



Simplified Blocking and Deletion With SAP Information Lifecycle Management for General Data Protection Regulation

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Session ID 83643

About the speakers

Iwona Luther

- SAP SE, Product Standard Owner of “Information Lifecycle Management”
- SAP representative for the DSAG and ASUG working group „Data Archiving and ILM“
- Autor of books and trainings on ILM and GDPR
- If you look for a girl from Warsaw, Poland with the most knowledge about ILM and Data Archiving, that’s probably me 😊



Melanie Skowron

- Deputy CIO, FC Bayern München
- Responsible for the SAP CRM System and for SAP.Marketing.
- Area of responsibility includes all the processes around the customer, **“the fan”**



ASUG

Key outcomes/objectives

1. Possible scenarios for blocking and deletion of person-related data with SAP Information Lifecycle Management
2. Understand Data Privacy at FC Bayern Munich and how this resonates in your companies.

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Personal disclaimer

SAP does not provide legal advice, nor does the presenter.

The implementation of data protection requirements at any data controller is a complex challenge with interdependent legal and technical aspects. The responsibility to identify and implement adequate technical features remains with the controller as for the organizational aspects.

The following presentation is only about technical features which might in that sense help a controller achieving compliance with data protection regulations.

To help the audience understanding the shown approach, in context information is given without claiming completeness or correctness.

Prerequisites

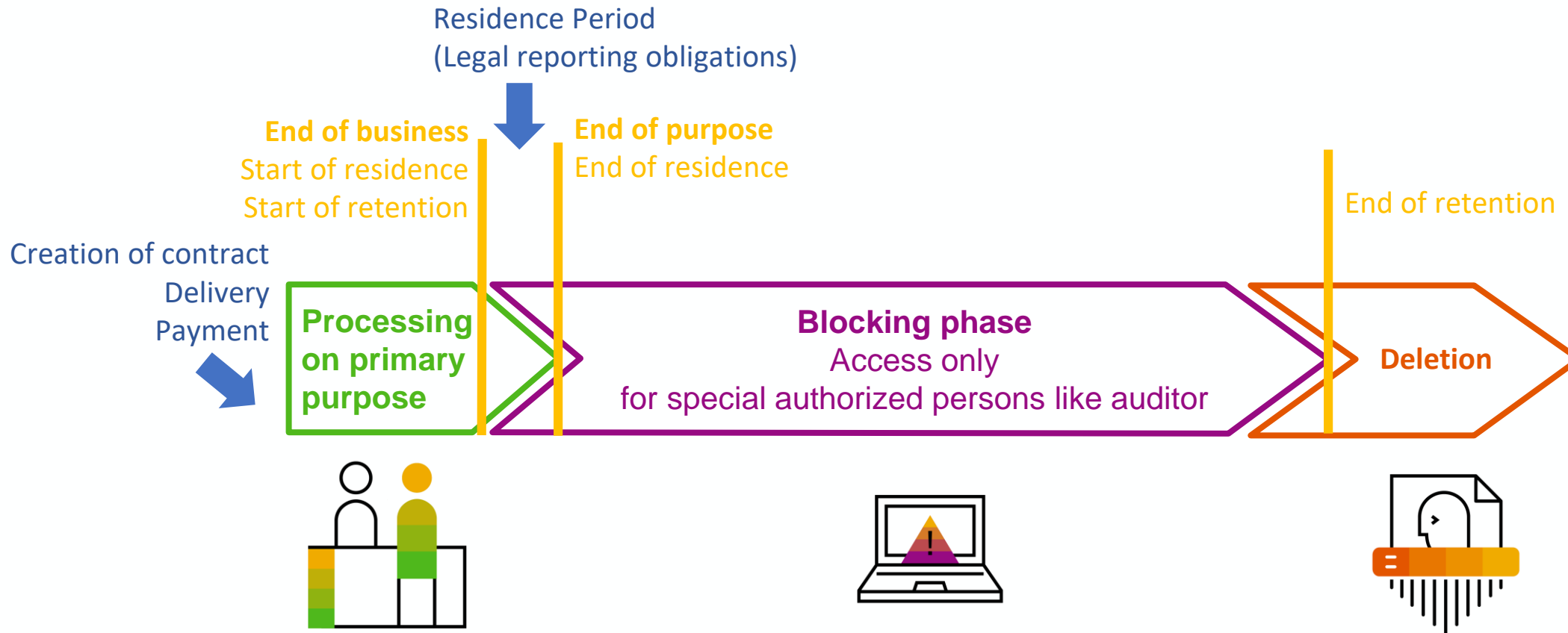
The following part of the presentation is based on the knowledge provided during the SAPPHIRE NOW and ASUG Annual Conference 2018 in the session “Data Protection with SAP Information Lifecycle Management” SESSION CODE: ASUG10045.

