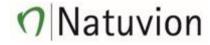


How SAP & Natuvion Solutions, Services & Expertise Support your Journey to Compliance

Wolfgang Epting, SAP Center of Excellence, Data Governance and Optimization & GDPR January 31, 2019

PUBLIC





Agenda

- Introduction and Expectation Setting
- Chances and Challenges of the new GDPR
- Insight into capabilities that support you for your GDPR Initiative in a SAP Business Suite centric landscape
- Beyond the SAP Business Suite Discover and Document your non-SAP Landscape
- Questions and Answers, Discussion and Next Steps

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It is the customer's responsibility to adopt measures that the customer deems appropriate to achieve GDPR compliance.

Chances and Challenges of the new GDPR



Crisis → weiji 危机 Chance → jihui 机会 / 机 → Opportunity

ft → Threat with a turn for the better

Challenges

Implementation effort is significant, broad, and complex



Initial effort to assess current status versus regulatory requirements and resulting gaps



Change management (organizational, policies, procedures, training, and communication...)



Prescribed data management: internal and external data, privacy by design, consent, storage, access, usage, retention, deletion



Sustainability and ongoing cost of the program—GDPR becomes "business as usual" once it becomes effective

Opportunities

Better governance and data management improve business outcomes



Create strong framework and processes to mitigate risks and support compliance (for GDPR and others), with controlled costs



Improve depth and breadth of policies and procedures with clear accountability

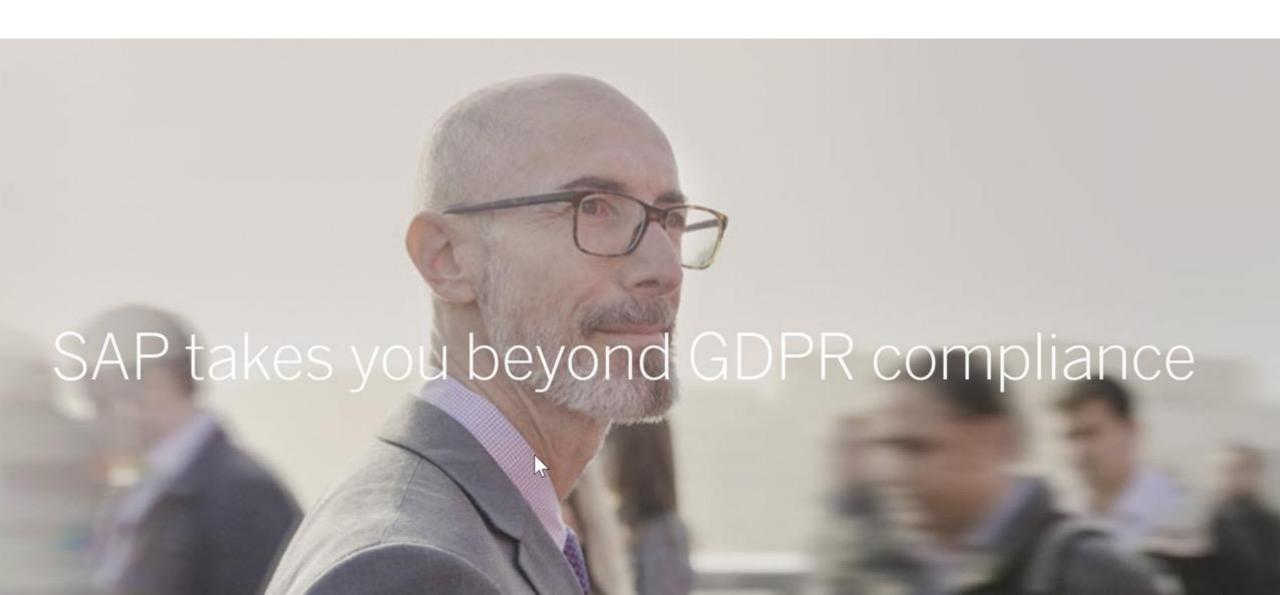


Embrace innovations like Big Data and the Internet of Things (IoT) with built-in data protection and privacy



Improve confidence of business partners in the protection and security of their data, boosting business relations and your brand image

How we get fit for the EU Data Protection Regulation



Data Privacy and Protection @SAP

The protection of personal data and privacy are part of our DNA. We protect the rights of our customers, employees, applicants, suppliers, partners and more. When we process and use data, we protect it, retain its ownership, and preserve the privacy of the person to whom it belongs.

We are committed to ensuring compliance with the new EU GDPR as a company until May 2019. In addition, we aim to develop products and services that help customers meet their needs.

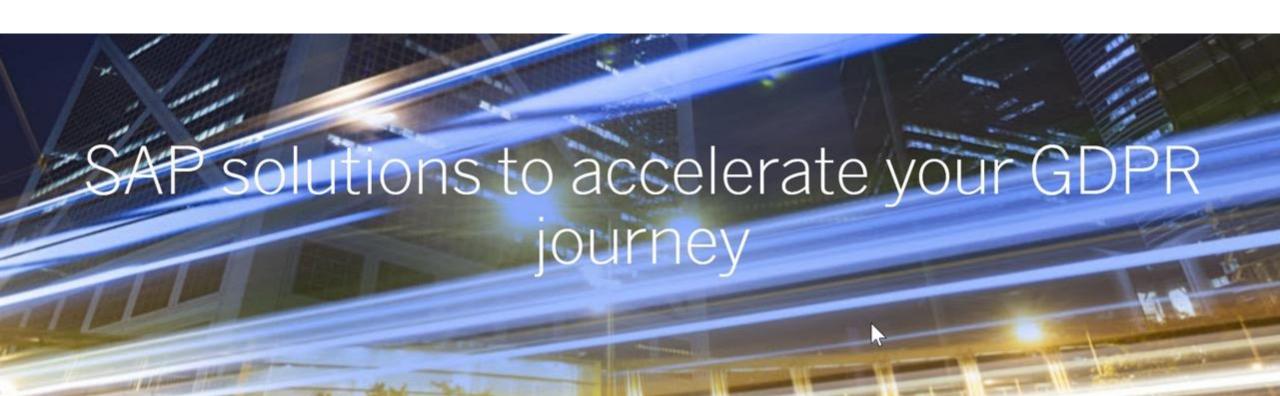




A Data Protection Officer (DPO), a Data Protection Management System (DPMS) and a Procedure Enrollment Tool (PET) - these are just a few of the measures we have put in place to prepare for compliance with the GDPR and provide the best possible support to our customers.

