



SAP Change Impact Analysis & SAP Enterprise Continuous Testing by Tricentis

Arjan van den Broek

a.vandenbroek@tricentis.com

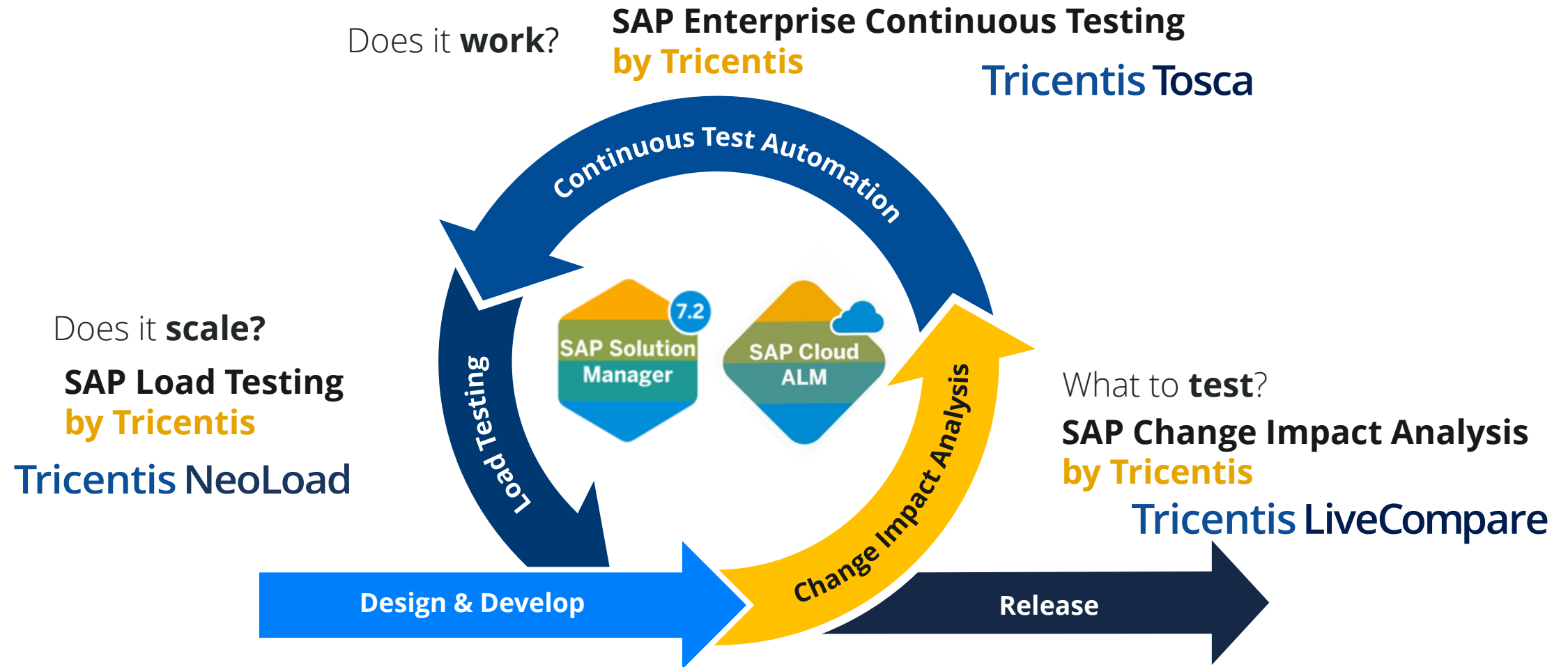
25 March 2025

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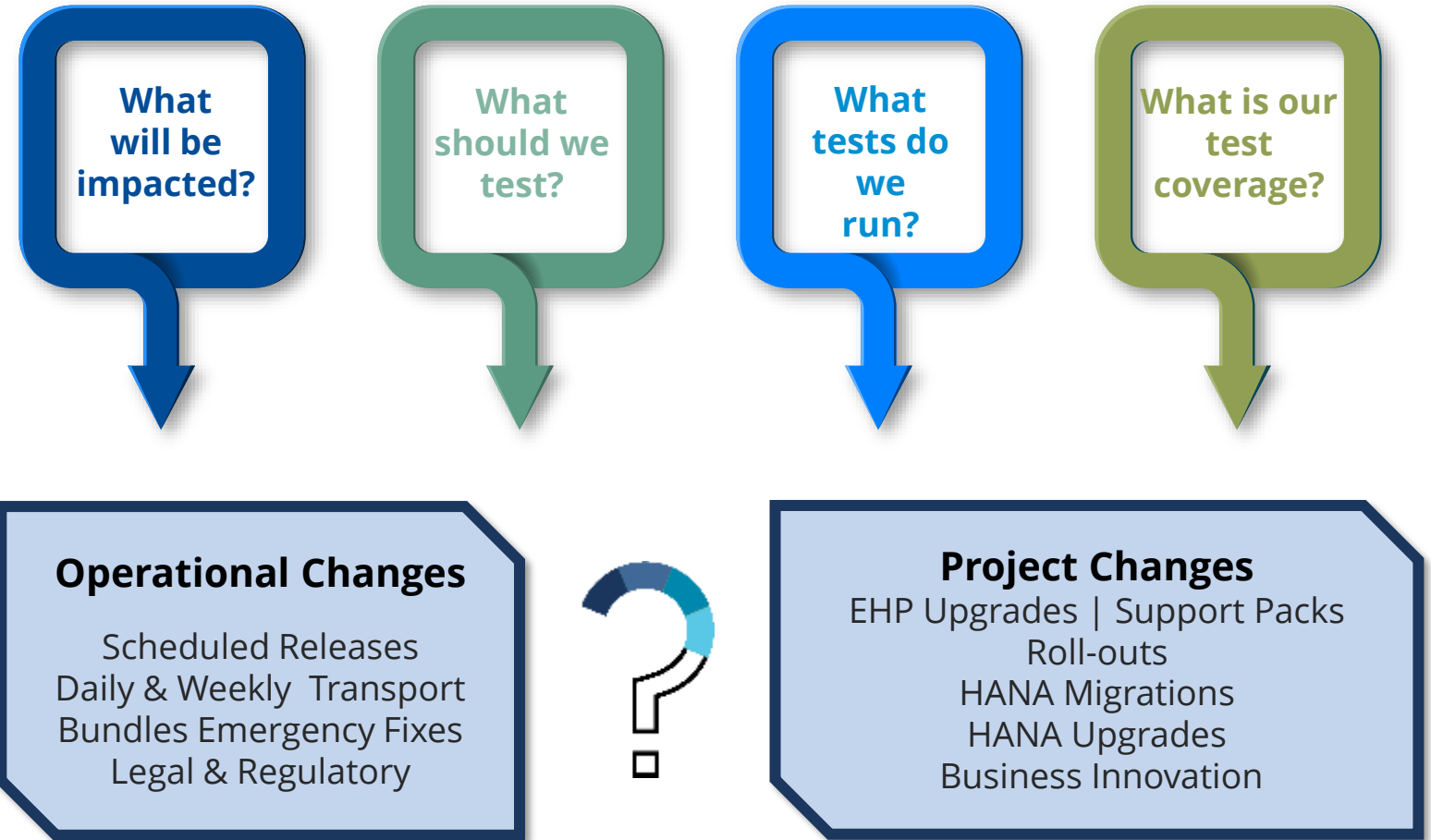




Strategic partnership with Tricentis



The Quality Challenge

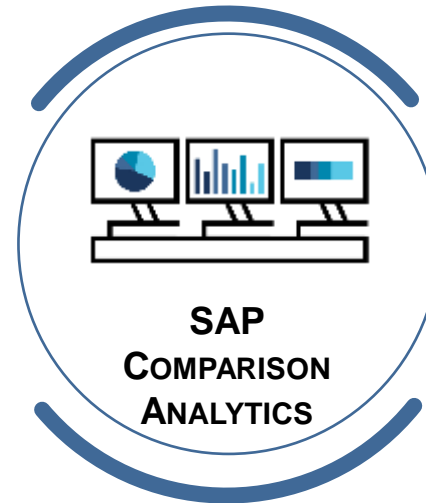


Core Functionality

and Use Cases



- Upgrades, Support Packs & EHP's, Feature Packs
- S/4 Version Upgrades
- Major-Minor Change Upgrades
- Daily & Weekly Transports
- Legal & Regulatory Changes
- Digital Transformation Projects
- Template Rollouts



- System Synchronization
- N+1 Landscape Management
- Troubleshooting & Debugging
- Data Quality & Governance
- Data Migration Validation
- SAP Consolidations & Mergers



- Custom Code Management
- Code Quality
- Test Coverage
- Transaction Utilization
- Test Quality Audit

Change Process



Identify the Risk ?

Did we cover the Risk ?

Is it safe?



Change Process



Identify the Risk ?

Smart Impact Analysis

Did we cover the Risk ?

Test Audit

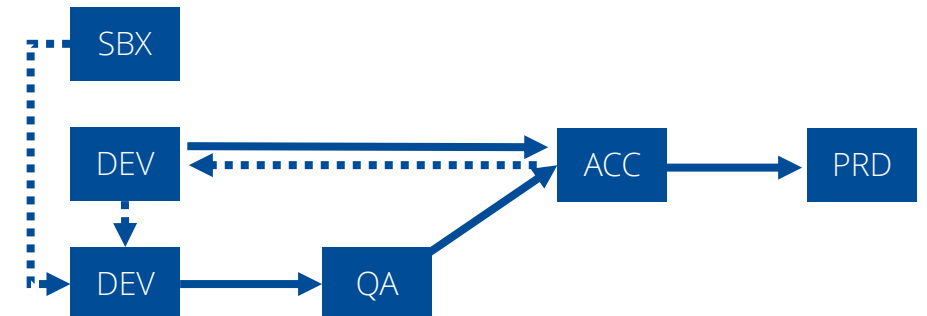
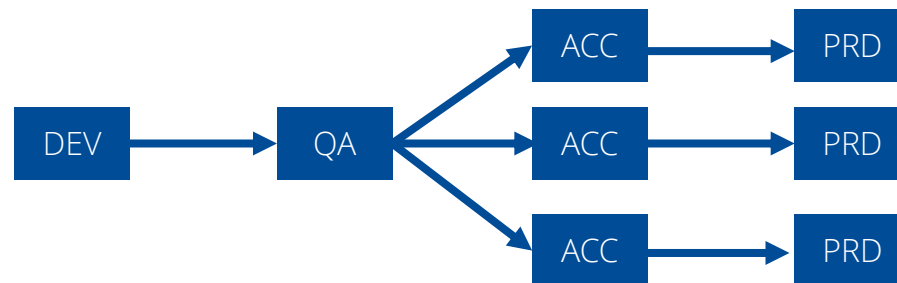
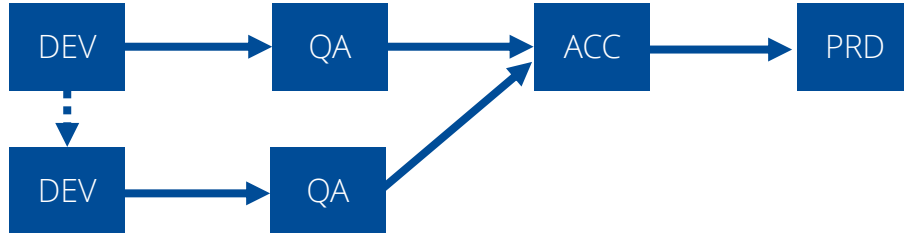
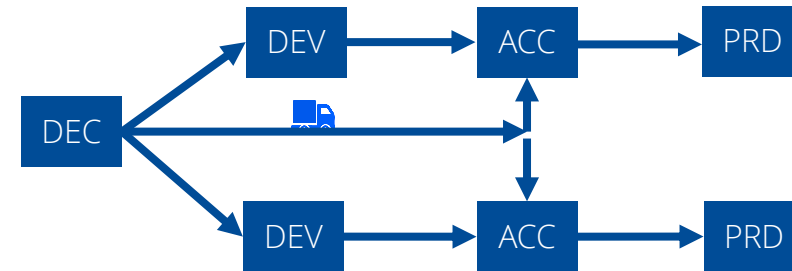
Is it safe?

Release Assurance

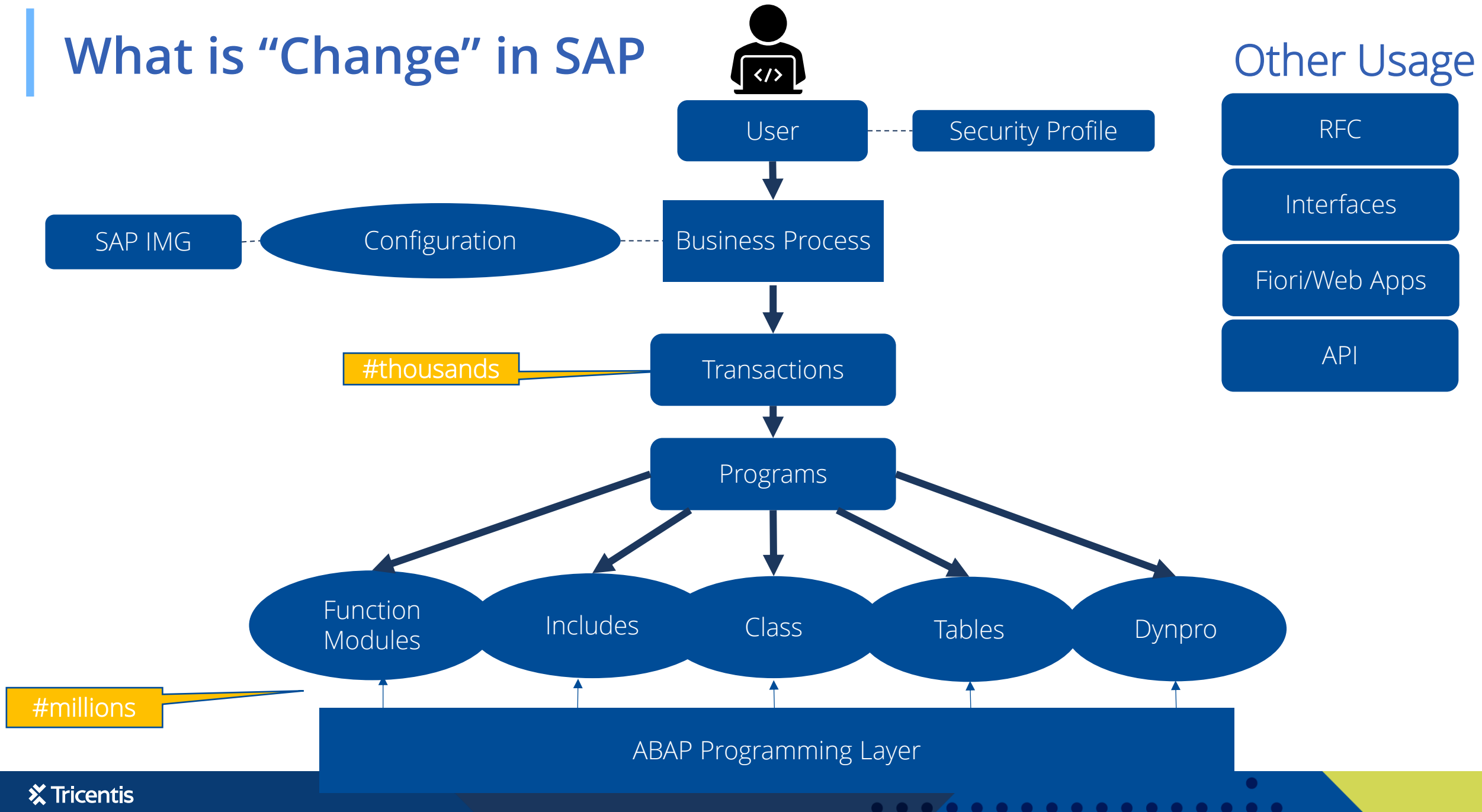


SAP Change Management

SAP Changes move through the landscape in many different ways



What is "Change" in SAP



LiveCompare Apps

Authorization NOTE Impact

Identifies the impacted and most-at-risk application capabilities based on AUTHORITY-CHECK OBJECT updates to objects introduced by SAP Notes.