You can find the presentation material under: <http://bit.ly/asug18slides>

Definitions

- **Personal Data:** Any information on an identified or identifiable natural person
- **Purpose:** Purpose of data processing defined in advance by organizational measures
- **End of Business (EoB):** Marks the start of the **residence period**. The length of the residence period is defined in ILM rules. For example, the residence period of a customer starts as soon as all documents in all applications have been completed.
- **End of Purpose (EoP):** Technical method to determine the point in time at which personal data is no longer processed in accordance with its original purpose. Consequently, the data must be **blocked**. Marks the end of the **residence period**.
- **Blocking:** Method of preventing access to personal data that is no longer necessary in relation to the purposes for which it was collected
- **Retention period:** Period of time, required by law, during which (personal) data must be retained
- **Destruction:** Irreversible and adequate deletion of personal data

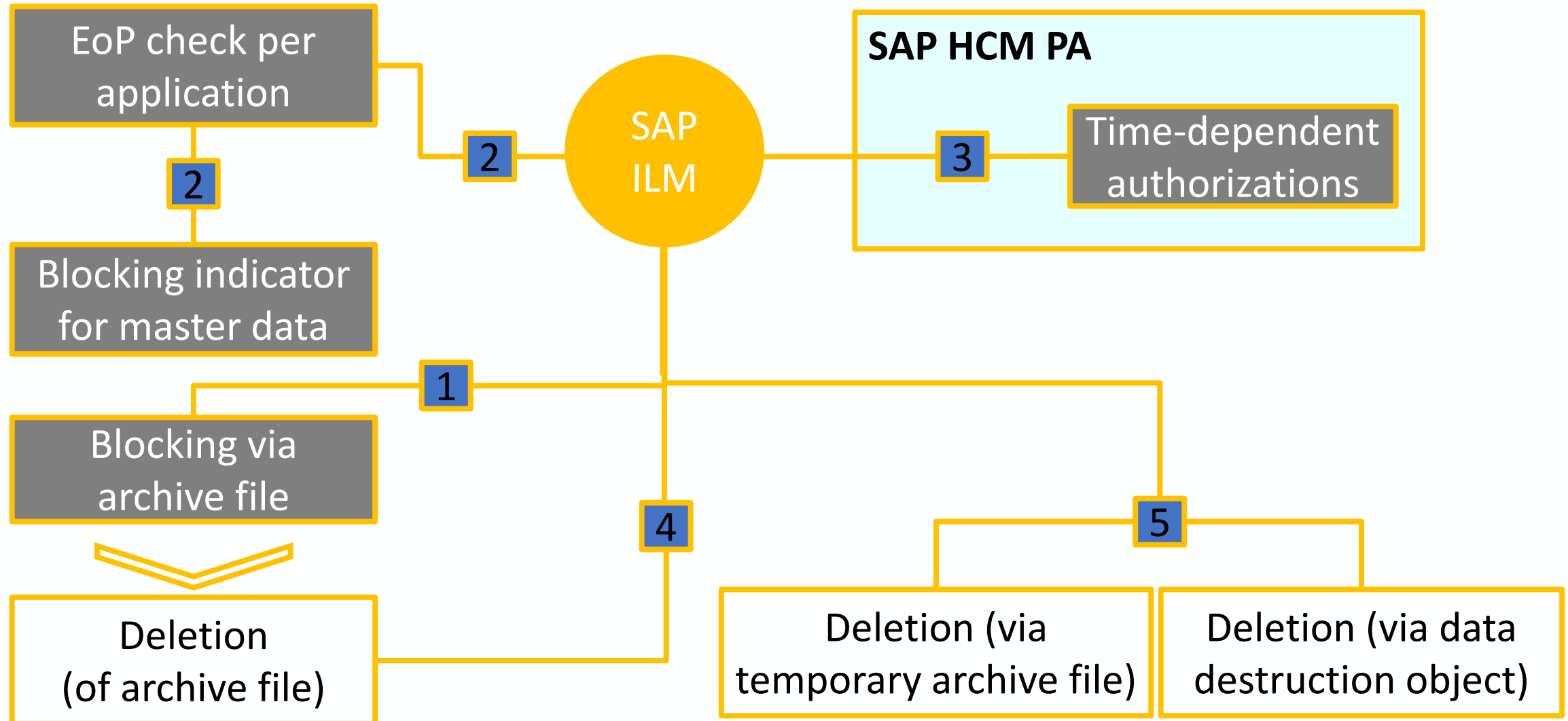
Lifecycle of personal data



Requirement:

Personal data that is **no longer needed for the primary processing purpose** must be **deleted** unless there are other **retention periods** defined by law or contract; in that case, it has to be **blocked**.

Blocking and deletion using ILM features



Motivational slide

- There is not button to switch on GDPR compliance.
- Effectively we talk about a large scale project to transform systems and organizational structures.
- We talk about blood, sweat and tears.

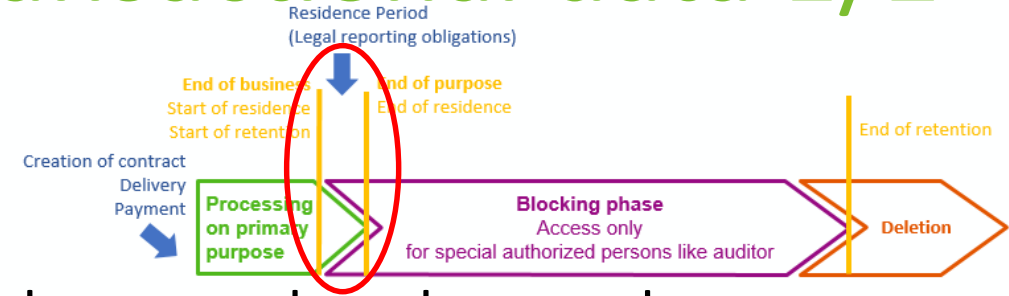




Case 1: Master data without transactional data
Question A: How to block it?

