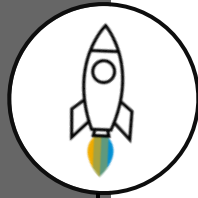


Continuous Change requires End-To-End Quality Assurance incl. Test Management

Roman Zednik, Tricentis



The continuous testing market leader with agile test management and advanced test automation optimized to support over **160+ technologies**



Results



10X

Faster Testing



50%

Lower Costs



90%

Risk Coverage

Tech Alliances



Partners



2021

Neotys Acquisition
Performance Testing

2020

Launch SAP OEM & SoIEx
Transformational partnership

2019

LiveCompare Acquisition
Impact Analysis

2018

QASymphony
Test Management

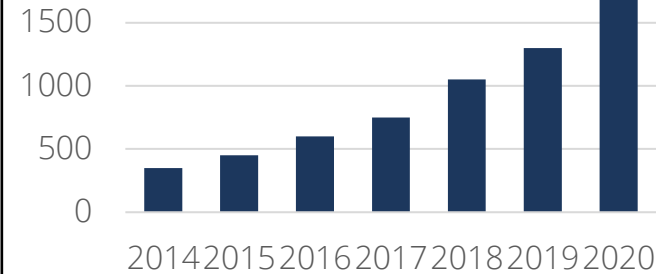
2016

Insight Venture Partners
Investment

2007

Founded

Customers

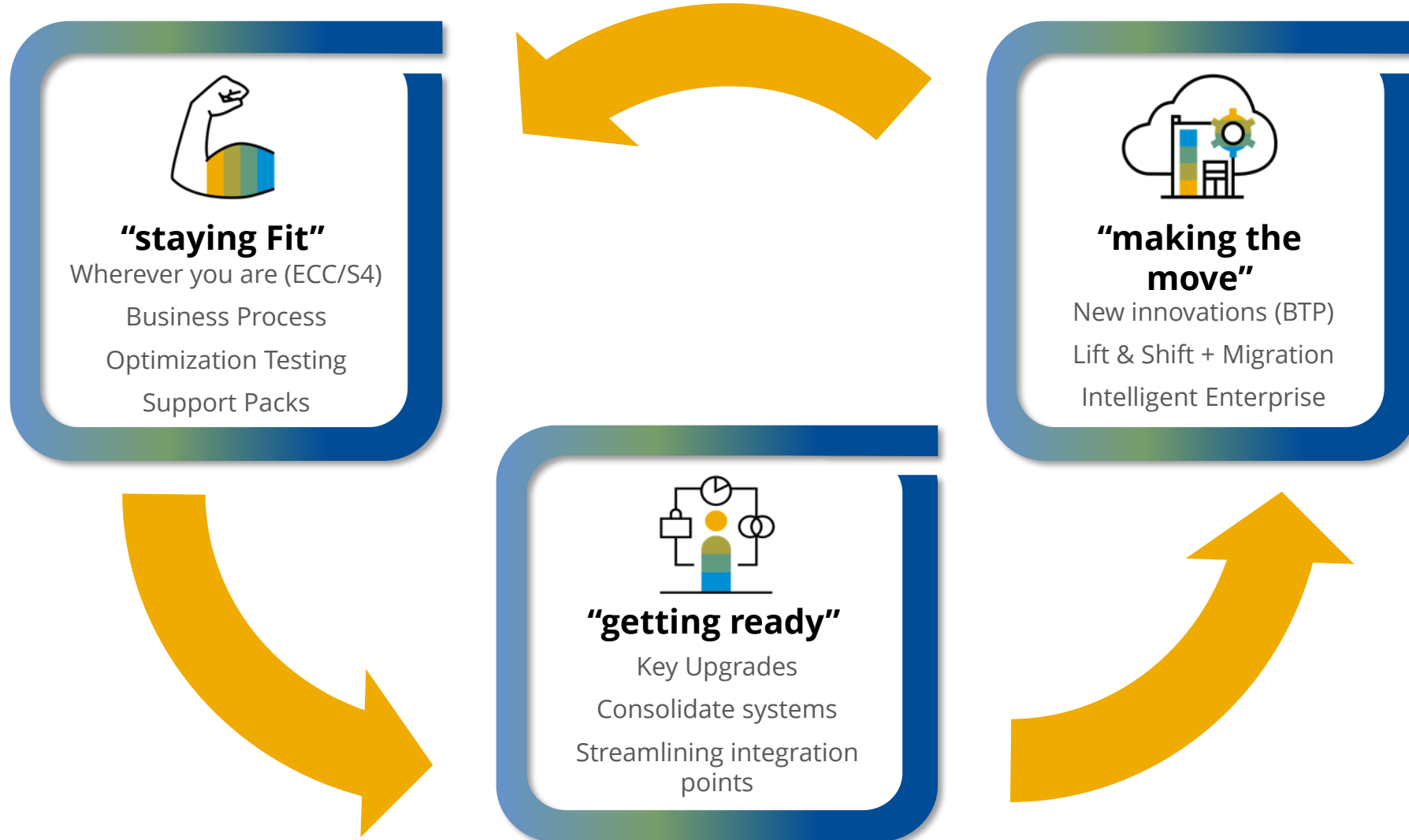


Greater than
1,800+
Customers
Worldwide

Analyst Recognition