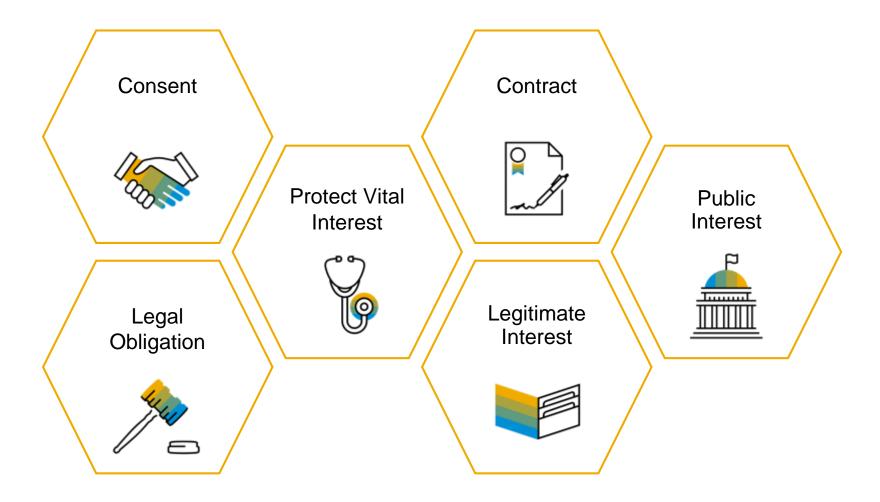
Learn more about SAP and GDPR
SAP Cloud Trust Center

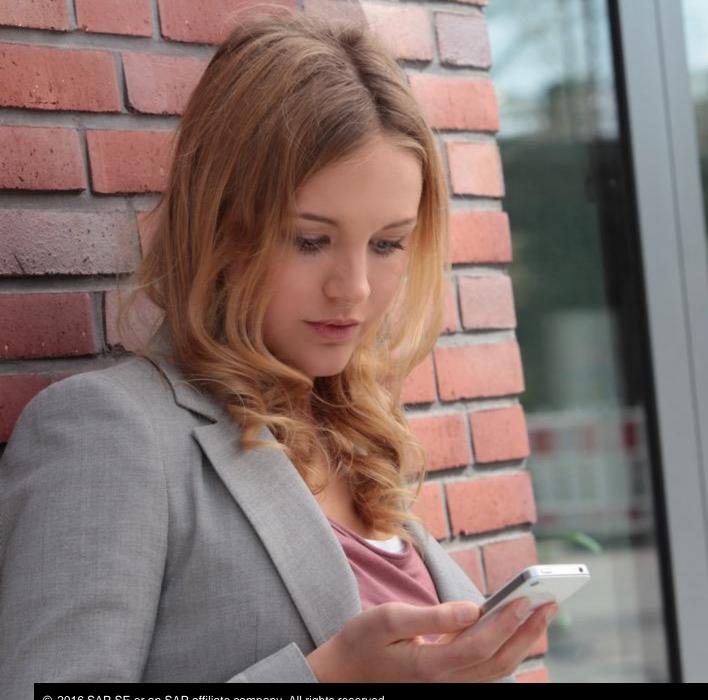
Insight into capabilities that support you for your GDPR Initiative in a SAP Business Suite centric landscape



Data Privacy within SAP Business Suite & S/4 HANA & S/4 HANA

Requirements and implementation approaches





Carla Customer Rainbowstreet 1 39761 Cloud city

Payment condition

Allcreditbank

IBAN: DE12500903170648489890

Communication

+49 610 9607207

Portal Account: CarCus

Contract for work

Working student (04.2011 - 03.2014)

Contract for work

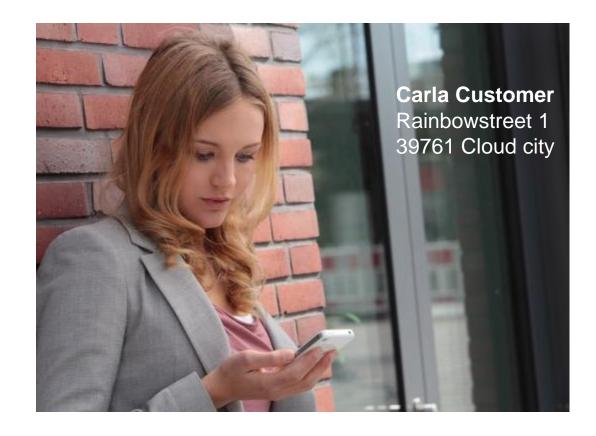
Targeted marketing with Beacons and Geofencing (12.2015)

Ordered items

- iPhone + maintenance contract (3.2015)
- The Divine Comedy Alighieri, D. (1.2016)

Type of Business Relationship = Purpose of Processing?

- Obviously, there are very different business relationships with Carla Customer, which partly necessitate other residence needs and retention periods.
- Maybe it makes sense to regard the different business relationships as different purposes as well.
- In many cases, master data is data whose purpose depends on other purposes.



Data Privacy within SAP Business Suite & S/4 HANA

Technical implementation: 1. Inventory, blocking and deletion

	Processing purpose	Processing	Blocking
Master data	Dependent on other processing purposes	With related data	Until end of purpose of all related data → in this example probably pension legislation
Payment data	Dependent on other processing purposes	With related data	Until end of purpose of all related data → in this example probably tax legislation
Communication data	Dependent on other processing purposes	With related data	Factual with master data
Marketing	Marketing	Until revocation of consent or missing renewal after x years	None
Sales contract data iPhone & service	Processing sales contract Processing service contract	Up to end of service contract rights	Until end of purpose of all related data → e.g. tax legislation
Sales contract data "The Divine Comedy"	Processing sales contract	During processing of sales contract/ if necessary reporting purposes	Until end of purpose of all related data → e.g. tax legislation
Data contract for work	Processing contract for work	During processing of contract for work/ if necessary reporting purposes	Until end of purpose of all related data → e.g. contract legislation
Data contract of employment	Processing employment relationship	During employment relationship and processing of termination	Attention: periods of pensions, health insurance, health and safety

The "Right to be forgotten" for Personal Data?

SAP supports our SAP Business Suite Customers with the ILM – Retention Management for the "right to be forgotten"

Article 16 Right to erasure ('right to be forgotten')

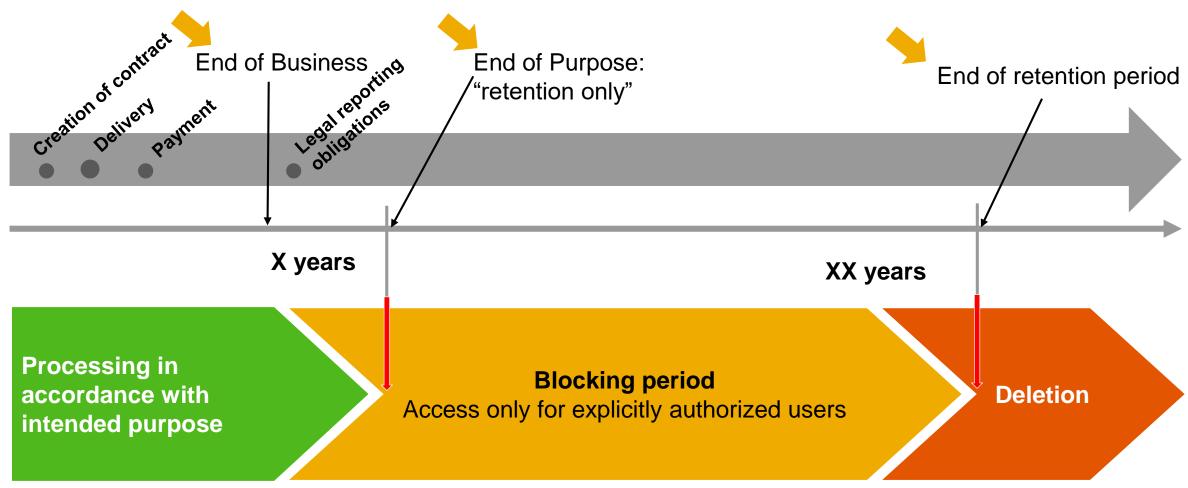
The data subject shall have the right to obtain from the controller the erasure of personal data concerning him or her without undue delay and the controller shall have the obligation to erase personal data without undue delay.

