DeceSoft

Software Add-on Solutions for SAP Application Lifecycle Management

May 2021

Introducing DeceSoft

Who we are

Decesoft is an innovative and customer-centric software development company based in Germany with development centers in Europe.

We build add-on products in the SAP environment that extends SAP solutions and do not compete with SAP.

What is special about us

1. DeceSoft‘s add-on products extend SAP Application Lifecycle Management
2. All products are built via co-innovation mode with pilot customers
3. We develop software for our customers with an agile approach focussing on fast and high-quality deliveries

SAP Solution Manager and DeceSoft are a winning team!

SAP Solution Manager

SAP Solution Manager is the well-established ALM platform of SAP. It is an on-premise solution to support on-premise applications as well as hybrid landscapes. The rich functional portfolio supports all aspects of ALM. Customers can select those functions they require and they can configure them individually to their individual needs.

DeceSoft

DeceSoft provides add-on solutions for SAP Solution Manager 7.2 and Focused Build. DeceSoft software products complement and extend functionality provided by SAP Solutions to solve complex customer challenges.

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DeceSoft Solutions

DeceSoft

Test Data Management

Usage Analytics

Migration to SAP S/4 HANA

Business Process Analysis

Custom Code Management

Project Monitoring

Migration to SAP S/4HANA

DeceSoft products

SAP and DeceSoft applications to support Migration to S4H

SAP Tool examples

- SAP Readiness Check for SAP S/4HANA
- ABAP Test Cockpit
- Simplification Item Catalog
- SAP Fiori Apps Reference Library
- SAP Solution Manager - Custom Code Lifecycle Management

D4S Add-on products

1. DeceSoft D4S products **complement** SAP tools – no competition!
2. DeceSoft D4S **Usage Analysis** of transactions / reports executed by customer plus analysis of used technical objects …
3. … is leveraged by D4S to provide **important details** and **decision criteria** about Business Processes, Process Steps and Executables relevant for transition to SAP S/4HANA.

DeceSoft add-on products for Migration to S4H

Which Custom Code is used in my Process Steps and Executables and must be available in S4H?

SAP Solution Manager

Executable Library	Development Library
Transactions, Reports, …	Custom Code objects

D4S Accelerator: Transparency about Transactions and Reports using Custom Code

DeceSoft CCE available

Which discontinued SAP functionality impacts my currently used transactions and reports?

Simplification Item→Transaction	Transaction T-1, T-3, …
SAP Transactions/Reports	T-5, T-9, T-20, …
Custom Transaction / Report	Z-20, Z-25, Z-Report-26,

D4S Accelerator: Used Executables / Function Modules impacted / discontinued in S4H

planned DeceSoft product

Which S4H Best Practice business processes do I use today in SAP ERP – or parts of it?

D4S Accelerator: Map and Usage Analytics of Business Processes with overlay of S4H processes

DeceSoft PMUA available

Which Fiori Apps can I use in S4H to replace my currently used SAPGUI transactions and reports?

SAPGUI transactions →

D4S Accelerator: Fiori Apps successors for currently used transactions

planned DeceSoft product

Migration to SAP S/4HANA Custom Code Management

DeceSoft CCE: Transparency about Custom Code used by Executables

DeceSoft Custom Code used by Executables (CCE)

Motivation

Amount of Custom Code	Custom Code - where used?	Decision making	Usage Analytics
1	2	3	4
Many SAP customers have developed more than 10.000 Custom Code objects in their SAP ERP systems	SAP Customers have no transparency which (important) Business Processes, Process Steps and Executables contain Custom Code	Which subset of Custom Code should be made available again in S/4HANA	How often was a Process Step used in the past that contains Custom Code?

DeceSoft Custom Code used by Executables (CCE)

Functionality (1)

Part 1: Identify used Custom Code, setup Development Library in SAP Solution Manager 7.2 and create link between Executables of Exe-Lib with Custom Code objects of Dev-Lib

SAP ERP (current system)

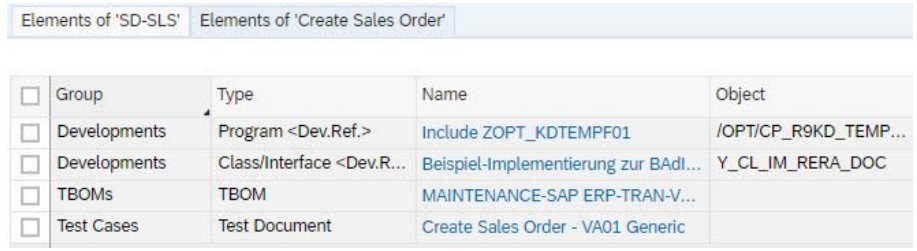
- identify Custom Code (CC) objects from customer usage

Development Library

- store used Custom Code objects*

Executable Library

- Identify Custom Code used by Executable (Transaction, Report, …
- Create link between Executable and used Custom Code



Elements of 'SD-SLS' | Elements of 'Create Sales Order'

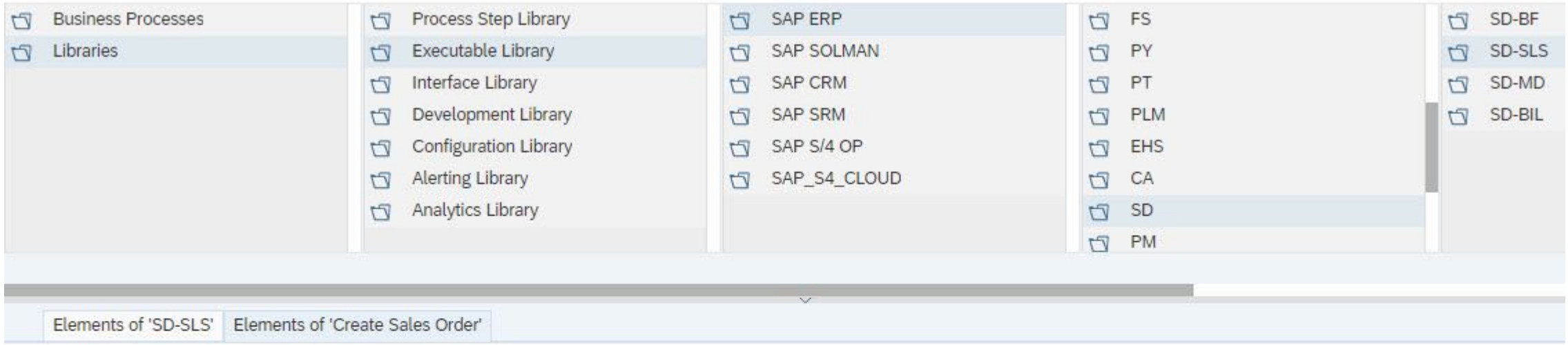
Group	Type	Name	Object
Developments	Program <Dev.Ref.>	Include ZOPT_KDTEMPF01	/OPT/CP_R9KD_TEMP...
Developments	Class/Interface <Dev.R...	Beispiel-Implementierung zur BAdI...	Y_CL_IM_RERA_DOC
TBOMs	TBOM	MAINTENANCE-SAP ERP-TRAN-V...	
Test Cases	Test Document	Create Sales Order - VA01 Generic	

* Standard functionality available in SAP Solman - tile Solution Administration – Library Generation Cockpit

DeceSoft Custom Code used by Executables (CCE)

Functionality (2)

Result in SAP Solution Manager – Executable Library with linked custom code. Example: Create Sales Order (VA01).



Group	Type	Name	Object	Test Case Classification	Path
Developments	Program <Dev.Ref.>	Include ZOPT_KDTEMPF01	/OPT/CP_R9KD_TEMP...		/Solution/Libraries/Executable Library/SAP ER...
Developments	Class/Interface <Dev.R...	Beispiel-Implementierung zur BAdI...	Y_CL_IM_RERA_DOC		/Solution/Libraries/Executable Library/SAP ER...
TBOMs	TBOM	MAINTENANCE-SAP ERP-TRAN-V...			/Solution/Libraries/Executable Library/SAP ER...
Test Cases	Test Document	Create Sales Order - VA01 Generic		Generic Functional Tes...	/Solution/Libraries/Executable Library/SAP ER...

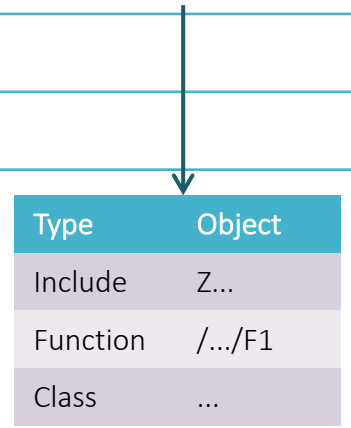
DeceSoft Custom Code used by Executables (CCE)

Functionality (3)

Part 2: Usage Analytics of Transactions, Reports that contain Custom Code

Drilldown to Custom Code objects and download to MS Excel

Executable	SAP Application Component	Process Step	Usage last n months	No. of contained Modifications	No. of contained Custom Code objects	No. of used user exists
Transaction T1	SD-SLS	Create SO*	1,5 Mio	0	150	1
Transaction T2	Custom	...				
Report R1	Custom					



Type	Object
Include	Z...
Function	/.../F1
Class	...

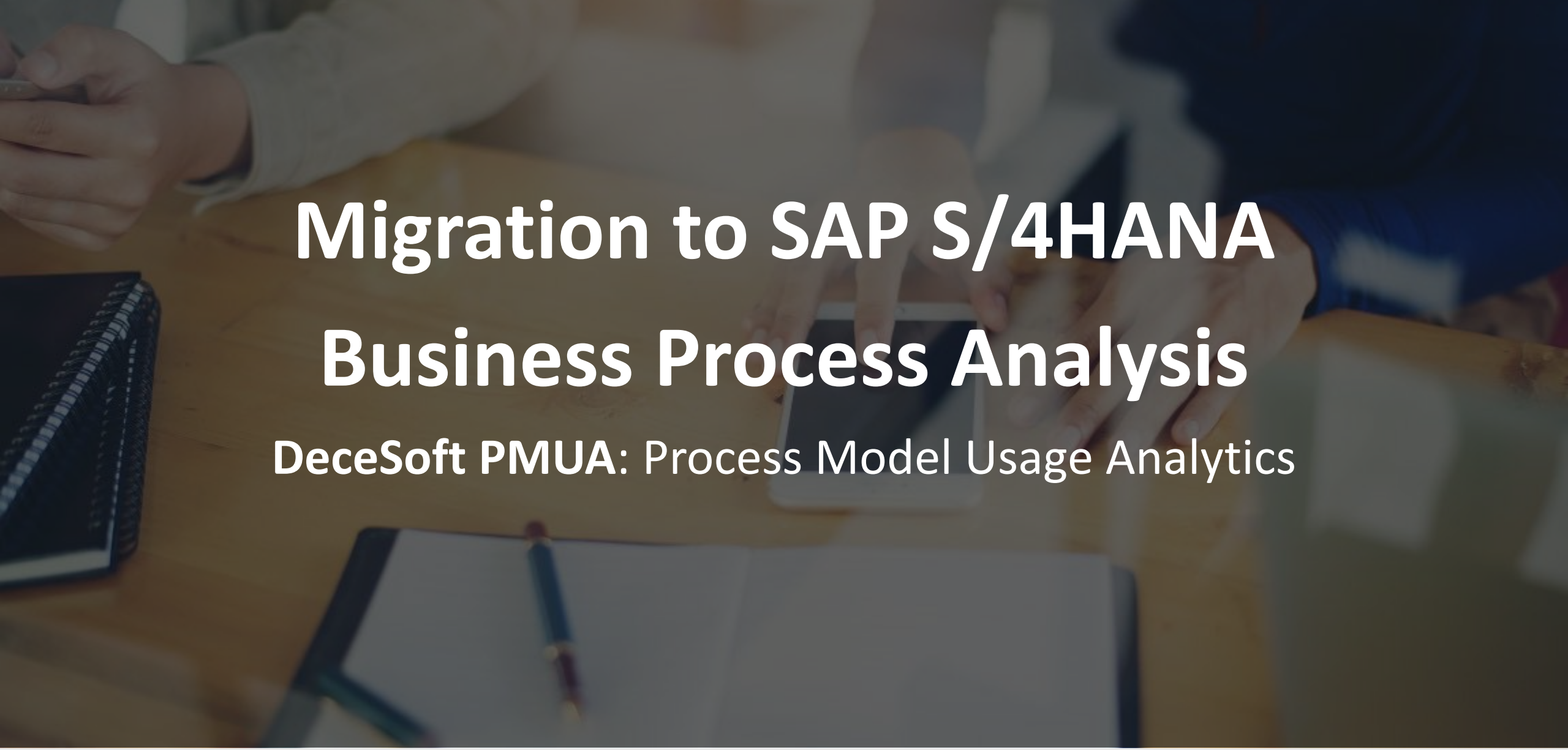
* 1:n relationship Exe to PS is shown

DeceSoft Custom Code Management

Transparency about Custom Code used by Executables

Summary and Business Value

1. Identify and differentiate between important custom-code that your organisation wants to keep versus discontinue when migrating from SAP ERP to SAP S/4HANA.
2. Analysis of used custom code by transactions and apps when using SAP ERP or SAP S/4HANA.
3. DeceSoft CCE highlights transactions and apps using custom code – not just the custom code objects without the context of the using transactions and apps.
4. Usage analysis provides insights into usage frequency of transactions and apps containing custom code



Migration to SAP S/4HANA Business Process Analysis

DeceSoft PMUA: Process Model Usage Analytics

DeceSoft Process Model Usage Analytics (PMUA)

Motivation

Business Processes in S4H

1

- What are the Best Practice business processes offered in SAP S/4HANA?

Overlay existing with new Processes

2

- Which S4H business processes do we use (partially) today?
- We have defined our own Business Process Models – show me the overlap with S4H processes

Usage Frequency

3

- How often are my Business Processes / Process Steps used today?