Code Guard

Reports on used standard-vs-custom, used-vs-unused custom, used and unused by application area, and custom code quality.

Impact for Security

Assesses the impact of security changes on SAP end-users.

Used Objects

Reports on used standard vs. custom, object types, test coverage, users and license type assignments.

Code Watch

Run and optimize custom code analysis based on transports, ChaRM change requests, named objects, development classes and developers.

Compare Objects

Compares SAP objects between two systems. The objects to compare can be specified by name or with a Select List.

Cross System Impact Analysis

Cross system impact analysis designed for gateway deployed Fiori implementations supported by a back-end SAP system.

Survey

Survey Role usage. Results include: users who have been assigned the single role(s); what tcodes are in the single roles (if assigned); whether a user is being assigned only single role or via a composite role (containing the single role); whether a user has actually used the tco...

Discover Reusable Tests

Searches the test repositories of a pipeline for existing tests that cover used executables.

Fix My Code

Fix custom ABAP code to work with SAP HANA.

Find Similar Roles

Given a set of authorization criteria, find roles that are similar.

Compare IMG

Compares IMG tables between two SAP systems. An optional 'Columns to Compare' parameter can be used to exclude or include specific table columns from the comparison.

Heal Tests

Identifies modules and test cases that depend on changed screens.

Impacted Custom Code

Identifies custom code that requires remediation because of changes in SAP dependencies.

Chronograph

Measure investment in custom programs by year for the specified SAP instance.

Release Assurance

Find the missing changed objects that should be reviewed for inclusion in this release.

Package Disassembler

Package disassembler.

Retrofit Analysis

Identify code and data that should be synchronised between the DEV systems of two pipelines (Source and Target). Analysis begins on the user-defined Start Date.

Smart Impact

Analyzes the impact of change on your SAP system to find the most-at-risk to test. Specify the change as a list of transports, a ChaRM project, or simply a list of objects. Integrate with Tosca, qTest and other test repos to identify test hits and gaps.

Short Dump Watch

Provides a summary of SAP short dump data that has been retrieved for the specified Pipeline. The pipeline's usage system is the SAP system from which the short dump data is retrieved.

SAP HANA Migration Assessment

Perform an S/4HANA migration assessment that produces an overall project dashboard report and summary plus detailed reports for development, testing, integration, security, and training. Works with SAP Business Suite on HANA and SAP S/4HANA.

SAP HANA Upgrade Analysis

Perform an SAP HANA upgrade assessment that produces an overall project dashboard plus detailed reports to help fix impacted custom code, prioritize standard SAP testing, and surface vulnerable integration points. Works with HANA to HANA version upgrades.

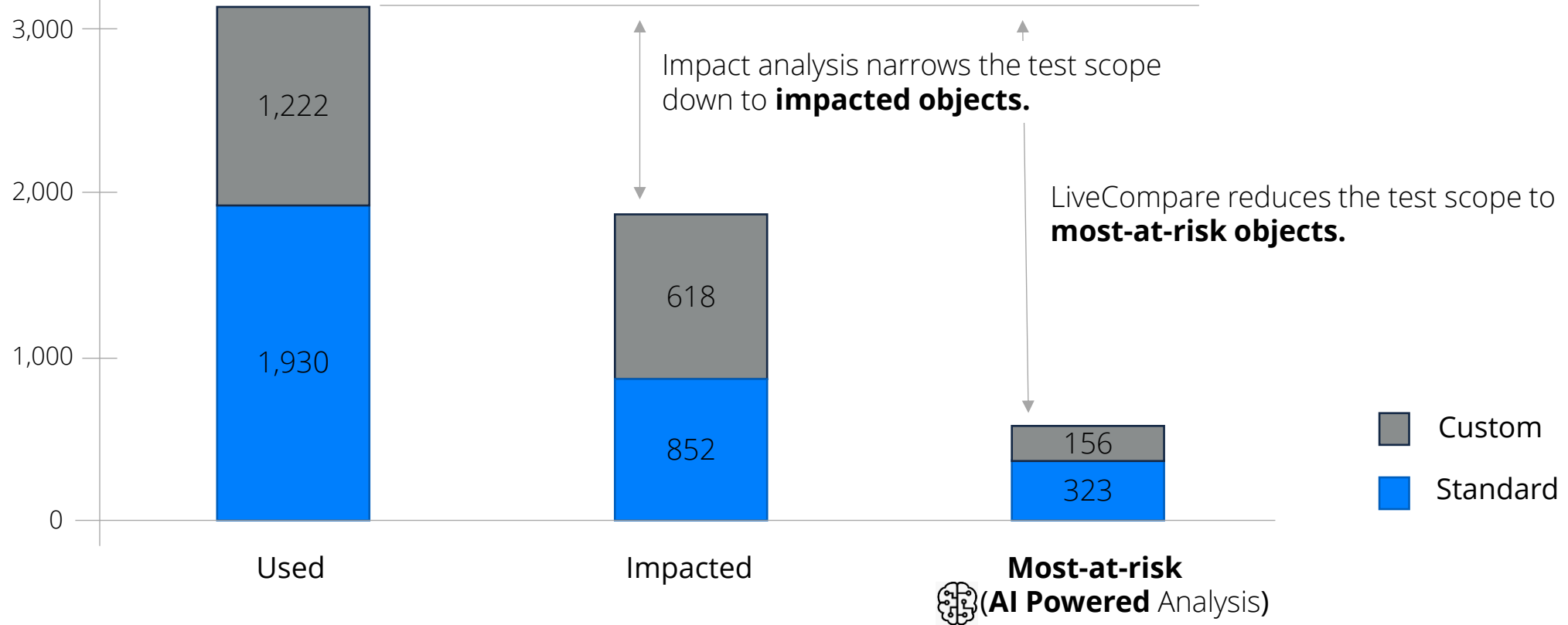
Test Audit

Reports which Most-at-risk objects (tokens) have been executed in QA, and whether tests for those tokens have been run in your Test Repository.

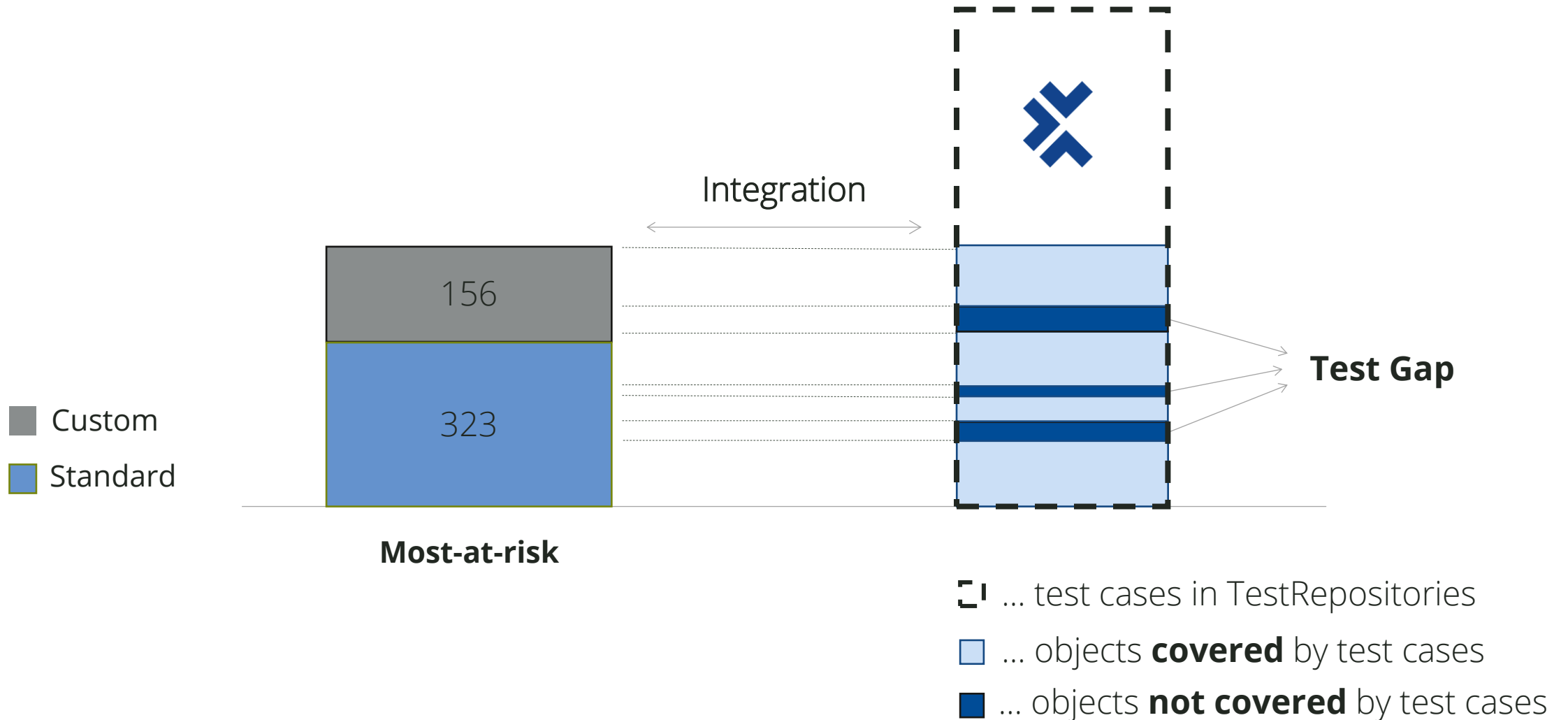
Custom Apps

Smart Impact Analysis with LiveCompare

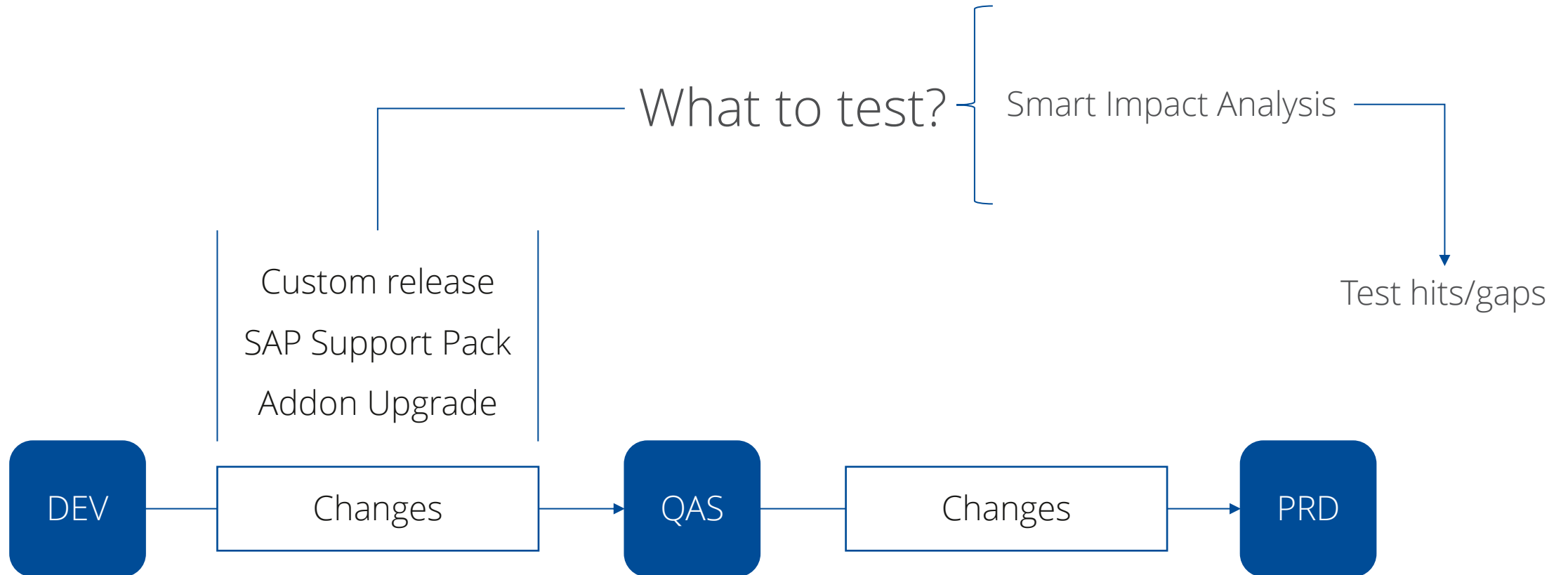
Objects used in
SAP System



LiveCompare/Test Repository Integration



Identify the Risk



Who: testers, key users, developers, SMEs.

