



# PBS archive add ons for SAP ERP

---

Advanced software solutions to improve SAP data archiving and ILM

Dr. Klaus Zimmer, PBS Software 2017

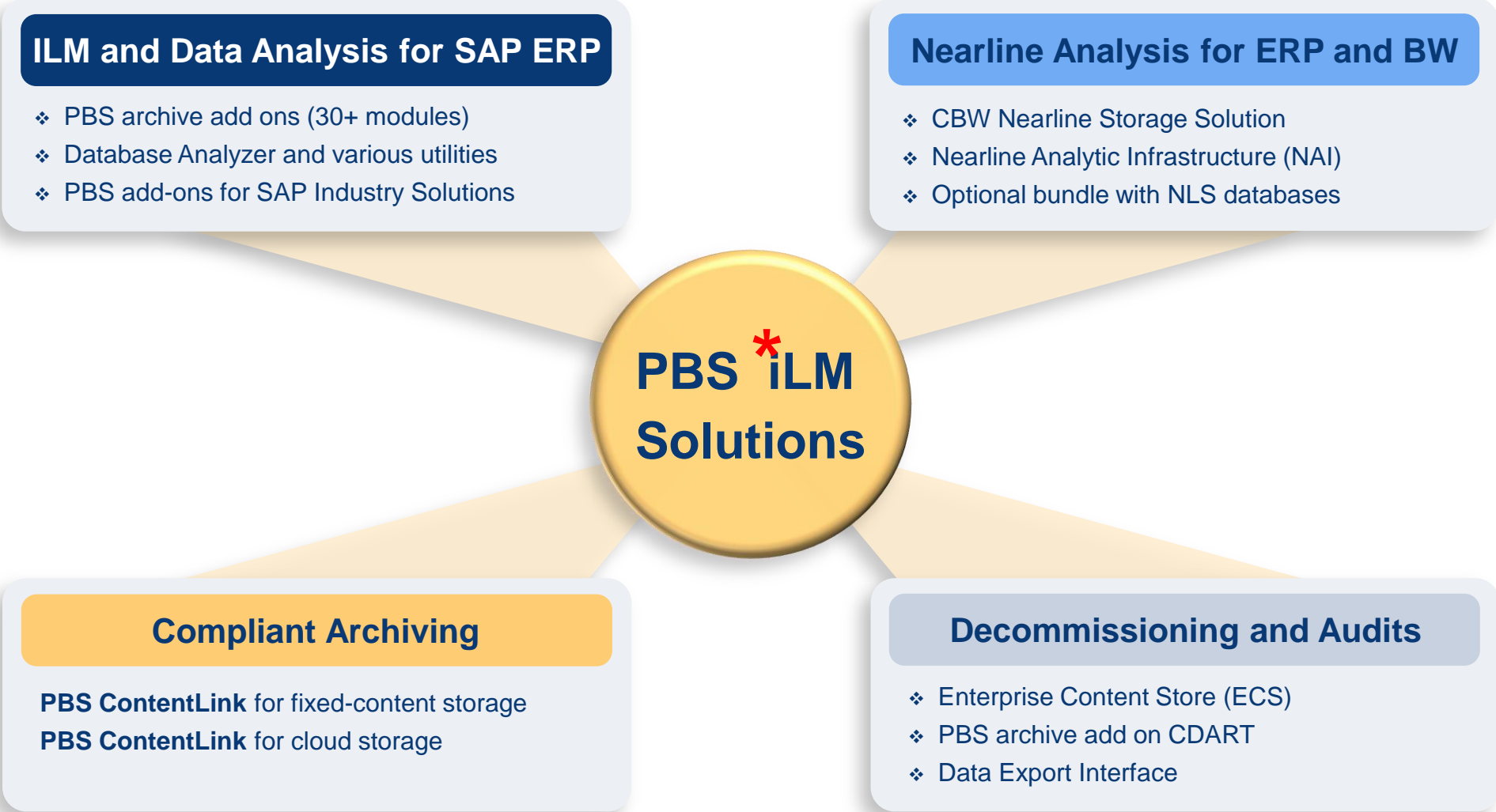


# Agenda

---

- Introduction
- Information Lifecycle Management and SAP Data Archiving
- PBS archive add ons for SAP ERP – Demo and Architecture
- Additional Components and Utilities
- Summary

# Solutions Portfolio



# Avoid a Data Tsunami

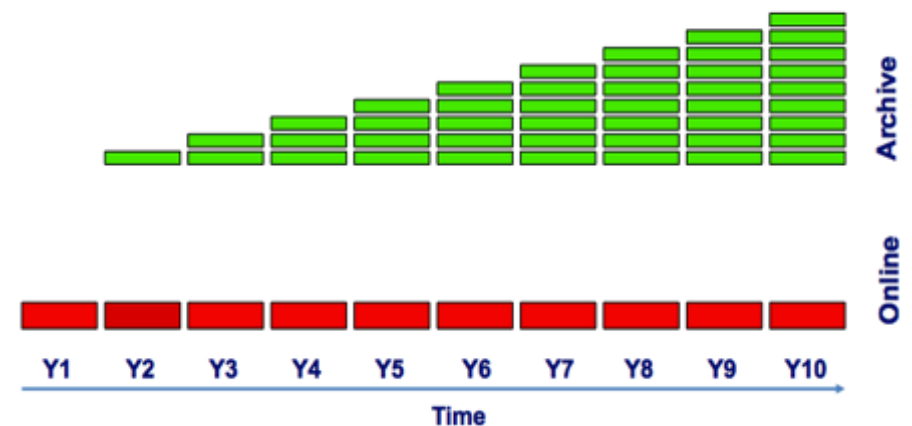
Without archiving



- Continuous SAP database growth
- Poor retrieval performance
- TCO explosion, system instability
- Backup/DR? Audits? Compliance?

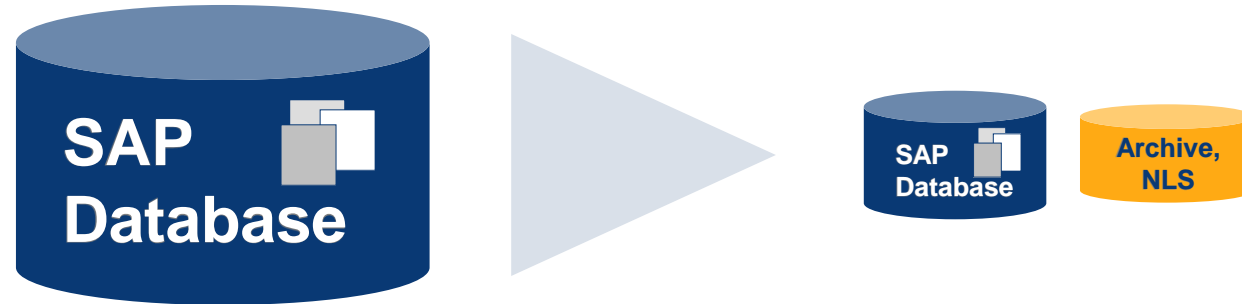
- Reduce operation costs (TCO) significantly
- Smaller data footprint – faster primary DB
- Faster response time for analysis needs
- Transfer data growth to low-cost archive
- Huge archive data compression > 1:5

With archiving and PBS solutions



# Tame the Data Demon!

---

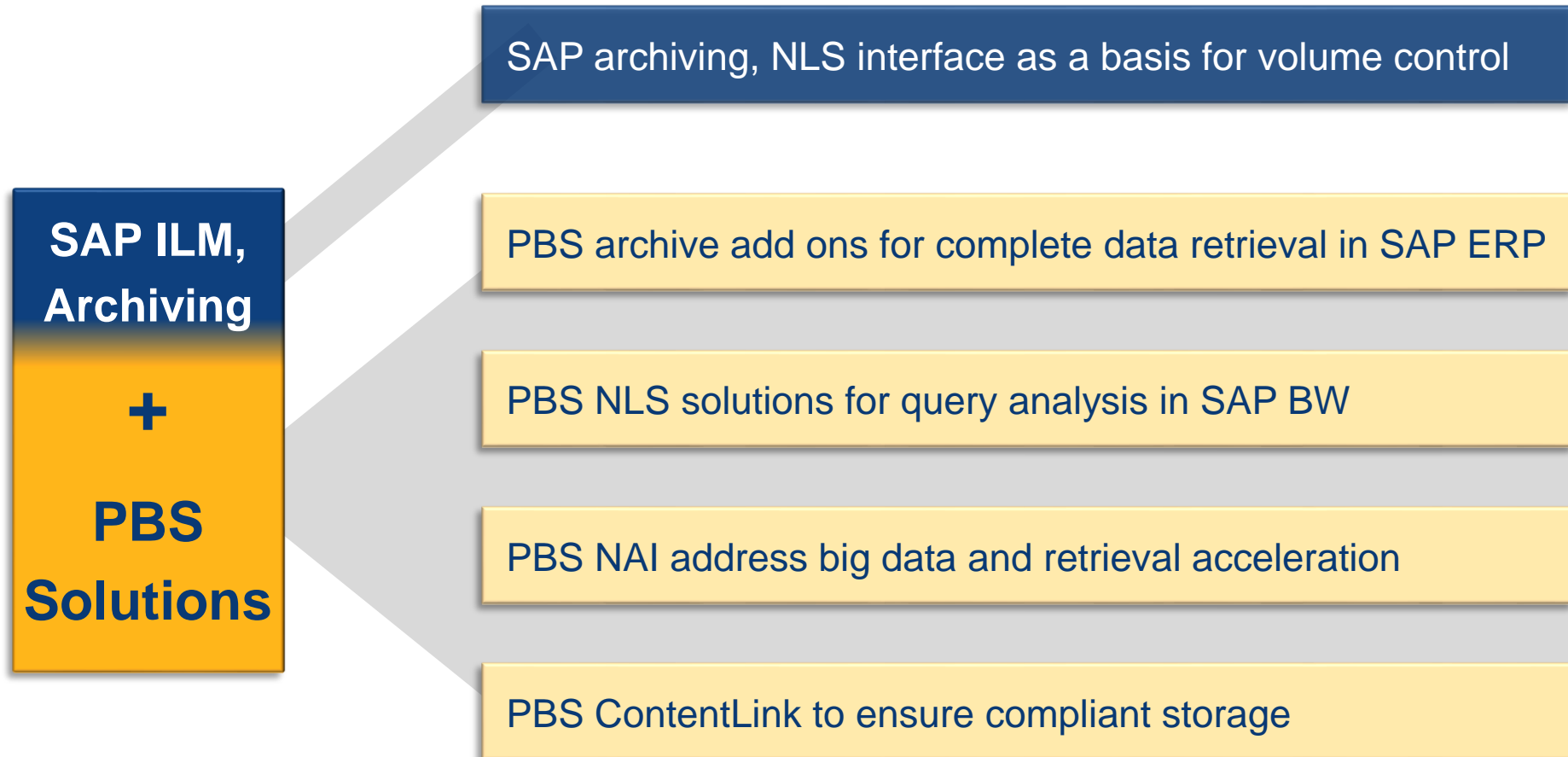


- Cut SAP operation costs!
- Meet legal requirements for analysis and audits
- Control data volume/growth and retrieval performance
- Ensure complete and effective data analysis