S4H transition problems

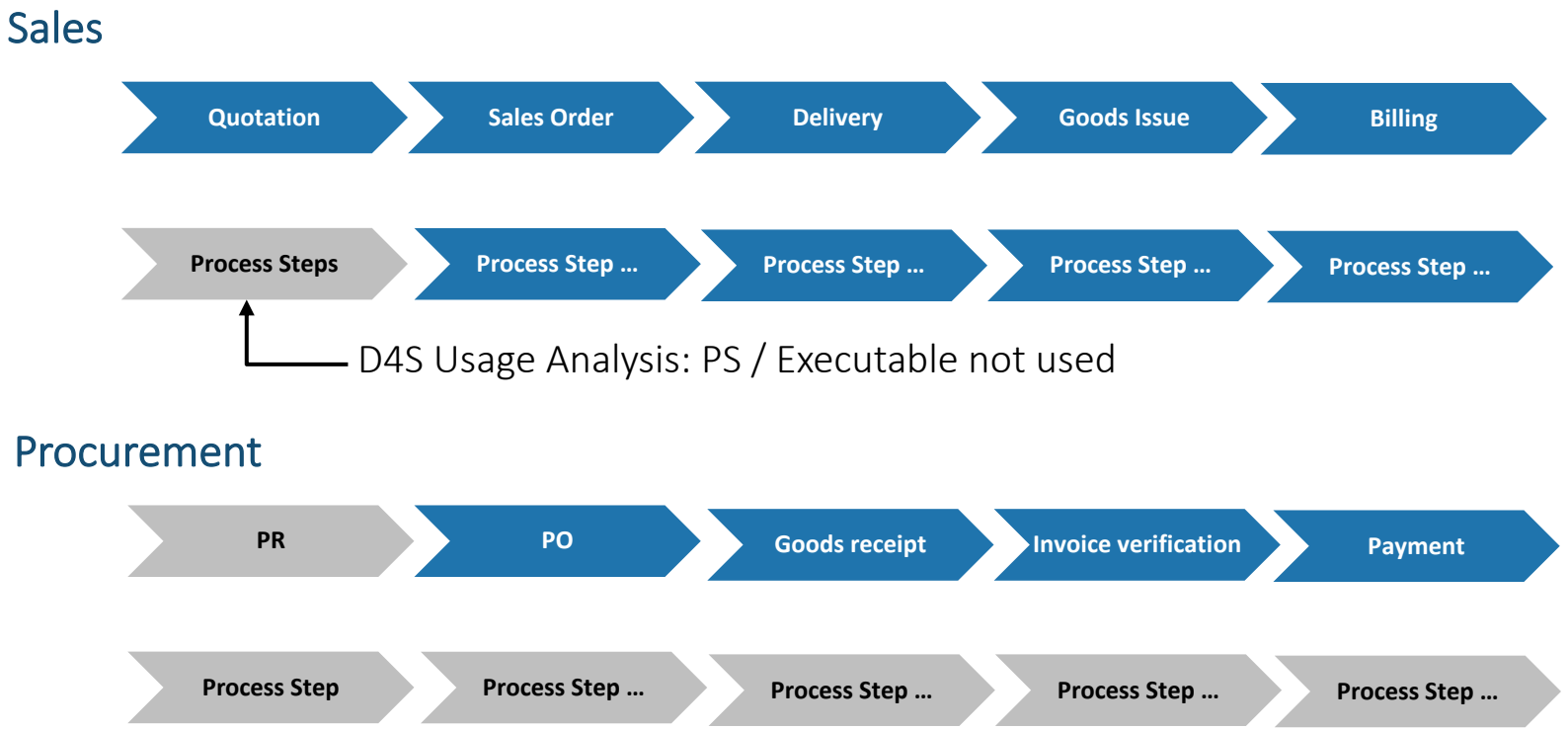
4

- Which of my currently used Business Processes contain Executables with S4H problems?
- Which Executables used in process steps have been discontinued?
- Which Executables used in process steps include discontinued SAP features and require adjustments or replacement?

DeceSoft Process Model Usage Analytics (PMUA)

Example

Usage Analytics: leverage process models and analyze which parts are used by customer today



DeceSoft Process Model Usage Analytics (PMUA)

Process Model sources

Starting point for Analysis: select Business Processes

Alternative Sources of Business Processes

SAP Solution Manager	SAP S/4HANA On-Premise Edition		SAP Model Company
Business Processes defined by customer in SAP SolMan 7.2 (BP, PS, Executables) for current SAP ERP	Business Processes defined by SAP Best Practices	Customer defined Business Processes in MS Excel format	Customer has purchased Business process models of SAP Model Company. BP Content upload possible

DeceSoft Process Model Usage Analytics (PMUA)

Functionality (1)

Analysis Grid with multiple options for filtering, xlsx download, …

Business Area	Business Process	Process Step	Executable	Executable occurances
Sales				
	Order to Cash 1			
		Sales Quotation	VA21	900,000
		Sales Order	VA01	2 Mio
		Delivery	…	n times
Procurement				
	Procure to Pay 1			
		Purchase Requisition	T11	no
		Purchase Oder	T12	m times

Customer selected Business Process Model

custom-specific Analysis

Optional integration with DeceSoft DTD and DBP for Process Step variation analysis

Order Type	Usage frequency
OR	1,8 Mio
RO	100,000
…	…

DeceSoft Process Model Usage Analytics (PMUA)

Integration with DeceSoft D4S

DeceSoft D4S offers integration with additional D4S Accelerators providing additional insights

Business Area	Business Process	Process Step	Executable	Executable used	Executable contains Custom Code	Exe with discontined SAP Function Modules in S4H	Executable discontinued in S4H
Sales							
	Order to Cash 1						
		Sales Quotation	VA21	x			
		Sales Order	VA01	x	x	3	
		Delivery	VL01N	x			x
Procurement							
	Procure to Pay 1						
		Purchase Requisition	T-Code...	no			
		Purchase Oder	T-Code...	x			

DeceSoft Process Model Usage Analysis

Helps you analyze to-be business processes and process models by overlaying the actual usage of the executables (transactions, reports, …) in your current SAP ERP or SAP S/4HANA system

Summary and Business Value

1. SAP customer selects a set of Business Processes – defined by his Process Owners in MS Excel or SAP Solution Manager – DeceSoft PMUA analyses which parts of them are partially in use in the current ERP or S/4HANA system
2. SAP customer selects Business Processes provided via SAP S/4HANA Best Practice content – DeceSoft PMUA analyses which parts of them are partially in use in the current ERP or S/4HANA system
3. SAP customer selects a combination of custom defined target processes and SAP Best Practice content – DeceSoft PMUA analyses which parts of them are partially in use in the current ERP or S/4HANA system
4. Overlay between currently used SAP Transactions with Business Process models to identify usage areas as well as gaps
5. Additional insights through integration with other Decesoft applications to display problematic process steps or executables

Project Management

DeceSoft PM: Progress Monitor

DeceSoft Progress Monitor

Monitor status and progress of your SAP Solution Manager – Focused Build projects

SAP Solution Manager

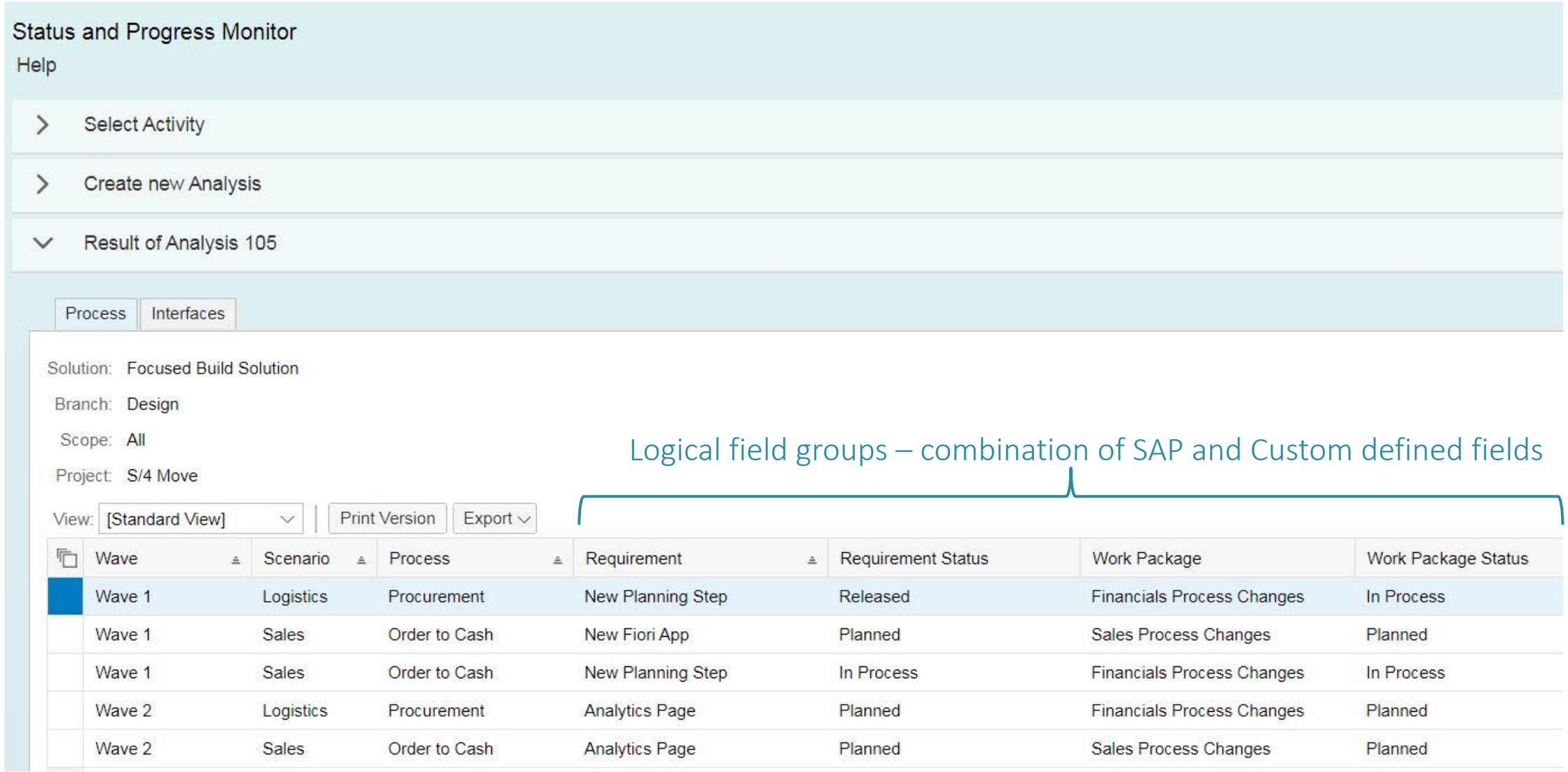
- Solution Readiness Dashboard
- Report: Requirements Management
- Report: Mass Change Operations

DeceSoft Progress Monitor

- Comprehensive status view for Focuses Build projects – combining SAP and Custom details
- Status and progress monitoring of Requirements and Work Packages by Business Processes
- Status and progress monitoring of Requirements and Work Packages for Interfaces used by Business Processes
- High flexibility through the ability to add SAP and custom fields by the customer into analysis views – extending SAP standard reporting capabilities
- Download of progress reports to MS Excel

DeceSoft Progress Monitor

Monitor status and progress of your SAP Solution Manager – Focused Build projects



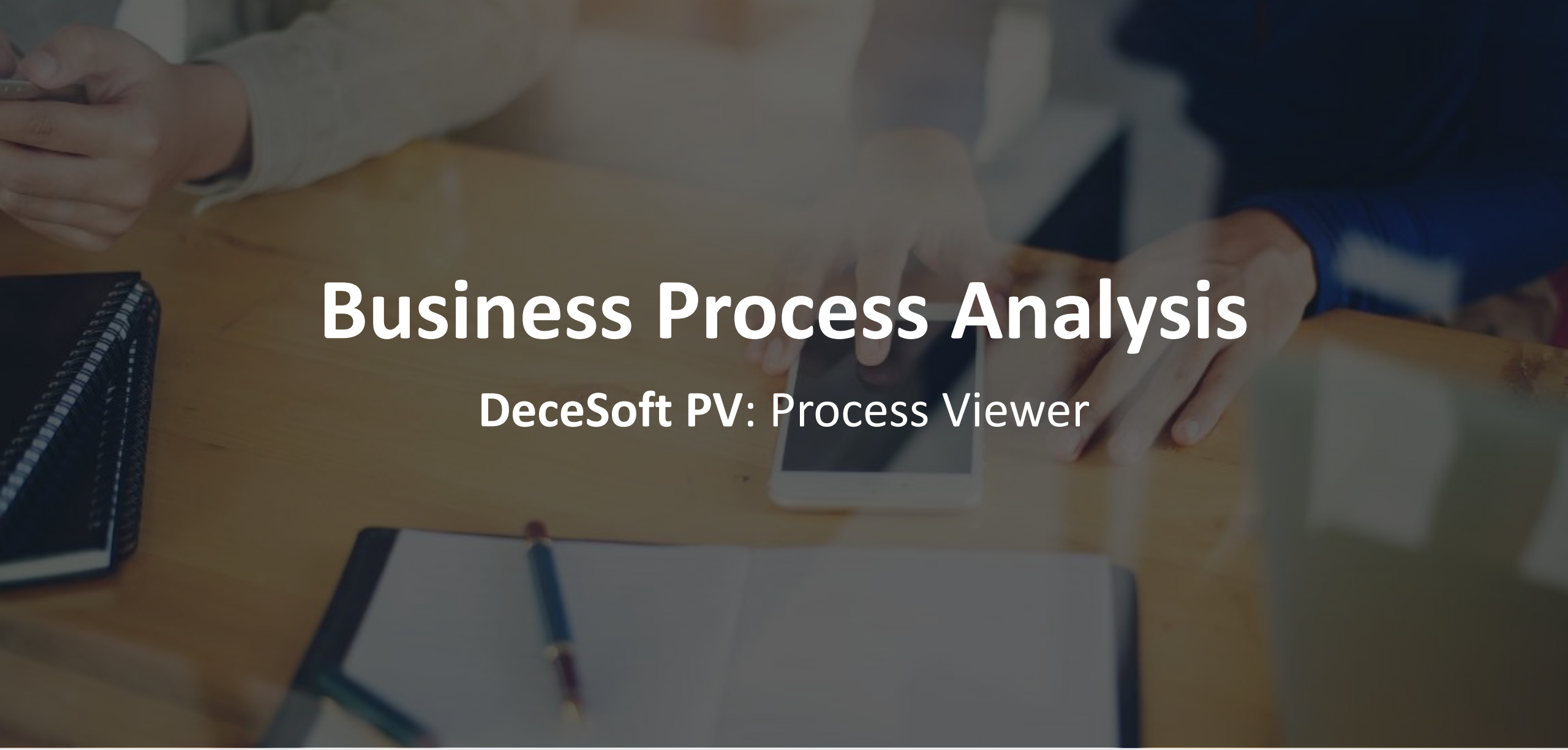
Wave	Scenario	Process	Requirement	Requirement Status	Work Package	Work Package Status
Wave 1	Logistics	Procurement	New Planning Step	Released	Financials Process Changes	In Process
Wave 1	Sales	Order to Cash	New Fiori App	Planned	Sales Process Changes	Planned
Wave 1	Sales	Order to Cash	New Planning Step	In Process	Financials Process Changes	In Process
Wave 2	Logistics	Procurement	Analytics Page	Planned	Financials Process Changes	Planned
Wave 2	Sales	Order to Cash	Analytics Page	Planned	Sales Process Changes	Planned

DeceSoft Progress Monitor

The Progress Monitor helps you review the status and progress of your SAP Solution Manager – Focused Build projects and allows to include your individual set of SAP and custom fields in the analysis views