ÌLM – Retention Management for Personal Data

ILM object including Personal data

ILM Residence & Retention Rules

Schema: Personal data lifecycle



Requirement

As soon as the **original purpose ends**, personal data has to be **deleted**. However, if **other retention periods apply**, the data has to be **blocked**.

SAP Information Lifecycle Management – Retention Management

Core Features

Manage and enforce retention policies

- Set policies for automatic data retention and subsequent destruction
- Retain data according to set policy
- Responsibly destroy data when expiration date has been reached

Maintain archives according to retention policy

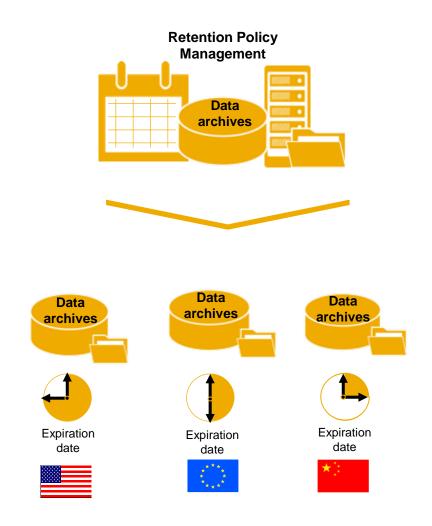
 Create archive files according to rule matching data values and expiration date

Perform e-Discovery

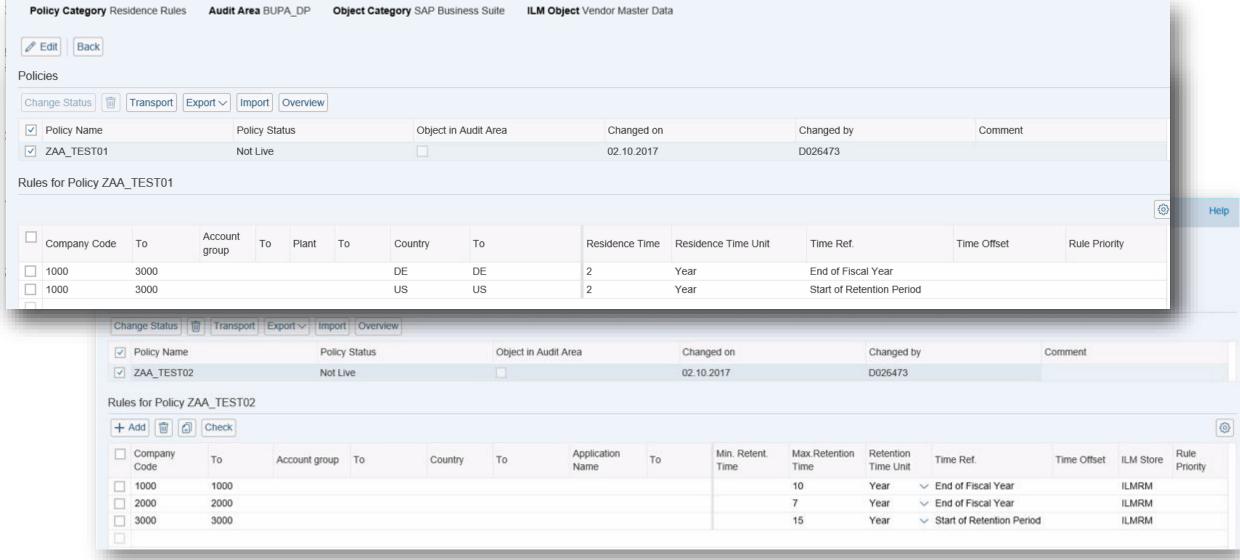
Search for information in response to legal requests

Apply legal hold on data

- Automatically prevent data deletion or destruction
- Apply holds to archives and database



Definition of Residence and Retention Rules - IRMPOL

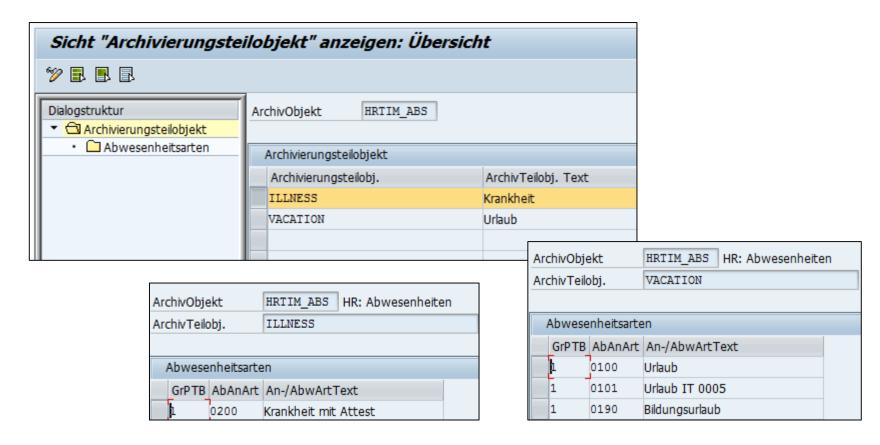


Customizing Example: Absences

Definition of archiving Subobjects

For Absences archiving Subobjects can be created

In this example: vacation and sick leave



Customizing Example: Absences

Definition of Retention Rules

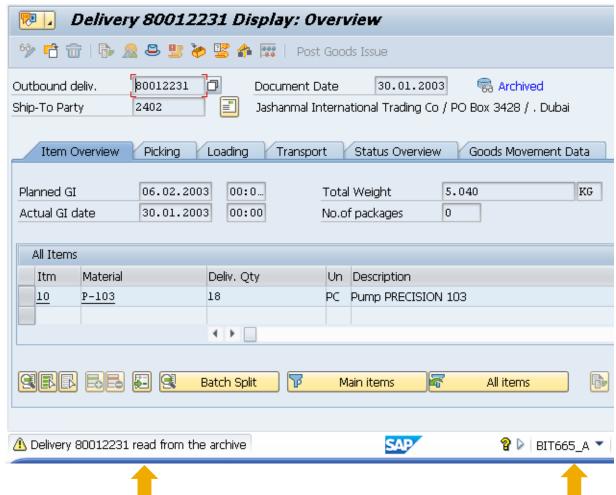


- For sick leaves of employees (object Illness) the data will be destroyed after 3 years, starting end of year.
- For vacation of a public officer (object vacation) the data will be destroyed after 5 years, starting end of year.