# Add-on Solutions to Improve your SAP Environment

---



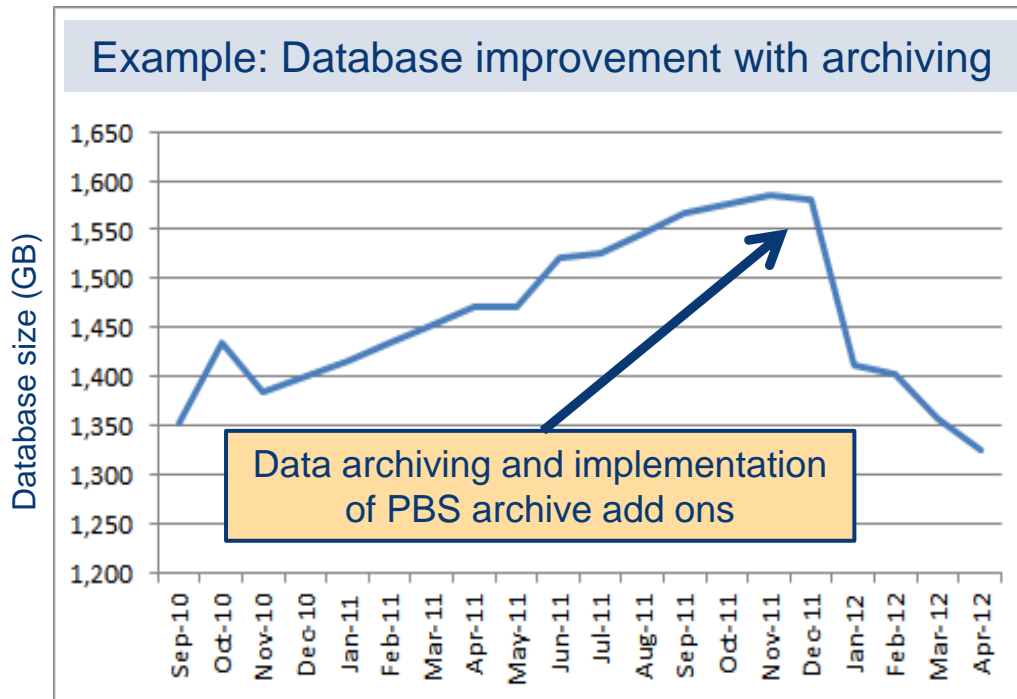
# Customer Success: Reduce the Data Footprint

SAP archiving features are often not sufficient for complete/effective archive data retrieval:

Companies postpone or cancel data archiving – Users fear the loss of information access!



**PBS archive add ons provide complete data access and navigation options!**

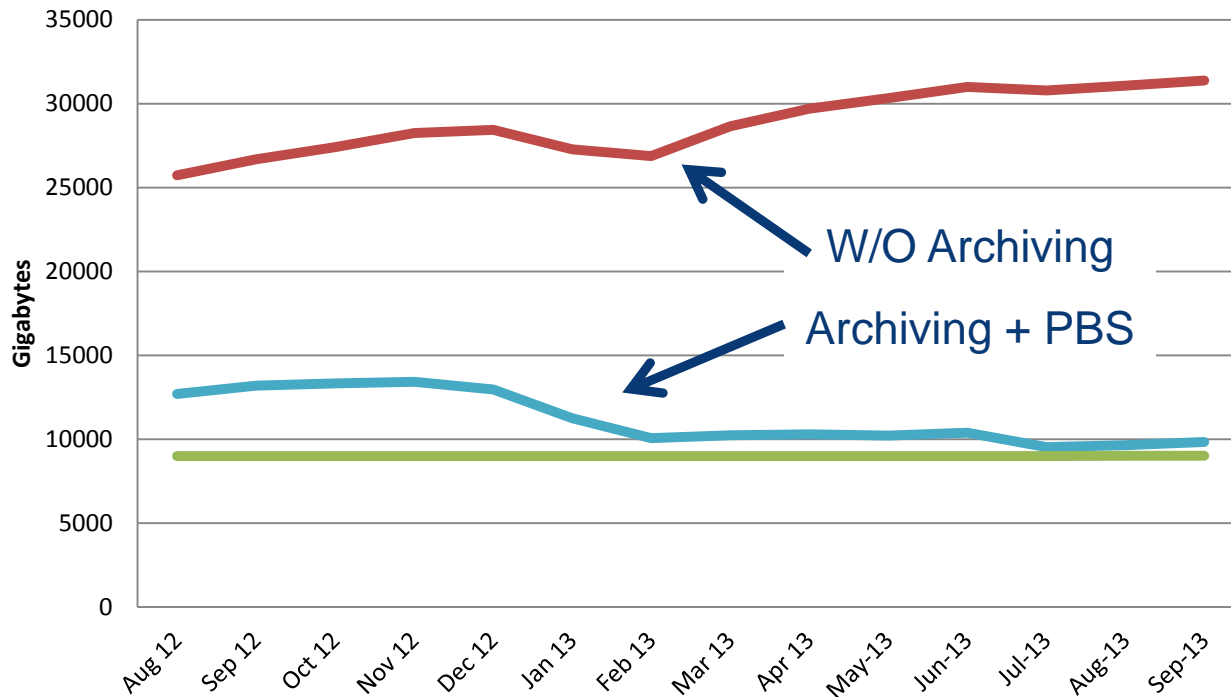


- Data archiving with SAP ADK
- 500 GB savings in < 3 months
- Data growth challenge solved
- Retrieval with **PBS archive add ons**
- Data and documents compliantly stored with **PBS ContentLink**.

# Continuous Savings with Archiving and PBS

- Cover database reduction with standard SAP data archiving features (SARA)
- Address complete and comfortable data retrieval with matching **PBS archive add ons**
- All standard and custom data access needs are **completely** covered by PBS add-on solutions

Database size with and without archiving



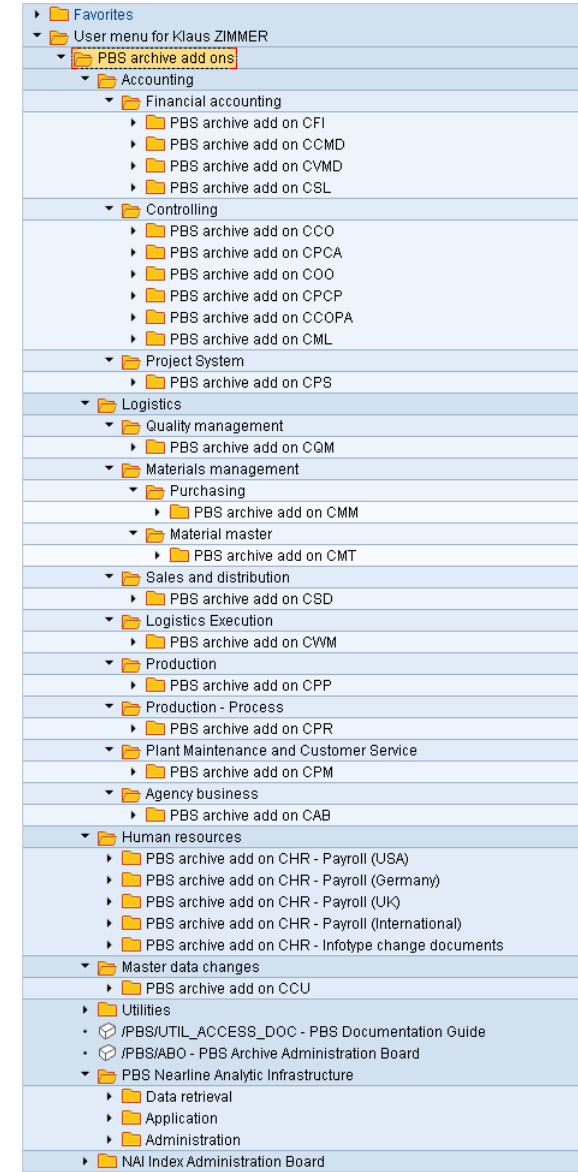
- **22 TB data archived!**
- Data growth challenge solved
- Data retrieval via PBS add-ons
- Compliant storage of data and docs with PBS ContentLink.