Case 1: Master data without transactional data 1/2

Question A: How to block it?



- **Example:** Customer has created an account but has never bought a product
- **You need** ILM for the residence rules for master data. **In detail:** You need a residence rule for the application name that corresponds to the master data in question (for example ERP_CUST in case of a customer).
- This rule defines **when you wish to be able to block** master data.
- Note: In the context of “Simplified blocking and deletion with SAP ILM”, we only **consider** the *central business partner, customer, vendor, and the contact person as master data*

ILM Policies

Continue | New

Policy Category: Residence Rules

* Object Category: SAP Business Suite

Audit Area: BUPA_DP Business Partner

ILM Object: FI_ACCRECV

Application Name	Application Rule Var	Residence Time	Residence Time Unit	Time Ref.	Time Offset
ERP_CUST		6	Month	Start of Retention Period	

Note: In this context, “Start of Retention Period” reflects the creation or last change date of the master data

Case 1: Master data without transactional data 2/2

Question A: How to block it?

The image shows two overlapping SAP configuration screens. The background screen is titled "Blocking of Business Partner Data" and includes sections for "Business Partner Details", "Variant for Additional Restrictions", "Further Selection Criteria", and "Parallel Processing". The foreground screen is titled "Block Customer and Vendor Master Data" and includes sections for "Data To Be Processed", "Customer Master Data" and "Vendor Master Data" tabs, "End of Purpose Check Execution Mode", and "Options".

Blocking of Business Partner Data

- Business Partner Details: Partner [] to []
- Check End of Purpose (selected) / Reset End of Purpose
- Variant for Additional Restrictions: Filter [], Differentiation []
- Further Selection Criteria: Interim Check (Local) w/o Setting Compl. Indicator (selected) / Overall Check (Remote) w/ Setting Compl. Flag (deselected)
- Options: Skip Subsequent EoP Checks if Ongoing Business Found (deselected), Consider Next Check Date (deselected)
- Parallel Processing: Block Size []

Block Customer and Vendor Master Data

- Data To Be Processed: AL Check on all Data Levels
- Customer Master Data (checked) / Vendor Master Data (unchecked)
- Customer [] to []
- Company Code [] to []
- Contact Person [0] to [0]
- End of Purpose Check Execution Mode: Interim Check (Local) w/o Setting Compl. Flag (deselected) / Overall Check (Remote) w/ Setting Compl. Flag (selected)
- Options: Skip Subsequent EoP Checks if Ongoing Business Found (deselected), Consider Next Check Date (deselected)

At the bottom of the SAP interface, two dropdown menus are circled in blue: "BUPA_PRE_EOP" and "CVP_PRE_EOP".



Case 1: Master data without transactional data
Question B: How to destroy it?

Case 1: Master data without transactional data 1/2

Question B: How to destroy it?

- **You need** ILM for the retention rules for this master data.
- **Note:** There are no specific retention rules as there was no business with this master data (customer, vendor, business partner). **This means that** as soon as the master data has been blocked, it shall also be destroyed. (Blocking of master data is a prerequisite for its destruction)
- The length of the residence period and the retention period are **identical** in this case 1

ILM Policies

Policy Category Retention Rules Audit Area Tax Audit Area for ILM Workshops Object Category SAP Business Suite ILM Object Customer Master Data