- For all employees, who left the company the data will be destroyed after 10 years.

Display outbound deliveries archived for blocking purposes (transaction VL03N) – users with check authorizations





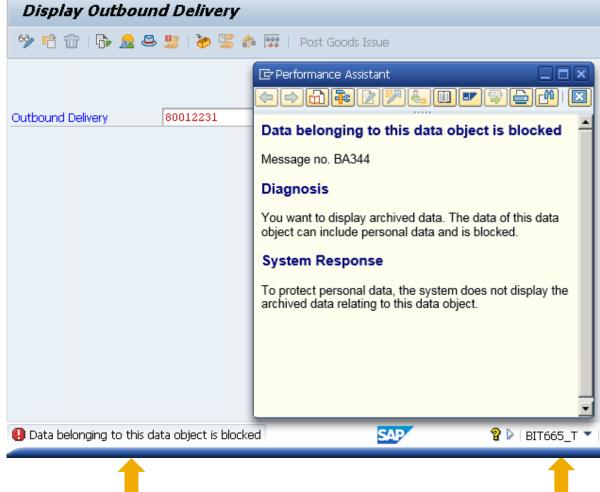




Display outbound deliveries archived for blocking purposes (transaction VL03N) – users without check authorizations





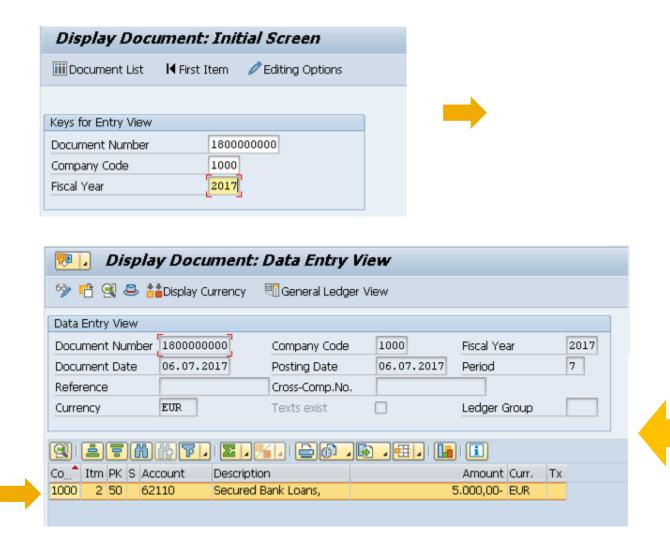


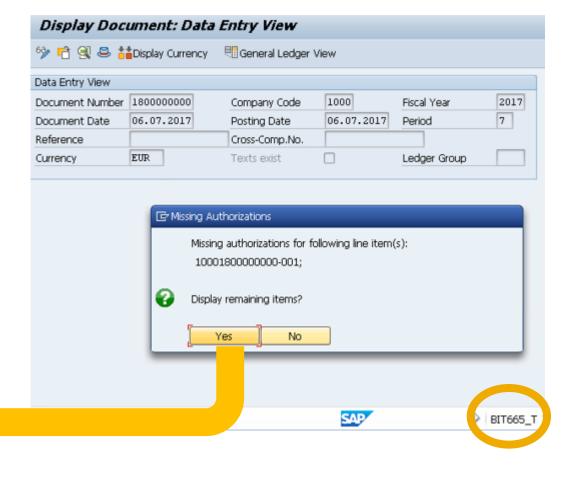




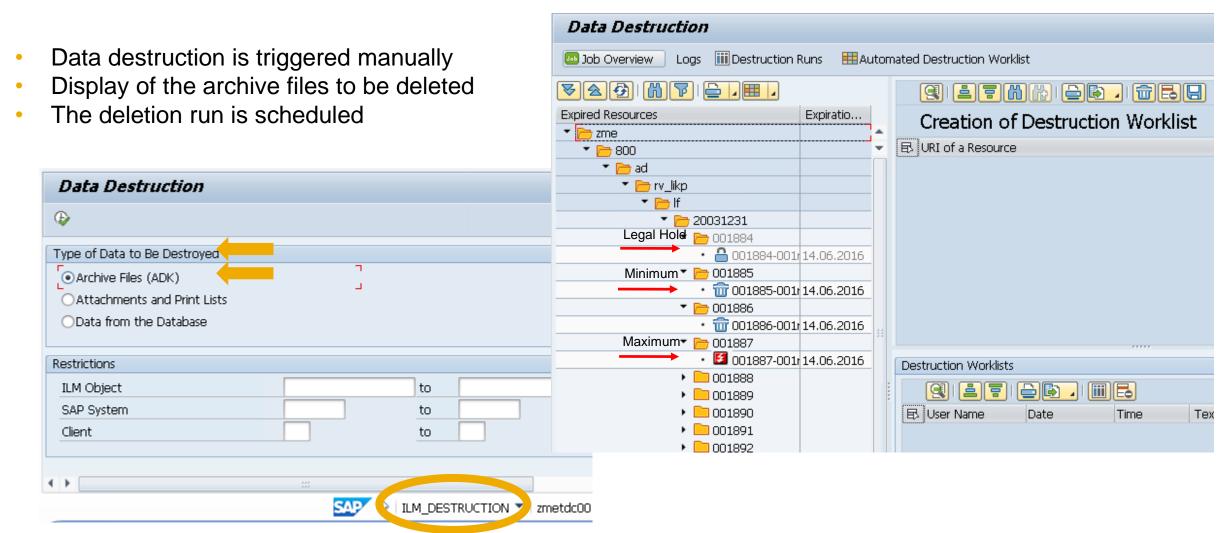
Display FI documents (not archived) for blocked customers

User without auditor authorization

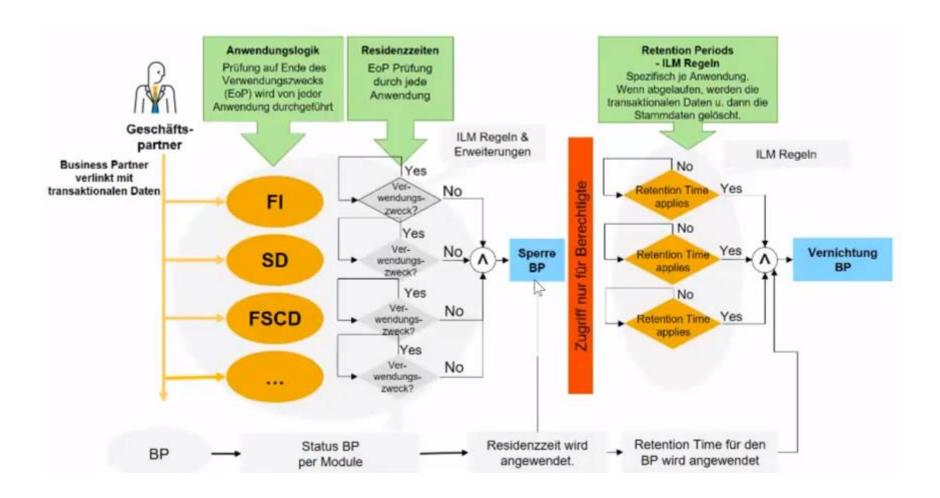




Destruction of data from the database / the archive



Synchronisation of End-of-Purpose and End-of-Retention checks across the SAP landscape



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The definition of ILM retention and residence and retention rules can get multi-dimensional taking into account different purposes for different Data controllers.