Identify the Risk – how to execute



Livecompare analyses can be triggered in different ways



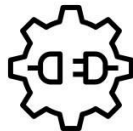
manual user action, starting the Impact Analysis app



Scheduled, based on released transports



On status change in Solution manager Charm

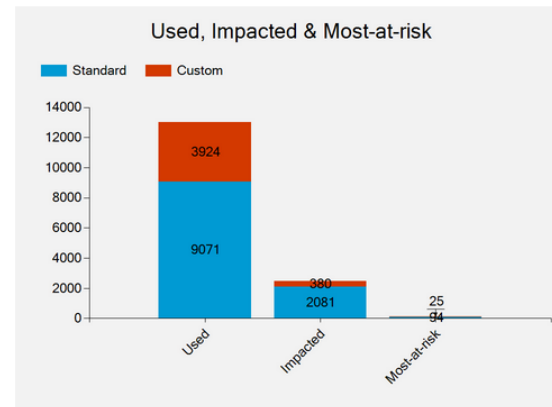


From ActiveControl, Revtrac or other using API's

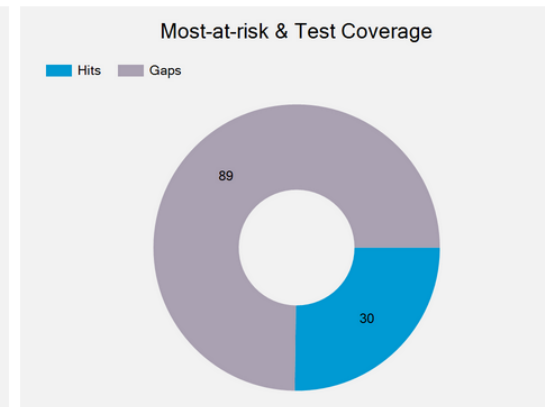


Smart Impact Analysis results

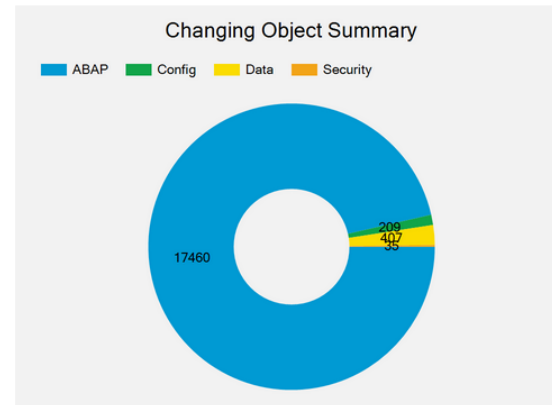
Analysis Date	Analysis System	Performance History	Pipeline
2024-03-13	Learning-DEV	Learning-PHD	Learning
		Dec 2023 - Feb 2024	



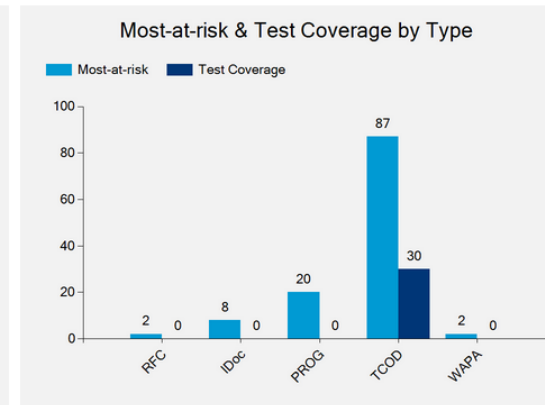
[Used, Impacted & Most-at-risk Description](#)



[Most-at-risk & Test Coverage Description](#)



[Changing Object Summary Description](#)



[Most-at-risk & Test Coverage by Type Description](#)

Smart Impact Analysis results – Details What to Test

APP_AREA	ALL	COVERING	OPTIMAL	TEST_GAPS
(None)	2	0	0	29
Aerospace & Defence Industry Solution	0	0	0	1
Basis Components	24	0	0	1
Controlling	30	1	1	8
Cross-Application Components	6	0	0	2
Enterprise Controlling	6	0	0	0
Financial Accounting	111	11	2	8
Logistics - General	16	7	5	2
Logistics Execution	42	8	4	3
Materials Management	96	23	12	4
Plant Maintenance	6	0	0	8
Production Planning and Control	34	14	3	3
Project System	0	0	0	3
Real Estate Management	0	0	0	12
Sales and Distribution	181	149	2	2
Service	0	0	0	3

A	B
NAME	TEST_COVERAGE
/BDL/SAPLBDL11	Gap
/BDL/SAPLBDL3	Gap
/SPE/CL_DLX_DISPATCH=====CP	Gap
AD23_OUTPUT_DMR_FRONT	Gap
CNV_CDMC_CA_COLLECT_STAT_700	Gap
ZRFREA/DATAADJMCN	Gap
ZRFREISBDOA	Gap
ZRFREISCDF	Gap
ZRFREISRO	Gap
ZRISERNR1	Gap
ZRM06BL00	Gap
ZRM06EHBE	Gap
ZRMCBNERP	Gap
ZRSSPAM30	Gap
ZRVKRED77	Gap
ZRWVWKLASS	Gap
SAPF1105	Gap
SAPLACEP55	Gap
SAPLSPAM	Gap
ZDELS	Gap

Testing Details report shows:

- All available Testcases by application area
- Testcases covering changes
- Optimal testcases to test changes
- Changes not covered by testcases

APP_AREA	TEST_REPOSITORY_TYPE	TEST_REPOSITORY_NAME	TEST_NAME	STATUS	RISK	TEST_DATA	TESTED_OBJECTS	TEST_PATH
Sales and Distribution	Tosca	Learning	VA01 - Create	Optimal	H			1 /AcmeInc_Import/Accelerators/SAI
Sales and Distribution	Tosca	Learning	VA01 - Create	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Create	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Create	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Create Sales Order	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Create Sales Order	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Create Sales Order	Covering	H			1 /AcmeInc_Import/TestCases/10 Ir
Sales and Distribution	Tosca	Learning	VA01 - In Work Test Case	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - In Work Test Case	Covering	H			1 /AcmeInc_Import/Projects/Project
Sales and Distribution	Tosca	Learning	VA01 - Rejected Test Case	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Rejected Test Case	Covering	H			1 /AcmeInc_Import/Projects/Project
Sales and Distribution	Tosca	Learning	VA01 - Review Test Case	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA01 - Review Test Case	Covering	H			1 /AcmeInc_Import/Projects/Project
Sales and Distribution	Tosca	Learning	VA02 - Change	Covering	H			1 /AcmeInc_Import/Accelerators/SAI
Sales and Distribution	Tosca	Learning	VA02 - Change	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA02 - Change	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA02 - Change	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA02 - Change	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA03 - Display	Covering	H			1 /AcmeInc_Import/Accelerators/SAI
Sales and Distribution	Tosca	Learning	VA03 - Display	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA03 - Display	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	VA03 - Display	Covering	H			1 /AcmeInc_Import/Import_import20
Sales and Distribution	Tosca	Learning	Yet Another Sales Order Test	Covering	H			1 /AcmeInc_Import/ExcudeFromSync
Sales and Distribution	Tosca	Learning	VF01 - Create	Optimal	M			1 /AcmeInc_Import/Accelerators/SAI

Smart Impact Analysis results – Details Why to Test

	A	B	C	D	E	F	G	H	I	
1	APP_AREA	TEST_REPOSITORY_TYPE	TEST_REPOSITORY_NAME	TEST_NAME	STATUS	RAT	TESTED_OBJECT	RIS	CHANGED_OBJECT	TEST_PATH
180	Sales and Distribution	Tosca	Learning	VA01 - Create	Optimal	H	VA01	H		11 /AcmeInc_Import/Accelerators/SAP ECC Acc
203	Sales and Distribution	Tosca	Learning	VF01 - Create	Optimal	H	VF01	M		1 /AcmeInc_Import/Accelerators/SAP ECC Acc

	A	B	C	D	E	F	G	H
1	CHANGE_ID	CHANGE_TYP	CHANGE_NAME	CHANGE_STAT	DEPT	TYP	NAME	DYN
54	SAPK-60016INECCDIMP	ENHO	/NFM/SD SAPMV45A	Different		2 TCOD	VA01	1
56	SAPK-60016INECCDIMP	ENHO	/SAPHT/DRM LOTMGMT SAPMV45A	Different		2 TCOD	VA01	1
68	SAPK-60016INECCDIMP	ENHO	/SAPHT/SW LIC BU VERS SAPMV45A	Different		2 TCOD	VA01	1
95	SAPK-60016INECCDIMP	ENHO	/SAPMP/FDE SD SAPMV45A	Different		2 TCOD	VA01	1
07	SAPK-60016INECCDIMP	ENHO	/SAPMP/GENERAL SAPMV45A	Different		2 TCOD	VA01	1
23	SAPK-60016INECCDIMP	ENHO	/SAPMP/OB GENERAL SAPMV45A	Different		2 TCOD	VA01	1
59	SAPK-60016INECCDIMP	ENHO	/SAPMP/SALES ORDER V SAPMV45A	Different		2 TCOD	VA01	1
65	SAPK-60016INECCDIMP	ENHO	DIMP GENERAL SAPMV45A	Different		2 TCOD	VA01	1
94	EH4K900056	INCL	MV45AFZZ	Different		4 TCOD	VA01	2
60	EH4K901755	TABL	TVAKT	Different		3 TCOD	VA01	
62	EH4K901755	TABL	TVAKZ	Different		3 TCOD	VA01	

Smart Impact Analysis Function Details

	A	B	C	D	E	F	G
1	APP_AREA	NOT_IMPACTED	IMPACTED	MOST_AT_RISK	TEST_HITS	TEST_GAPS	IMPACTFUL_CHANGES
2	(None)	9305	420	29	0	29	145
3	Materials Management	20	213	17	13	4	36
4	Real Estate Management	25	44	12	0	12	20
5	Financial Accounting	206	429	10	2	8	16
6	Controlling	23	174	9	1	8	16
7	Plant Maintenance	3	50	8	0	8	76
8	Logistics - General	13	75	7	5	2	23
9	Logistics Execution	10	113	7	4	3	12
10	Production Planning and Control	5	24	6	3	3	17
11	Sales and Distribution	24	107	4	2	2	15
12	Project System	38	53	3	0	3	10
13	Service	0	2	3	0	3	30
14	Cross-Application Components	168	242	2	0	2	2
15	Aerospace & Defence Industry Solution	0	3	1	0	1	4
16	Basis Components	616	115	1	0	1	41
17	Accounting - General	1	0	0	0	0	0
18	Application Platform	3	17	0	0	0	0
19	Bank Components	11	42	0	0	0	0
20	Customer Service	2	5	0	0	0	0
21	Defense Forces and Public Security	2	1	0	0	0	0
22	Enterprise Controlling	3	32	0	0	0	0
23	Environment, Health and Safety	0	3	0	0	0	0
24	Financial Services	0	2	0	0	0	0
25	Financials	34	31	0	0	0	0
26	Governance, Risk and Compliance	5	0	0	0	0	0
27	Industry-Specific Component Automotive	0	3	0	0	0	0
28	Investment Management	2	47	0	0	0	0
29	Payroll	2	6	0	0	0	0
30	Personnel Management	1	19	0	0	0	0
31	Personnel Time Management	2	5	0	0	0	0
32	Public Sector Management	2	2	0	0	0	0
33	Quality Management	0	8	0	0	0	0
34	SAP Business Information Warehouse	3	27	0	0	0	0
35	SAP Healthcare - Industry-Specific Components for Hospitals	0	2	0	0	0	0
36	SAP NetWeaver Master Data Management	3	2	0	0	0	0
37	SAP Utilities	0	5	0	0	0	0
38	Supply Chain Management	2	15	0	0	0	0
39	Treasury	0	4	0	0	0	0

Function Details report shows per application area:

- All used transactions not impacted
- Used TCodes Impacted
- Used TCodes defined Most At Risk
- Most at Risk TCodes covered by testcases (HITS)
- Most at Risk TCodes not covered by testcases (GAPS)
- Amount of changes creating impact

Impact App - Most at Risk Drill Down Report

Application Area

Impacted
TCode to Test

Objects impacting the
TCode

Usage

	A	B	C	D	E	F	G	H	I	J	K	L
1	APP_AREA	TYP	NAME	STATUS	RISK	IMPACTFUL_OBJECTS	DESCRIPTION	TEST	USAGE	USEFUL	CUST	BUSINESS_CRITICAL
10	Sales and Distribution	TCOD	VA01	Most-at-risk	H	11	Create Sales Order	1	2343555	295		Y
63	Sales and Distribution	TCOD	VA11	Most-at-risk	H	2	Create Inquiry		1843170	53		
119	Sales and Distribution	IDOC	INVOIC02	Most-at-risk	M	1	Invoice/Billing document		1			
120	Sales and Distribution	TCOD	VF01	Most-at-risk	M	1	Create Billing Document	1	1290109	408		
2335	Sales and Distribution	PROG	CMSR_OUTPUT_ENTRY	Impacted			CMS Report program to redirect the flow to CMS Plugin components		1			
2336	Sales and Distribution	PROG	SDADIN02	Impacted			Data Selection Program for Form for Invoice		1			
2337	Sales and Distribution	PROG	UKM_RVKRED77	Impacted			SD: Creates XI Messages for Liability Update in Credit Management		97	2		
2338	Sales and Distribution	TCOD	ALO1	Impacted			Determine ASH/DOREX Relationships		2	1		
2339	Sales and Distribution	TCOD	CO09	Impacted			Availability Overview		27	1		
2340	Sales and Distribution	TCOD	MCTC	Impacted			SIS: Material Analysis - Selection		1	1		
2341	Sales and Distribution	TCOD	MCTE	Impacted			SIS: Sales Org. Analysis - Selection		3	1		
2342	Sales and Distribution	TCOD	NACE	Impacted			WFMC: Initial Customizing Screen		1105	35		