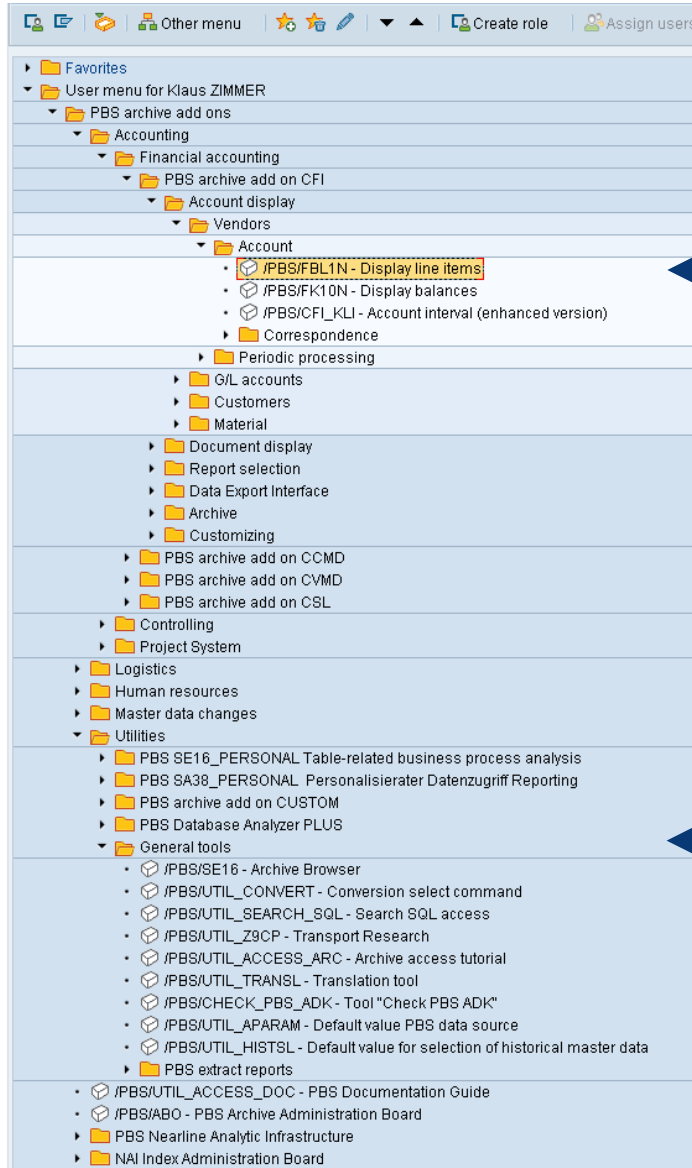
# PBS archive add ons for SAP ERP

- Standardized software solutions for SAP ERP
- Archived data display 1:1 to SAP database data
- Simultaneous display of database and archive
- Effective navigation in document chains (doc flow)
- Available for all major SAP modules
- SAP certified, currently SAP ERP 6.17
- BIG DATA processing option with **PBS NAI**

**SAP**<sup>®</sup> Certified  
Powered by SAP NetWeaver<sup>®</sup>



# Access to the PBS User Menu



Access to the **PBS archive add on CFI** via roles in the user menue.

PBS version of transaction **FBL1N „Display line items“**

Additional tools which are delivered together with the PBS archive add ons

# Display Vendor Line Items (i)

**Vendor Line Item Display**

Vendor selection  
Vendor account 1000 to [ ]  
Company code 1000 to [ ]

Selection using search help  
Search help ID [ ]  
Search string [ ]  
Search help

Line item selection  
Status  
1=DB+archive 2=DB 3=archive **1**  
 Open items  
Open at key date 18.05.2011  
 Cleared items  
Clearing date [ ] to [ ]  
Open at key date [ ]  
 All items  
Posting date 01.01.2000 to 30.04.2000

Type  
 Normal items  
 Special G/L transactions  
 Noted items  
 Parked items  
 Customer items  
 Item without MR for single acc

List Output  
Layout /PBS/1SAP  
Maximum number of items [ ]

Selection screen  
**/PBS/FBL1N**

PBS-specific parameter to  
choose the data source



# Display Vendor Line Items (ii)

**Vendor Line Item Display**

Vendor 1000  
 Company Code 1000  
 Company code  
 Name C.E.B. BERLIN  
 City Berlin

St	Assignment	DocumentNo	Type	Doc. Date	S	DD	Amount in local cur.	LCurr	Clrng doc.	A
<input type="checkbox"/>	<input checked="" type="checkbox"/> 20000000032000	2000000003	ZP	31.01.2000			223,17	EUR	2000000003	
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000142000	5100000014	RE	11.01.2000			223,17-	EUR	2000000003	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 20000000242000	2000000024	ZP	25.02.2000			203,77	EUR	2000000024	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000472000	5100000047	RE	09.02.2000			203,77-	EUR	2000000024	*
<input type="checkbox"/>	<input checked="" type="checkbox"/>	1000000042	EU	06.04.2000			0,01	EUR	2000000030	
<input type="checkbox"/>	<input checked="" type="checkbox"/> 20000000302000	2000000030	ZP	31.03.2000			78.611,23	EUR	2000000030	
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000792000	5100000079	RE	07.03.2000			223,17-	EUR	2000000030	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000842000	5100000084	RE	02.02.2000			12.831,69-	EUR	2000000030	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000852000	5100000085	RE	28.02.2000			12.915,91-	EUR	2000000030	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000000862000	5100000086	RE	30.03.2000			13.064,78-	EUR	2000000030	*
<input type="checkbox"/>	<input checked="" type="checkbox"/> 20000000472000	2000000047	ZP	30.04.2000			223,17	EUR	2000000047	
<input type="checkbox"/>	<input checked="" type="checkbox"/> 51000001082000	5100000108	RE	07.04.2000			223,17-	EUR	2000000047	*
* <input checked="" type="checkbox"/>							39.575,69	EUR		
** Account 1000							39.575,69	EUR		

## Results List /pbs/FBL1N

← Database data

← Archive data via PBS index

← Totals from archive and database

# Navigation & Drill-Down Features

**Vendor Line Item Display**

Vendor: 1000  
Company code: 1000  
Name: C. E. B. BERLIN  
City: Berlin

St	Assignment	DocumentNo	Type	Doc. Date	Amount in local cur.	LCurr	Clrng doc.
1500003713	1999	1500003713	KZ	18.02.1999	11.804,71	EUR	1500003713
5100005123	1999	5100005123	RE	18.02.1999	11.804,71	EUR	1500003713
2000000528	1998	2000000528	ZP	18.12.1998	698,62	EUR	2000000528
2000000528	1998	2000000528	ZP	18.12.1998	511,29	EUR	2000000528
2000000528	1998	2000000528	ZP	18.12.1998	21.474,26	EUR	2000000528
5100005010	1998	5100005010	RE	07.12.1998	101,88	EUR	2000000528
5100005034	1999	5100005034	RE	05.01.1999	102,26	EUR	2000000725
2000000729	1999	2000000729	ZP	01.02.1999	339,61	EUR	2000000729
5100005060	1999	5100005060	RE	11.01.1999	339,61	EUR	2000000729
5100005105	1999	5100005105	RE	05.02.1999	198,91	EUR	2000000754
5100005138	1999	5100005138	RE	05.03.1999	213,47	EUR	2000000754
* Account 1000					22.067,65	EUR	
***					22.067,65	EUR	

Drill-down with double-click



**Display Document: Line Item 001**

Vendor: 1000 C.E.B. BERLIN G/L Acc: 160000  
Company Code: 1000 Kolping Str. 15  
IDES AG Berlin Doc. no.: 5100005010

Line Item 1 / Invoice / 31  
Amount: 199,26 DEM Amount in LC: 101,88 EUR  
Tax Code: VN

Additional details  
Bus. Area: Trdg part BA  
Disc. base: 199,26 DEM Disc. amount: 5,98 DEM  
Payt terms: Days/percent: 14 3,000 % 30 2,000 % 45  
Blnc date: 07.12.1998  
Prmt block: R Invoice ref.: / / 0  
Payment cur.: Prmt/c amnt: 0,00  
Prnt Method:  
Clearing: 18.12.1998 / 2000000528  
Assignment: 51000050101998  
Text: Long text

Document 1000 5100005010 1998 is already archived

Original document

**Rechnung**

Bestandsdatum: 00005189 / 28.01.1997  
Rechnungsdatum: DG-21011997-4 / 21.01.1997  
Lieferdatum: 00003378 / 24.01.1997  
Anfangsbestand: 4975 / 21.01.1997  
Kundennummer: 1002

Bedingungen: Zahlungsbedingungen Bis zum 11.02.1997 erhalten Sie 3,000 % Skonto  
Bis zum 27.02.1997 erhalten Sie 2,000 % Skonto.  
Lieferbedingungen: CPT Bismberg

Gewichte (Brutto/Netto) - Volumen - Markierung  
Bruttogewicht: 286 KG Nettogewicht: 286 KG

Pos.	Matrid	Menge	Bezeichnung	Preis	Prozentsatz	Wert
000010	M-13		MAG DX 1TF			
	Position 0					
		7 ST	1.520,00 DEM	1 ST		10.640,00
000020	M-14		MAG PA/DX 175			
	Position 0					
		4 ST	1.599,00 DEM	1 ST		9.594,00
000030	M-15		SBC Multilayne XV15			
	Position 0					
		5 ST	2.031,00 DEM	1 ST		10.155,00
000040	M-16		SBC Multilayne XV 17			
	Position 0					
		1 ST	2.389,00 DEM	1 ST		2.389,00