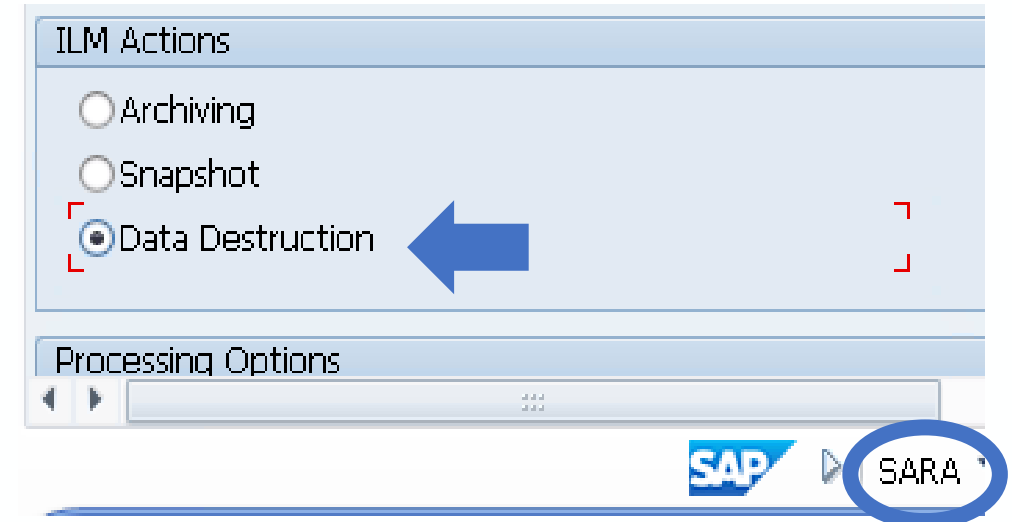
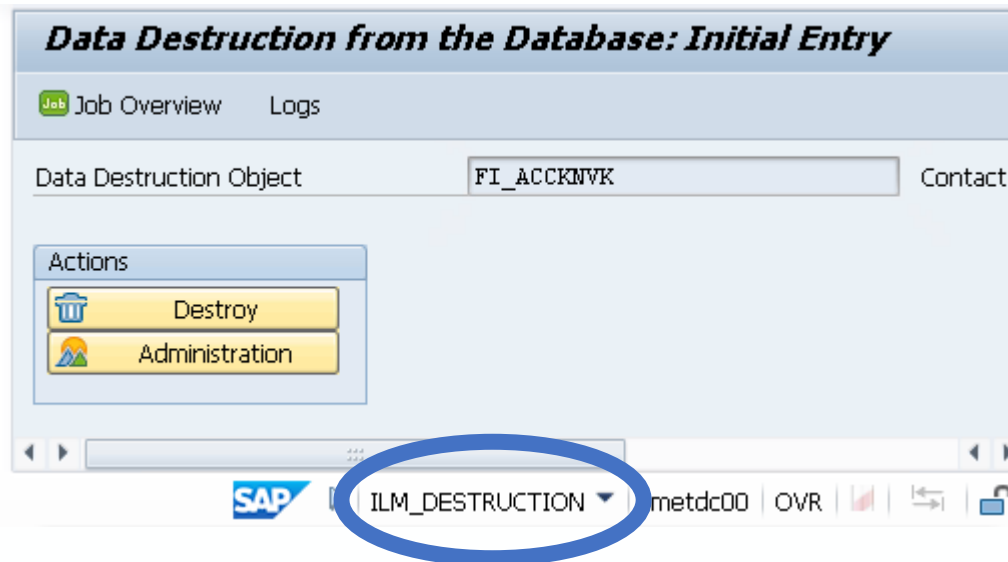
Rules for Policy BIT665_00

	Application Name	Company Code	To	Authorizati... Group	Min. Retent. Time	Max.Retention Time	Retention Time Unit	Time Ref.	Time Offset
	ERP_CUST	1000			6		Month	Start of Retention Period	End of Year
	ERP_CUST	2000			1		Year	Start of Retention Period	

Case 1: Master data without transactional data 2/2

Question B: How to destroy it?

- **You need ILM to use:**
 - The **Archiving Objects** FI_ACCRECV (Customer master data), CA_BUPA (Business Partners), FI_ACCPAYB (Vendor master data) and their **ILM Action *Data Destruction*** during the write phase in transaction SARA.
 - The **Data Destruction Object** for contact person FI_ACCKNVK in transaction ILM_DESTRUCTION
- **Note:** We do not recommend to archive blocked master data





Case 2:

Master data with transactional data in
several fiscal years

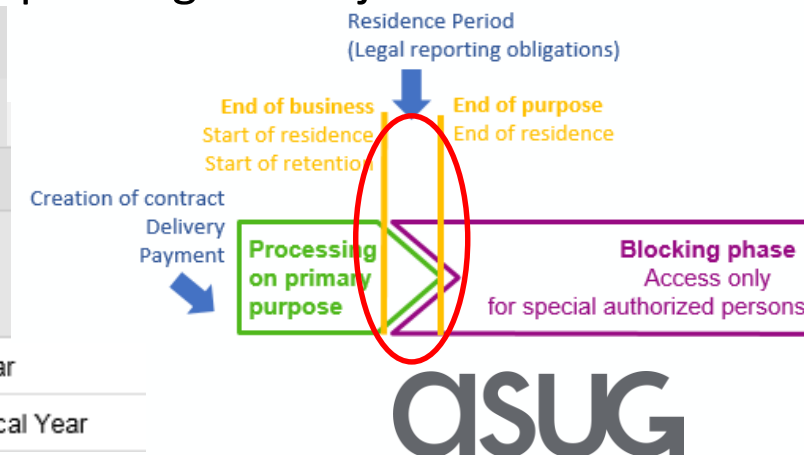
Question A: How to block transactional and
master data?

Case 2: Master data with transactional data in many fiscal years. Question A: How to block data?

Example: **Loyal Customers**. Continuous business with the customer over many years means that you have transactional data for business in status **“complete”** as well as not.

- **Master data cannot be blocked** as there is some business where *End of Business* (EOB) or *End of Purpose* (EOP) is not yet reached. (Transaction CVP_PRE_EOP or BUPA_PRE_EOP refuses blocking.)
 - You **do not (yet) need** ILM for the blocking or destruction of the master data.
- You **can block transactional data** for which *End of Purpose* (EOP) has been reached
 - You **need ILM** for the blocking of the transactional data through **archiving** (transaction SARA) **plus** filling the **column *Authorization Group*** in transaction IRMPOL for the corresponding ILM objects.