1	CHANGE_ID	CHILD_TYPE	CHILD_NAME	CHILD_STATUS	DEPT	TYP	NAME	DY
54	SAPK-60016INECCDIMP	ENHO	/NFM/SD SAPMV45A	Different	2	TCOD	VA01	1
56	SAPK-60016INECCDIMP	ENHO	/SAPHT/DRM LOTMGMT SAPMV45A	Different	2	TCOD	VA01	1
68	SAPK-60016INECCDIMP	ENHO	/SAPHT/SW LIC BU VERS SAPMV45A	Different	2	TCOD	VA01	1
95	SAPK-60016INECCDIMP	ENHO	/SAPMP/FDE SD SAPMV45A	Different	2	TCOD	VA01	1
107	SAPK-60016INECCDIMP	ENHO	/SAPMP/GENERAL SAPMV45A	Different	2	TCOD	VA01	1
123	SAPK-60016INECCDIMP	ENHO	/SAPMP/OB GENERAL SAPMV45A	Different	2	TCOD	VA01	1
159	SAPK-60016INECCDIMP	ENHO	/SAPMP/SALES ORDER V SAPMV45A	Different	2	TCOD	VA01	1
263	SAPK-60016INECCDIMP	ENHO	DIMP GENERAL SAPMV45A	Different	2	TCOD	VA01	1
394	EH4K900056	INCL	MV45AFZZ	Different	4	TCOD	VA01	2
460	EH4K901755	TABL	TVAKT	Different	3	TCOD	VA01	
462	EH4K901755	TABL	TVAKZ	Different	3	TCOD	VA01	

```
Include: MV45AFZZ
General  DE Header  DE Code
1 FORM USEREXIT_DELETE_DOCUMENT.
2 ENDFORM.
3 FORM USEREXIT_FIELD_MODIFICATION.
4 ENDFORM.
5 FORM USEREXIT_MOVE_FIELD_TO_VARA.
6 ENDFORM.
7 FORM USEREXIT_MOVE_FIELD_TO_VARP.
8 ENDFORM.
9 FORM USEREXIT_MOVE_FIELD_TO_VARD.
10 ENDFORM.
11 FORM USEREXIT_MOVE_FIELD_TO_VARO.
12 ENDFORM.
13 FORM USEREXIT_PREDEFINE_PREPARE_TFORM.
14 ENDFORM.
15 FORM USEREXIT_PREDEFINE_PREPARE_TFORM.
16 ENDFORM.
17 FORM USEREXIT_PREDEFINE_PREPARE_TFORM.
18 ENDFORM.
19 FORM USEREXIT_DELETE_DOCUMENT.
20 ENDFORM.
21 FORM USEREXIT_READ_DOCUMENT.
22 ENDFORM.
23 FORM USEREXIT_SAVE_DOCUMENT.
24 ENDFORM.
25 FORM USEREXIT_SAVE_DOCUMENT.
26 ENDFORM.
27 FORM USEREXIT_SAVE_DOCUMENT.
28 ENDFORM.
29 FORM USEREXIT_SAVE_DOCUMENT.
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93 FORM USEREXIT_SAVE_DOCUMENT.
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95 FORM USEREXIT_SAVE_DOCUMENT.
96 ENDFORM.
97 FORM USEREXIT_SAVE_DOCUMENT.
98 ENDFORM.
99 FORM USEREXIT_SAVE_DOCUMENT.
100 ENDFORM.
```

Impact App Hits & Gaps

Test Hits

1	APP_AREA	TEST_REPOSITORY_TYPE	TEST_REPOSITORY_NAME	TEST_NAME	STATUS	RAV	TESTED_OBJECT	HAS_DATA	COMMON_TEST	TEST_PATH
55	Sales and Distribution	Tosca	Learning	0101 TC WithModule + With TestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/01 TestCases
56	Sales and Distribution	Tosca	Learning	0102 TC WithModule + No TestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/01 TestCases
57	Sales and Distribution	Tosca	Learning	0103 TC WithModule + Disabled TestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/01 TestCases
58	Sales and Distribution	Tosca	Learning	0104 TC WithModule + Disabled TestStep	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/01 TestCases
59	Sales and Distribution	Tosca	Learning	0201 TC with VA01 token in Name	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/02 TestCases
60	Sales and Distribution	Tosca	Learning	0202 TC with token in TestStepName	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/02 TestCases
61	Sales and Distribution	Tosca	Learning	0203 TC with token in TestStepValueName	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/02 TestCases
62	Sales and Distribution	Tosca	Learning	0204 TC with VA01 token in TestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/02 TestCases
63	Sales and Distribution	Tosca	Learning	0301 TC WithModule + With TestStepValue-InWork	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
64	Sales and Distribution	Tosca	Learning	0302 TC WithModule + With TestStepValue-Planned	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
65	Sales and Distribution	Tosca	Learning	0303 TC with VA01 token in Name-InWork	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
66	Sales and Distribution	Tosca	Learning	0304 TC with VA01 token in Name-Planned	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
67	Sales and Distribution	Tosca	Learning	0305 TC with VA01 token in Name-Completed	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
68	Sales and Distribution	Tosca	Learning	0306 TC WithModule + With TestStepValue-Completed	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/03 TestCases
69	Sales and Distribution	Tosca	Learning	0402 TC WithTestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/04 Templates
70	Sales and Distribution	Tosca	Learning	0403 TC WithoutTestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/04 Templates
71	Sales and Distribution	Tosca	Learning	0501 TC with RTSB	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/05 RTSBs/050
72	Sales and Distribution	Tosca	Learning	0503 TC with RTSB with parameter	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/05 RTSBs/050
73	Sales and Distribution	Tosca	Learning	0604 TC with VA01 token in TestStepValue	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/06 TestCases
74	Sales and Distribution	Tosca	Learning	0701 Manual TC VA01	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/LiveCompare/TestCases/07 Manual Te
75	Sales and Distribution	Tosca	Learning	A P1 Test of VA01	Covering	M	VA01		VA01	/AcmeInc_Import/TestCases/P1/A P1 Test of VA01
76	Sales and Distribution	Tosca	Learning	A P2 Test of VA01	Covering	M	VA01		VA01	/AcmeInc_Import/TestCases/P2/A P2 Test of VA01
77	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Import_import210722_0952/Projects/Project B/
78	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Projects/Project B/Test Cases/COMPLETED/Test
79	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Import_import210722_0949/TestCases/Tests wi
80	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Import_import210722_0949/TestCases/Manual
81	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Import_import210722_0952/TestCases/Tests wi
82	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/Import_import210722_0952/TestCases/Manual
83	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/TestCases/Tests with References/Create Sales C
84	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/TestCases/Manual Tests for Execution/Create Si
85	Sales and Distribution	Tosca	Learning	Create Sales Order	Covering	M	VA01		VA01	/AcmeInc_Import/TestCases/A/B (A) C (B) (A) Create Sales Order

Test Hits, ExecutionList in Tosca

Name
QHL Functional Tests_2024-03-18 09:46:44
ActualLog
LB02 - Change
CS20 - Mass Changes
CS21 - Mass Changes
MD04 - Stock/Requirements List
ZDEBS - Delete Buffer

Auto Execution though Dex

Name
TestEvents
QHL Functional Tests_2024-03-18 09:46:44
Any
QHL Functional Tests_2024-03-18 09:46:44

Test Gaps

NAME	TEST_COVERAGE
ZSD_RVADDN01_HQ_PRINTS	Gap
SAPLXCO1	Gap
ZWM21	Gap
VL02N	Hit
ZMM_BR_GM	Gap
Z_MM_GSP_SEND_MATMAS	Gap
/SPE/STO_ID_PROCESSING	Gap
SAPLLMGT	Gap
ZQM_BATCH_UPDATE	Gap
MB31	Gap
SAPF110S	Gap
COOISPI	Gap
MD04	Gap
QA11	Hit
/ISDFPS/EPA_PRINT_ADOBE_FORM	Gap
ZSD_BR_GI	Gap
BAPI_OUTB_DELIVERY_CHANGE	Gap
ZEWM_TRF_BATMAS_IDOC	Gap
ZEWM02	Gap
ZEWM002	Gap
ZEWM02	Gap
ZLO_TRANSFER_HU_ASSIGNMENT	Gap
ZQM_SAVE_UD	Gap
ZMM_BATCH_INITIALIZE	Gap
ZMM_USEREXIT2078	Gap
Z_EWM_IL_UD_CHANGE	Gap

Test Gaps

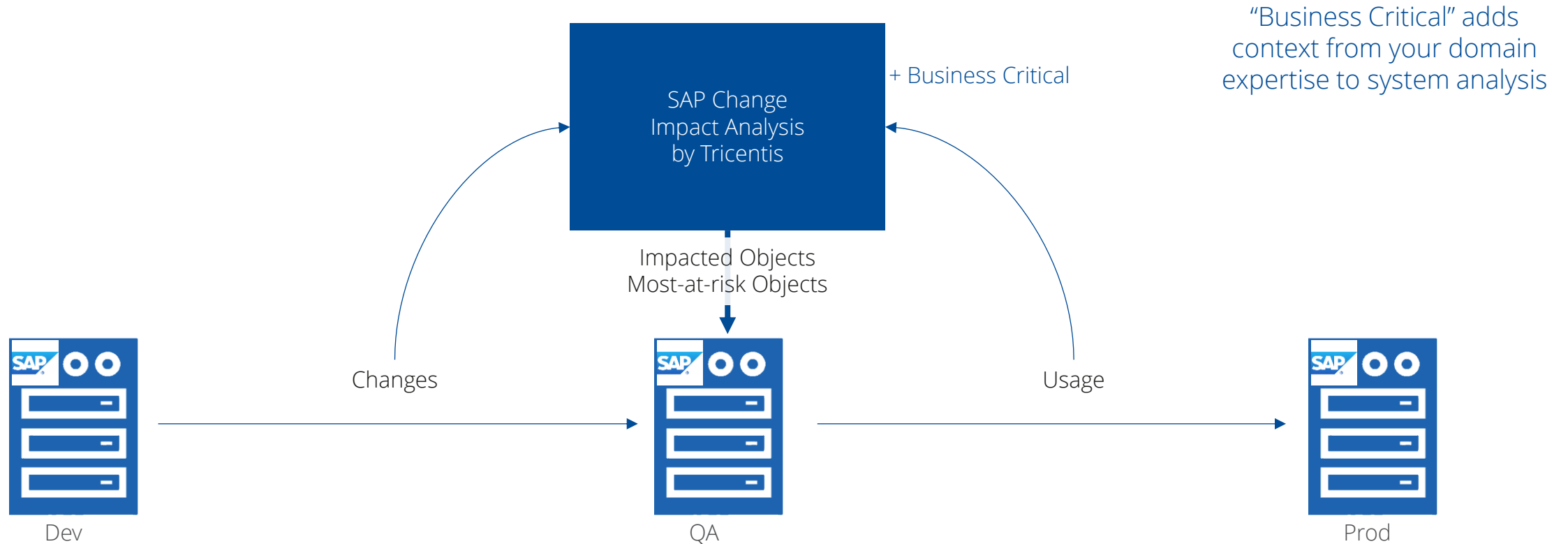
Name	Frequency class	Damage class	Weight
QHL Functional Test Gaps Sprint 2024-11			
BASIS COMPONENTS	1	1	4
CONTROLLING	1	4	32
FINANCIAL ACCOUNTING	1	1	4
FINANCIALS	3	4	128
BNK_APP	3	4	128
PERSONNEL MANAGEMENT	1	4	32
PRODUCTION PLANNING AND CONTROL	1	3	16
SALES AND DISTRIBUTION	4	3	128
VL01N	4	3	128

Demo

Questions ?