Summary and Business Value

1. Status and progress monitoring of Requirements and Work Packages by Business Processes
2. Status and progress monitoring of Requirements and Work Packages for Interfaces used by Business Processes
3. High flexibility through the ability to add SAP and custom fields by the customer into analysis views
4. Download of progress reports to MS Excel



Business Process Analysis

DeceSoft PV: Process Viewer

DeceSoft Process Viewer

Complete view of your Business Processes in Solution Documentation

SAP Solution Manager

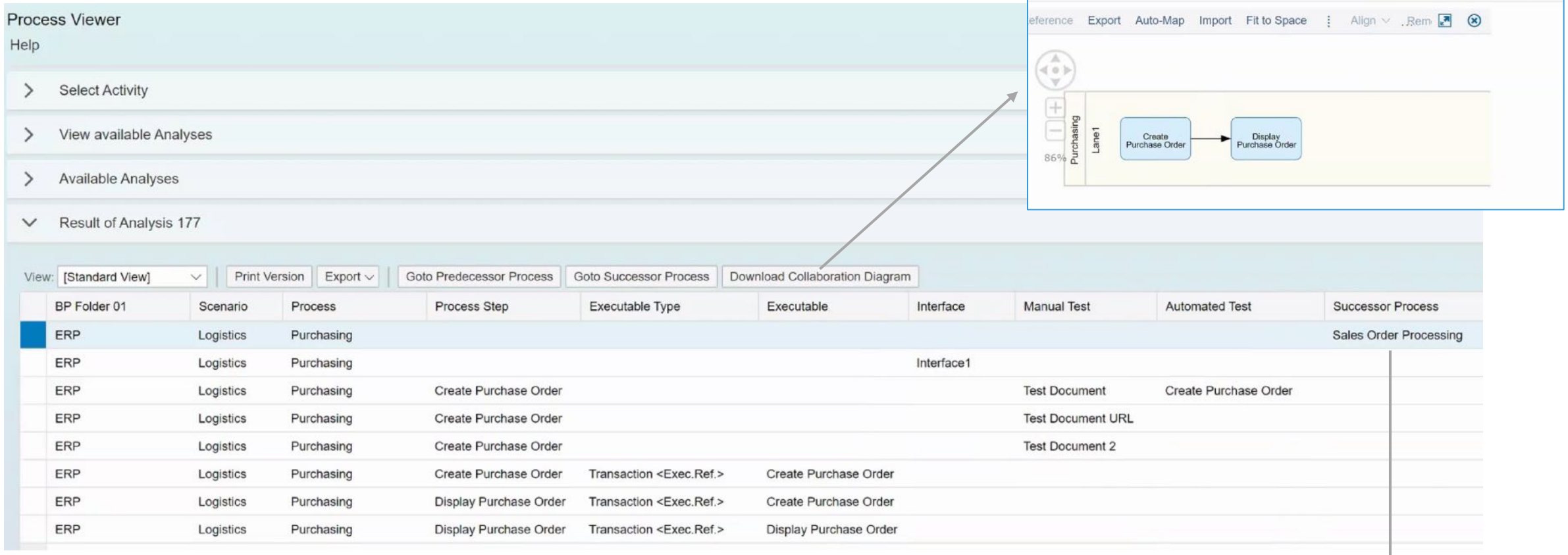
- Solution Documentation using column browser
- plus SolDoc reports

DeceSoft Process Viewer

- view all of your business in hierarchical layout
- shows predecessor / successor processes
- shows related process diagrams
- MS Excel download
- saved analysis for documentation of versions over time

DeceSoft Process Viewer

Complete view of your Business Processes in Solution Documentation



DeceSoft Process Viewer

The Process Viewer helps you display hierarchical Business Processes defined in SAP Solution Manager plus related objects in a simple grid view including download capabilities

Summary and Business Value

1. User wants to view the business process hierarchy containing multiple levels, folders, processes, process steps, test cases, interfaces, etc. in one grid view
2. User wants to see predecessor and successor processes
3. User wants to quickly view and print the associated collaboration diagrams
4. User wants to download the business processes, process steps, etc to MS Excel

Business Process Analysis

DeceSoft DTD: Usage Analytics

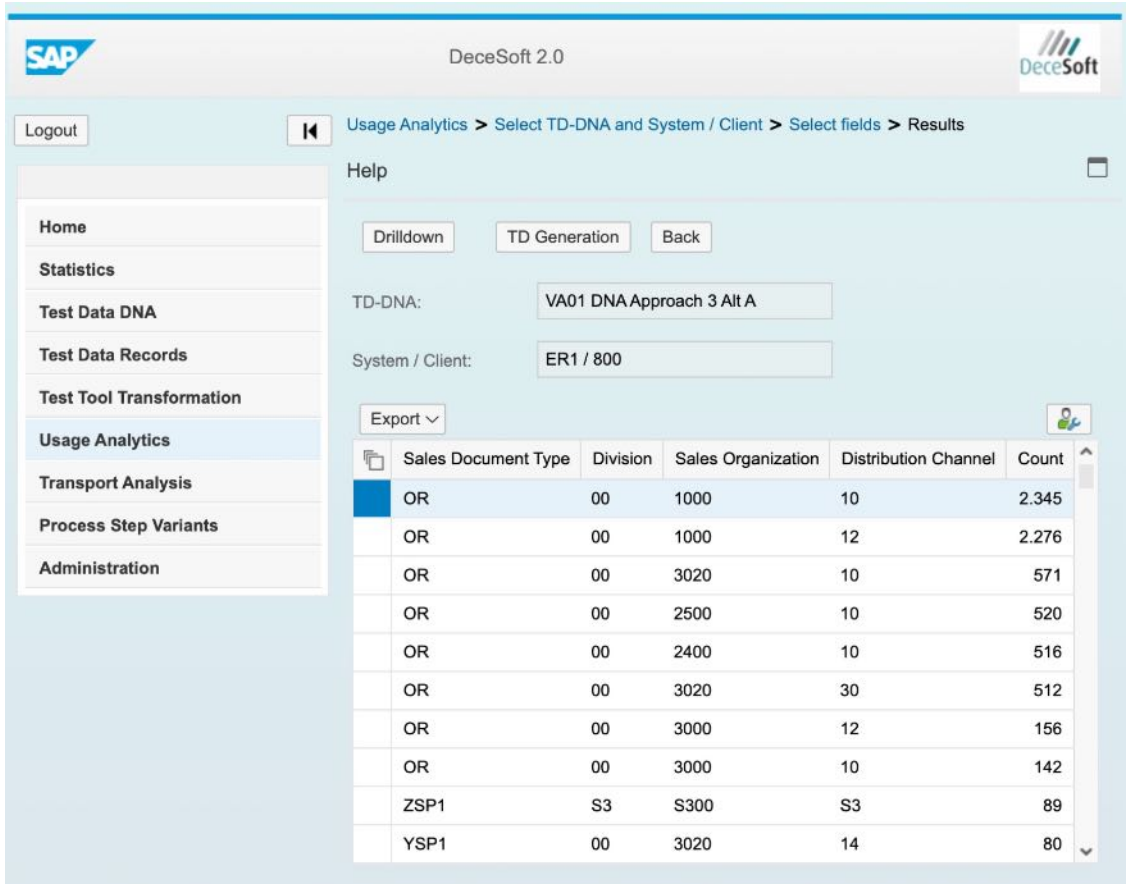
DeceSoft UA – Usage Analytics

Functionality and customer benefits

- Analyse business document data in your quality assurance and production systems for usage patterns to derive suitable test data

- Review the occurence of posted business transactions by data field values (e.g. order type) to generate most-used process step variants in the Solution Documentation of SAP Solution Manager

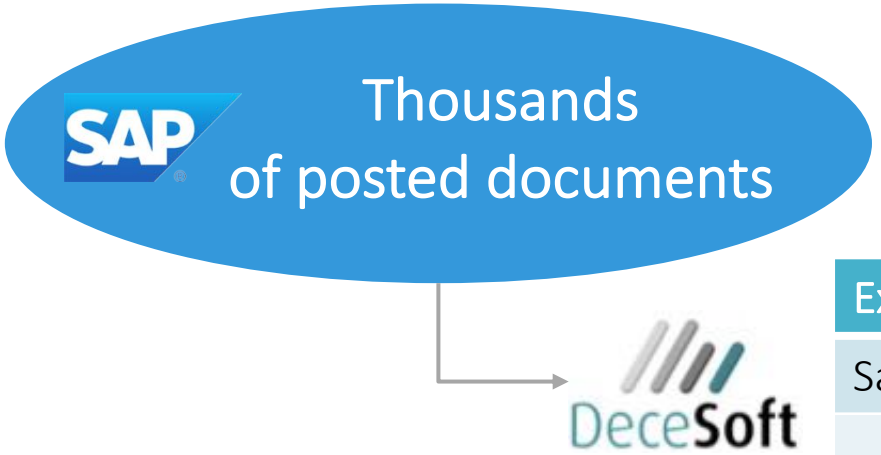
- Extends the analysis of custom code by highlighting most frequently used executables



DeceSoft UA - Usage Analytics

Analyze posting patterns of your Business Departments by any dimension

… and identify relevant test data for your regression tests



Example	Typical questions
Sales	Pricing Procedures used by Sales Document Types
	Top 10 Material Classes used in North America
	Top n Customers for Product P1
Procurement	Top Vendors of Material M1
	Number of POs posted using Incoterm I3 without PR

Select business transaction → read posted documents → Analyze → Drilldown → create Test Data

DeceSoft UA – Usage Analytics

Thousands / millions
of posted documents

Usage Analysis
for selected business transaction

ABC	Order Type	Sales Org	..	Document Occurence
A	OR	S-01		1.500.000
	...	S-02		800.000
B	...	...		75.000
C	...	....		50.000

Drilldown
customer, material group, ...

Test Data generation

Generic	Flexible selection of important fields per business transaction – generic approach – no specific coding
Automatic	Automatic derivation of fields with dependencies – generic approach
Fast	Very fast retrieval of valid combinations from PRD, Pre-PRD or QAS systems
Drilldown	Drilldown by any dimension to analyze used fields
Test Data	Automatic generation of test data for for manual or automated regression tests

DeceSoft Usage Analyzer

Fast analysis of large amounts of posted documents to understand posting patterns of organization units, ABC ranking of used field combinations and for test data generation

Summary and Business Value

- Analyse business document data in your quality assurance and production systems for usage patterns to derive suitable test data
- Review the occurence of posted business transactions by data field values (e.g. order type) to generate most-used process step variants in the Solution Documentation of SAP Solution Manager
- Extends the analysis of custom code by highlighting most frequently used executables

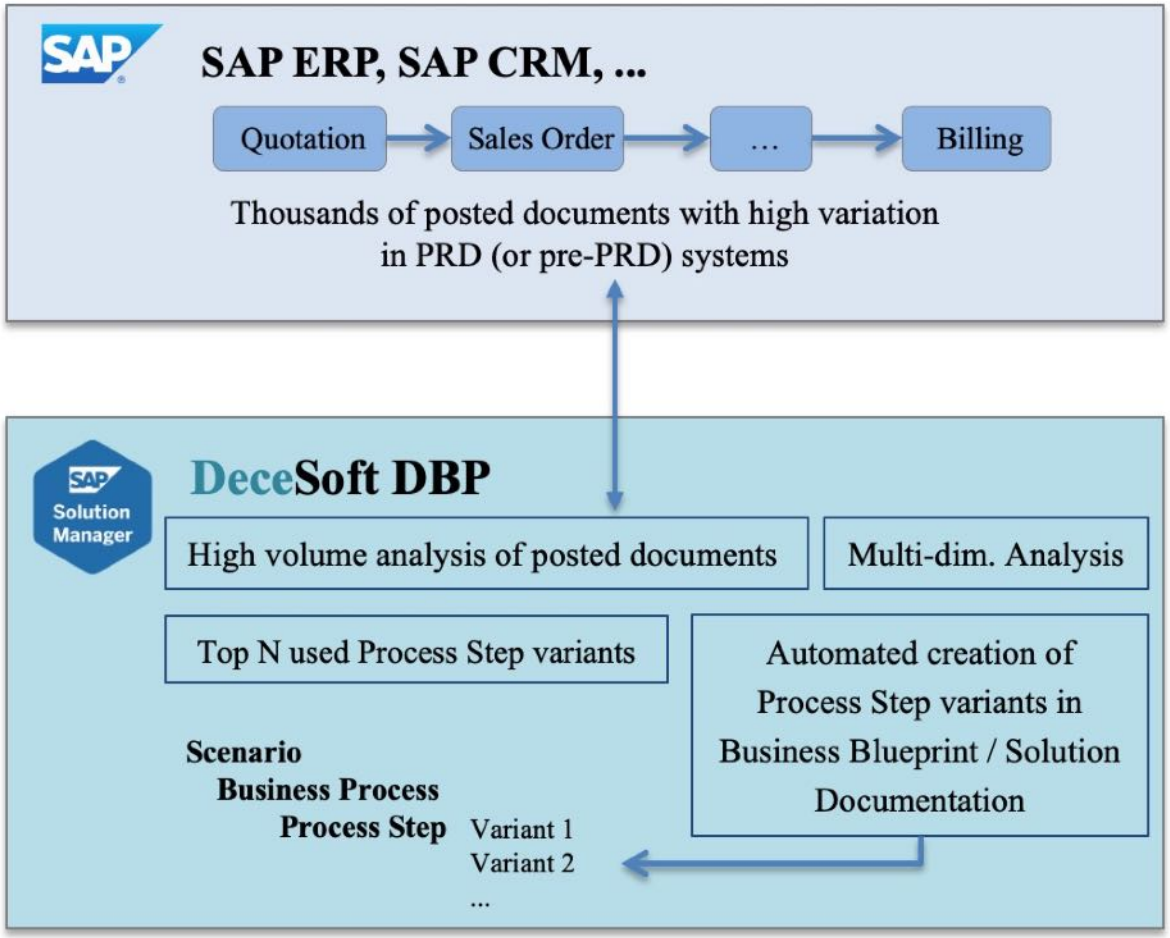
Business Process Analysis

DeceSoft DBP: Identification of Business Process Variants and Solution Documentation

DeceSoft DBP - Identification of Process Step Variants

Functionality

- DeceSoft high volume analysis of thousands of posted business transactions
- User driven usage analysis of posting patterns by any dimension to identify Top N Process Step variants
- Automatic extension of SAP Solution Manager Business Blueprint with Process Step variants

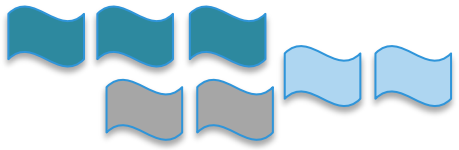


Benefits

- Fast and convinient analysis of posting patterns for any business unit, location, ...
- Generic approach – SAP and custom transactions
- Fast documentation of most important Process Step variants in SAP Solution Manager