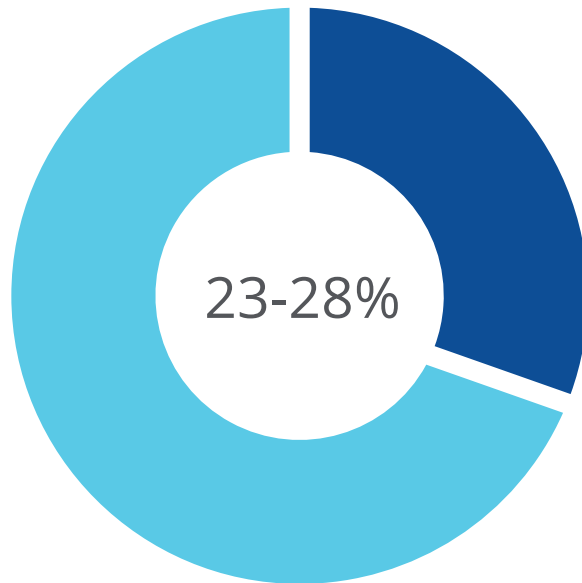


Business Transformation Requires Continuous Innovation and Continuous Testing



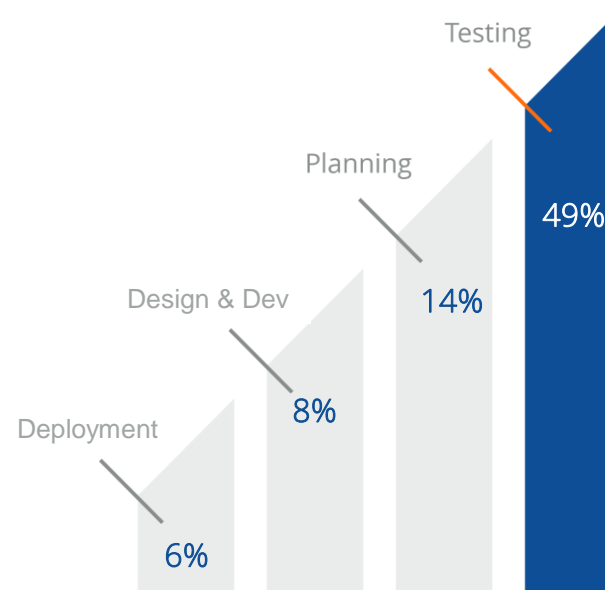
The Business Reality of Testing

IT Budgets Allocated to QA

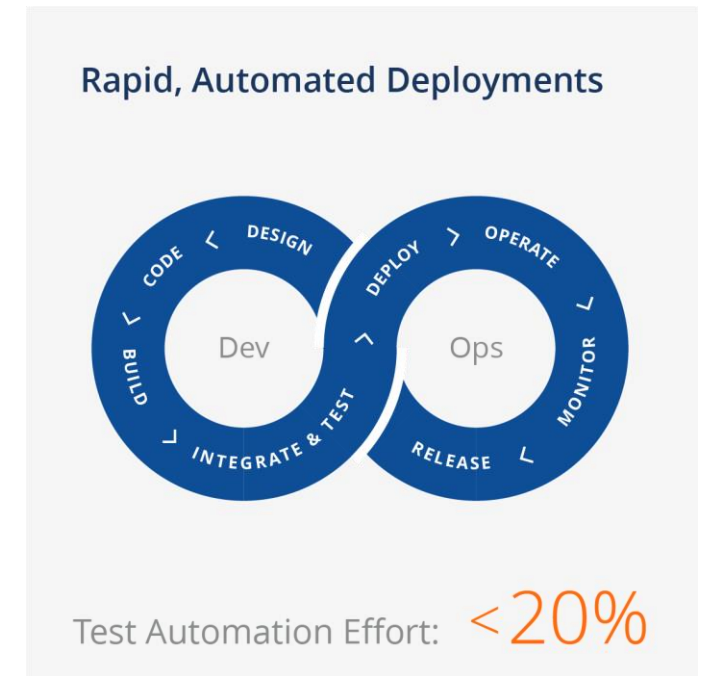


Source: Capgemini, World Quality Report 2019

What Impedes Software Delivery?

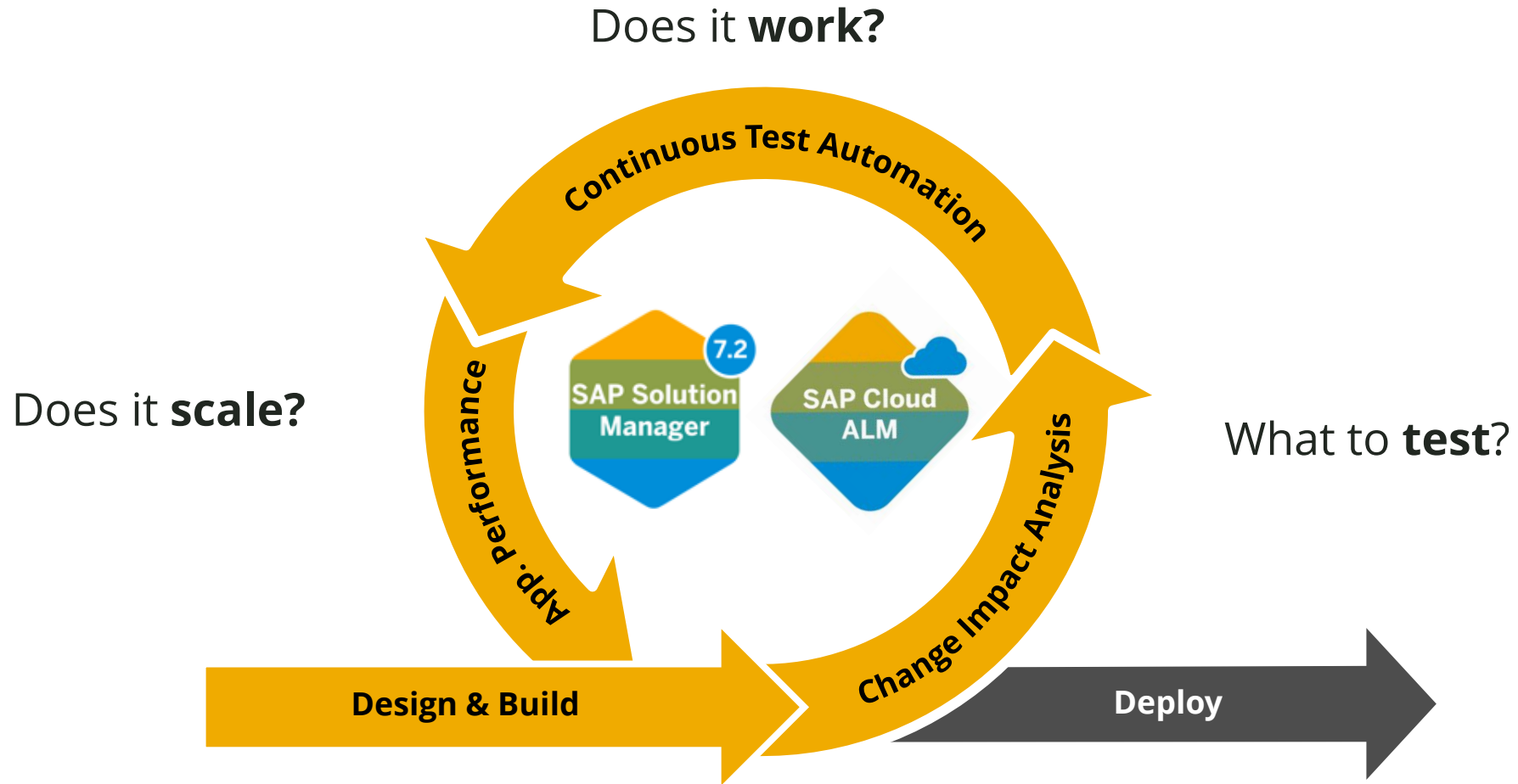


Test Execution Rates?