Backup

Source of Heuristics



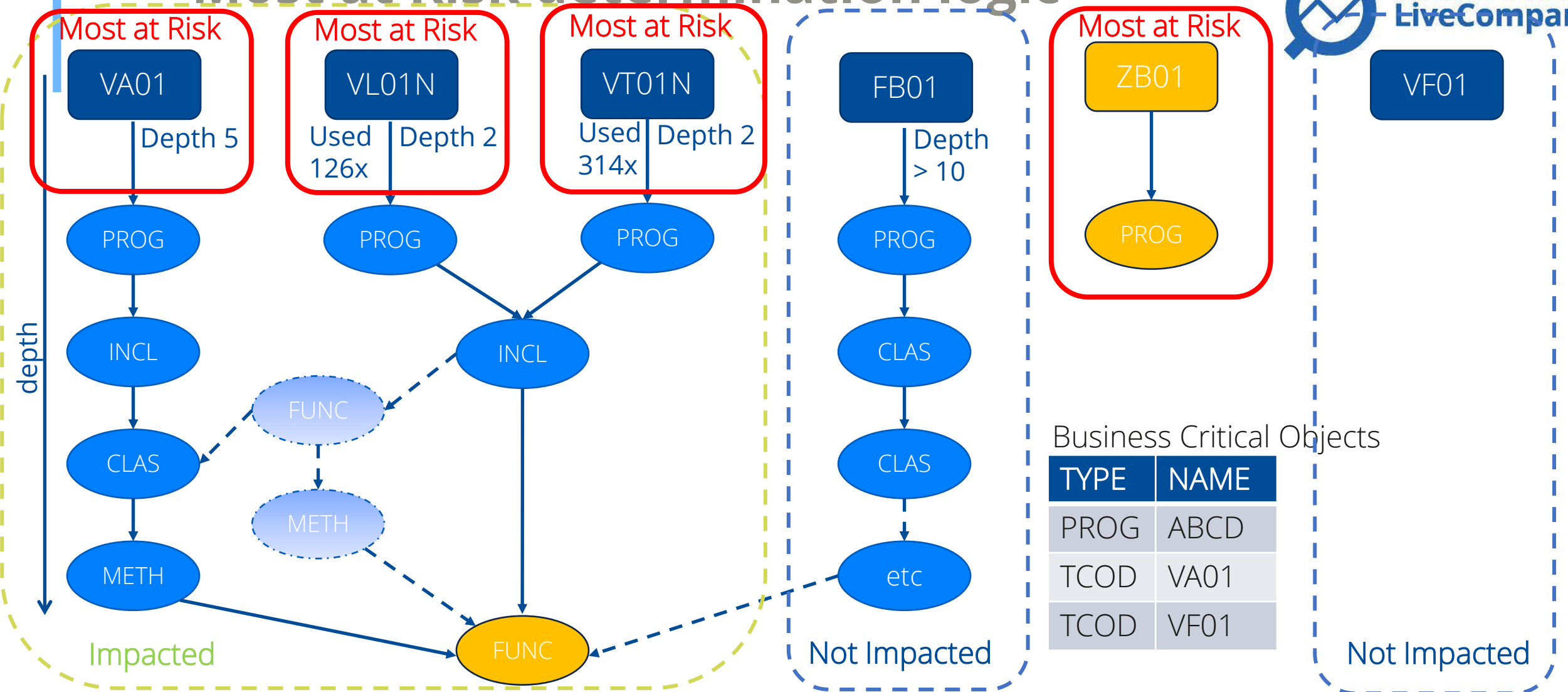
Impacted =

Objects with a relation to a changed object

Most-at-risk =

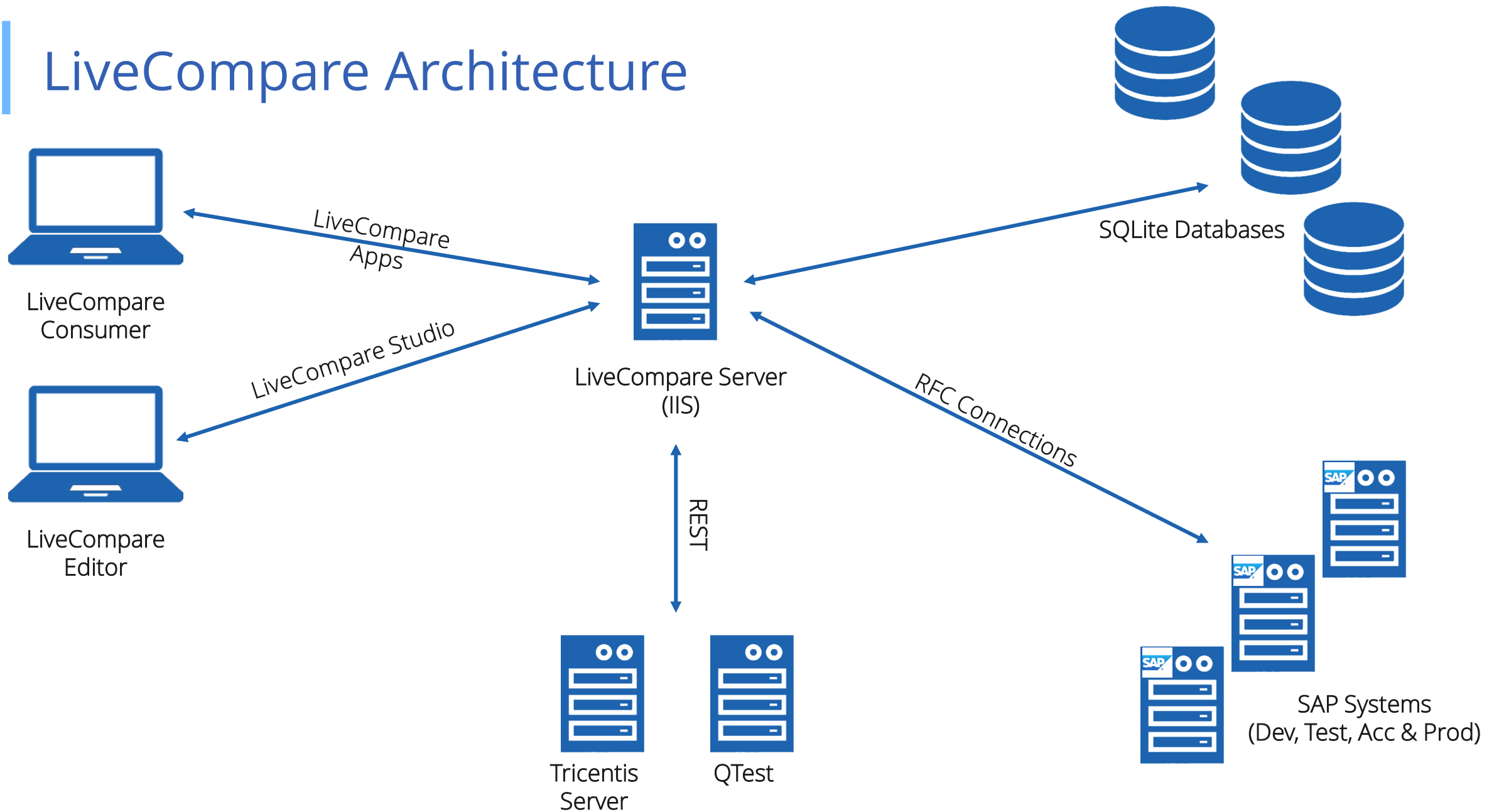
Impacted objects that are Most At Risk
Using, Depth, Usage & Business criticality

Most at Risk determination logic

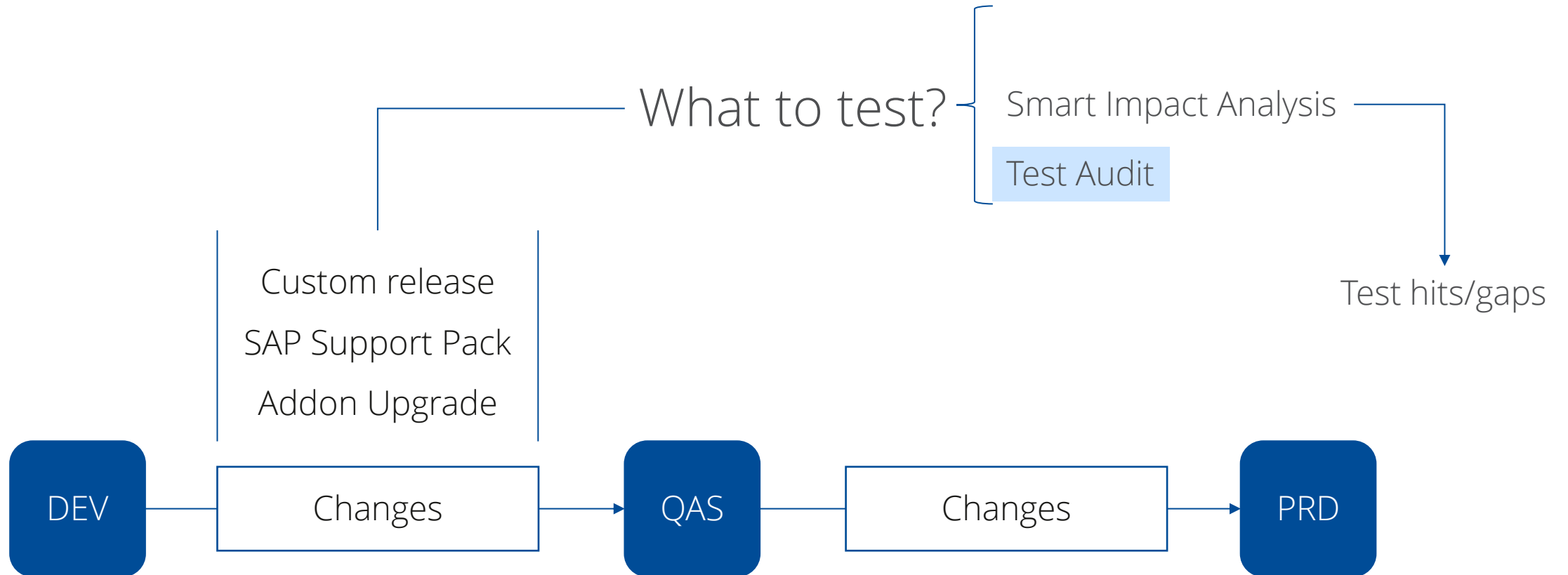


A TestRepository Search will be executed for all Impacted Executable Objects (Most at Risk is a subset of Impacted)
All testcases found for the Impacted Executable Objects will be a **HIT**
All Most At Risk Executable objects for which no testcases are found, are a **GAP**

LiveCompare Architecture



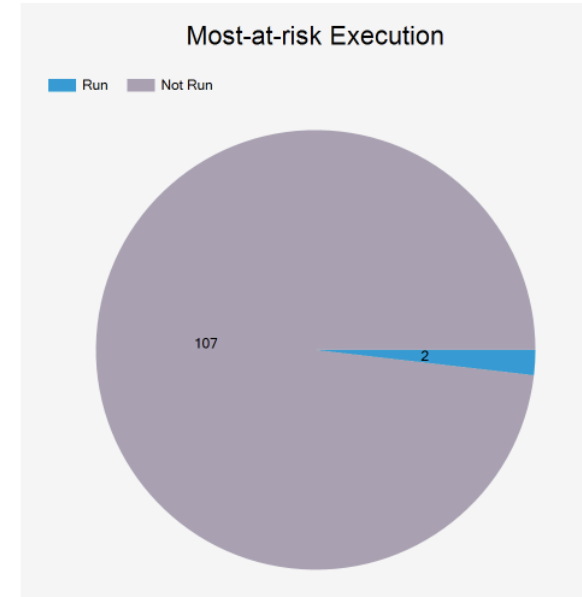
Did we cover the risk ?



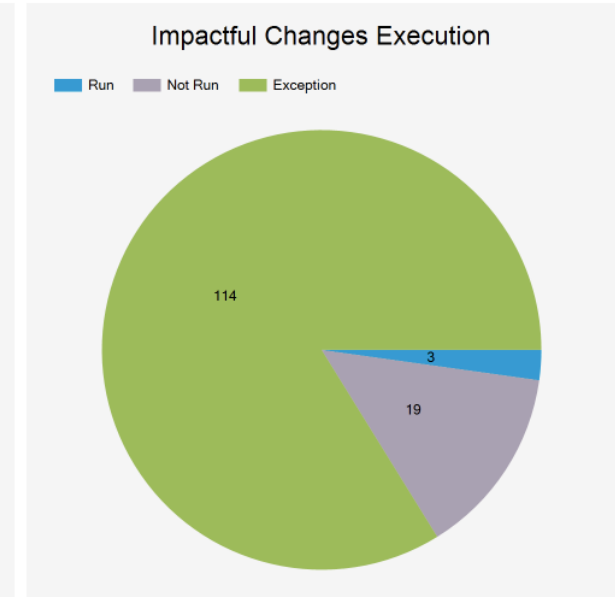
Who: testers, key users, developers, SMEs.

Test Audit Capabilities

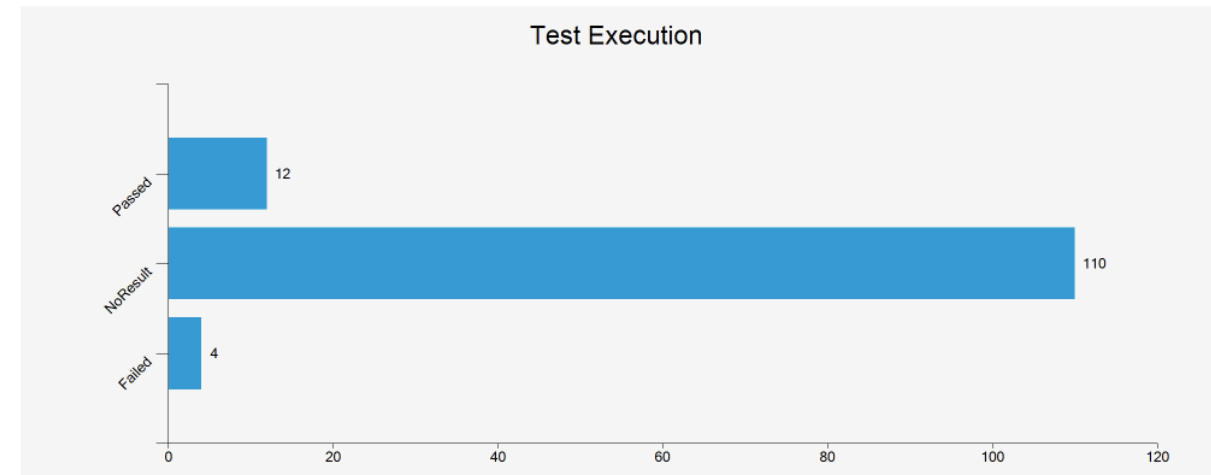
- Verifies if the Testable Object (Transaction, Fiori, Program) has been executed in the QA environment
- Gives the status (Pass, Fail, Not run) of the Test Execution from Test Tool (Tosca, qTest)
- Checks to see if the Impactful Object (Function, Include, Class etc) was run in the QA environment



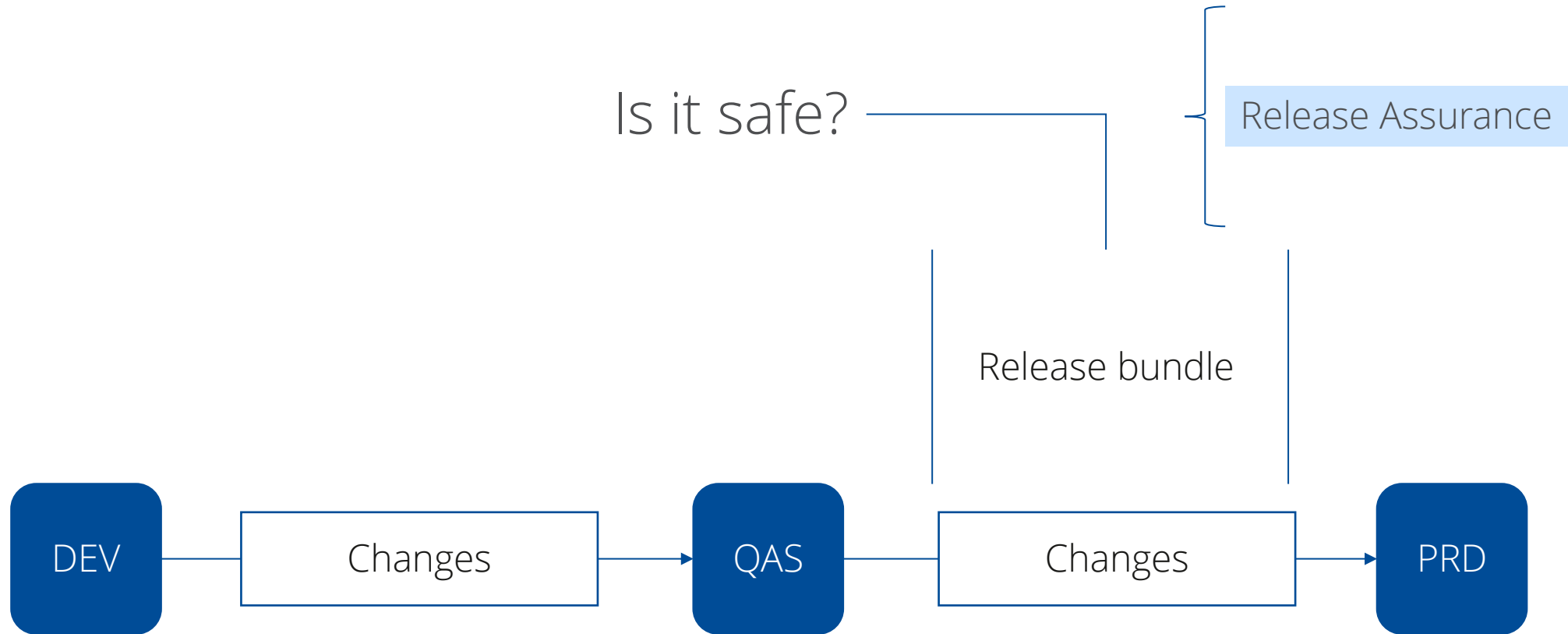
[Most-at-risk Execution Description](#)



[Impactful Changes Execution Description](#)

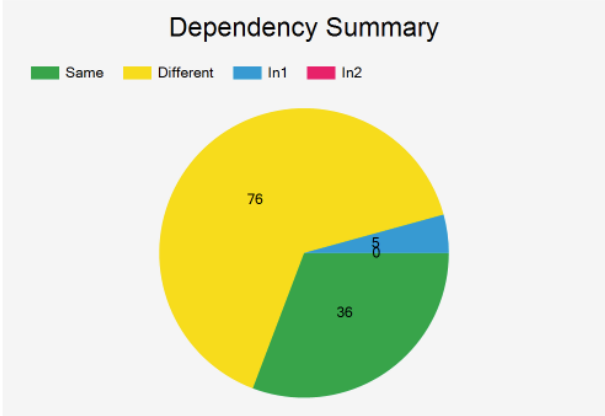
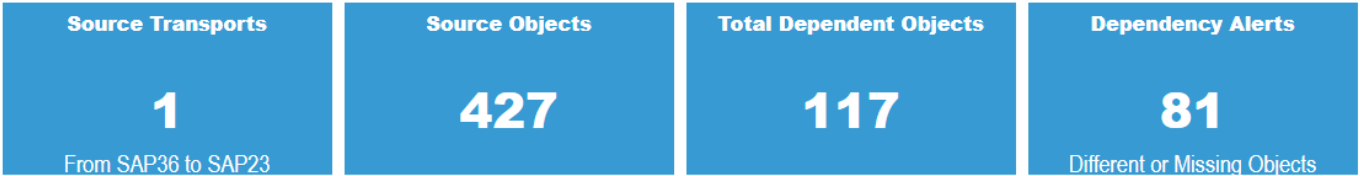


Is it safe to go-live ?