DeceSoft DBP - Identification of Process Step Variants

Business Transactions



Thousands of posted Business Transactions

DeceSoft DBP

Analyze posted business documents

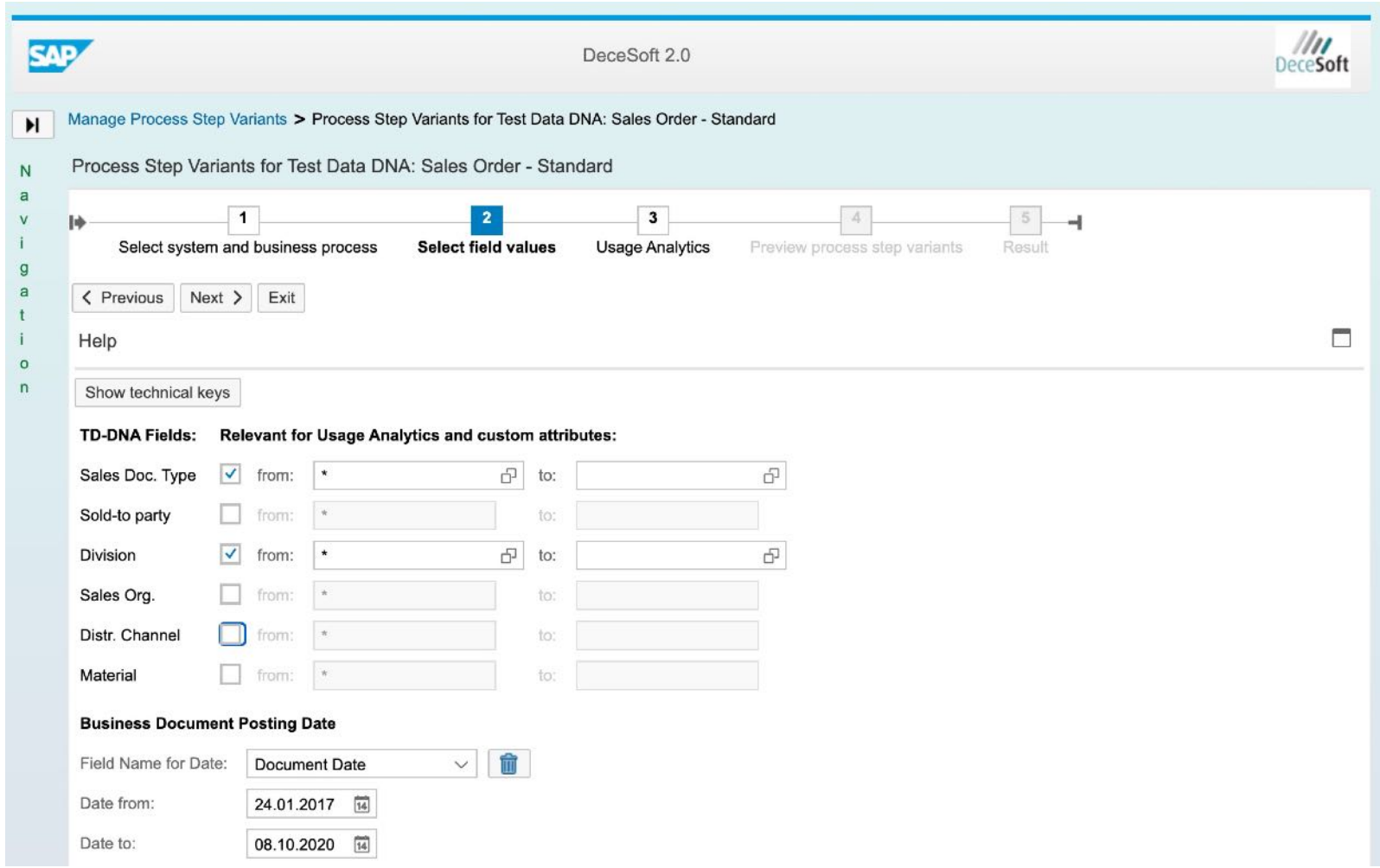
Create Process Step Variants

Solution Documentation

Solution
Process Step Library
Process Step Folder

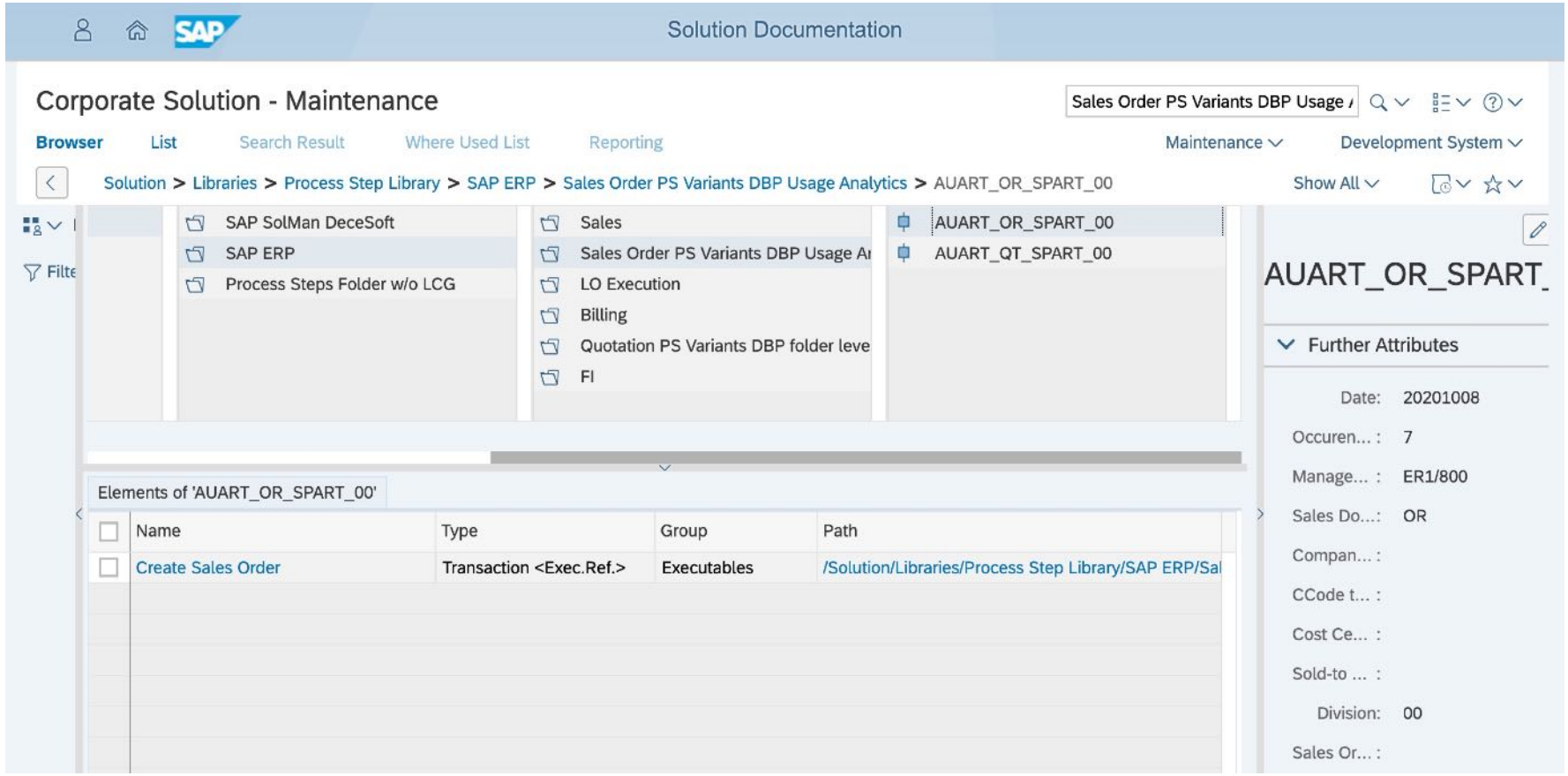
DeceSoft DBP - Identification of Process Step Variants

DBP step-based approach to identify Process Step Variants



DeceSoft DBP - Identification of Process Step Variants

DBP created Process Step Variants in SAP Solution Manager – Solution Documentation



- Process Step Variant includes Executables
- DeceSoft generated custom-attributes, e.g. occurance, dimensions to define the PS variant, source system, date of analysis, …

DeceSoft Process Step Variants

Helps you discover important or often used process variants, when documenting your business processes using SAP Solution Manager

Summary and Business Value

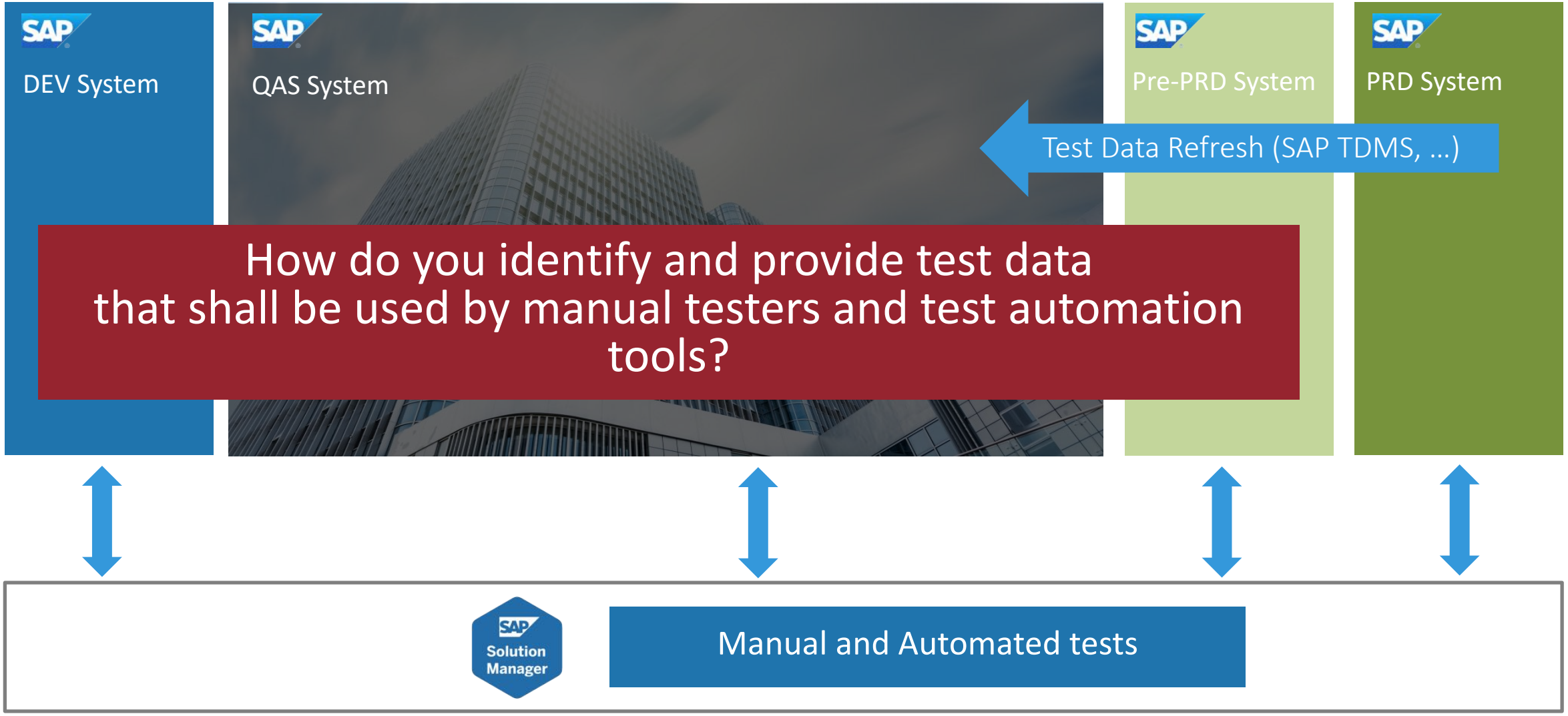
1. Run a fast and convenient analysis of key posting patterns across business units, locations, etc.
2. Benefit for the generic approach, working for all SAP and custom executables
3. Generate the most important Process Step variants in your SAP Solution Manager Solution Documentation

Test Data Management

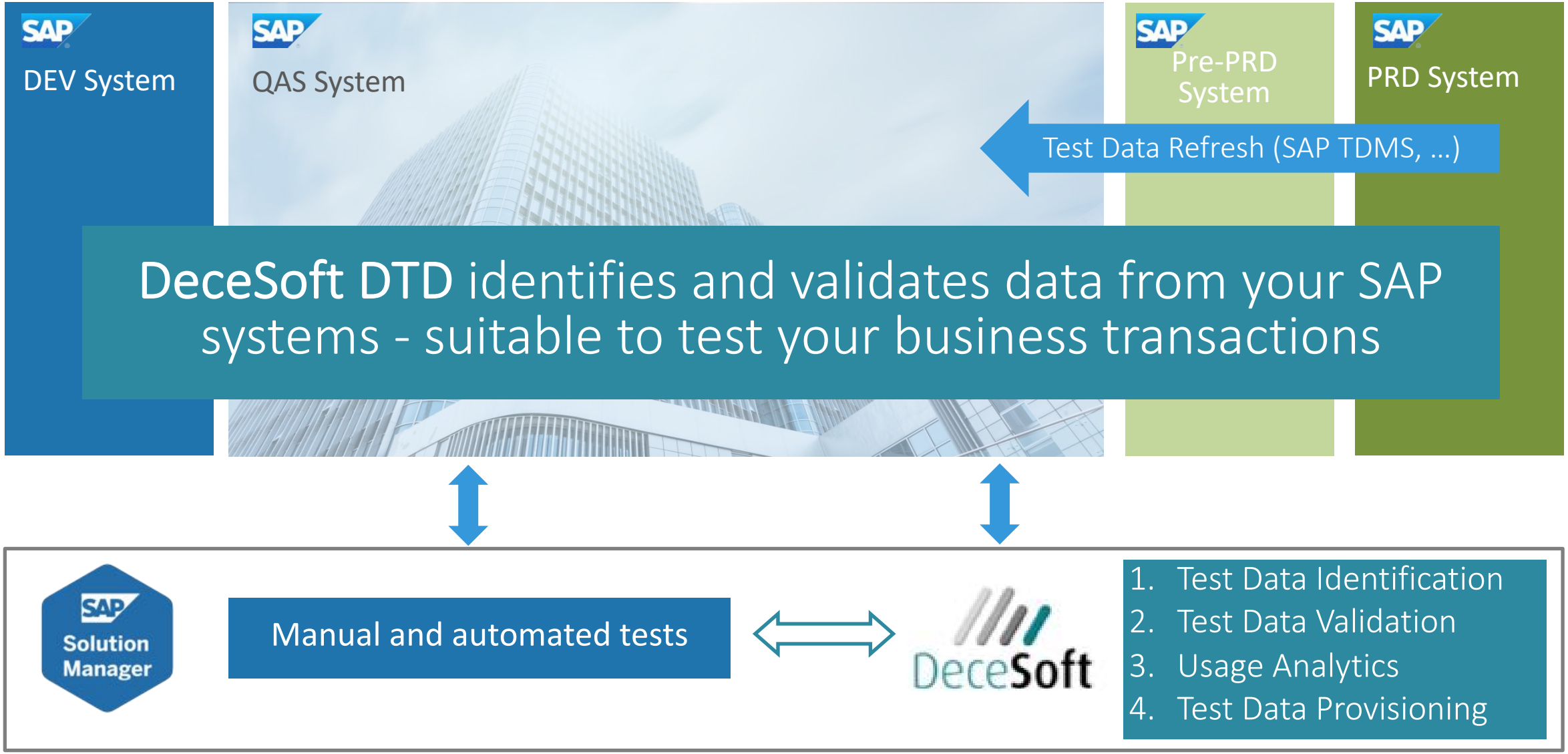
DeceSoft DTD: Test Data Identification, Planning and Validation