ILM Policies											
Policy Category	Retention Rules				Object Category	SAP Business Suite	ILM Object	Financial Accounting Documents			
	Document type	To	Company Code	To	Authorization Group	Rule Group	Min. Retent. Time	Max.... Time	Rete... Time Unit	Time Ref.	
			1000		FIAU	BUKRS_1000	10		Year	End of Year	
			5000			BUKRS_5000	7		Year	End of Fiscal Year	





Case 2:

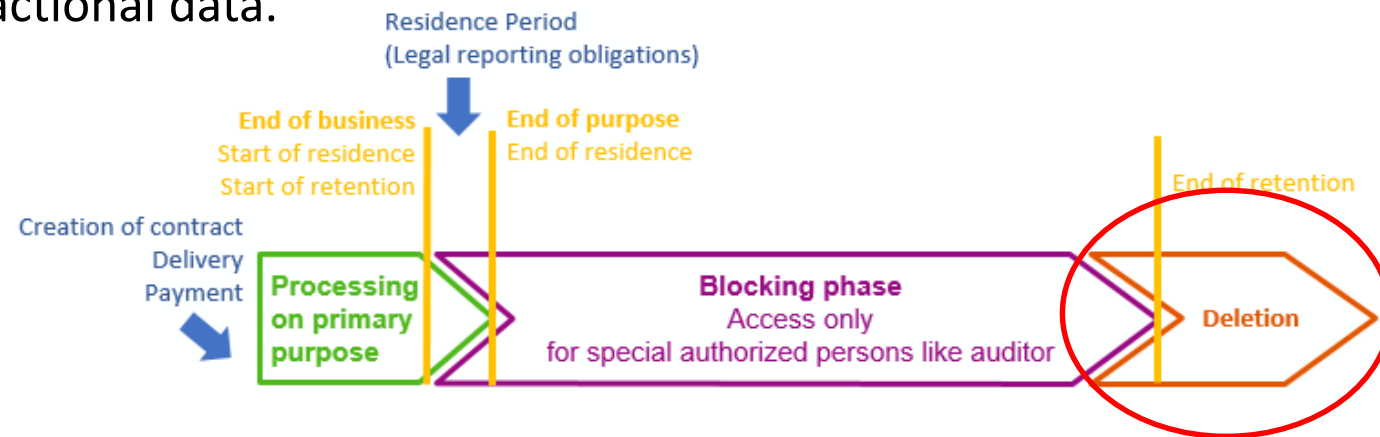
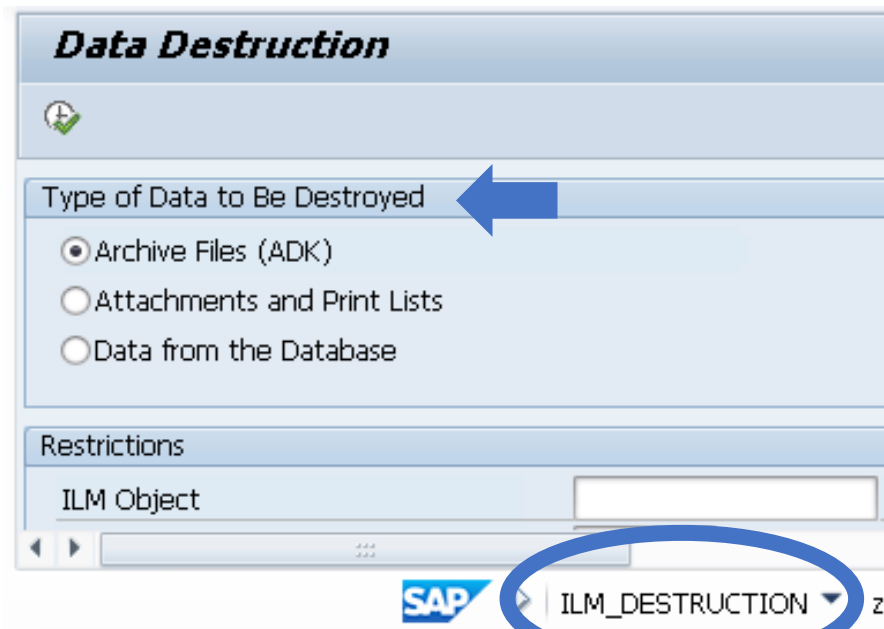
Master data with transactional data in several fiscal years

Question B: How to destroy transactional and master data?

Case 2: Master data with transactional data in many fiscal years – how to destroy the data? 1/2

Example: **Loyal customers**. Continuous business with the customer over many years means that you have transactional data for business in **status “complete” as well as not**.

- You **cannot destroy master data** as some corresponding transactional data has not yet reached *End of Purpose* (EOP)
- You **can destroy transactional data** when the retention period are over (older fiscal years).
- You need ILM for this destruction of transactional data.