Data Controller Rule Framework

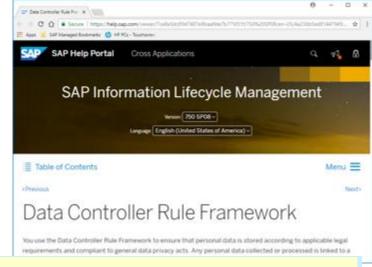
SAP offers a Data Controller Rule Framework

SAP Data Controller Rule Framework

Source:

https://help.sap.com/viewer/f3b1d0fcc2e042a0b ddf01553952465f/750%20SP08/en-US/83ca47b40e5f418799e30255c037a0d8.html

	Purpose	Data Controller	Retention period
	Order to Cash Processing	SAP SE Germany	6 years
	Order to Cash Processing Medicine	SAP SE Germany	30 years
>	Order to Cash Processing	SAP SE France	10 years



ILM object	ILM condition field related to business purpose	Value in IRMPOL	ILM condition field related to responsible organization	Value in IRMPOL	Retention Period
SD_VBAK	AUART Sales Document	Not required, applies to all values	VKORG Sales Organization	FR01	10 Years
RV_LIKP	LFART Delivery	Not required, applies to all values	VKORG Sales Organization	FR01	10 Years
MM_MATBEL	VGART Transaction	Not required, applies to all values	WERKS Plant	FR01	10 Years
SD_VBRK	FKART Biling	Not required, applies to all values	BUKRS Conpany Code	FR01	10 Years
FI_DOCUMNT	BSCHL Posting Key	Not required, applies to all values	BUKRS Conpany Code	FR01	10 Years

Information Lifecycle Management – Guide for Customers

https://www.sap.com/products/information-lifecycle-management.html

Comply with regulations for data retention with information lifecycle management

Improve system availability and performance by archiving data to readily accessible storage. Our information lifecycle management (ii.M) software can help streamline your IT infrastructure by decommissioning legacy systems and automating data retention according to rules you define minimizing risk with control over your data.

- Archive obsolete data to enhance performance and reduce database size and administration costs
- Support data retention rules by creating separate archives based on varying data lifetimes
- Reduce IT management costs by consolidating systems and decommissioning legacy systems
- Preserve compliance auditing and reporting capabilities for decommissioned systems
- Reduce the cost and risk of legal discovery by automating data collection for legal cases

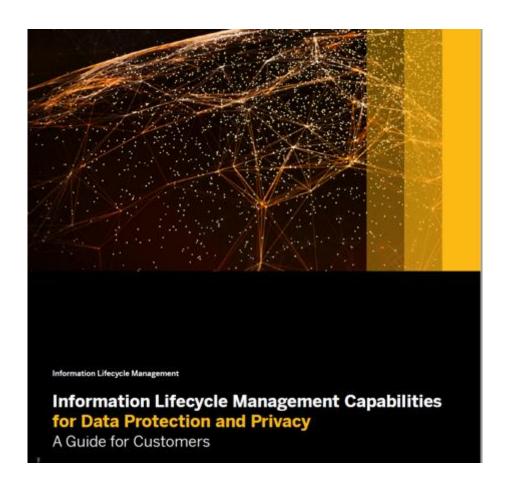
Learn how SAP ILM and SAP NetWeaver can help your business with EU GDPR and similar data protection and

privacy regulations

Read the customer guide







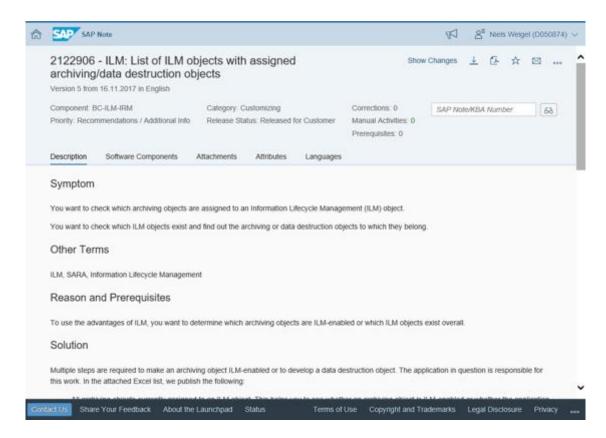
Information Lifecycle Management – Guide for Customers

https://www.sap.com/germany/documents/2019/07/bcb1b4a1-0e7d-0010-87a3-c30de2ffd8ff.html



- Datenschutz und die Rolle von SAP-Lösungen
- 3 Zweck dieses Dokuments
- 4 Die Funktionen von SAP Information Lifecycle Management (SAP ILM)
- 5 Warum die Funktionen Sperren und Löschen so wichtig sind
- 5 SAP NetWeaver: integrierte Funktionen für den Datenschutz
- 6 SAP ILM: integrierte Funktionen für den Datenschutz
- 7 Erste Schritte mit den Funktionen für Sperren und Löschen
- Vorbereitung
- 10 Konfiguration
- 11 Ausführung
- 12 Lizenzbedingungen
- 13 Weitere Informationen, Schulungen, Services und Hilfen

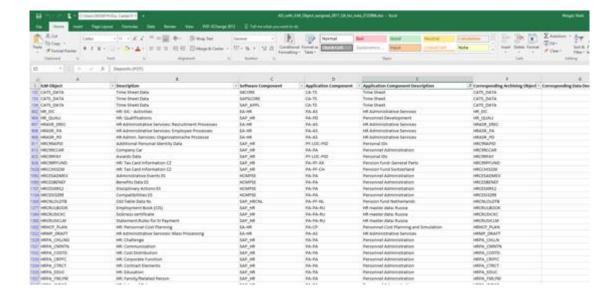
List of ILM objects



Source: SAP Note 2122906

https://launchpad.support.sap.com/#/notes/2122906

Includes XLS Lists with detailed Information



What is beyond the "Right to be forgotten" for Personal Data?

