or encryption

o Workflow keeps track of their data register in a centralized fashion, with <u>register accountability and audit trails</u>

o The workflow can make tracked-in-log and <u>quick communication</u> between members for "right to be forgotten" request to delete-> submit -> approve-> ready for delete

GLossary			

Data Element	Category	Attribute 1	Attribute 2
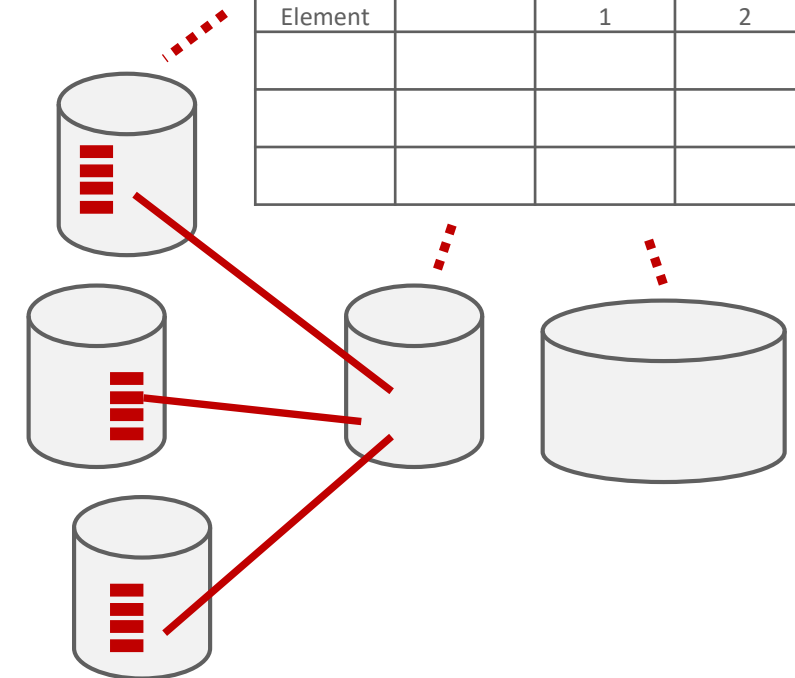
D GROUP OF GDPR RELATED GOVERNANCE ACTIVITIES/PROJECTS

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D1 - Govern Application Level Services

o The more data reused without proper governance, the greater the chance of misinterpretation. Without a clear understanding of the context in which data are captured, and their meaning, a multitude of poor data accuracy, integrity is there. Applications, which necessitate complex data and process integration, contributes to further data and process abuse if not approached with proper governance.

o The real solution to prevent the abuse across the enterprise is to ensure good collaboration between Data Governance and SOA Governance. Process owners will provide the subject matter expertise required to understand meaning of data within the context of their processes, while data owners will bring the understanding of the processes and metrics using their data sets.

o Solution : SOA Suite and associated cloud services (APIP CS).

D2 – Govern Process Interactions

o   Pre-built compliance of any packaged application or custom-built application should not be mistaken as a one-shot fix for compliance needs. The reason is that business needs and regulatory requirements inevitably out grow end-to-end capabilities of even the most comprehensive packaged or custom-built business application. Thus, processes that originally resided within the application will eventually spill outside the application boundary. Therefore, capabilities of existing applications should be extended by modeling their data and process interactions, with other applications or user-channels with process modeling tool.

o   Solution : OBPM and associated cloud services (PCS).

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Recap

o There is coherent & extensive list of activities & projects that can help GDPR compliance within the scope of governance of data & application services

o Oracle Unified Integration platform includes tools which features can be efficiently used for these activities

o GDPR is an opportunity to achieve commercial long-term benefits, if it evolves into a broader efforts. Governance, integration and data management projects are example.

Next Steps

o 1-1 Workshops 'Oracle Integration Governance For GDPR'

o Oracle Cloud Test Drives For Integration Solutions

o Architecture Workshops (Integration Success Workshops)

o Contact Integration Solutions Specialist for your country

o If any questions about next steps pls contact milomir.vojvodic@oracle.com

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THANK YOU

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Q & A

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