The Test Data Challenge

DeceSoft



The Test Data Challenge solved



Functionality

DeceSoft Test Data (DTD)

Test Data Identification

Generic approach to plan and derive test data for manual and automated tests

Test Data Validation

Validation of test data for any SAP system. Checks allowed field combinations and availability of important entities like material in stock

Usage Analytics

Fast analysis of large amounts of posted documents to understand posting patterns of org. units, ABC ranking of used field combinations and test data generation

Test Data Provisioning

Make validated test data available to your testers and automated test tools through MS Excel files or push to SAP Solution Manager Test Data Container (TDC)

Plan and Identify Test Data – 4 Approaches

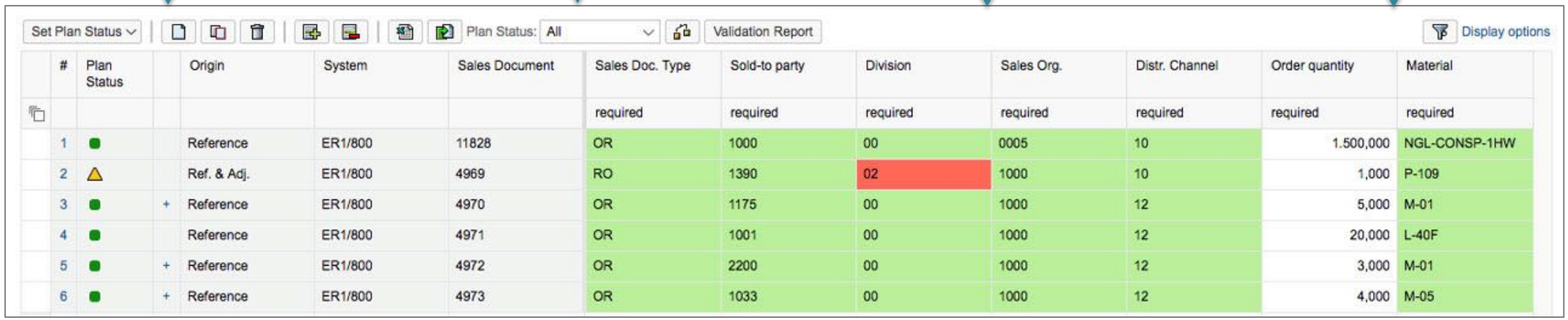
DeceSoft Test Data (DTD)

Online Planning with access to SAP system

Offline Planning (MS Excel) plus DTD online validation

Derive data from posted business documents

High volume usage analytics of posted business documents



#	Plan Status		Origin	System	Sales Document	Sales Doc. Type	Sold-to party	Division	Sales Org.	Distr. Channel	Order quantity	Material
						required	required	required	required	required	required	required
1	●		Reference	ER1/800	11828	OR	1000	00	0005	10	1.500,000	NGL-CONSP-1HW
2	△		Ref. & Adj.	ER1/800	4969	RO	1390	02	1000	10	1,000	P-109
3	●	+	Reference	ER1/800	4970	OR	1175	00	1000	12	5,000	M-01
4	●		Reference	ER1/800	4971	OR	1001	00	1000	12	20,000	L-40F
5	●	+	Reference	ER1/800	4972	OR	2200	00	1000	12	3,000	M-01
6	●	+	Reference	ER1/800	4973	OR	1033	00	1000	12	4,000	M-05

DTD planning grid to identify / plan Test Data Records

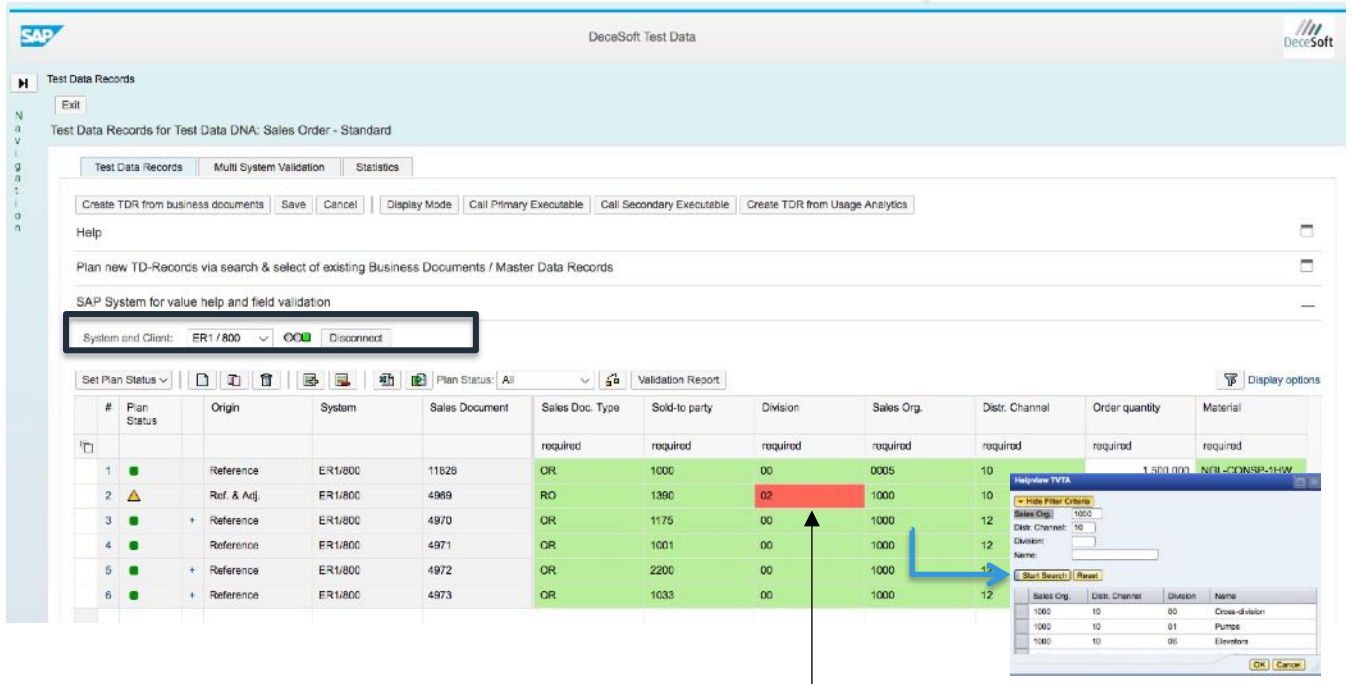
Plan and Identify Test Data

Approach 1: Online planning

- User gets a table (like MS Excel) which allows data entry
- Value help from DTD integrated with managed system like SAP ERP test system allows seamless take over of valid data into planning grid
- DTD immediately shows whether field combinations are not valid
- Example VA01: Division, Sales Org, Distribution Channel
- Correct values via value help
- Online test data validation

Business Analyst

- Value help to get valid data from connected SAP system
- Online data validation



Get correct data via value help (F4) with access to connected SAP ERP test system

Plan and Identify Test Data

Approach 2: Offline planning with MS Excel and DTD online validation

Set Plan Status | Plan Status: All | Validation Report | Display options

#	Plan Status	Origin	System	Sales Document	Sales Doc. Type	Sold-to party	Division	Sales Org.	Distr. Channel	Order quantity	Material
				KEY0-VBELN	VBAK-AUART	VBAK-KUNNR	VBAK-SPART	VBAK-VKORG	VBAK-VTWEG	VBAP-KWMENG	VBAP-MATNR
					required	required	required	required	required	required	required
1		Reference	ERT/800	8826	OR	1000	00	1000	10	4,000	R-NET-INST
2		Ref. & Adj.	ERT/800	8827	OR	1000	00	1000	10	4,000	P-100
3		Reference	ERT/800	11272	OR	1000	00	1000	10	1,000	T-AQ300
4		Manual			OR	300505	02	1000	02	0,000	p-100

4 Validation of test data against SAP system

1 Download DTD test data DNA to generate MS Excel file

MS Excel file includes column header with field texts

3 File upload to DTD

2 Offline planning of test data

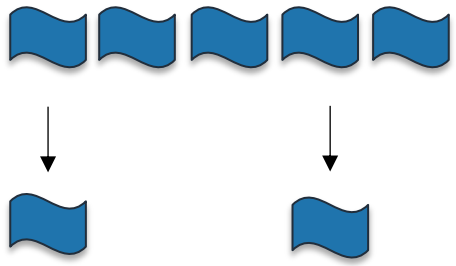
	A	B	C	D	E	F	G	H
1	SalesDocType	Sold-to party	Division	Sales Org	Distr. Channel	Order qty	Material	Customer
2	VBAK-AUART	VBAK-KUNNR	VBAK-SPART	VBAK-VKORG	VBAK-VTWEG	VBAP-KWMENG	VBAP-MATNR	VBPA-KUNNR
3	OR	1000	00	0005	10	25,00	P-100	1000
4								

Plan and Identify Test Data

DeceSoft

Approach 3 derive data from available business documents of executed business transactions

0 SAP system contains many documents of posted business transactions



1 DTD supports User to find posted documents with suitable data,
e.g. launch of display transaction in SAP system

2 DTD fetches selected documents and extracts relevant data

Document 11828: Order Type OR, …

Document 4969: Order Type RO, …

3 DTD saves as new Test Data Records in DTD planning grid

System and Client: ER1 / 800 | Disconnect

Set Plan Status | Plan Status: All | Validation Report | Display options

#	Plan Status		Origin	System	Sales Document	Sales Doc. Type	Sold-to party	Division	Sales Org.	Distr. Channel	Order quantity	Material
						required	required	required	required	required	required	required
1	●		Reference	ER1/800	11828	OR	1000	00	0005	10	1.500,000	NGL-CONSP-1HW
2	△		Ref. & Adj.	ER1/800	4969	RO	1390	00	0005	10	1,000	P-109
3	●	+	Reference	ER1/800	4970	OR	1175	00	1000	12	5,000	M-01

Plan and Identify Test Data

Approach 4: Usage Analytics

Thousands / millions
of posted documents

Usage Analysis
for selected business transaction

ABC	Order Type	Sales Org	..	Document Occurence
A	OR	S-01		1.500.000
	...	S-02		800.000
B	...	...		75.000
C	...	....		50.000

Drilldown
customer, material group, ...

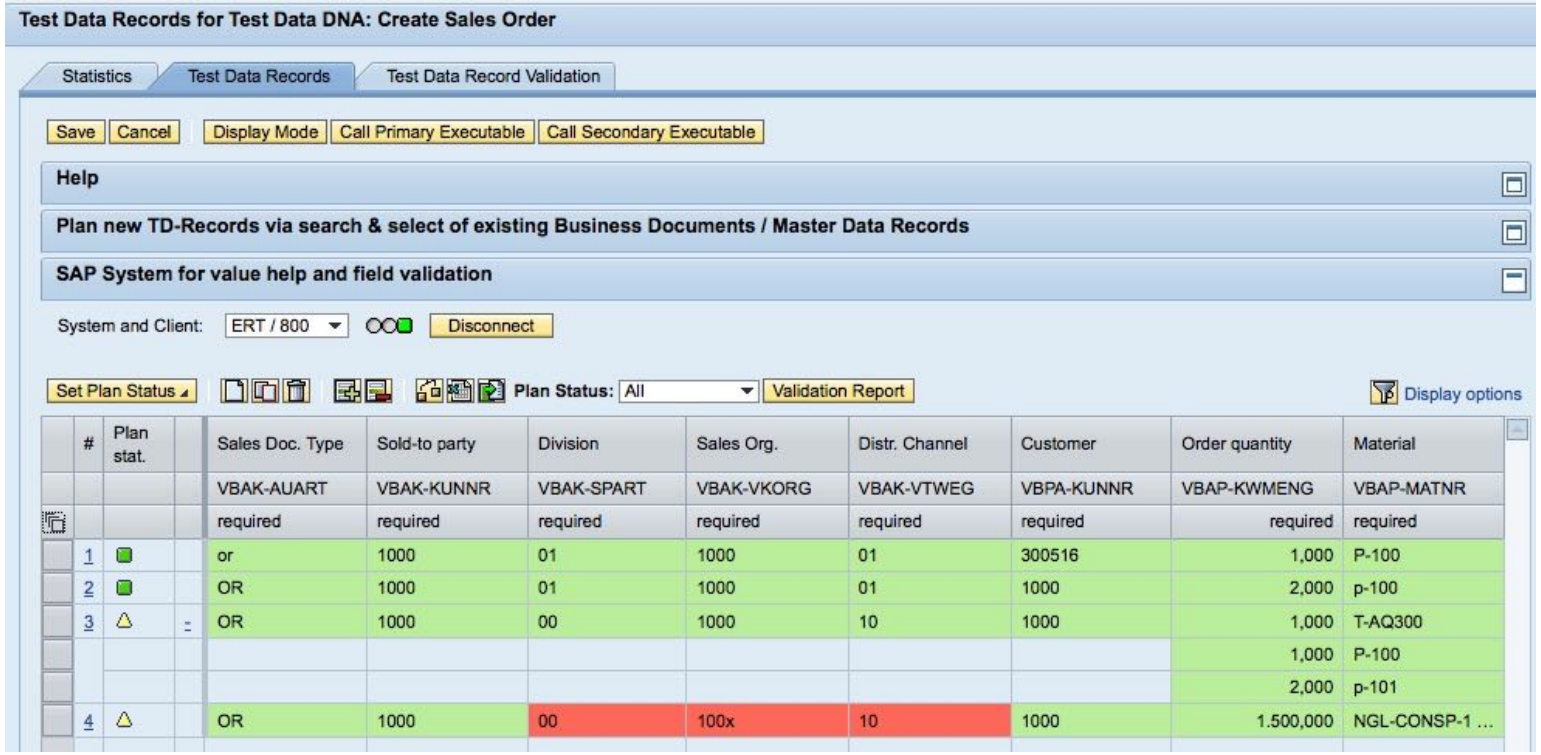
Test Data generation

Generic	Flexible selection of important fields per business transaction – generic approach – no specific coding
Automatic	Automatic derivation of fields with dependencies – generic approach
Fast	Very fast retrieval of valid combinations from PRD, Pre-PRD or QAS systems
Drilldown	Drilldown by any dimension to analyze used fields
Test Data	Automatic generation of test data for for manual or automated regression tests