Environment:  
- Further assignments  
- Object links

**Document Overview - Display**

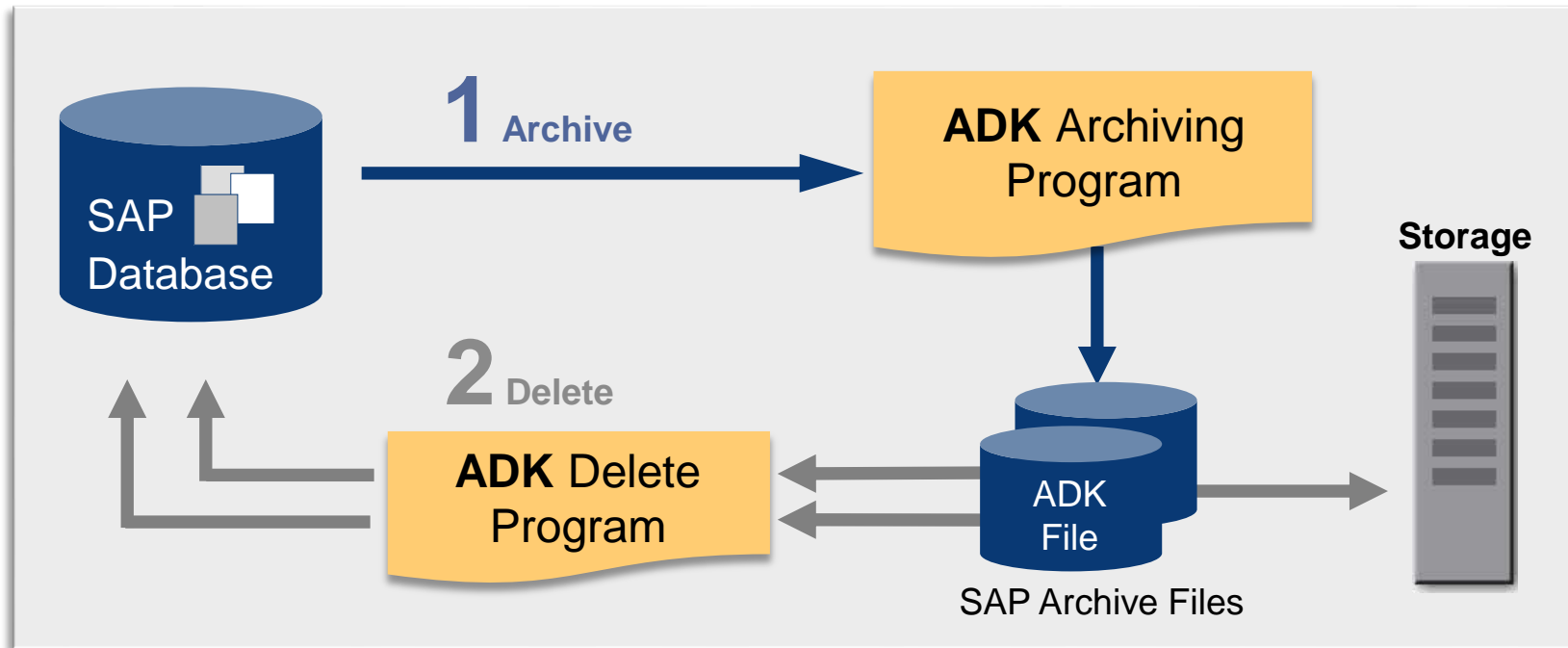
Doc. type: RE ( Gross inv. receipt ) Normal document Archive: \*

Doc. Number	5100005010	Company code	1000	Fiscal year	1998
Doc. date	07.12.1998	Posting date	07.12.1998	Period	12
Doc. currency	DEM				

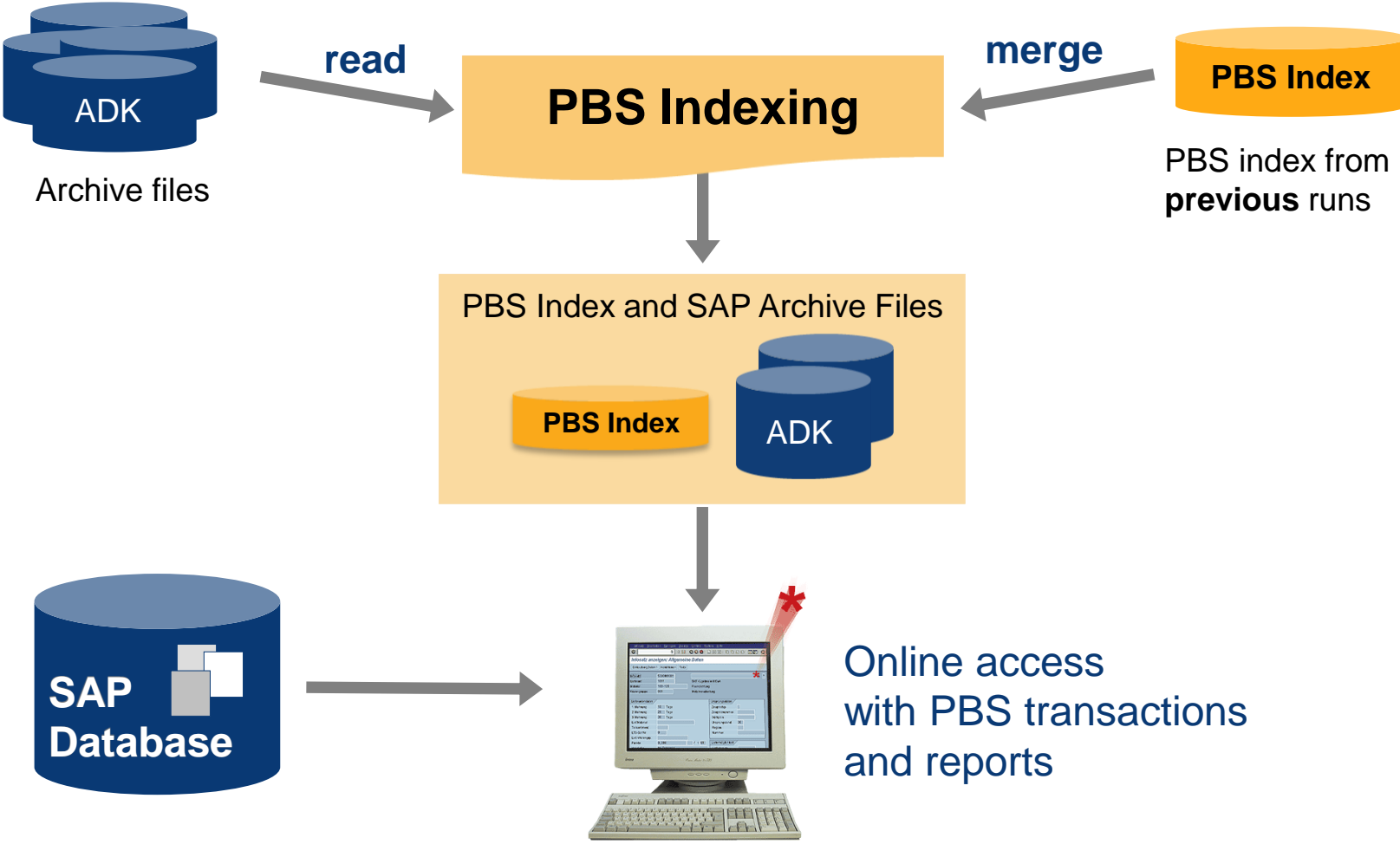
Ita	PK	Account	Account short text	Assignment	Tx	Amount
1	31	1000	C. E. B. BERLIN	51000050101998	VN	199,26-
2	86	191100	Goods Rcvd/Invoice R	450000576600010	VN	171,78
3	40	154000	Input tax		VN	27,48
1	31	1000	C. E. B. BERLIN	51000050101998	VN	199,26-
2	86	191100	Goods Rcvd/Invoice R	450000576600010	VN	171,78
3	40	154000	Input tax		VN	27,48
1	31	1000	C. E. B. BERLIN	51000050101998	VN	199,26-
2	86	191100	Goods Rcvd/Invoice R	450000576600010	VN	171,78
3	40	154000	Input tax		VN	27,48

# Integration with SAP ADK (Archive Development Kit)

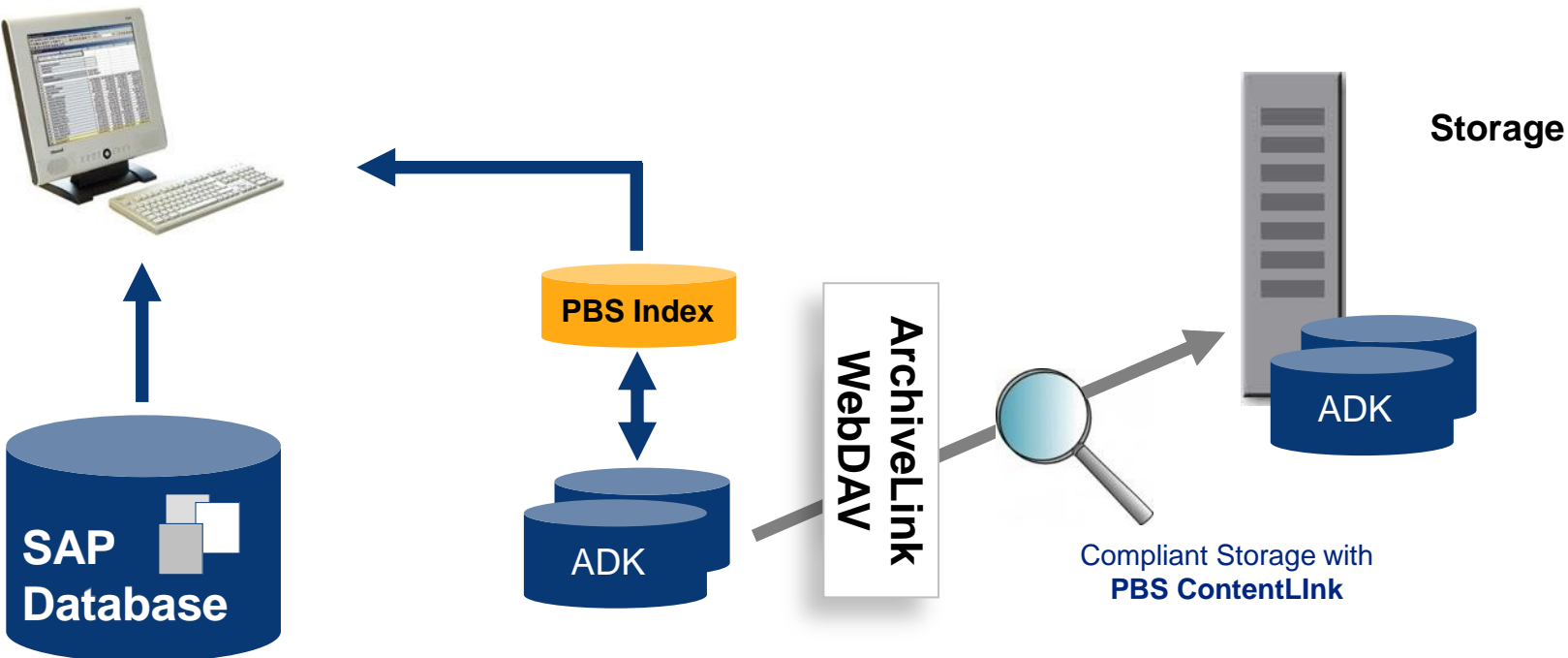
- SAP application data is archived consistently with **Archiving Objects** (= program packages) into flat files.
- SAP archive files (ADK) are highly compressed (= encrypted) files.