Case 2: Master data with transactional data in many fiscal years – how to destroy the data? 2/2

The image displays the SAP Data Destruction configuration and execution interface. It is divided into several key sections:

- Data Destruction Configuration:** A central panel titled "Data Destruction" with a green checkmark icon. It features a "Type of Data to Be Destroyed" section with three radio button options: "Archive Files (ADK)", "Attachments and Print Lists", and "Data from the Database". The "Data from the Database" option is selected. Below this is a "Restrictions" section.
- ILM Actions:** A panel titled "ILM Actions" with three radio button options: "Archiving", "Snapshot", and "Data Destruction". The "Data Destruction" option is selected.
- Data Destruction from the Database: Initial Entry:** A panel showing the "Data Destruction Object" as "EHS_HEA_SRV_DESTRUCTION" and "Medical Service". It includes an "Actions" section with "Destroy" and "Administration" buttons.
- Creation of Destruction Worklist:** A panel showing the "URI of a Resource" as "ILM_DESTRUCTION".
- Expired Resources Table:** A table listing expired resources with columns for "Expired Resources" and "Expiration Date". The table shows a hierarchy of folders: "zme" > "800" > "ad" > "rv_likp" > "lf" > "20031231" > "001884" > "001885" > "001886" > "001887". Red arrows point to the "Legal Hold", "Minimum", and "Maximum" rows, which have expiration dates of "14.06.2016".

Blue arrows indicate the flow of configuration: from the "Data from the Database" option to the "Data Destruction" option in the ILM Actions panel, and from the "Data Destruction" panel to the "Data Destruction from the Database: Initial Entry" panel. A blue circle highlights the "ILM_DESTRUCTION" URI in the "Creation of Destruction Worklist" panel.



Case 2: ... years later

Appendix to Question A:
How to block master data?

Case 2: Master data with transactional data in many fiscal years - how to block master data?

Example: **A leap in time** – **Some of** your loyal customers ended their business. Some time later (1-2 years for example) all corresponding transactional data has reached the **status “complete”**.

- You **can block and destroy master data** as all corresponding transactional data has reached *End of Purpose* (EOP). You already know the respective transactions from Case 1 and 2.
- You need ILM for the blocking (as shown in case 1 and 2). Most likely you will also add **application-specific residence periods** before blocking this master data.

ILM Policies

Policy Category Residence Rules Audit Area Business Partner Data Privacy Object Category SAP Business Suite ILM Object Customer Master Data

Application Name	Application Rule Var	Residence Time	Residence Time Unit	Time Ref.	Time Offset	Rule Priority
ERP_CUST		6	Month	Start of Retention Period		
ERP_FI		2	Year	Start of Retention Period		
ERP_SD		2	Year	Start of Retention Period		



How to block master data?

The image shows two overlapping SAP configuration windows. The background window is titled "Blocking of Business Partner Data" and the foreground window is titled "Block Customer and Vendor Master Data".

Blocking of Business Partner Data (Background Window):

- Business Partner Details:** Includes a "Partner" field with a yellow highlight and a "to" field.
- Check End of Purpose:** Radio buttons for "Check End of Purpose" (selected) and "Reset End of Purpose".
- Variant for Additional Restrictions:** Includes "Filter" and "Differentiation" fields.
- Further Selection Criteria:** Radio buttons for "Interim Check (Local) w/o Setting Compl. Indicator" (selected) and "Overall Check (Remote) w/ Setting Compl. Flag". A checked checkbox "Check All Applications for EoP" is also present.
- Parallel Processing:** Includes a "Block Size" field.

Block Customer and Vendor Master Data (Foreground Window):

- Data To Be Processed:** A dropdown menu with "AL Check on all Data Levels" selected and highlighted in yellow.
- Customer Master Data / Vendor Master Data:** Two tabs, with "Customer Master Data" selected. Below are fields for "Customer", "Company Code", and "Contact Person", each with a "to" field and a "0" value.
- End of Purpose Check Execution Mode:** Radio buttons for "Interim Check (Local) w/o Setting Compl. Flag" and "Overall Check (Remote) w/ Setting Compl. Flag" (selected).
- Options:** Two unchecked checkboxes: "Skip Subsequent EoP Checks if Ongoing Business Found" and "Consider Next Check Date".
- Navigation:** At the bottom, there are two dropdown menus circled in blue: "BUPA_PRE_EOP" and "CVP_PRE_EOP".



Case 2: ... years later

Appendix to Question B:
How to destroy master data?

Case 2: Master data with transactional data in many fiscal years - how to destroy master data?

- You need ILM for the destruction of the master data.
- **Note:** Because there is business with the customer, **retention periods of the corresponding transactional data must be applied (inherited) to the master data.** This inheritance does not happen automatically. So-called **double maintenance** is needed.
- The retention period for the master data in Case 2 is not the same as the residence period for the master data. (This was true only in case 1.)