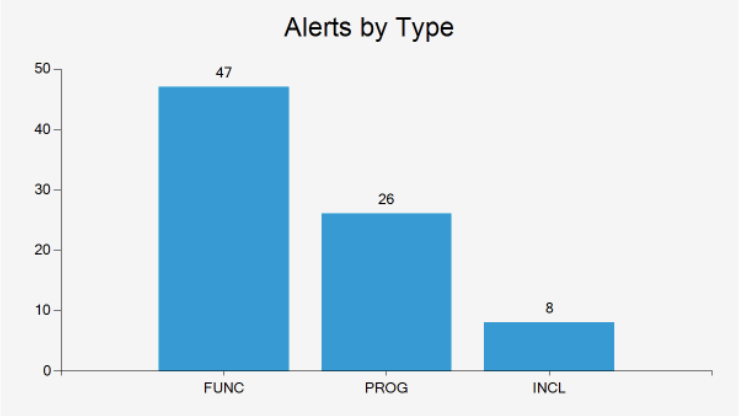


Who: basis admin/ops.

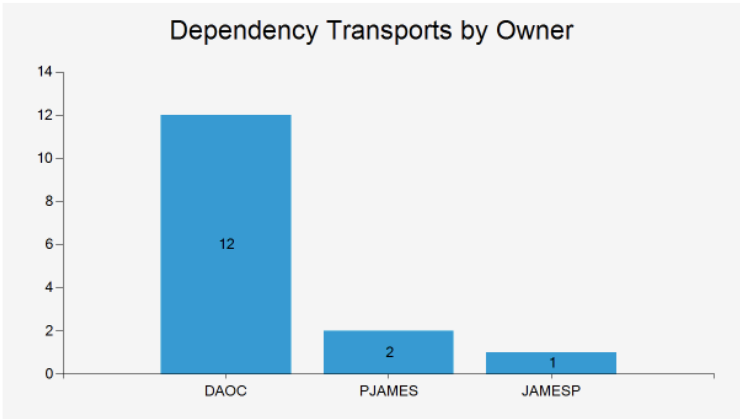
Release Assurance Dashboard



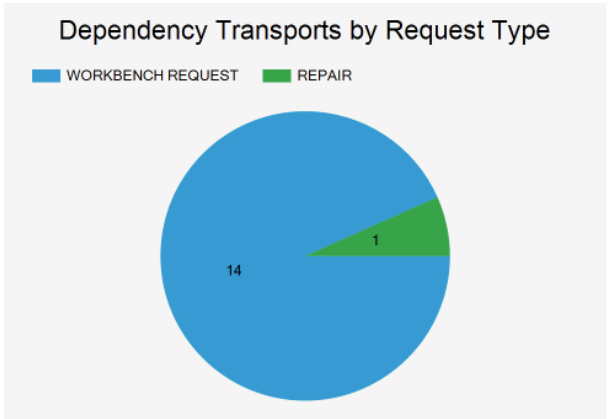
[Dependency Summary Description](#)



[Alerts by Type Description](#)



[Dependency Transports by Owner Description](#)



[Dependency Transports by Request Type Description](#)

Summary



Identify the Risk ?

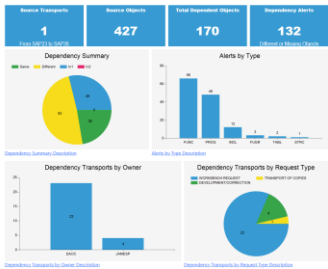
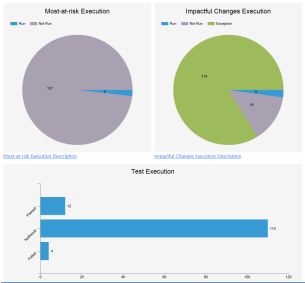
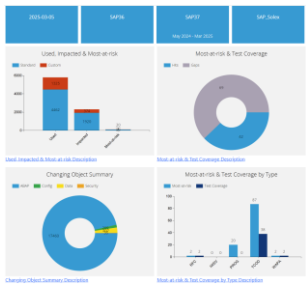
Smart Impact Analysis

Did we cover the Risk ?

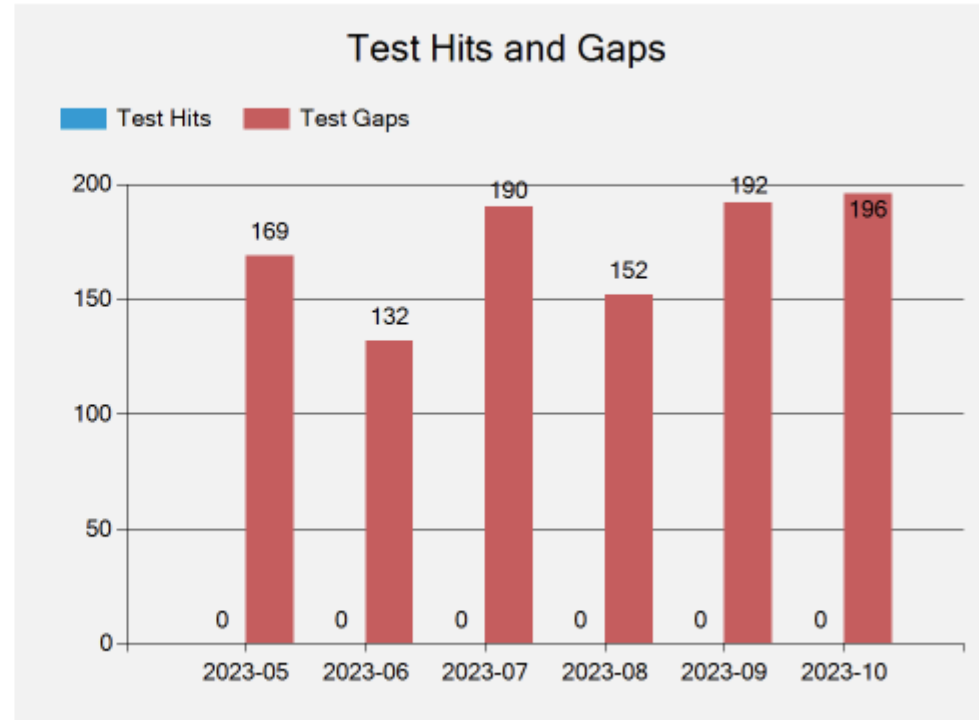
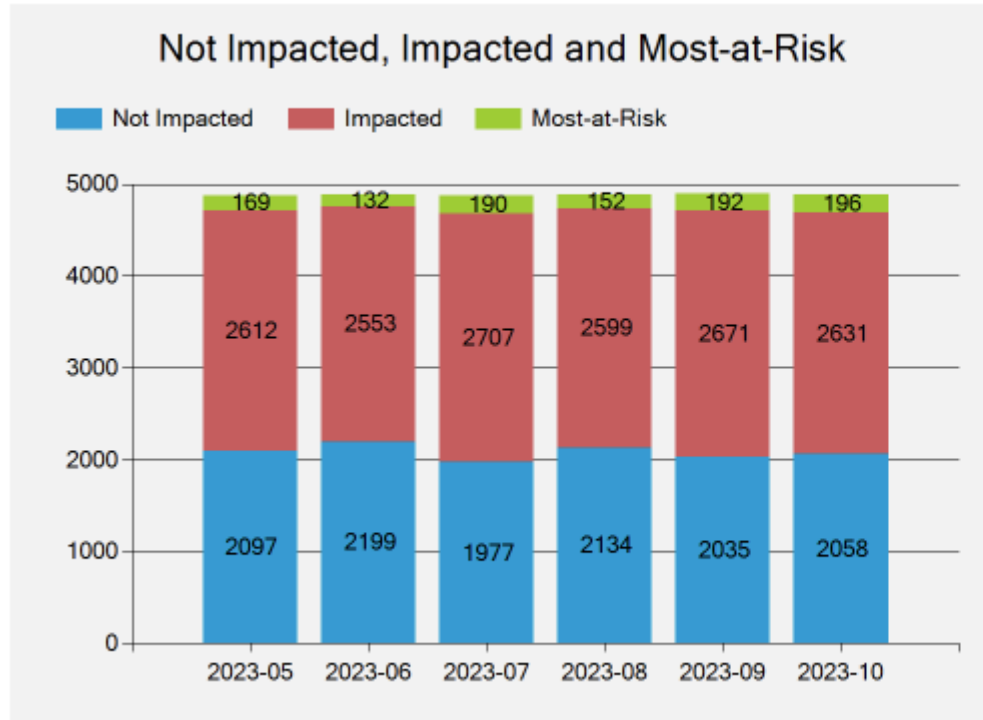
Test Audit

Is it safe?

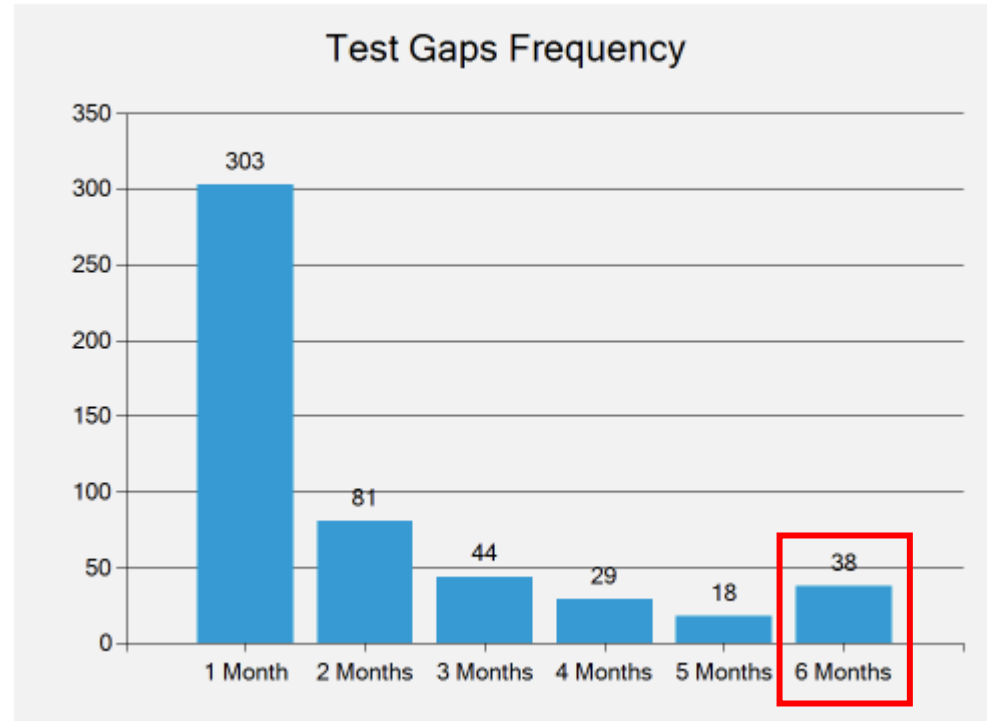
Release Assurance



Test Quality Audit



Test Quality Audit



APP_AREA	MONTHS	TO_BE_TESTED_OBJECT
Custom	6	ZMIM_STOCK_TRANSFER_SITE
Custom	6	/OPT/SAPLVIM_ICC
Custom	6	Z_GET_ORDER_TYPE
Custom	6	ZMM_POREL
Custom	6	ZFM_PS_PMWEB_PO
Sales and Distribution	6	/1SDBF12L/RV14AKZ1
Custom	6	ZTR_BANK_RECONCILE_STMT
Sales and Distribution	6	SAPDV70A
Sales and Distribution	6	VA02
Sales and Distribution	6	RVIVAUFT
Payroll	6	PC00_M14_NCTEA
Materials Management	6	MBSTOCKS
Materials Management	6	ME82
Materials Management	6	ME28
Logistics - General	6	SAPLWSO5
Logistics - General	6	WBTI
Financial Accounting	6	SAPF110S
Financial Accounting	6	RFKORK00
Financial Accounting	6	ZFR_RFBILA00
Financial Accounting	6	RFBISA10
Financial Accounting	6	ZTRM_BRS

Test Automation – where to start ?