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Article 15 Right of access by the data subject

The data subject shall have the right to obtain from the controller confirmation as to whether or not personal data concerning him or her are being processed.

Article 20 Right to data portability

The data subject shall have the right to receive the personal data concerning him or her, which he or she has provided to a controller, in a structured, commonly used and machine-readable format and have the right to transmit those data to another controller.

SAP also supports our SAP Business Suite Customers for further articles with Information Retrieval Framework as part of the SAP Business Suite

Information Retrieval Framework

ILM object & Business Suite Data Model Information

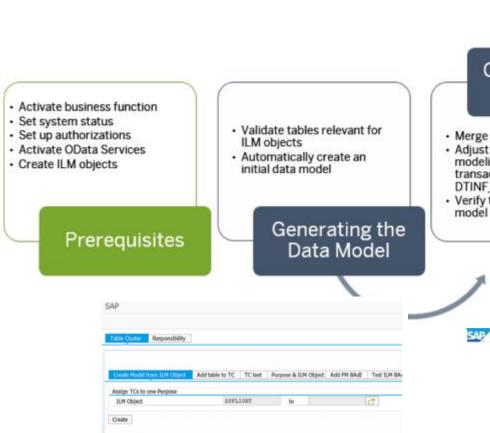
Information Retrieval Framework

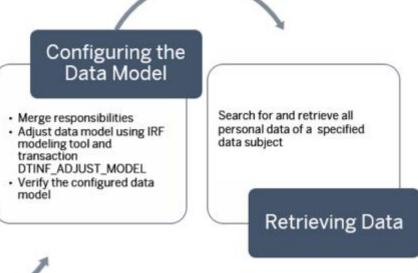
Overview

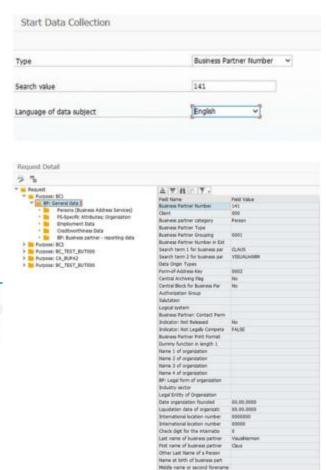
Link: https://help.sap.com/doc/04e9cb8f9da44c1ebf35c03799c8fac2/7.51.4/en-US/IRF.pdf

You can use this business function to search for and retrieve all personal data of a specified data subject.

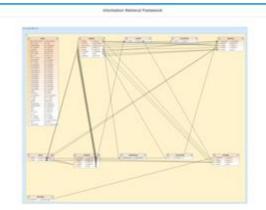








Academic Title: Key



WARNING Execution successful

The Evolution of Information Lifecycle Management

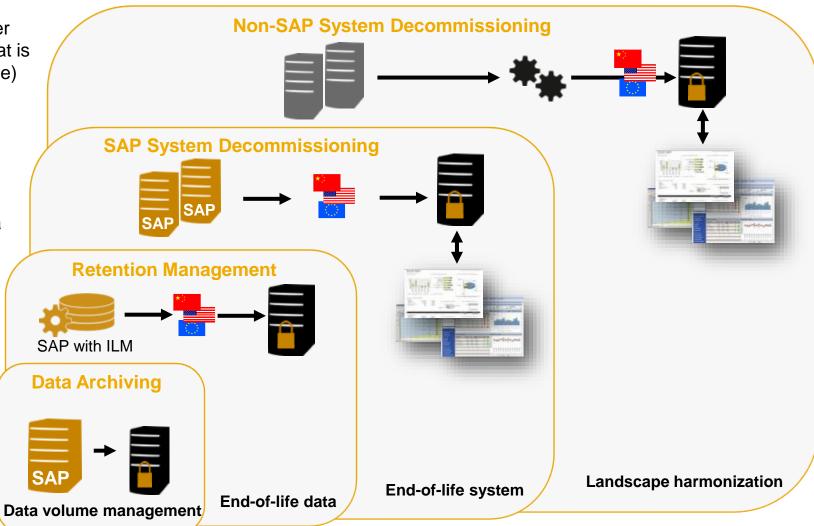
From Data Archiving to SAP ILM

Harmonize and integrate old an no longer actively used data (and only that data that is necessary and compliantly allowed to use) from several non SAP systems into a Retention Warehouse System

Decommissioning old an no longer actively used data (and only that data that is necessary and compliantly allowed to use) from SAP systems into a Retention Warehouse System

Defining Residence and Retention rules for automated blocking and deletion of data in operational live applications

Managing classical Data Archiving activities (moving data from live database to archiving systems) in operational live applications



SAP Data Reduction Package

Rightsizing to be ready for SAP HANA - powered by SAP Information Lifecycle Management

SAP Data Reduction Package powered by SAP Information Lifecycle Management:

Reduced data volumes, optimized HANA license costs, simplified system landscape, consistent reporting, revision-proof storage / archiving

SAP Information Lifecycle Management

Archiving	Retention Management	Retention Warehouse		
Control data growth proactively to meet service-level requests Analyze data volumes Move data securely from the database to the archive	 Enforce data retention periods required by regulations and industry practice Manage the responsible destruction of data based on policies Store data securely with SAP or partner products Perform e-discovery operations and set legal holds 	Consolidate data from multiple systems Decommission legacy systems Run reports on data from decommissioned systems		
Data Volume	End-of-life data	End-of-life system		



Management and long-term retention of data and documents as well as significant reduction of data volumes



Control and reduce HANA licensing, system and storage costs



Ensure compliance with regulatory requirements and audit requirements in accordance with existing records management policies

Standardization and flexibility of reporting mechanisms for all legacy system data, independent of different platforms, systems and releases

Automation of data destruction in accordance with specifications and guidelines

Beyond the SAP Business Suite – Discover and Document your non-SAP Landscape



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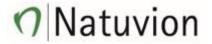
For the definition of ILM Objects, SAP Provides pre-defined objects for specific purposes and use cases (e.g. HCM related). But personal data can be stored in many tables and columns within the Business Suite data model. Either in columns not intended for personal data purpose or in customer own tables like Z-tables.

Information Steward

SAP offers with SAP Information Steward a solution to profile and assess the content of tables to identify potential personal data information.