ILM Policies							
Policy Category	Retention Rules	Audit Area	Tax Audit Area for ILM Workshops	Object Category	SAP Business Suite	ILM Object	Customer Master Data
Rules for Policy BIT665ARV2							
	Application Name	Authorization Group	Min. Retent. Time	Max.Retenti... Time	Retention Time Unit	Time Ref.	Time Offset
	ERP_FI		10		Year	Start of Retention Period	End of Year
	ERP_SD		10		Year	Start of Retention Period	End of Year
	ERP_CUST		6		Month	Start of Retention Period	

Usage of Application Rule Variants: Double maintenance of retention periods

ILM Policies

Policy Category Retention Rules Audit Area Tax Audit Area for ILM Workshops Object Category SAP Business Suite ILM Object Customer Master Data

Application Rule Var	Application Name	Min. Retent. Time	Ma... Time	Retention Time Unit	Time Ref.	Time Offset	ILM Store
FI_1000	ERP_FI	10		Year	End of Year		ILM_ARCHIVE_STORE
FI_5000	ERP_FI	7		Year	End of Fiscal		ILM_ARCHIVE_STORE
SD_1000	ERP_SD	10		Year	End of Year		ILM_ARCHIVE_STORE
SD_5000	ERP_SD	7		Year	End of Fiscal		ILM_ARCHIVE_STORE
ERP_CUST		6		Month	End of Year		

- This picture explains the so-called double maintenance.
- With the help of the so-called **application rule variants (ARV)**, you can define the required rules faster as the fields marked in blue will be filled from the **rule group** that you have assigned to the **application rule variant**.
- This is the exact use case for which the application rule variants have been developed.



See Appendix for
Case 3: Master data with transactional data in
one fiscal year only

Further information 1/2

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BIT660 – Data Archiving

BIT665 – Information Lifecycle Management (ILM)

BIT670 – How to develop Data Archiving and ILM solutions for applications in customer name space

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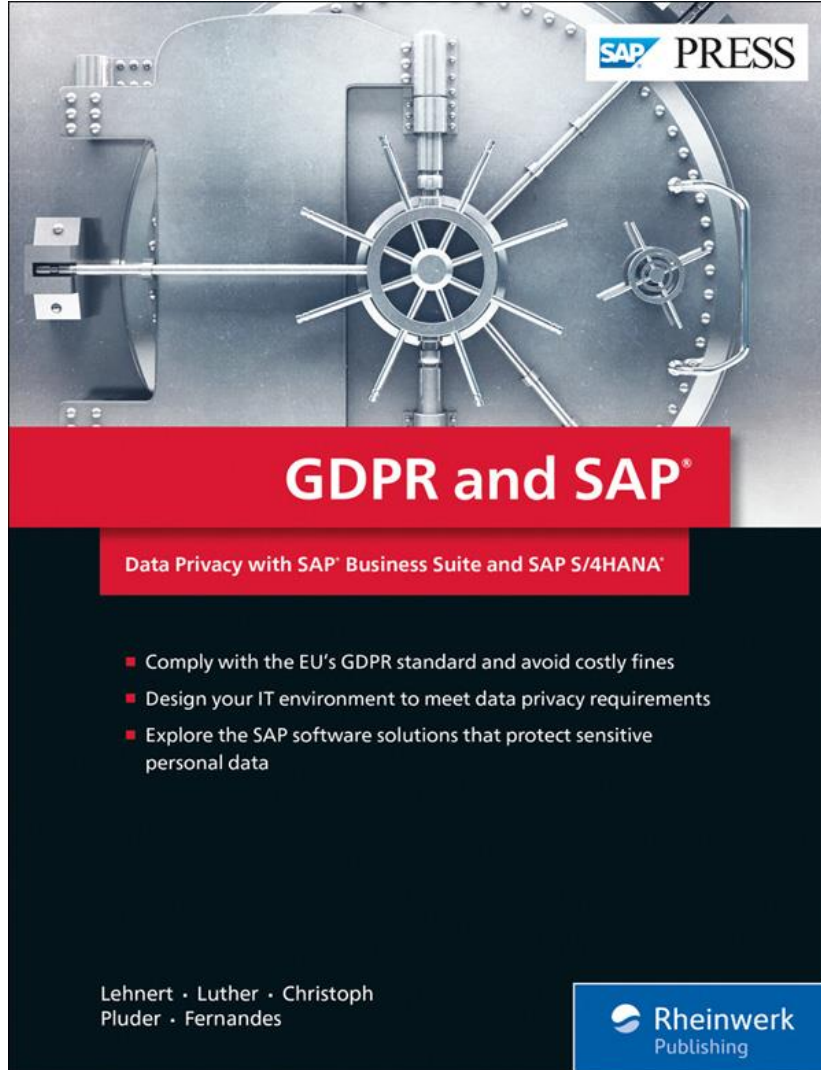
GDPR and SAP

Data Privacy with SAP Business Suite and SAP S/4HANA

Written by: Lehnert, Luther, Christoph, Pluder, Fernandes

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Q&A

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Appendix



Case 3:

Master data with transactional data in one
fiscal year only

Question A: How to block master data?

Case 3: Master data with transactional data in one fiscal year only - how to **block** master data?

Example: You had some special offers for your company's anniversary and won new customers. But you didn't manage to have business with them in subsequent years. In this case, as soon as the transactional data reaches the status "complete" and can be blocked, the **corresponding master data can be blocked too** – this makes this case a **special one**. Potentially you can apply case 3 (instead of covering it with case 2). So let's see what happens if you start with blocking the master data and then take care of blocking of the transactional data?