38 common Most-at-Risk objects over 6 months' worth of changes

LiveCompare App Examples

ABAP Code Quality Analysis



- Pinpoint coding issues early on SDLC
- Instant feedback for developers
- Data driven insights for commit approvals

Smart Impact Analysis



- Intelligent targeted testing
- 80% reduced testing efforts
- Speeds up release cadences 2-3X

SAP Test Coverage Insights



- Insights into test coverage in every release
- Prioritize time, resources and money in appropriate areas
- Track test coverage trends and monitor progress

Test Audit



- Quality gate for deployment approvals
- Instant feedback for release managers
- Zero defect leakage

N+1 Transport Merge Comparison



- Perform Transport merges 80% faster
- Auto discover code and config conflicts for retrofitting
- Eliminate manual analysis & investigative work

SAP Custom Code Management Insights



- Continuous visibility into custom code
- Manage, govern, optimize customizations
- Track trends and KPI's around custom code
- Eliminate Technical debt

SAP Root-Cause Analysis



- Debug Prod issues 80% faster
- Less resource involvement
- Minimize production downtime

SAP System Synchronization



- Ensure code, config & data stays in sync
- Avoid defects caused by system discrepancies
- Reduced need for system refreshes

S/4 Readiness Assessment



- Compare existing ECC to target S/4
- Key insights to plan, scope and strategize
- Retire dormant custom code
- Remediate existing code to be S/4 ready

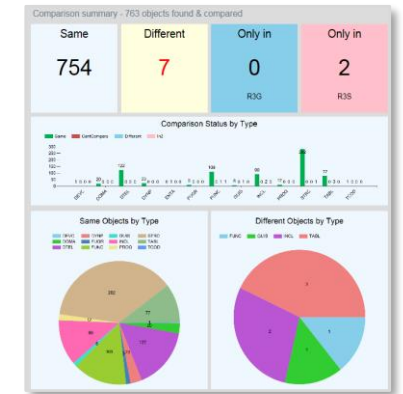
CIA

#1 platform for SAP operational analytics & project intelligence

Real-time actionable insights that help with day-to-day production support and point in time projects

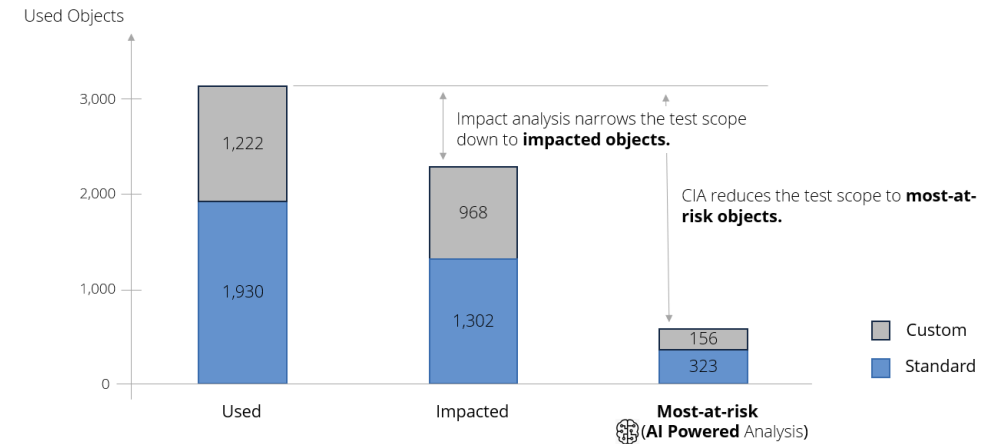
Interactive dashboards & detailed reports that feed your SAP experts the information and data they need to do their jobs faster and better

- ✓ Increase Productivity
- ✓ Speed Testing Cycles
- ✓ Reduce Production Defects
- ✓ Enhances Governance Controls
- ✓ Improves Collaboration.



Business Benefits & ROI:

- Reduced testing scope by 84%
- Reduced production errors by 78%
- Reduced time-to-release by 67%
- Improved application release rate by 300%
- Reduced costs of hypercare by 90%



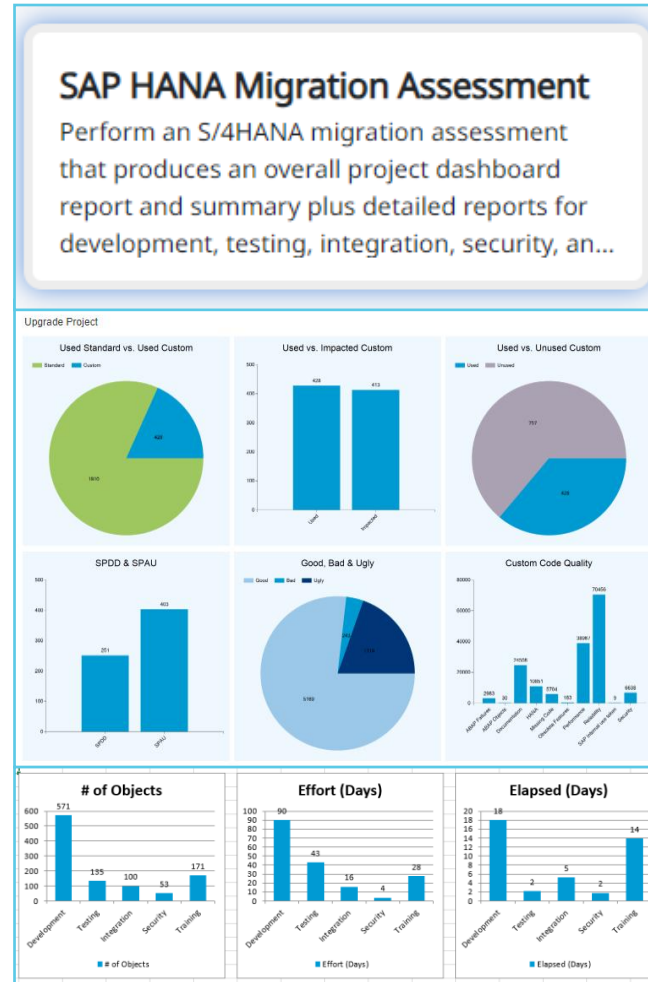
“The benefits of SAP Change Impact Analysis are really clear: less conditions to test, less effort in testing, and less production incidents.” ERP principal test manager, telecommunications

SAP HANA Migration Assessment



The Challenge:

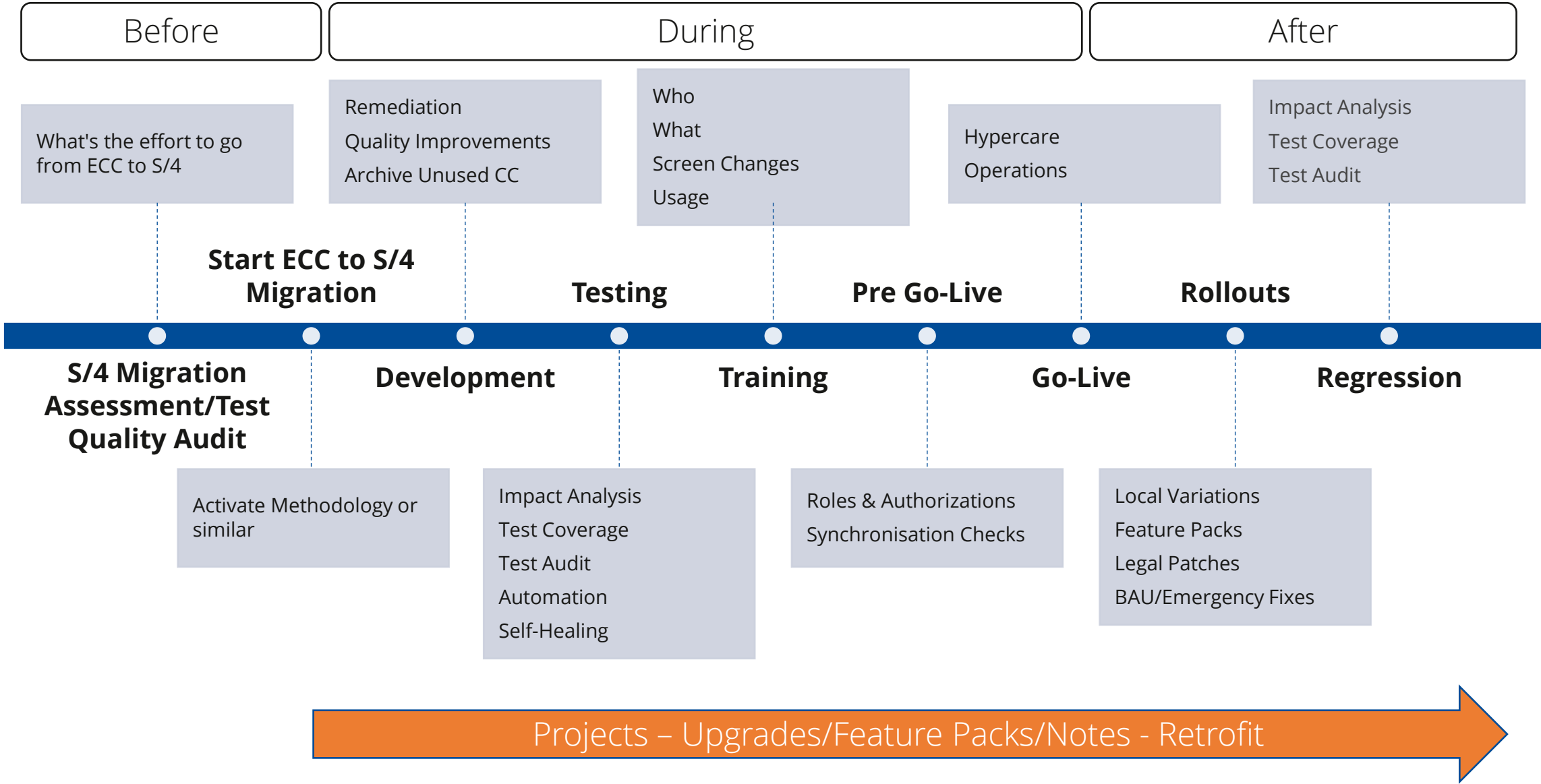
- Understand the impact of moving to S/4
- Greenfield or Brownfield
- How much Custom Code needs fixing
- What Custom Code can be archived
- How much Testing will need to happen
- Are any end users affected
- Which Interfaces are impacted
- What is the best approach (staged or big bang)



Benefits:

- Cloud based S/4 Migration Assessment
- Real As-Is vs To-Be comparison
- Quick to implement, minimum effort required from BASIS team.
- Identify impact on 5 key areas
 - Development
 - Testing
 - Training
 - Integration
 - Security
- Results used to Scope project effort

Typical timeline – S/4 Migration



How it Works



Make an As-is LUX

- 1 Check the integrity of the SAP DEV system's "where used" indexes. [?](#)
- 2 Download your SAP PRD performance history data. [?](#)
- 3 Download the extract program code: [SAP 700 Kernel and Above](#) [?](#)
- 4 Create the extract program on your as-is SAP DEV system. [?](#)
- 5 Run the extract program. [?](#)
- 6 ZIP the output files (if not automatically ZIPped by the extract program). [?](#)
- 7 Use the [LUX utility](#) to upload the ZIP archive to LiveCompare. [?](#)

Congratulations! You now have an as-is LUX.

Make a To-be LUX

- 1 Download data files from as-is LUX. [?](#)
- 2 Download the extract program code: [SAP 700 Kernel and Above](#) [?](#)
- 3 Create the extract program on your to-be SAP DEV system. [?](#)
- 4 Run the extract program. [?](#)
- 5 ZIP the output files (if not automatically ZIPped by the extract program). [?](#)
- 6 Use the [LUX utility](#) to upload the ZIP archive to LiveCompare. [?](#)

Congratulations! You now have a to-be LUX and are ready to run the SAP HANA Migration Assessment app.

ECC to S4 Migration Assessment [?](#)

Parameters

As-Is LUX

To-Be LUX

AAQ Select List
1 items selected [Edit](#)

Covers Five Areas

- Development
- Testing
- Integration
- Security
- Training

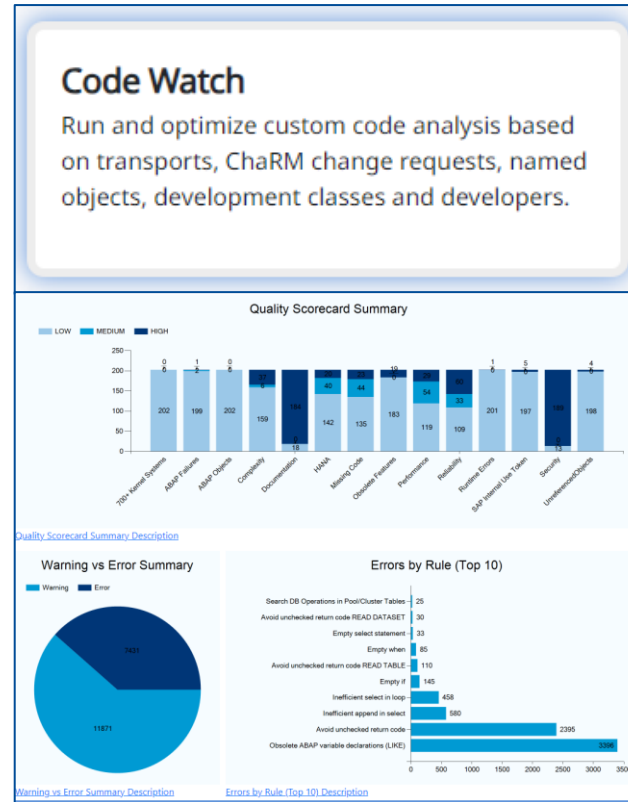
Quick to complete

Development - CodeWatch



The Challenge:

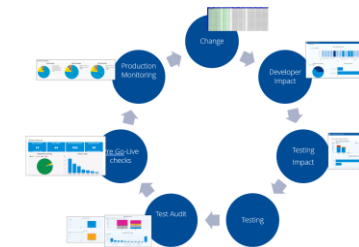
- How good (or bad) is the Custom Code
- Ensure good practice across development teams
- Improve Code Quality in Development
- Stop defects moving through the landscape
- Identify highly complex code



Benefits:

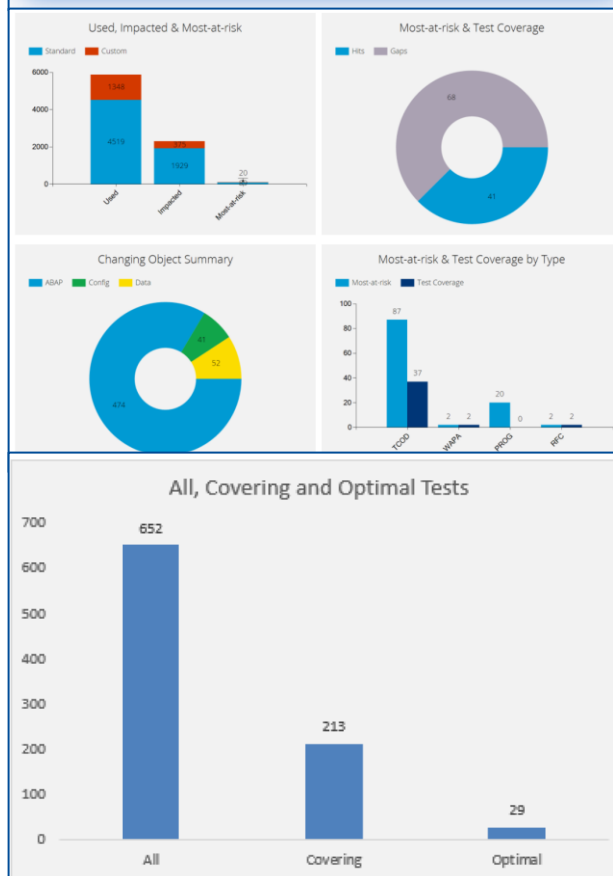
- Shift left on quality. Identify poor coding early on in development cycle and use as quality gate
- Development managers can make data driven decisions
- Instant visibility into coding work being performed by 3rd party system Integrator
- Build quality in vs testing it out farther down the development cycle.
- Elimination of Hidden Risks
- Improved Application Health

Testing - Smart Impact Analysis



Smart Impact

Analyzes the impact of change on your SAP system to find the most-at-risk to test. Specify the change as a list of transports, a ChaRM project, or simply a list of objects. Integrate...