SAP offers Data Controller Rule Framework

SOPHIA supports you in identifying data with a personal reference and offers a wide range of processing options

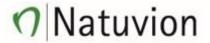


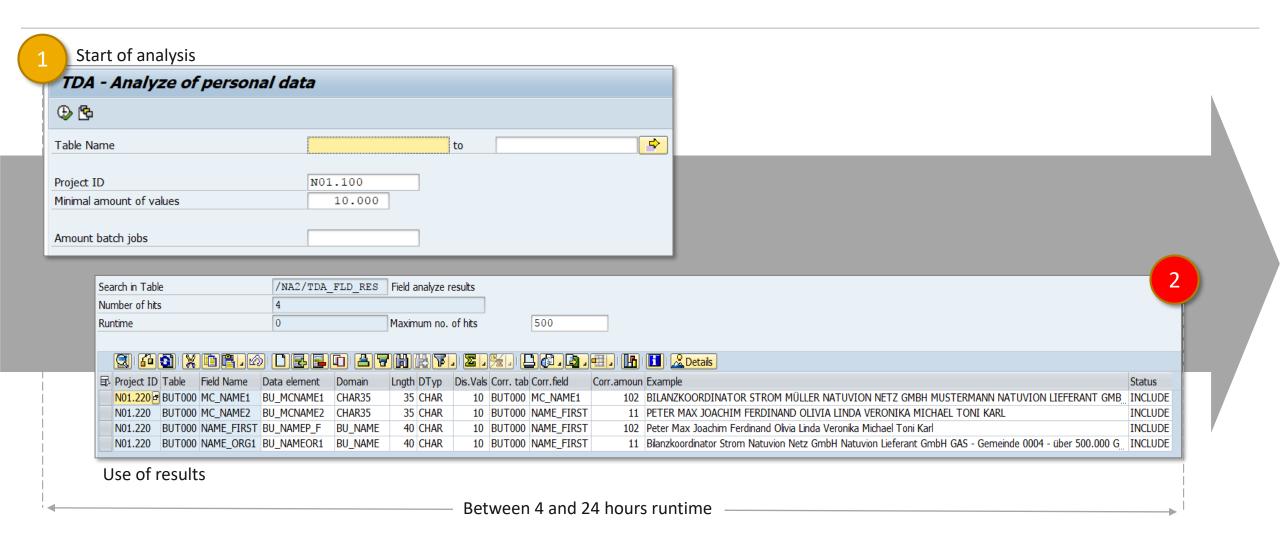
SOPHIA intelligent and complete identification of personal data

- Technical identification of all personal data fields
- Content identification of personal data in all tables Identification of relevant archiving / ILM objects Delta
- O Determination of ILM Archiving / ILM Objects
- O Determination of the quantity structures
- Automatic integration into table lists (e.g. depersonalization)
- n Revision-proof storage of results (versioning)
- Free restriction of the table scope / analysis scope (for example, to customer developments)
- 7 Free threshold value definition for the content-based search for personal data
- O Compatible with all systems of SAP Business Suite, Business Warehouse, Human Capital Management and HANA

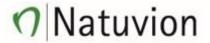


Find 99% of personal data in your SAP systems

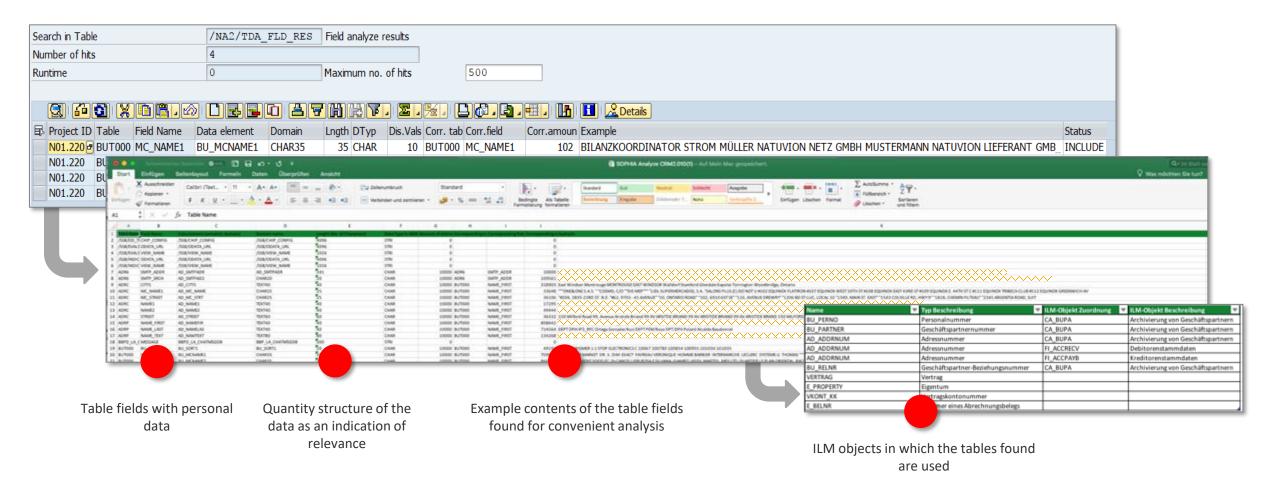




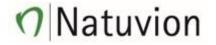
Find 99% of personal data in your SAP systems



Exemplary result of a search for personal data with SOPHIA



SOPHIA supports you in identifying data with a personal reference and offers a wide range of processing options



Find 99% of personal data in your SAP systems

Overview of Functionalities

- Covers all SAP system landscapes
- Covers all data / fields with personal reference (customer tables, table field enhancements,...)
- Combination of DDIC-based structure search and semantic/content-based search
- Data scan: finds all table fields that contain "conspicuous" data (direct and indirect personal reference)
- Content scan: finds table fields with direct personal reference, based on the content
- High performance parallelization

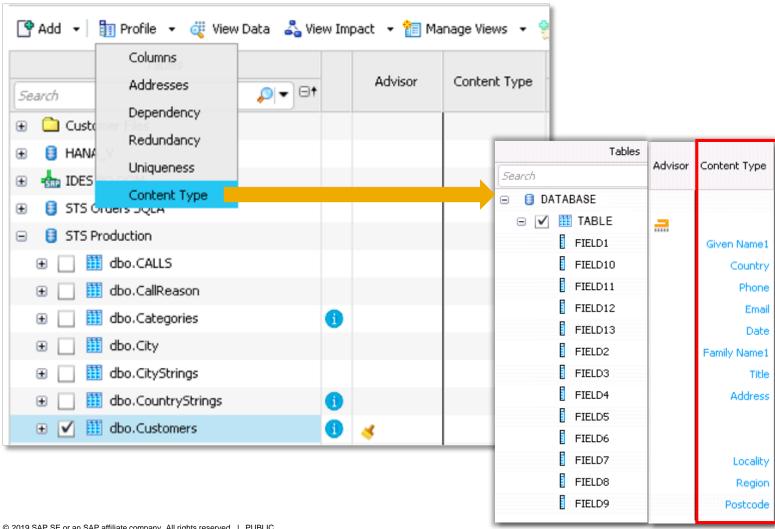
Why do you need Sophia?