# PBS Index Generation



# Compliant Data Storage

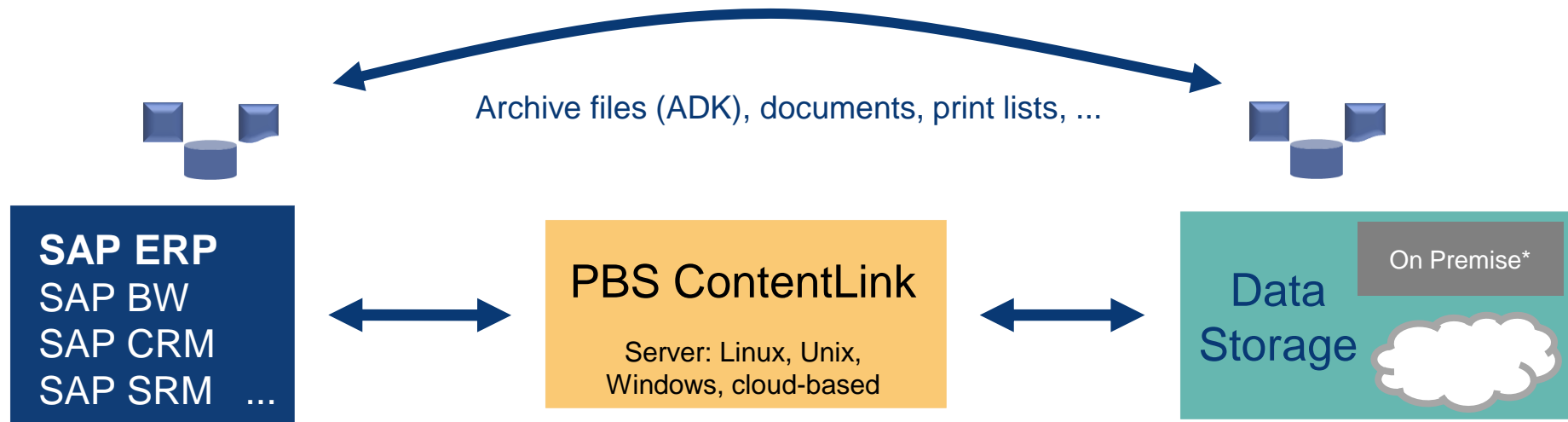




# Compliant Storage for Structured and Unstructured Data

PBS ContentLink (PCL) is a lean interface solution building the bridge between SAP and compliant storage systems (on premise or in the cloud).

PCL covers structured and unstructured data with SAP ArchiveLink and WebDAV.

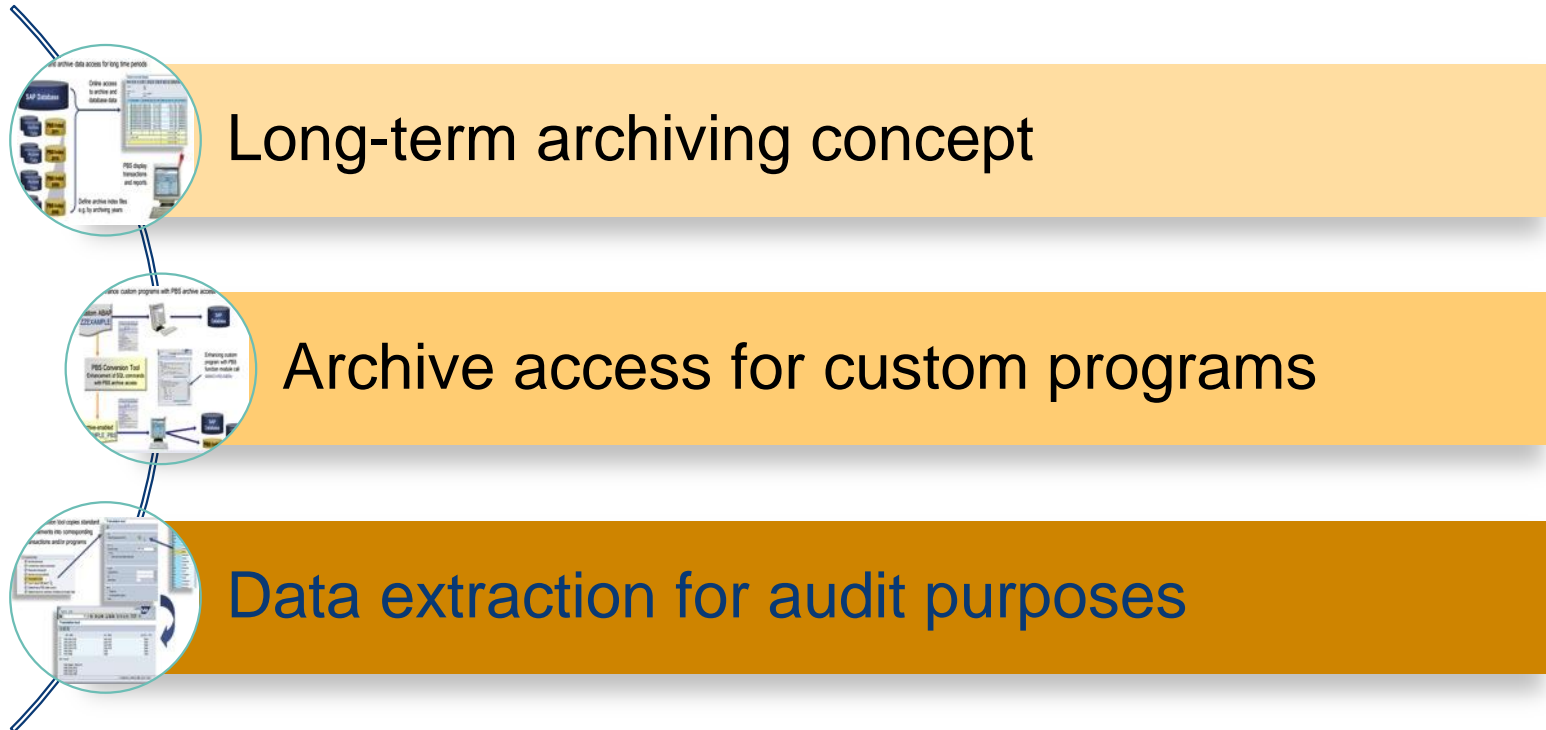


\* Storage supported by PCL:  
see product specification sheet on the PBS website

# Archive add ons: Further Features

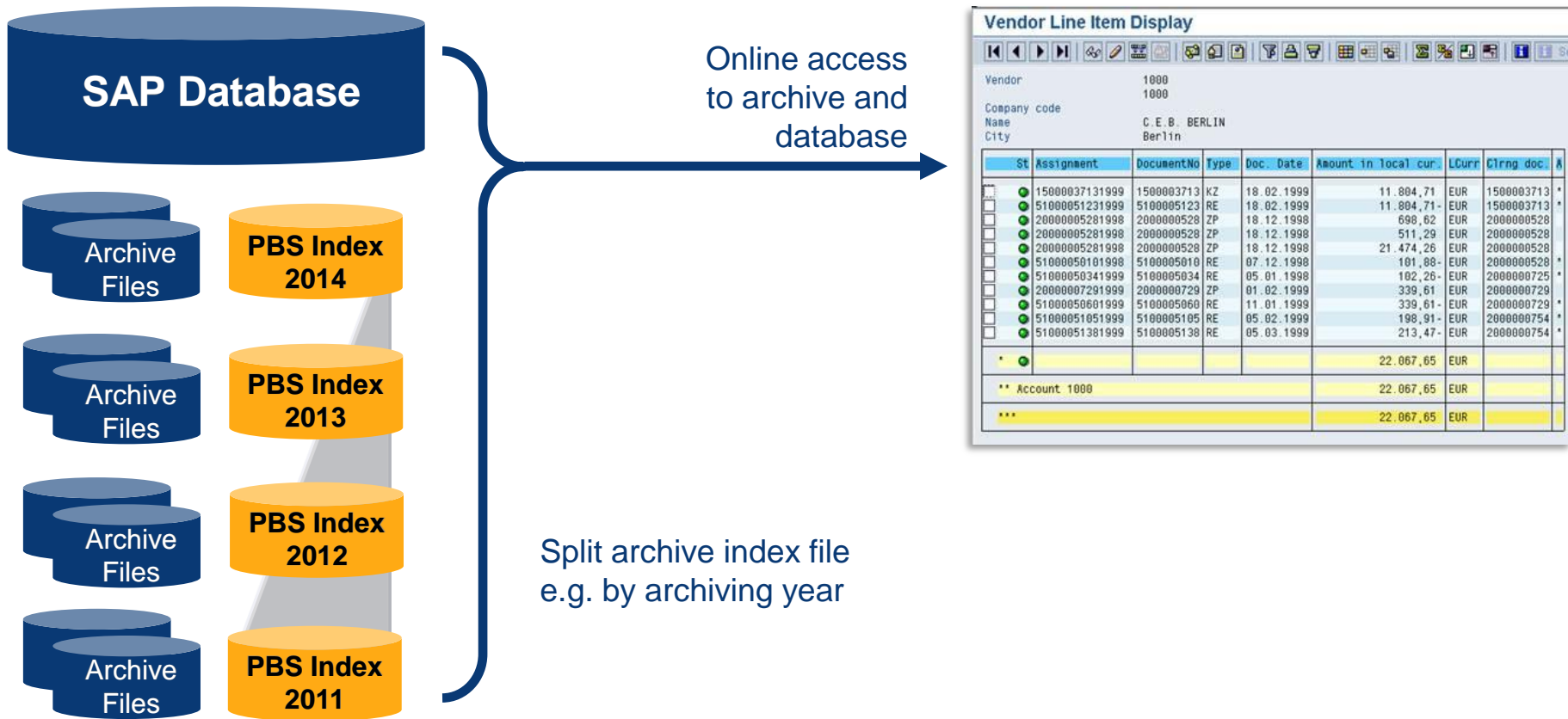
---

PBS archive add ons provide a bundle of additional components for different tasks in the data archiving environment:



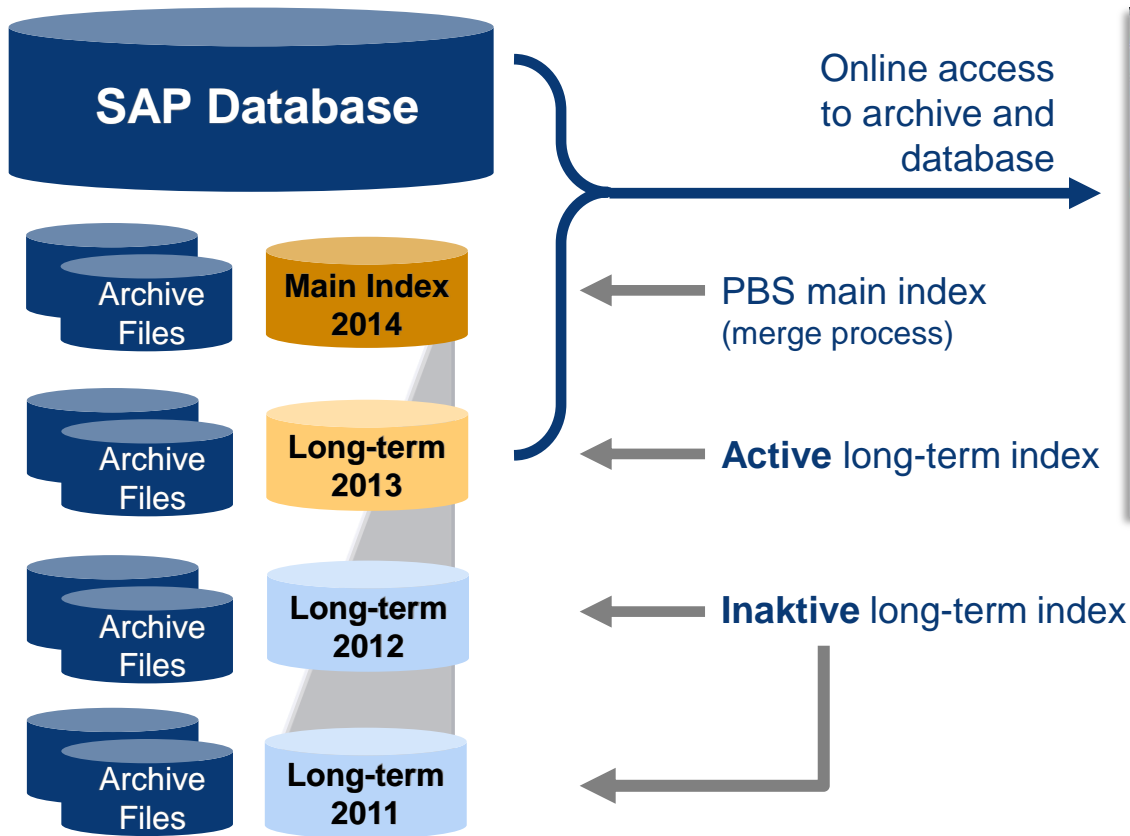
# Long-term Archiving Concept (i)

Enable index and archive data access for long time periods – split PBS index files



# Long-term Archiving Concept (ii)

Split PBS index into main index, active and inactive long-term index



Vendor Line Item Display

Vendor: 1000  
Company code: 1000  
Name: C. E. B. BERLIN  
City: Berlin

St	Assignment	DocumentNo	Type	Doc. Date	Amount in local cur.	LCurr	Clrng doc.
	15000037131999	1500003713	KZ	18.02.1999	11.804,71	EUR	1500003713 *
	51000051231999	5100005123	RE	18.02.1999	11.804,71	EUR	1500003713 *
	20000005281998	2000000528	ZP	18.12.1998	698,62	EUR	2000000528 *
	20000005281998	2000000528	ZP	18.12.1998	511,29	EUR	2000000528 *
	20000005281998	2000000528	ZP	18.12.1998	21.474,26	EUR	2000000528 *
	51000050101998	5100005010	RE	07.12.1998	101,88	EUR	2000000528 *
	51000050341999	5100005034	RE	05.01.1999	102,26	EUR	2000000725 *
	20000007291999	2000000729	ZP	01.02.1999	339,61	EUR	2000000729 *
	51000050601999	5100005060	RE	11.01.1999	339,61	EUR	2000000729 *
	51000051051999	5100005105	RE	05.02.1999	198,91	EUR	2000000754 *
	51000051381999	5100005138	RE	05.03.1999	213,47	EUR	2000000754 *
					22.067,65	EUR	
**	Account 1000				22.067,65	EUR	
***					22.067,65	EUR	

# Archive Data Access for Custom Programs

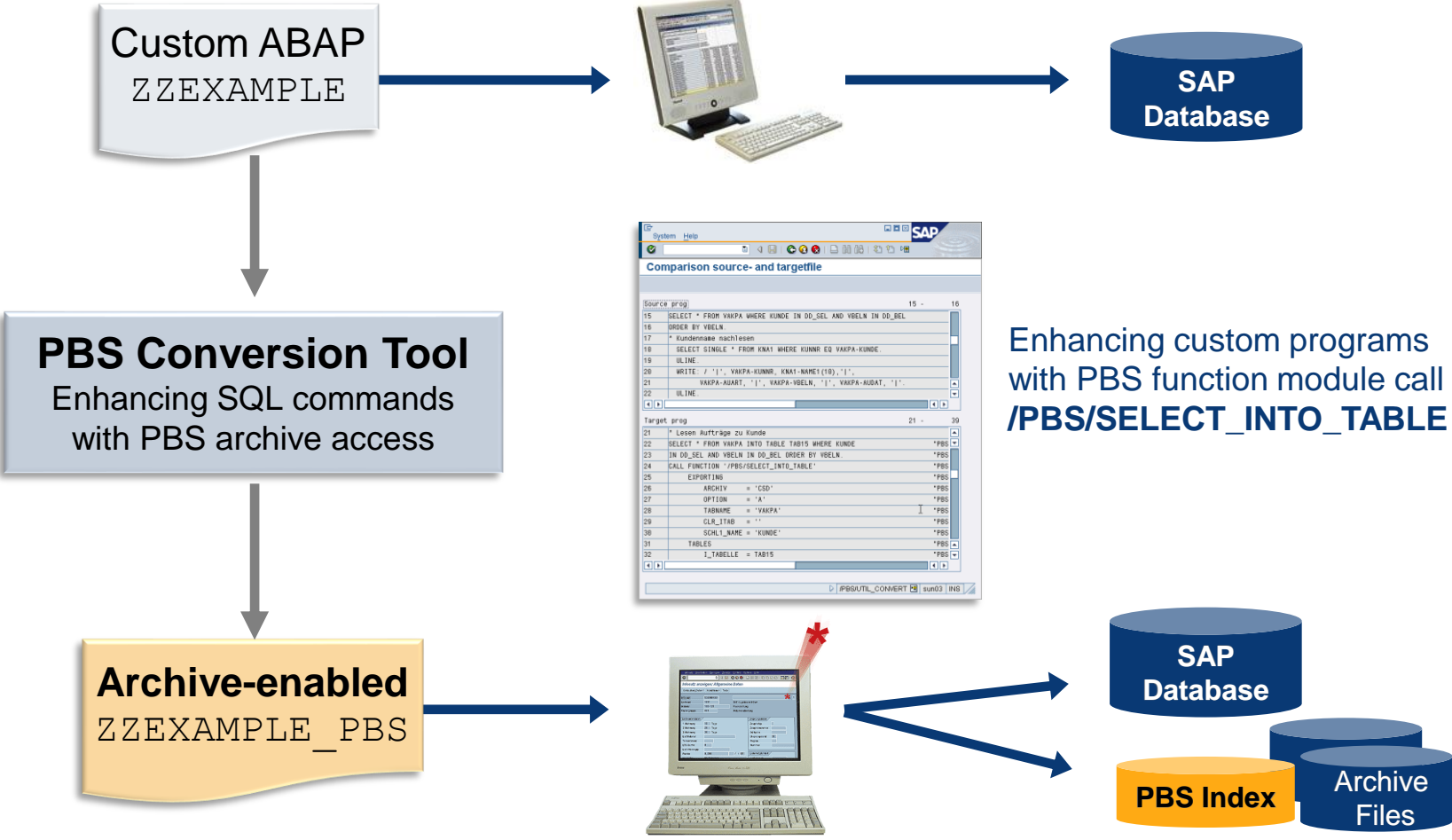
---

PBS provides different options to adapt own (custom) programs and reports to archive data access via PBS features and index structures:

- 1** Data access via logical databases (LDBA)  
Change LDBA in the report's attributes, for example „BRF“ => /PBS/BRF
- 2** Report conversion with PBS Conversion Tool  
Enhance SQL commands with PBS archive access
- 3** Individual adaption: PBS Archive Access Tutorial  
Nested or complex programs: individual development work

# Conversion Tool

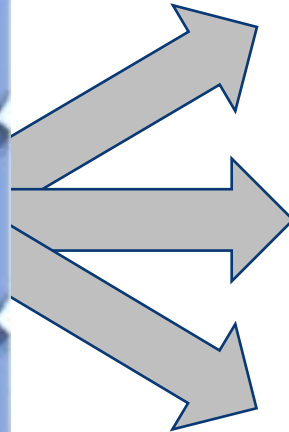
API to enhance (standard) custom programs with PBS archive access:



Enhancing custom programs with PBS function module call `/PBS/SELECT_INTO_TABLE`

# Big Data – Key Challenges for SAP Customers

Vast data  
volume growth



Storage Costs

System  
Administration

Performance  
Management

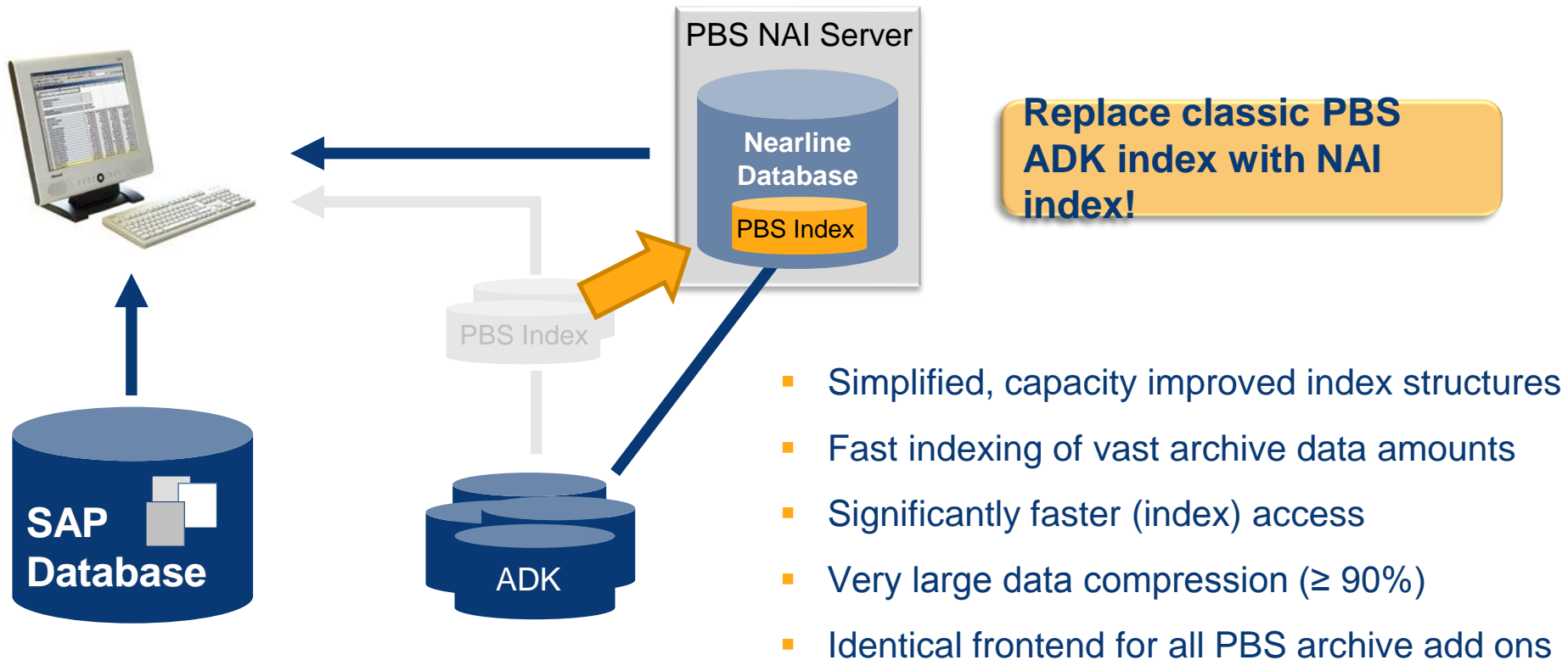
**PBS NAI**  
for SAP ERP

Classical archiving approach no longer appropriate

Improve data processing and performance with column-based DB technology

# BIG DATA – Nearline Storage for SAP ERP

The **PBS Nearline Analytic Infrastructure – NAI** – allows the usage of column-oriented database technology for **SAP ERP**. For all NAI-enabled PBS archive add ons, the archive index information will be stored and maintained in nearline storage (SAP/Sybase IQ oder Actian Vectorwise):



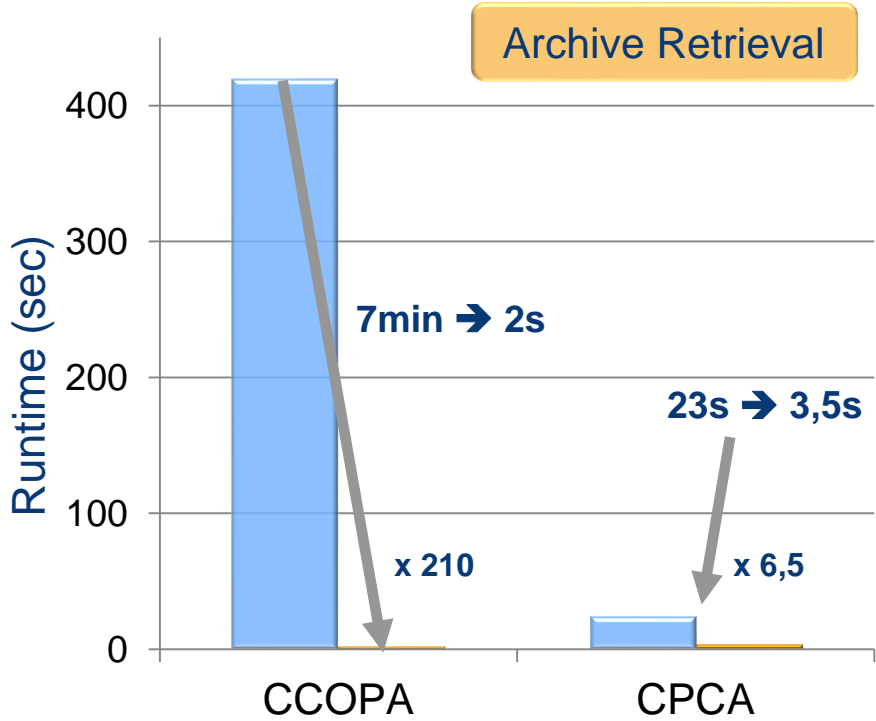
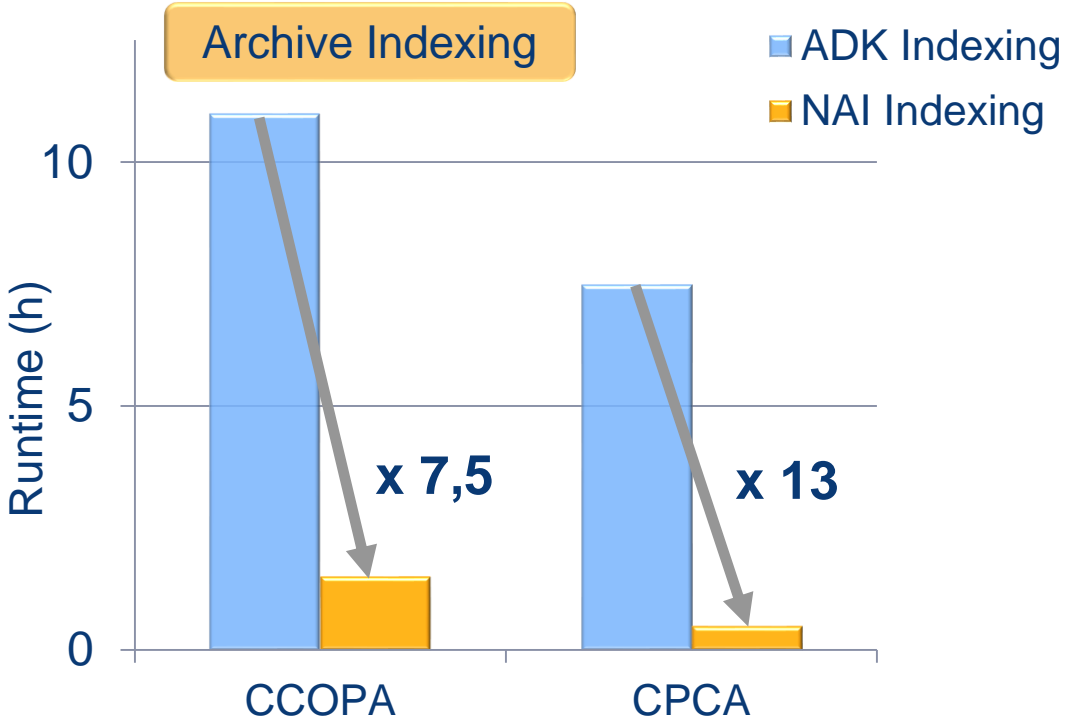