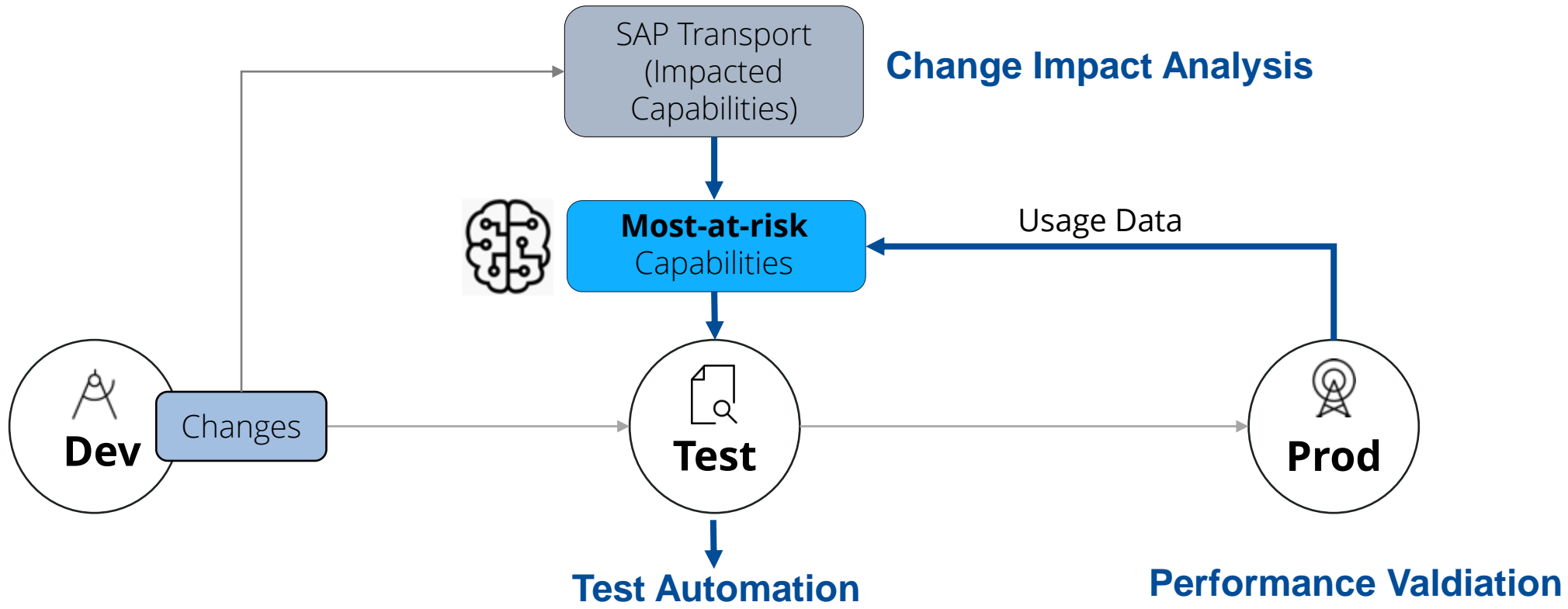




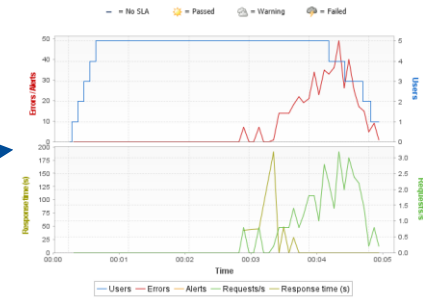
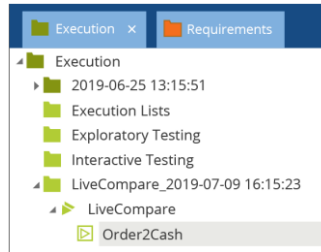
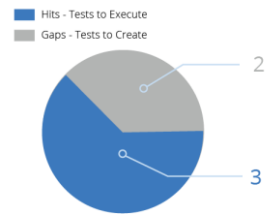
Continuous Application Testing