- You **can block and destroy master data** as all corresponding transactional data has reached *End of Purpose* (EOP). You already know the respective transactions from case 1 and 2.
- You need ILM for the blocking (as shown in case 1 and 2). Most likely you will also add **application-specific residence periods** before blocking this master data.

ILM Policies

Policy Category Residence Rules Audit Area Business Partner Data Privacy Object Category SAP Business Suite ILM Object Customer Master Data

Application Name	Application Rule Var	Residence Time	Residence Time Unit	Time Ref.	Time Offset	Rule Priority
ERP_CUST		6	Month	Start of Retention Period		
ERP_FI		2	Year	Start of Retention Period		
ERP_SD		2	Year	Start of Retention Period		



How to block master data?

The image displays two overlapping SAP configuration windows. The background window is titled "Blocking of Business Partner Data" and includes sections for "Business Partner Details", "Variant for Additional Restrictions", "Further Selection Criteria", and "Parallel Processing". The foreground window is titled "Block Customer and Vendor Master Data" and includes sections for "Data To Be Processed", "Customer Master Data" and "Vendor Master Data" tabs, "End of Purpose Check Execution Mode", and "Options".

Blocking of Business Partner Data

- Business Partner Details: Partner [] to []
- Check End of Purpose (selected) / Reset End of Purpose
- Variant for Additional Restrictions: Filter [], Differentiation []
- Further Selection Criteria: Interim Check (Local) w/o Setting Compl. Indicator (selected) / Overall Check (Remote) w/ Setting Compl. Flag (unselected)
- Check All Applications for EoP (checked)
- Parallel Processing: Block Size []

Block Customer and Vendor Master Data

- Data To Be Processed: AL Check on all Data Levels
- Customer Master Data (checked) / Vendor Master Data (unchecked)
- Customer [] to []
- Company Code [] to []
- Contact Person [0] to [0]
- End of Purpose Check Execution Mode: Interim Check (Local) w/o Setting Compl. Flag (unselected) / Overall Check (Remote) w/ Setting Compl. Flag (selected)
- Options: Skip Subsequent EoP Checks if Ongoing Business Found (unchecked), Consider Next Check Date (unchecked)

Navigation bars at the bottom of both windows show the current screen: "BUPA_PRE_EOP" (circled in blue) and "CVP_PRE_EOP" (circled in blue).



Case 3:

Master data with transactional data in one
fiscal year only

Question B: How to block transactional data?

Case 3: Master data with transactional data in one fiscal year only. How to block transactional data 1/3

Example: The customer has bought something only in one fiscal year.

- **Scenario A:** Block transactional data by archiving this data, **if the respective display transactions would otherwise show transactional data associated to a blocked master data.**
- You **need** ILM for the archiving under the control of ILM.
- **Additionally** you need to fill the column *Authorization Group* in transaction IRMPOL for the corresponding ILM objects.

Rules for Policy BIT665

Document type	To	Company Code	To	Authorization Group	Rule Group	Min. Retent. Time	Max.... Time	Rete... Time Unit	Time Ref.
		1000		FIAU	BUKRS_1000	10		Year	End of Year
		5000			BUKRS_5000	7		Year	End of Fiscal Year

Case 3: Master data with transactional data in one fiscal year only. How to block transactional data 2/3

- **Scenario B:** Block transactional data *implicitly* by blocking the master data and doing nothing further for the transactional data (= you block transactional data without archiving it).
- You **do not need ILM for the archiving-based blocking** (as explained on the previous slide) if the display-transactions of the respective applications **do not show** their transactional data if the corresponding master data has been blocked.
- **Note:** This is only the case if the application uses the central read application interfaces (provided by the master data). These application interfaces check if the user has the authority group stated in the corresponding customizing activity (see next slide).
- **Experience shows** that some applications follow this approach, but others don't. Nevertheless it is important to understand this option too in order to have a full understanding of possible scenarios and judge when to use which one.

Case 3: Master data with transactional data in one fiscal year only. How to block transactional data 3/3

The image shows a sequence of SAP configuration steps:

- Navigation:** A tree view under "Data Protection" > "Blocking and Unblocking of Data" > "Business Partner" > "Customer Master/Vendor Master Deletion" > "Define Authorization Group Indicating Blocked Master" is highlighted.
- Display IMG:** A screenshot of the "Display IMG" tool showing the "Structure" of the selected authorization group, listing various SAP processes and tools.
- Configuration:** A screenshot of the "Change View 'Define Authorization Group Indicating Blocked Master Data'" showing a table with two entries:

ID	Type	Company Code	Authorization Group	Order block for sales area	Billir
1	Customer master data		§DPP		
2	Vendor master data		§DPP		

- Details:** A screenshot of "New Entries: Details of Added Entries" showing the "Authorization Group" field set to "§DPP".

Blue arrows indicate the flow from the navigation tree to the IMG tool, then to the configuration view, and finally to the details view.



Case 3:

Master data with transactional data in one fiscal year only

Question C: How to destroy master data?

See Case 2 for answers



Case 3:

Master data with transactional data in one
fiscal year only

Question D: How to destroy transactional data?

See Case 2 for answers