Test Data Validation

Test Data Validation: check data validity against SAP systems such as DEV, QAS, Pre-PRD

- Online validation of each Test Data Record against selected SAP system
- Check of each field as well as field combinations
- Error messages explain reasons for failed validation
- SAP table entries can be checked via drill-down
- Validation reports allow fast correction of incorrect test data
- Custom-specific validation checks available via BADI

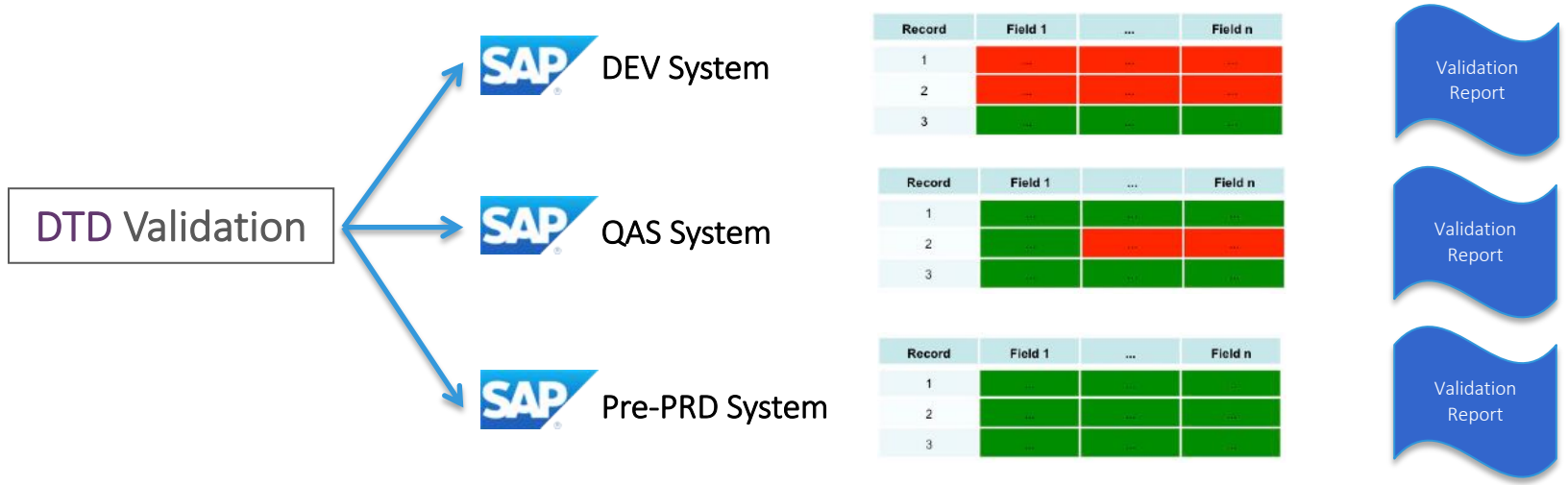


Test Data Validation

Validation of test data against multiple SAP systems during test data planning

Test Data Records for Executable ...

Record	Order Type	...	Material
1	OR	...	M-100
2	OR	...	M-200
3	AB	...	M-300



- Test Data validity can be checked against any selected SAP system
- DTD validation reports provide meaningful explanations and user guidance to correct the test data

Test Data Validation

Advanced Validations with custom specific check rules via DTD Enhancement Spot

QAS + DeceSoft plug-in

DTD enhancement spot (BADI)
Method: check data

- ...
- Call Function 'BAPI_MATERIAL_AVAILABILITY'
- ...
- <customer specific validation logic>

} SAP standard BAPIs

SAP Solution Manager + DeceSoft

Sales Doc. Type	Sold-to party	Division	Sales Org.	Distr. Channel	Order quantity	Material
required	required	required	required	required	required	required
OR	1172	00	1000	10	140,000	R-1001
OR	2007	00	1000	10	1,000	M-09
OR	1000	00	1000	10	2,000	P-200
OR	2301	01	1000	01	1,000	p-100

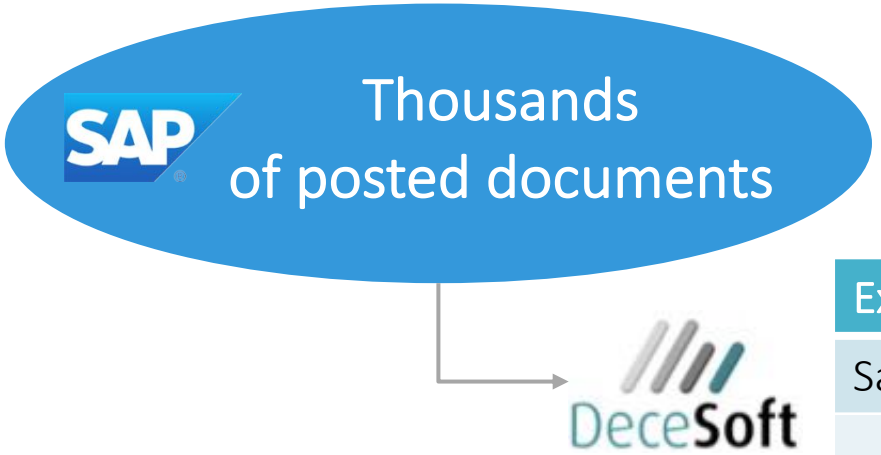
DTD Validation

- Mouse-over shows DTD standard and custom-defined validation errors
- Example: material in stock shortage
- DTD validation report lists all problems
- DTD test data generation via Usage Analytics with validations

DeceSoft DTD - Usage Analytics

Analyze posting patterns of your Business Departments by any dimension

… and identify relevant test data for your regression tests

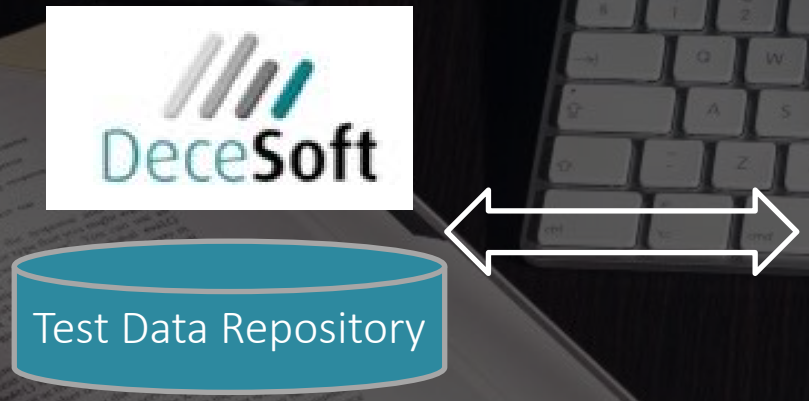


Example	Typical questions
Sales	Pricing Procedures used by Sales Document Types
	Top 10 Material Classes used in North America
	Top n Customers for Product P1
Procurement	Top Vendors of Material M1
	Number of POs posted using Incoterm I3 without PR

Select business transaction → read posted documents → Analyze → Drilldown → create Test Data

Test Data Provisioning

DeceSoft DTD makes it easy to use validated test data in manual and automated tests



Manual Tests

- **MS Excel:** DTD download of validated test data into MS Excel and assign to test case – for all manual testing tools from SAP and partners
- **TDC**: DTD push of validated test data into Test Data Container (TDC) of SAP Solution Manager

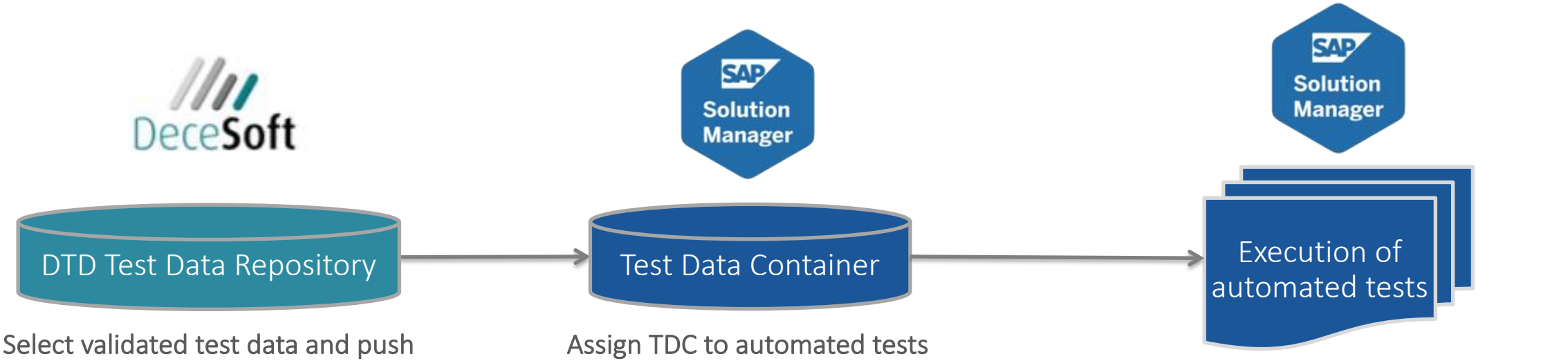
Automated Tests

- **TDC:** DTD push of validated test data into Test Data Container (TDC) of SAP Solution Manager
- **MS Excel:** DTD download of validated test data to MS Excel and subsequent upload for all test automation tools (CBTA, SAP TAO, HP ALM, Micro Focus ALM, Tricentis Tosca, ...)

Test Data Provisioning for SAP Solution Manager

DeceSoft

Use Case 1: Automated Tests - Test Suite - SAP Solution Manager



Select validated test data and push into Test Data Container

Assign TDC to automated tests

Create Test Plan and assign automated tests

Test Automation Tools

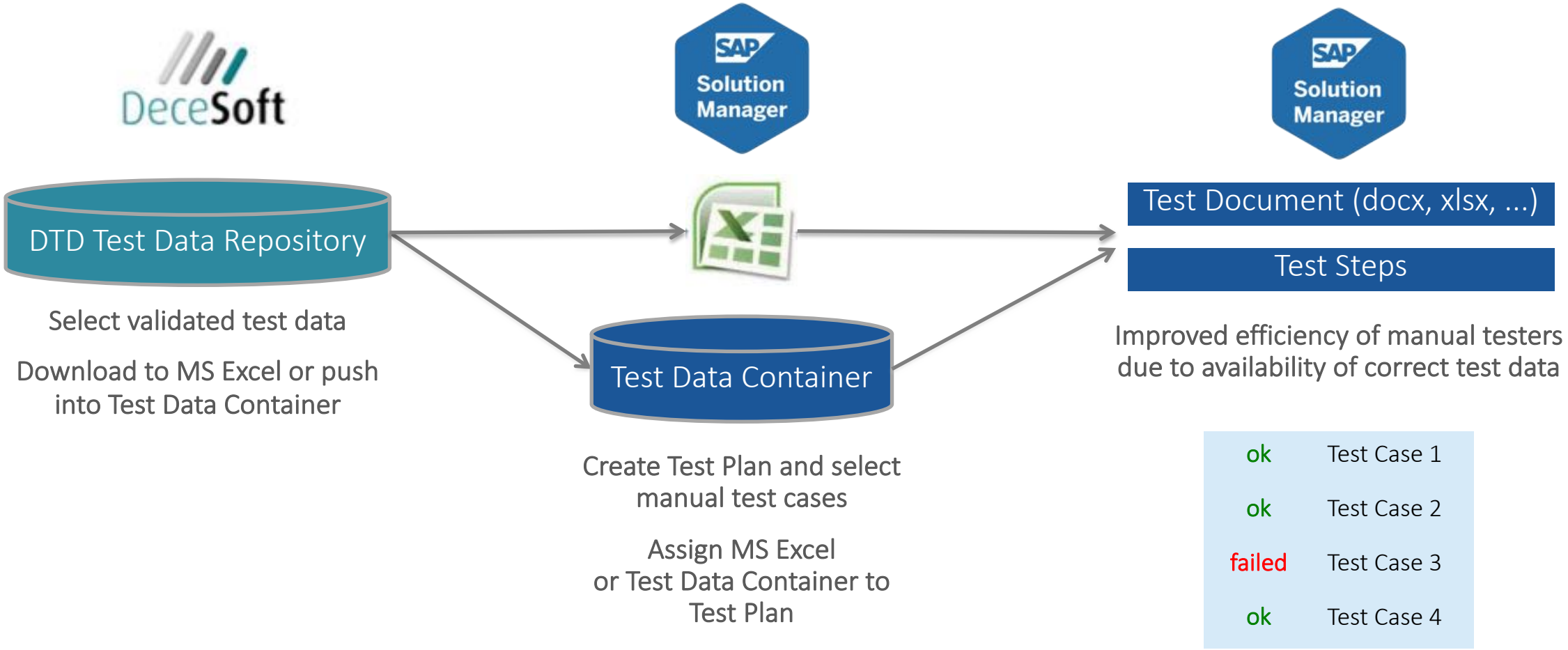
- SAP CBTA
- Micro Focus UFT (ex HP QTP)
- WorkSoft Certify
- Tricentis Tosca

Automated tests fail less often due to incorrect test data and identify application errors

ok	Test Case 1
ok	Test Case 2
failed	Test Case 3
ok	Test Case 4

Test Data Provisioning for SAP Solution Manager

Use Case 2: Manual Tests - Test Suite - SAP Solution Manager



Test Data Provisioning for Micro Focus ALM

Use Case 3: Manual and Automated Tests – Micro Focus ALM (formerly HP ALM, HP QC)

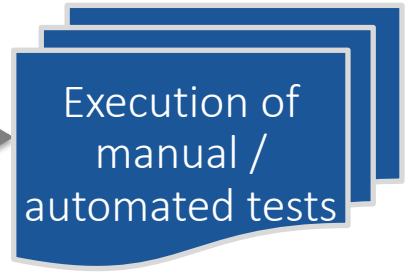
Select validated test data and download to MS Excel

Upload MS Excel file with test data to ALM.

Define Test Set, select manual or automated cases and assign test data.

Test Automation Tools

- UFT Unified Functional Tests (formerly HP UFT, HP QTP)
- SAP TAO



Improved efficiency of manual testers and automated tests, due to availability of correct test data

ok	Test Case 1
ok	Test Case 2
failed	Test Case 3
ok	Test Case 4

Test Data Provisioning for Tricentis Tosca

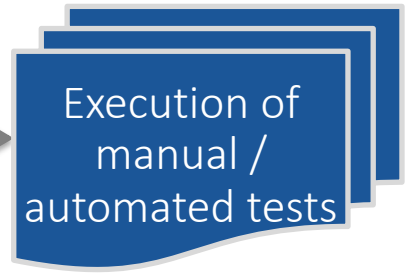
Use Case 4: Manual and Automated Tests – Tosca Test Suite – Tricentis

Select validated test data and download to MS Excel

Convert DTD Excel file with validated test data to Tosca Excel file format.