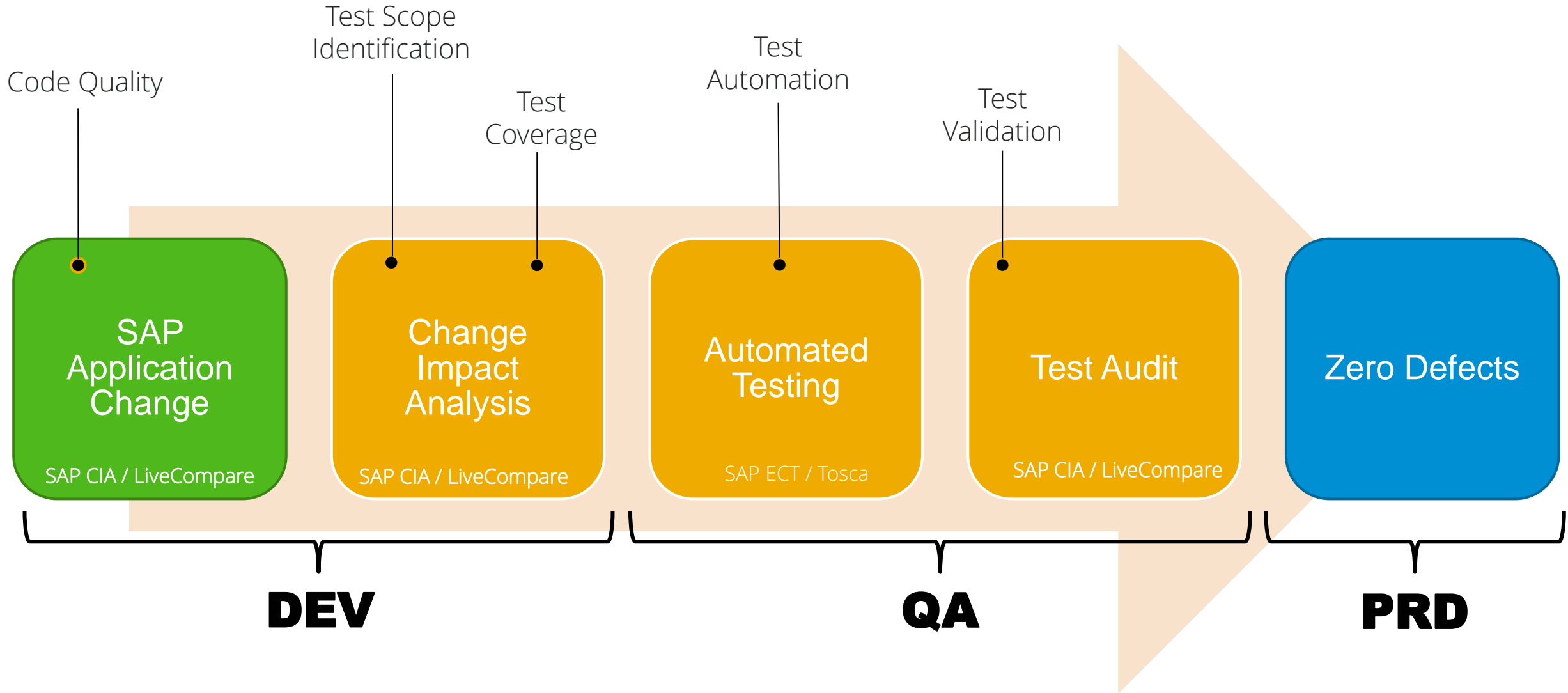
What to Test? Does it Work? Does it Scale?