Benefits:

- CIA will identify the Most-at-Risk processes for the new rollout
- Focus testing on the right areas
- Reduce Testing effort by as much as 85%
- Results used to Scope automation
- Increase Test Coverage
- Optimize Test Executions

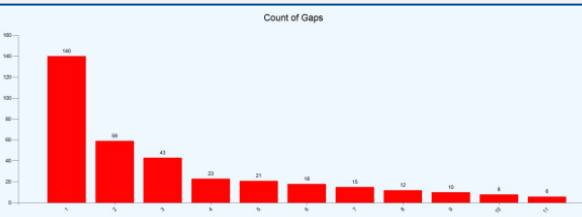
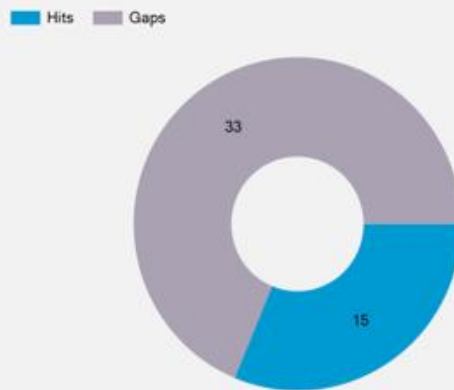
Testing - Coverage & Audit



Test Audit

Reports which Most-at-risk objects (tokens) have been executed in QA, and whether tests for those tokens have been run in your Test Repository.

Most-at-risk & Test Coverage



The Challenge:

- How accurate is your Test Coverage
- Are Test Cases current
- Do you have redundant Test Cases
- Which Test should I run for a Release
- What test cases are missing
- Did we test all the Most At Risk processes

Benefits:

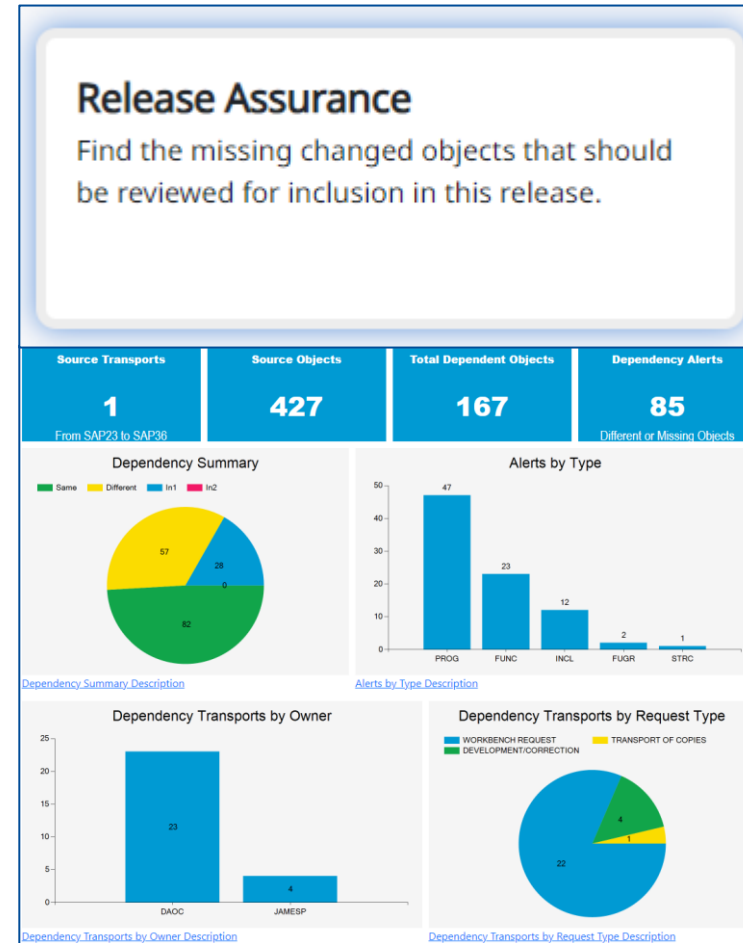
- Understand status of current tests based on actual changes
- Build test execution lists automatically for Test Case Hits
- Build test requirement automatically for Testing Gaps
- Early visibility of Test Coverage for each release
- Audit trail of Test Executions before releasing changes to Prd.

Operations -Release Assurance



The Challenge:

- Is it safe to release changes into Production
- Are there any missing changed dependent objects in the transports



Benefits:

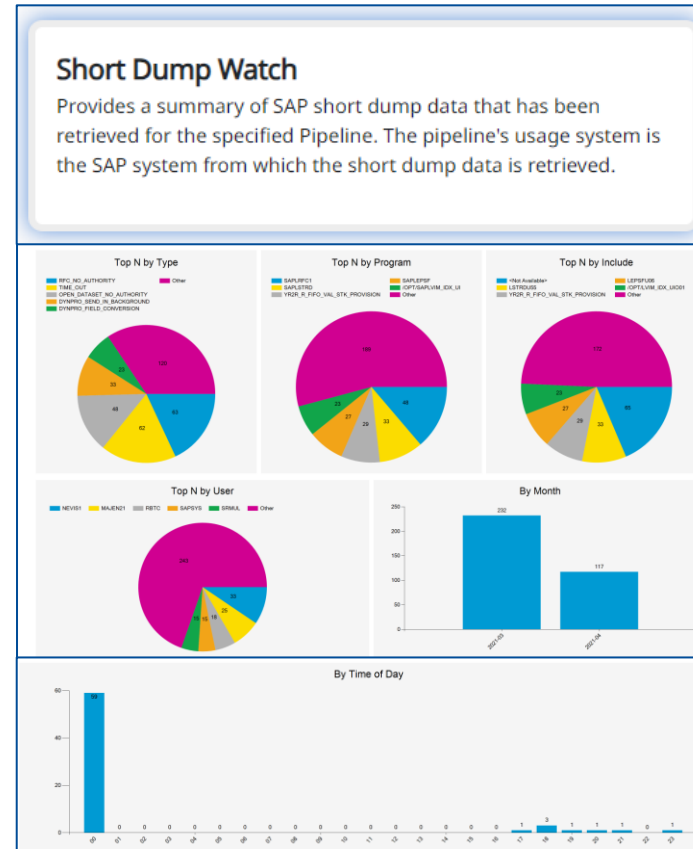
- Final check before releasing into Production
- Missing objects can be fixed before releasing into Prod
- Reduce Defects happening in Prod.

Operations - Short Dump Watch



The Challenge

- Tracking Defects in Production
- Understand trends of defects
 - Do they happen at
 - a certain time of day
 - for particular users
 - for particular objects
 - Do we get more after a go live

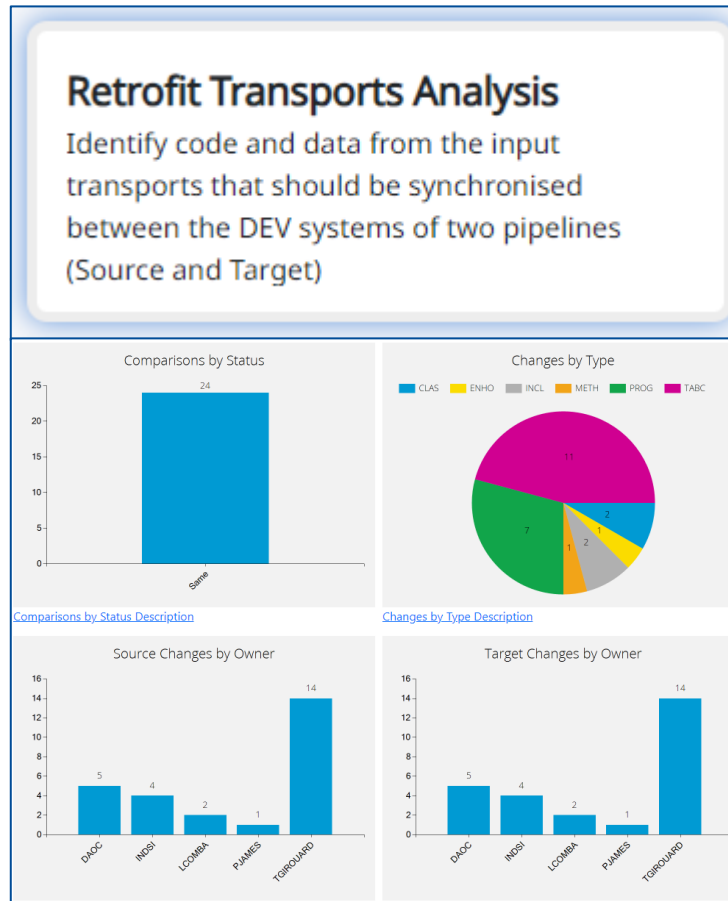


Retrofit Transports Analysis



The Challenge:

- Are the BAU and Project landscapes correctly synchronized
- Dual Maintenance of Code and Configuration
- Verify Project changes will not overwrite BAU changes



Benefits:

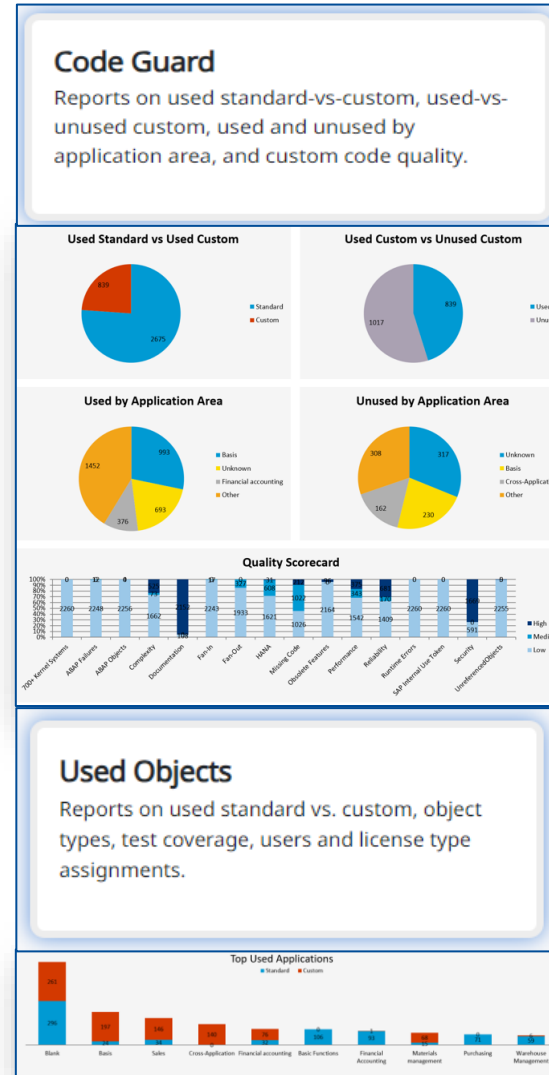
- QA systems configuration and codebase aligned with BAU and Project landscapes
- Identify issues early in the Development phase
- Ensure code, configuration & data across SAP systems are in-sync

Operations - Code Guard & Used Objects



The Challenge:

- Understand current environment when taking over new service contract
- What is being used
- How much Custom Code is being used
- How much Custom Code is not being used
- How good (or bad) is the Custom Code)
- How many users are using the system
- What modules make up the implementation



Benefits:

- Clear, continuous visibility into your custom code. To manage, maintain, govern and optimize
- Monitor which application areas are being customized the most/least.
- Observe which users are utilizing your custom code the most/least
- Ensure good quality code is being written and best practice coding standards are being met
- Eliminate technical debt and uncover custom code that can be retired.
- Identify custom code that can be reverted to standard code
- Track key trends and KPI's around custom code

Comparison Analytics



The Challenge:

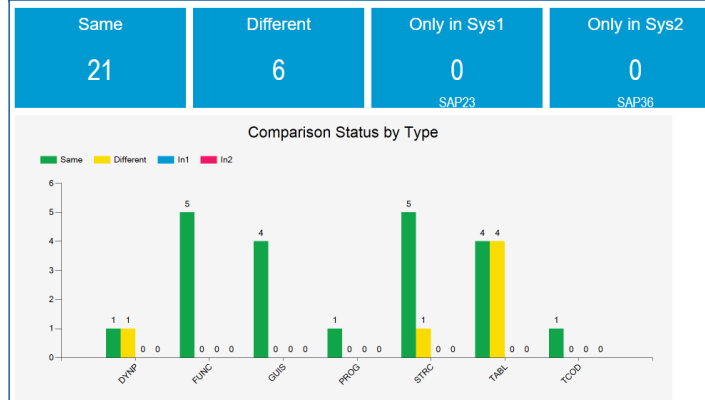
- Understand where there are differences between systems
- Keeping systems in Synchrony
- Quickly find issues when troubleshooting & debugging
- For SAP Mergers and Consolidation
- Landscape Management
- Guarantee Global Objects are the same throughout all SAP systems

Compare Objects

Compares SAP objects between two systems. The objects to compare can be specified by name or with a Select List.

Compare IMG

Compares IMG tables between two SAP systems. An optional 'Columns to Compare' parameter can be used to exclude or include specific table columns from the comparison.



Benefits:

- Real-time visibility into what is the same, different or unique across various SAP systems, clients, and modules
- Execute intelligent comparisons for rapid troubleshooting and uncover the root-cause of issues within minutes
- Schedule recurring system comparisons to monitor that transports, objects, code, tables, configuration and master data stay in sync.
- Run mass volume comparisons of code, configuration and data when consolidating/merging SAP environments to effectively plan, prep, scope and execute the project.
- Apply smart filtering options to any comparisons to display only the discrepancies that are significant