Tosca Excel templates can be leveraged.

Provide the path to the Excel file with the Tosca Excel DataSource Wizard.



Improved efficiency of manual testers and automated tests, due to availability of correct test data

ok	Test Case 1
ok	Test Case 2
failed	Test Case 3
ok	Test Case 4

Customer Benefits

DeceSoft Test Data (DTD)

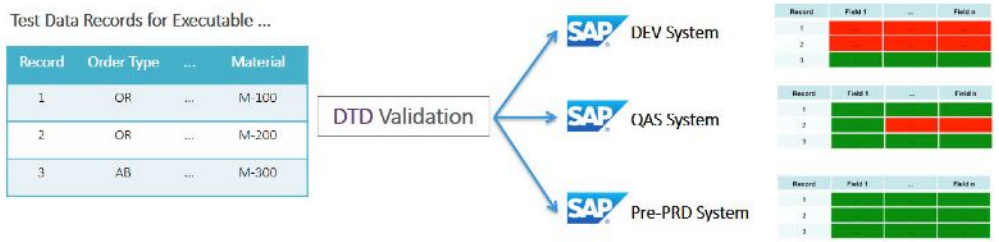
Fast and efficient way to identify test data for functional tests of SAP business transactions

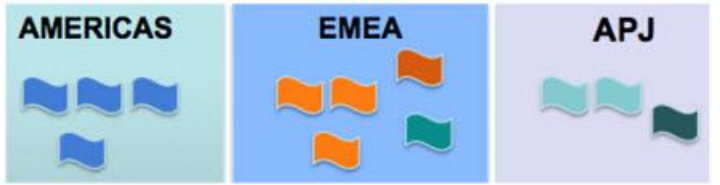
Sophisticated validation of test data to ensure correct test data before start of test cycles

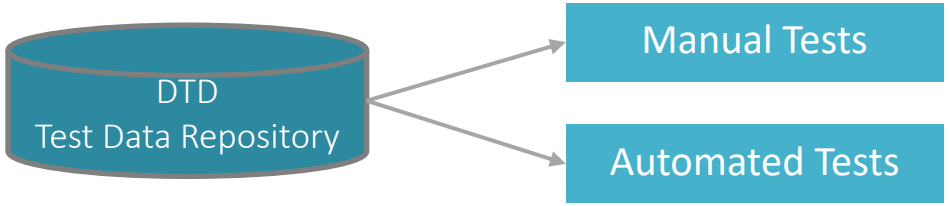
Efficient way to understand how org.units post business transactions plus test data generation

Convenient Test Data provisioning via MS Excel or SAP Solution Manager (TDC)

Sales Doc. Type	Sold-to party	Division	Sales Org.	Distr. Channel	Order quantity	Material
required	required	required	required	required	required	required
OR	1172	00	1000	10	140,000	R-1001
OR	2007	00	1000	10	1,000	M-09
OR	1000	00	1000	10	2,000	P-200
OR	2301	01	1000	01	1,000	p-100



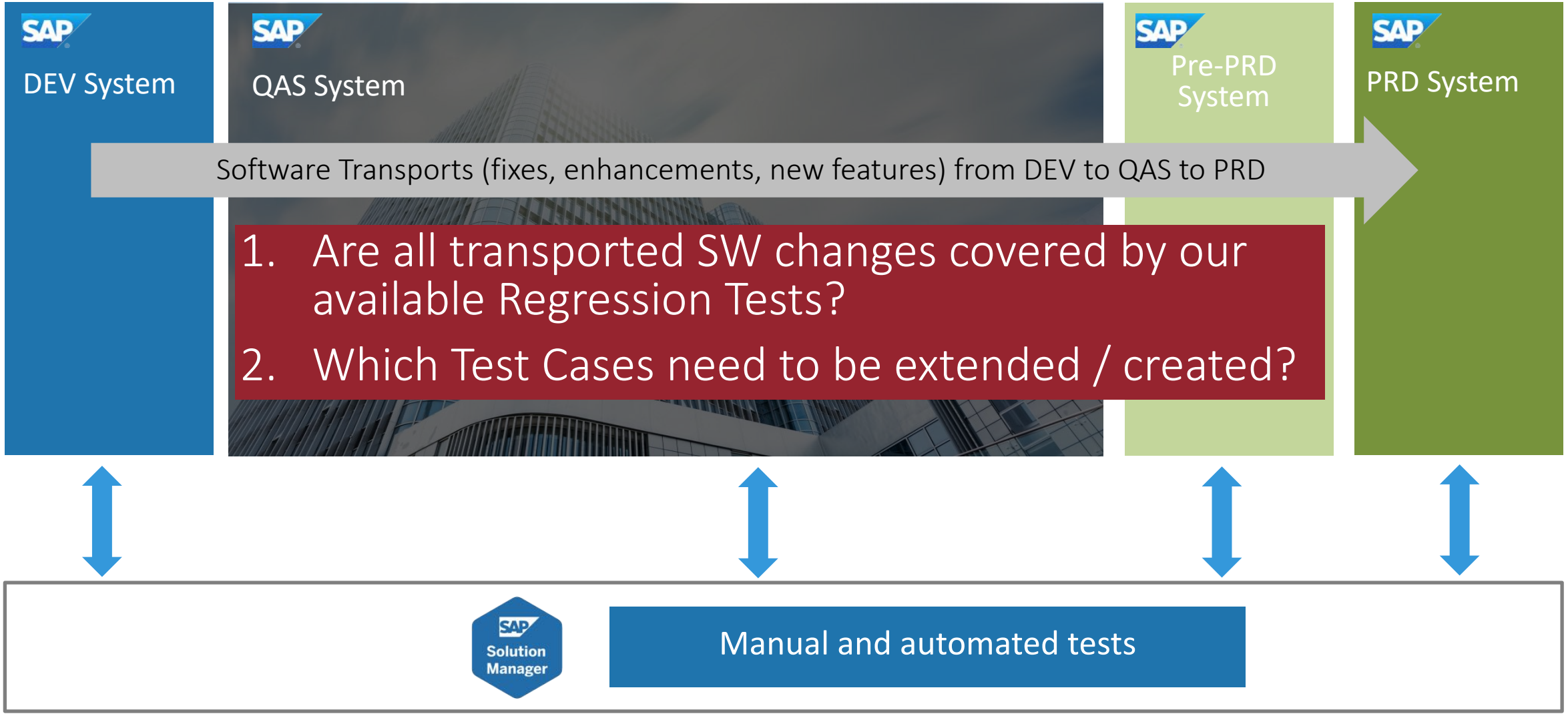




Test Management

DeceSoft DTA: Identification of Transports not covered by Regression Tests

The Sofware Change and Regression Test Challenge

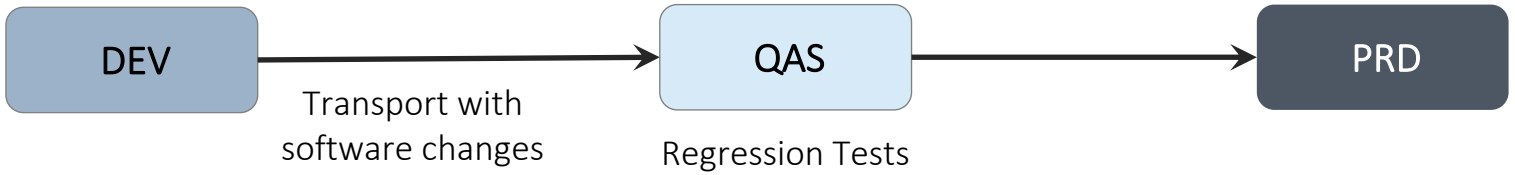


The Sofware Change and Regression Test Challenge

DeceSoft

Software Transports

Standard situation: regular software transports for fixes and enhancements, like monthly maintenance from DEV to PRD systems

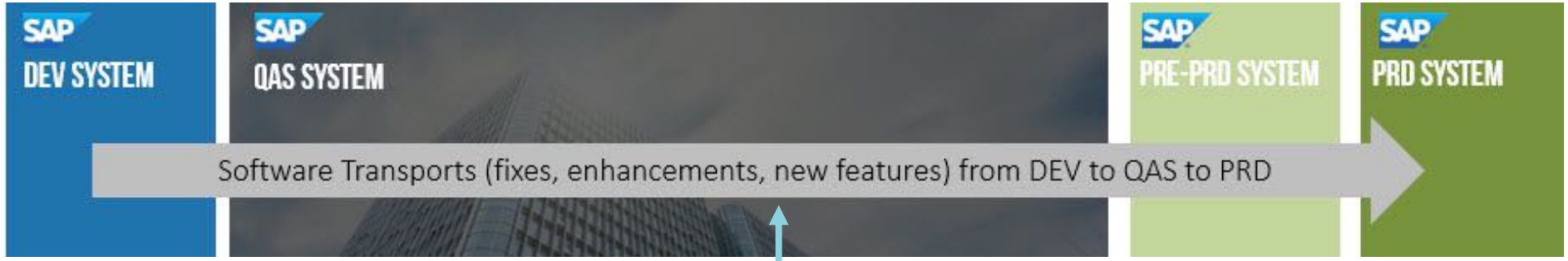


Challenges

- Do we have sufficient Regression Tests to cover software changes?
- How do we know that available regression tests cover changes included in transports?

Identify software changes not covered by Regression Tests

DeceSoft Transport Analysis (DTA)



DeceSoft

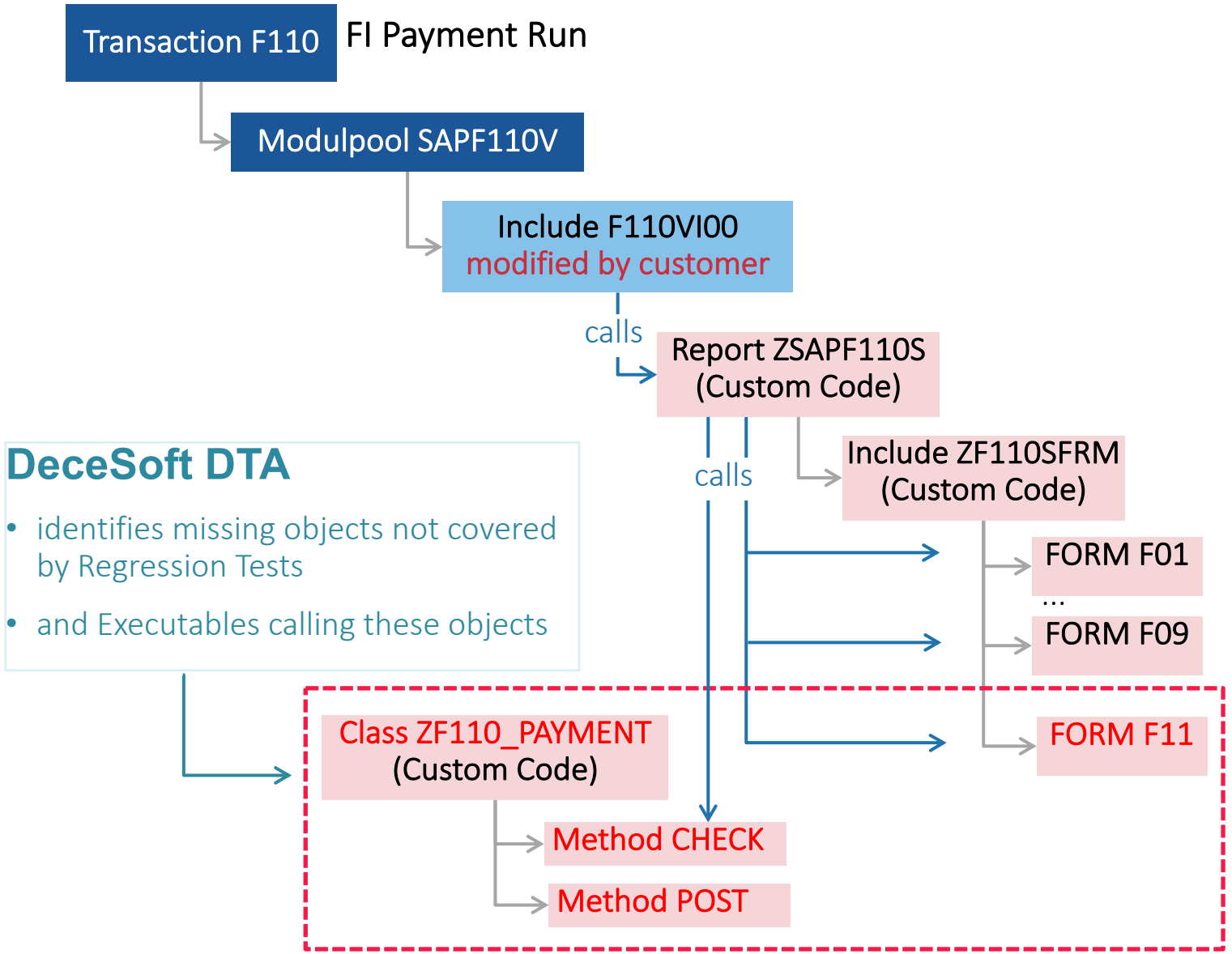
SAP Solution Manager

DeceSoft Transport Analysis (DTA)

1. **Identification of software changes** included in Transports, but not covered by Regression Tests
2. Advanced **changed code analysis** in managed system (ERP, CRM, S/4…) for Includes and their FORM routines
3. **Identification of Executables** (SAP, custom code) impacted by changed SAP objects, but not covered by Regression Tests

DeceSoft DTA Transport Analysis

Example: Modified SAP Financials Payment Run



DeceSoft DTA

- identifies missing objects not covered by Regression Tests
- and Executables calling these objects

Change Cycle May 20xx

- Transport ER1K900014
- all objects included in BPCA TBOMs
- all covered by Regression Tests

Change Cycle June 20xx

- Transport ER1K900021 contains Report ZSAPF110S
- Software Change not covered by Regression Tests
- New objects missing in BPCA TBOMs