Most-at-risk Test Hits & Gaps

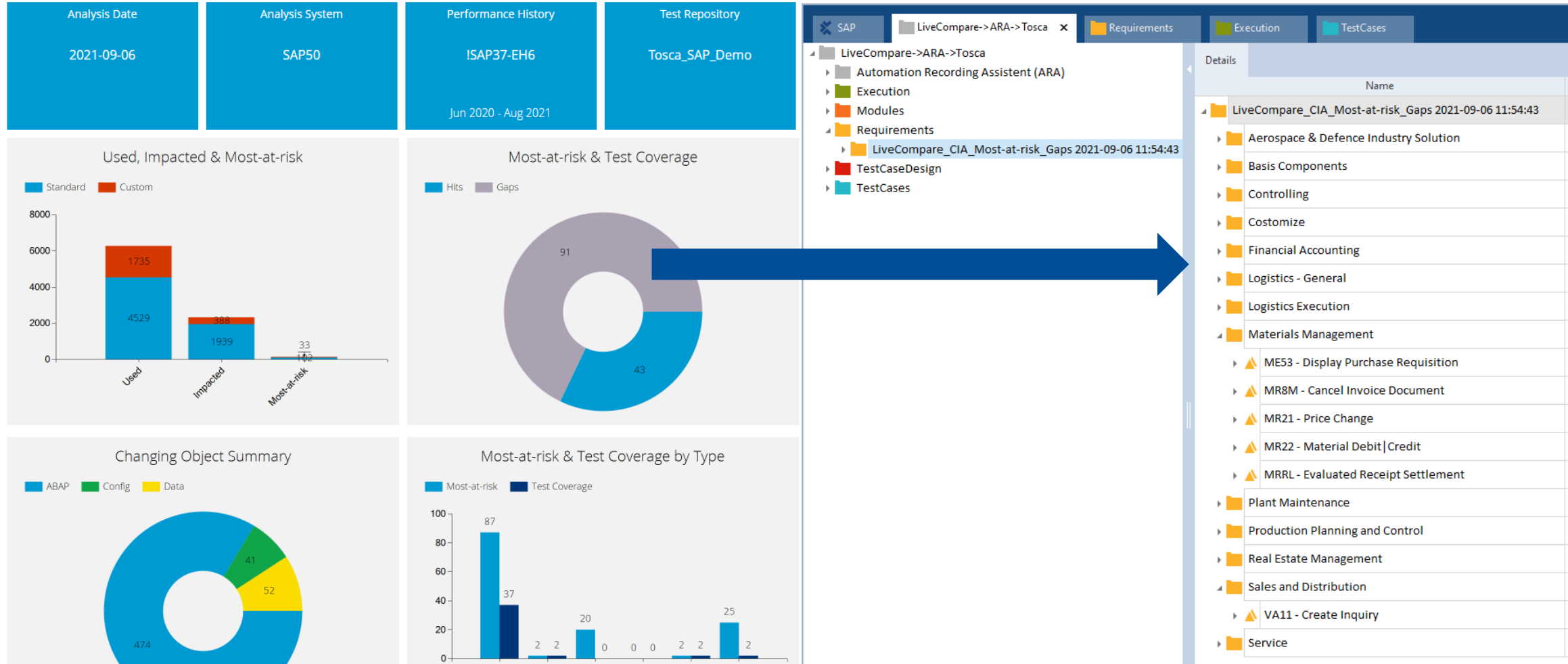


DevOps Delivery Pipeline



Impact Analyse → Test Automation

Smart Impact Analysis Dashboard



GAPS → Automation Recording Assistant

LiveCompare->ARA->Tosca

- Automation Recording
 - SAP Easy Access - 2
 - Recorded Modu
 - Recorded Testca
- Execution
 - ExecutionLists
 - Exploratory Testing
 - Interactive Testing
 - LiveCompare_CIA_
 - TestCase Hits fr
- Modules
- Requirements
 - LiveCompare_CIA_
- TestCaseDesign
- TestCases

ARA

Willkommen bei ARA
Der Automation Recording Assistant von Tricentis!