- Sophia drastically reduces the effort involved in introducing a depersonalization strategy
- Sophia provides the basis for the introduction of a data life cycle strategy
- Sophia helps you to identify the scope of the information
- Sophia helps to prioritize the topics of her GDPR / Data Privacy Strategy
- Sophia delivers substantiated results within the framework of compliance audits and controls

Sophia drastically reduces manual effort in data protection projects by analyzing and automatically identifying all personal data in a system / system landscape

SAP Information Steward

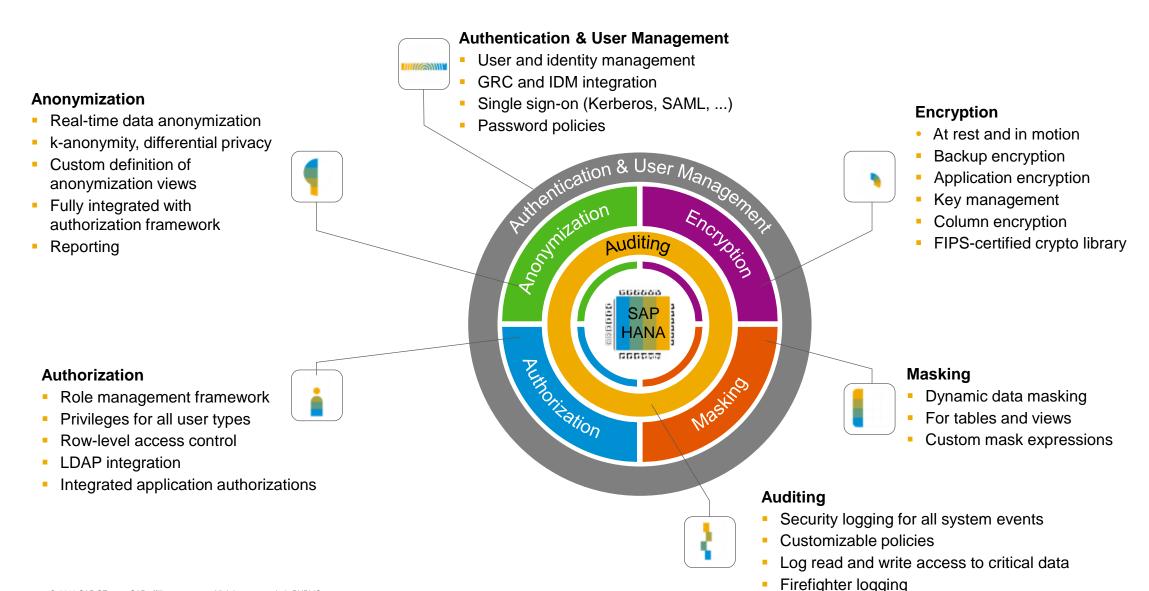
WHERE in my system landscape can be personally identifiable information?



Content Type profiling on "unknown data sources" to find columns of personally identifiable information

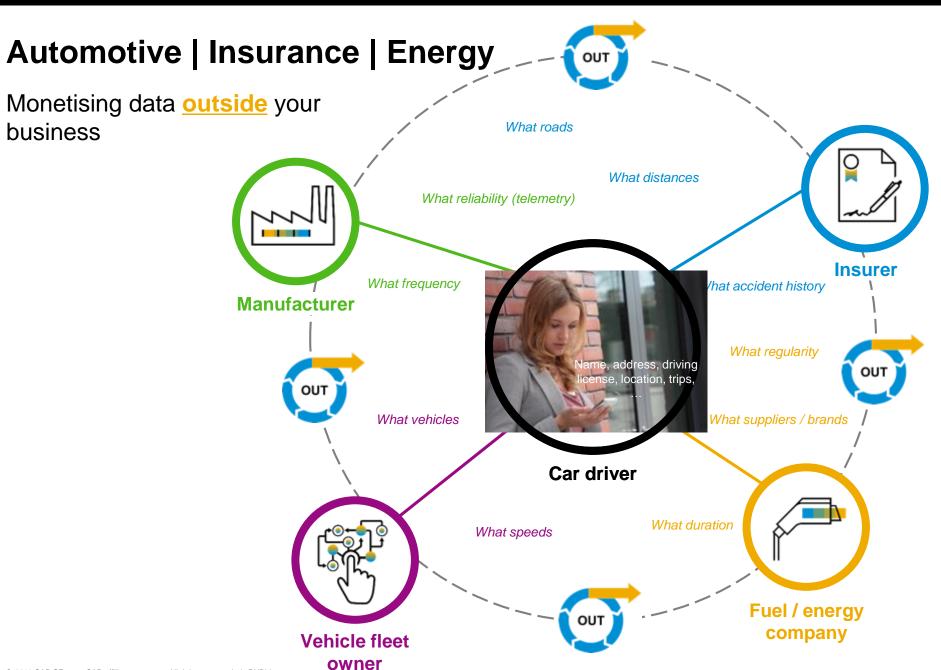
Use of a reference dataset with business partner details

SAP HANA's holistic framework for secure information access



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40



- Vehicle fleet owners and manufacturers provide "Mobility-as-a-Service"
- Insurance pay-per-drive in real-time
- Energy is predictively optimised across fleets of vehicles in real-time
- Driver-time is optimised
- Ride-sharing
- Vehicle use is maximised

. ???

Data Management: How SAP solutions can help

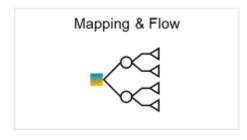


SAP Information Steward – Dynamic data discovery, tagging, classification

SAP Enterprise Architecture Designer – Documentation of Data Architecture including Personal Data lineage

QUANTIFY SCOPE:

What personal data and where it is stored across your enterprise



SAP Process Mining by Celonis – Use or personal data in business processes relating to lawful purpose

SAP Master Data Governance – Correct and complete master data with assigned user governance

SAP Data Services – Standardise formats, consolidate & cleanse personal data, quality & accuracy

TRANSPARENCY & ASSURANCE:

Why your business uses personal data and for what purpose



SAP Information Lifecycle Management – End of purpose blocking & deletion according to retention rules; Data from legacy systems consolidated to central "retention warehouse"

SAP Extended Enterprise Content Management by OpenText –Manage unstructured content sales orders, invoices & HR documents

TCO & RISK REDUCTION:

Automated management of personal data lifecycle

What can SAP help you accomplish?

End-to-End Solutions for GDPR Data Protection & Privacy



- Seamless implementation with easily adaptable Cloud services
- Availability of best practices to save time and effort
- Easy navigation through workspaces
- Flexible set of options from SAP and our extensive partner ecosystem



Strengthen the foundation

- Market-leading governance and data management capabilities
- Comprehensive assessments and surveys
- Consistent documentation and auditability to support attestation



- Well-defined policies, processes, and controls
- Clear ownership and accountability
- Automated notification and workflow for issue resolution

Q&A, Discussion and next steps



SAP NOW Berlin Shaping the future

Welcome to SAP's Ultimate Innovation Forum!

A forum for a wide range of industries, with cross-industry inspirations.

A forum where everyone is picked up individually, no matter if IT, HR or Marketing.

A forum to think and act the INTELLIGENT ENTERPRISE.

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Thank You!

Wolfgang Epting

Center of Excellence
Database & Data Management

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M +49 151 18887021 wolfgang.albert.epting@sap.com