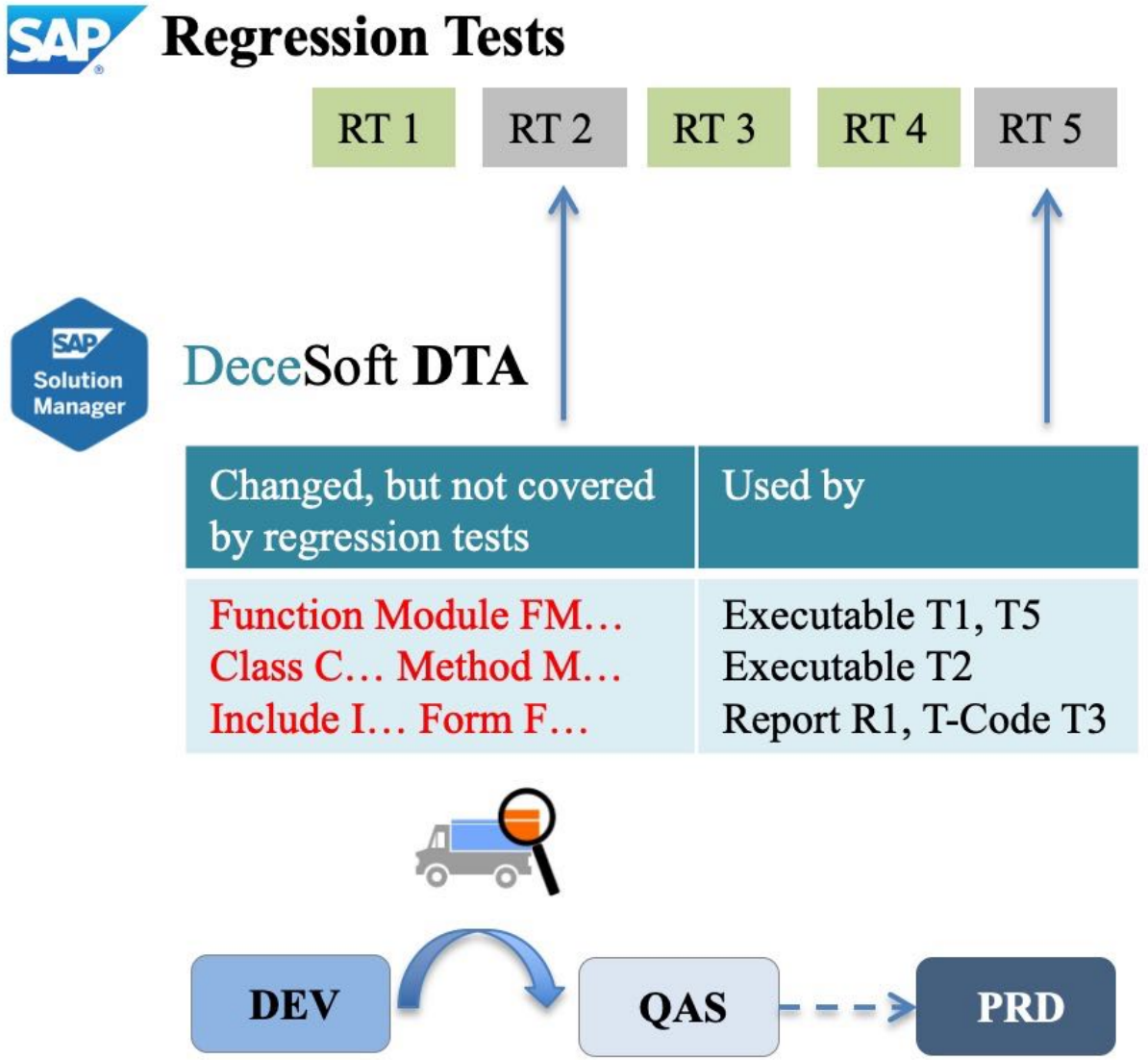
DeceSoft DTA Transport Analysis

Functionality

- Identification of SAP objects included in transports, but not covered by regression tests
- Sophisticated code change analysis in managed system (ERP, CRM, …) for Includes and their FORM Routines
- Identification of executables (SAP, custom code) using changed SAP objects not covered by RT

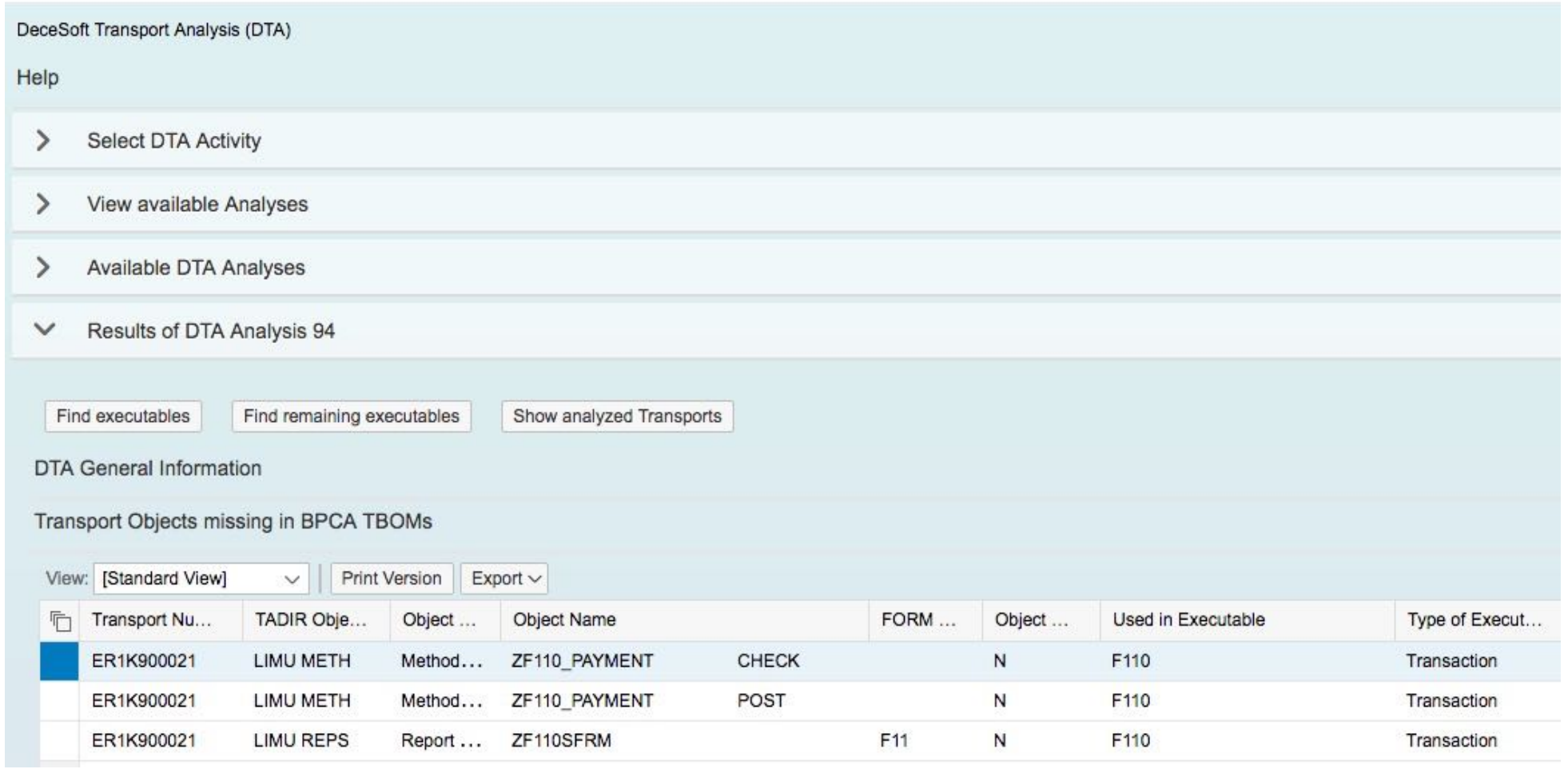
Benefits

- Reduced risk of PRD issues due to incomplete RT
- Fast and efficient way to identify changed objects not included in available regression tests
- Automated identification of transactions, reports, … using changed objects not covered by RT
- Supports SAP and custom executables



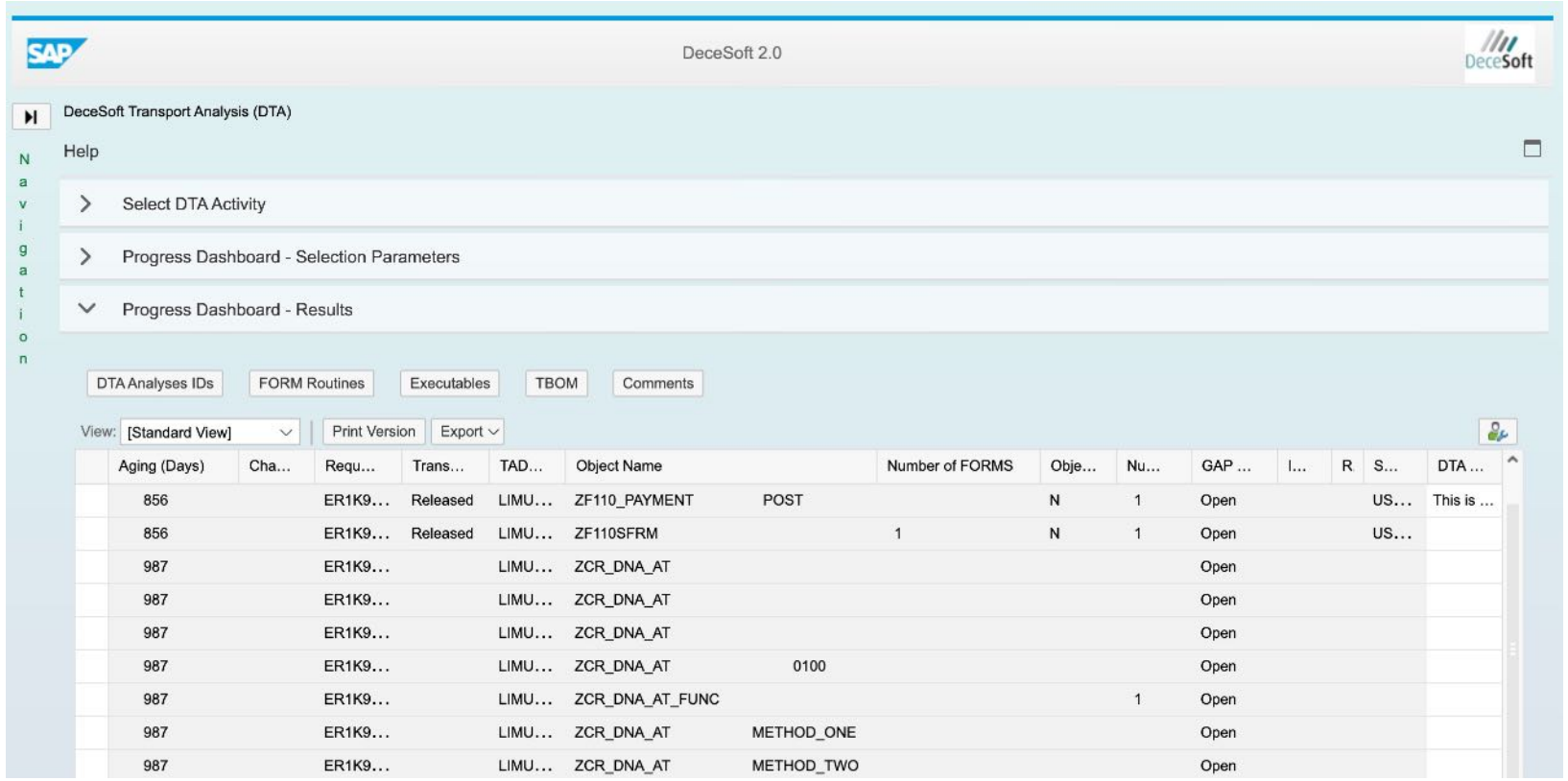
DeceSoft DTA Transport Analysis

DTA Analysis with identified changed and missing objects and related Executables



DeceSoft DTA Transport Analysis

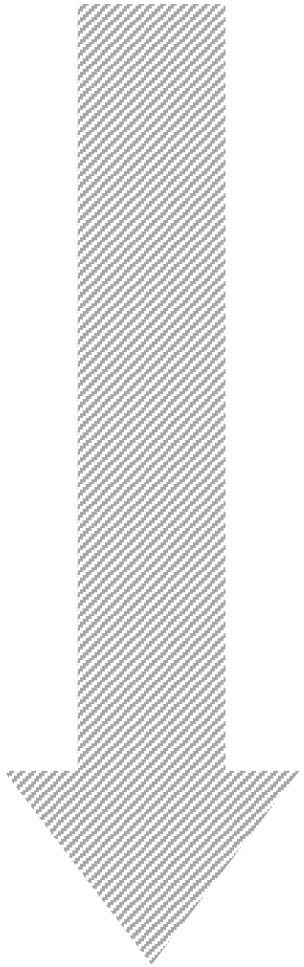
DTA Progress Dashboard shows whether gaps still exists, for how long plus custom-specific information



- Aging (days)
- Change Requests and Transports
- Type of change
- transported objects
- Change: new or changed
- User comments with history
- Custom fields (10) examples:
  - Gap status
  - ChaRM infos
  - Invasive change
  - Regression test required
  - Responsible user

Typical flow of Activities

DeceSoft Transport Analysis (DTA)



Prepare

Change

Analyze

Take Action

Prepare activities before Software Change

Solution Documentation with Processes / Steps and Executables covered with BPCA TBOMs

Regression Tests (RT) up-to-date and available for all mission critical Processes

BPCA TBOMs generated via automated Regression Tests

Software Change Event

Software changes (fixes, enhancements, new features) implemented in DEV system

Transports (TR) or Transport of Copies (ToC) to Quality Assurance System (QAS)

DTA Transport Analysis

Gap identification of changed objects included in TR /ToC, but not BPCA TBOMs

Advanced gap identification in managed system for Includes and new/changed/deleted FORM Routines

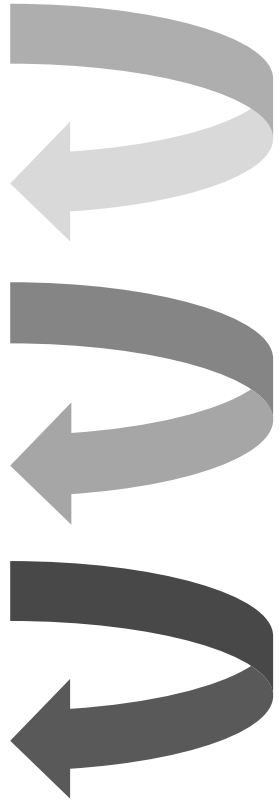
Identification of Executables using of identified gap objects to provide guidance for Test Engineers

Take Action and close Gaps

Test Engineers close gaps by extending test cases.

Example: additional steps with navigation that use changed objects. Result: up-to-date Regression Tests

Execute Regression Test Case and re-generate TBOMs



DeceSoft Transport Analysis

Summary and Business value

Reduced Risk

Reduced risk of PRD system issues due to incomplete Regression Tests

Efficient

Fast and efficient way to identify changed objects not included in available regression tests

Automated

Automated identification of transactions, reports, … using changed objects not covered by RT

SAP and Custom

Supports SAP and custom executables

Thank you!

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