# Big Data Customer Success

Improvements with **PBS NAI** nearline solution for SAP ERP

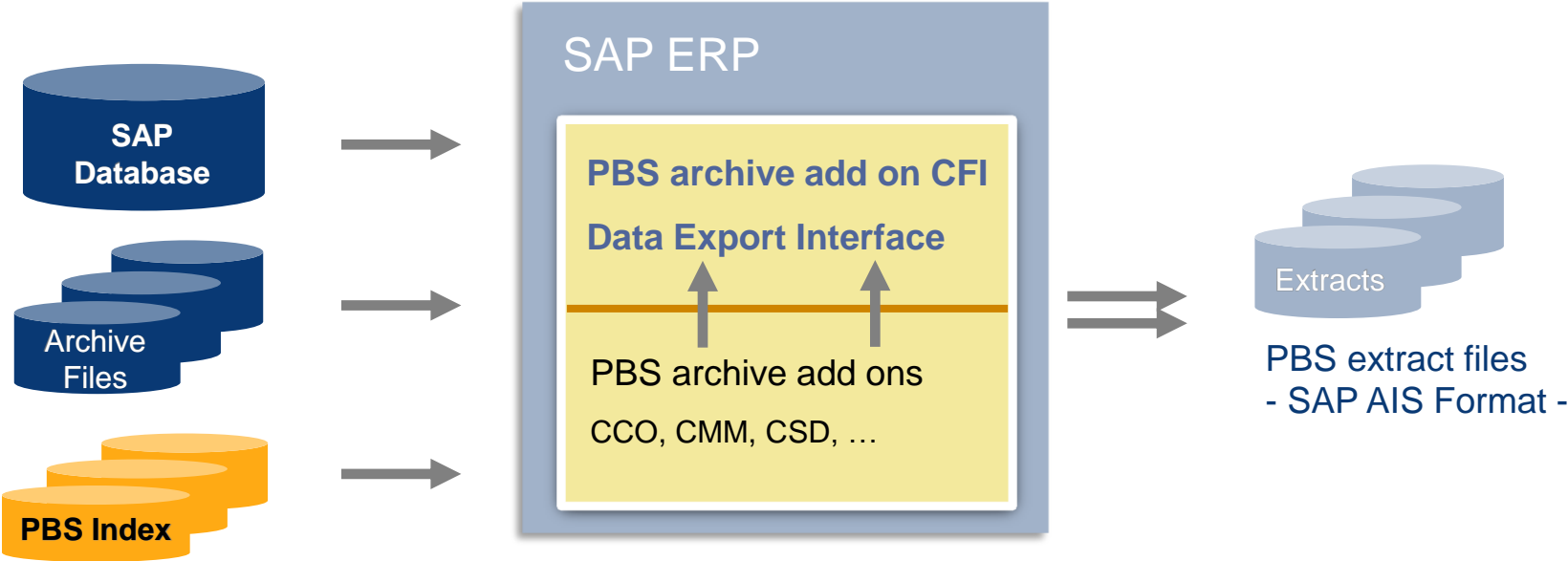
- 10 times faster archive data indexing
- 5 times faster user access

Large retailers in Europe and America



# Data Extraction to Meet Audit Requirements

PBS provides several options for the extraction of application data from SAP environments (typical audit needs). In addition to PBS archive add on specific extraction programs, there are utilities such as the **PBS Data Export Interface** (contained in the PBS CFI delivery):



The **PBS Data Export Interface** enables extraction of SAP application data into external files (AIS format). Archive and database data can be processed.

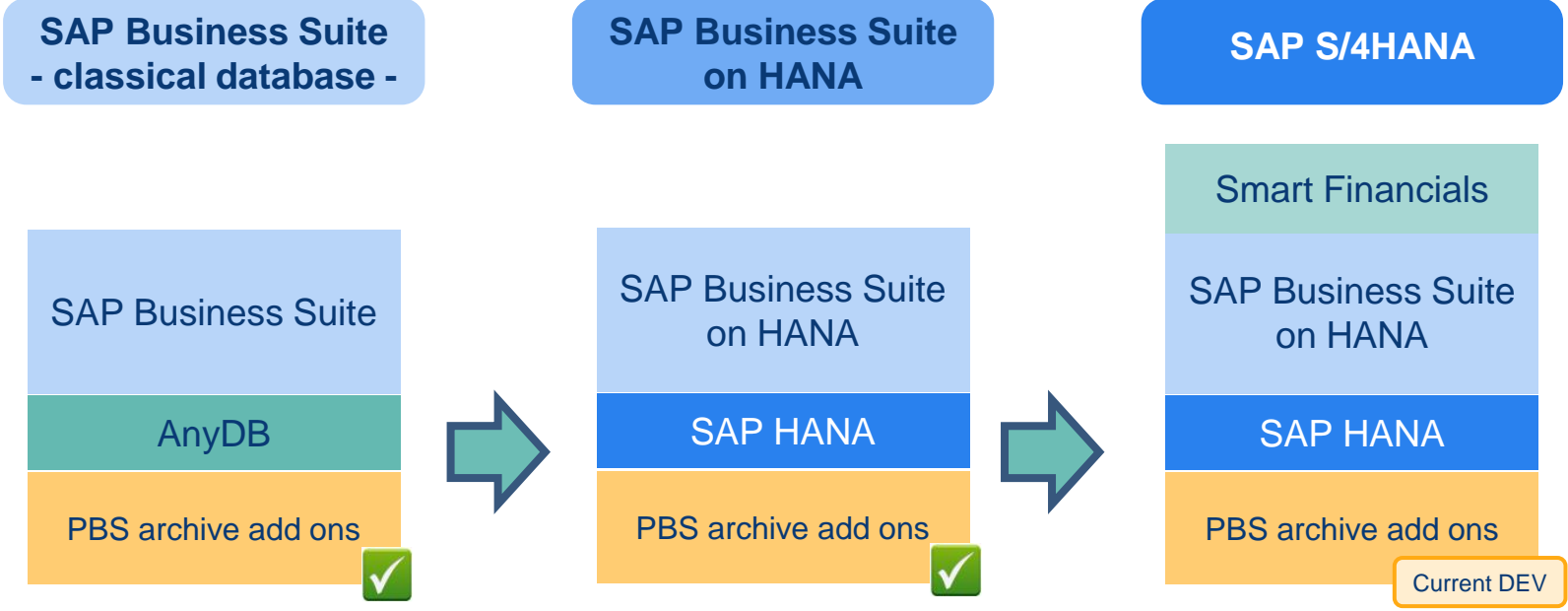
# Translation Tool – Local Language Adaption

**PBS Translation Tool:** customize user frontend for local language: copy standard SAP text elements automatically into corresponding PBS transactions and programs.  
Very few PBS specific terms need to be treated manually.

The image illustrates the PBS Translation Tool interface. On the left, a 'General tools' menu lists various utilities, with 'Translation tool' highlighted. An arrow points from this menu to the main 'Translation tool' configuration window in the center. This window is divided into several sections: 'Lang.' (Target language, currently set to IT), 'Shipment' (Transfer order, set to /PBS/CSD), 'Display' (checkbox for 'Show also translated elements'), 'Fastpath' (fields for 'Copy text from', 'to', and 'Object type'), and 'Mode' (radio buttons for 'Text pool', 'Screenpainter dynpros', and 'All', with 'All' selected). To the right, a separate window displays a list of languages with their corresponding codes. An arrow points from this list to the 'IT' field in the 'Lang.' section of the main tool window.

Language	Language
FI	Finnish
FR	French
HE	Hebrew
HR	Croatian
HU	Hungarian
ID	Indonesian
IS	Icelandic
IT	Italian
JA	Japanese
KO	Korean
LT	Lithuanian
LV	Latvian
MS	Malaysian
NL	Dutch
NO	Norwegian
PL	Polish
PT	Portuguese
RO	Romanian
RU	Russian

# Short-term Roadmap



## Current PBS archive add on release versions:

- PBS archive add ons for SAP ECC 6.0 EHP7 – classical database system released
- PBS archive add ons for SAP Business Suite on Hana (SoH) released
- HANA optimized features included into PBS archive add ons current development
- PBS archive add ons for SAP S/4HANA (access to archived data) current development
- PBS solutions to enhance SAP data aging features in preparation

# Summary – PBS Features and Benefits

---

- **Save Costs** - Cut database operation costs in half (and more)
- **Speed** data access 10 times with column-oriented DB technology
- **Data Analysis** – Integrate online database, nearline/archive retrieval and legacy data
- **Tame the Daemon** – Help customers reduce SAP data footprint and control growth
- **Audits** - Ensure compliant data storage and reporting



# Summary – PBS Features and Benefits

---

- Transparent and user-friendly software solution to enhance SAP data archiving.
- Direct end user access to archived data via PBS index.
- Integrated display transactions: Simultaneous access to database and archive.
- Effective navigation options to subsequent information (document flow).
- Advanced data extraction options for audit needs.
- Available and SAP certified for all SAP ERP (R/3) release levels.
- Enhancement option for Big Data (NAI – Nearline Analytic Infrastructure).



... one more thing:

## The Gartner 2016 Magic Quadrant for Structured Data Archiving and Application Retirement



Click  
[www.pbs-software.com](http://www.pbs-software.com)  
for more details

**Dr. Klaus Zimmer**

Director Sales and Alliance Management

---

**PBS Software GmbH**

Schwanheimer Straße 144a  
64625 Bensheim, Germany

T: +49-6251-174 0

F: +49-6251-174 174

[klaus.zimmer@pbs-software.com](mailto:klaus.zimmer@pbs-software.com)

<http://www.pbs-software.com>





# Copyright

---

© Copyright 2017 PBS Software GmbH. All rights reserved.

No part of this presentation may be reproduced or transmitted in any form or for any purpose without the written permission of PBS Software GmbH. The information of this presentation might change without prior notice.

**PBS archive add ons** is a registered trademark of PBS Software GmbH.

SAP, SAP ERP, SAP HANA, S/4 HANA, SAP ILM, SAP NetWeaver, SAP NetWeaver Business Warehouse and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP SE in Germany and other countries.

All other product and service names mentioned are the trademarks of their respective companies.

Data contained in this document serves informational purposes only. PBS Software GmbH shall not be liable for errors or omissions with respect to the materials. The only warranties for products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.