Aufzeichnung starten

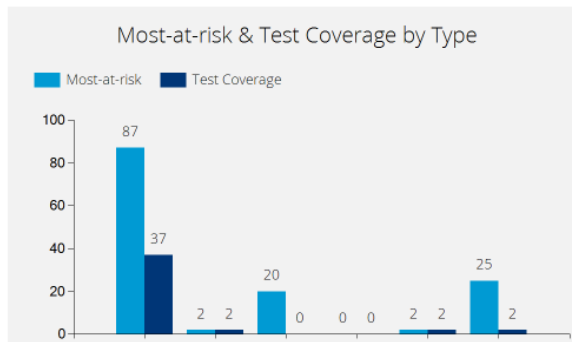
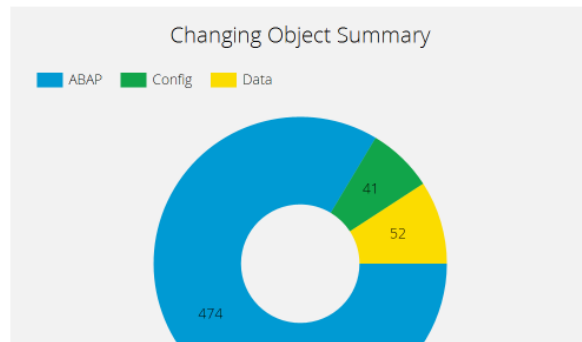
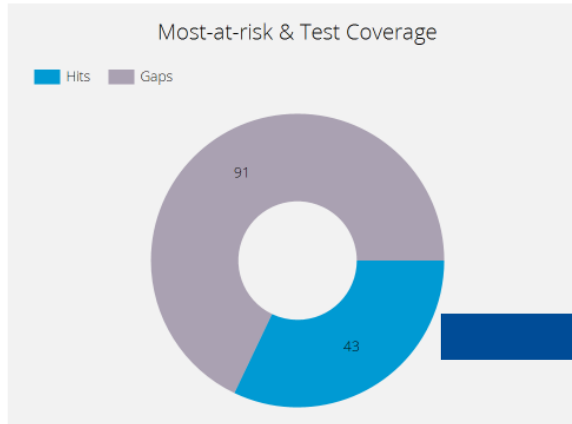
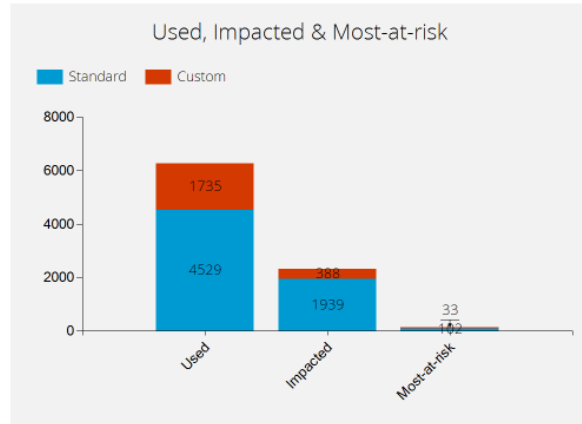
Hilfe v1.4.0

Name	Image	Value	ActionMode
Recorded Testcases			
Recorded TC			
SAP Easy Access			
Command Field		/nVA11 ENTER	Input
Create Inquiry: Initial Screen			
Inquiry Type		ZIN	Input
Sales Organization		AU01	Input
Distribution Channel		A1	Input
Division		80	Input
Sales Office		ENTER	Input
Create Spectar Inquiry: Overview			
Sold-To Party		1000000040 ENTER	Input
Spectar Mel Cust / 570 Bourke Street / Melbourne VIC 3000		Spectar Mel Cust / 570 Bourke Street / Melbourne VIC 3000	Verify
All items			Select
Save (Ctrl+S)		X	Input
Spectar Inquiry 10001044 has been saved		Spectar Inquiry XB InquiryNumber has been saved	Verify
Command Field		/n ENTER	Input

Impact Analyse → Test Automation

Smart Impact Analysis Dashboard

Analysis Date 2021-09-06	Analysis System SAP50	Performance History ISAP37-EH6 Jun 2020 - Aug 2021	Test Repository Tosca_SAP_Demo
------------------------------------	---------------------------------	---	--



SAP | LiveCompare->ARA->Tosca | Requirements | Execution | TestCases

- LiveCompare->ARA->Tosca
 - Automation Recording Assistant (ARA)
 - Execution
 - ExecutionLists
 - Exploratory Testing
 - Interactive Testing
 - LiveCompare_CIA_2021-09-06 13:54:29
 - TestCase Hits from LiveCompare Most-at-Risk Coverage
 - ActualLog
 - MD04 - Stock/Requirements List
 - MB52 - Warehouse Stock
 - IE03 - Display
 - MMBE - General
 - VT03N - Display
 - MB5B - Stock for Posting Date
 - CV03N - Display
 - AS02 - Asset
 - MM06 - Immediately
 - ME28 - Collective Release
 - ME2K - General
 - MI24 - Physical Inventory List
 - MRBR - Release Blocked Invoices
 - Order2Cash - WinGUI
 - VF01 - Create
 - VA01 - Create Sales Order - EMEA
 - VA01 - Create Sales Order - APAC
 - VA01 - Create Sales Order - US



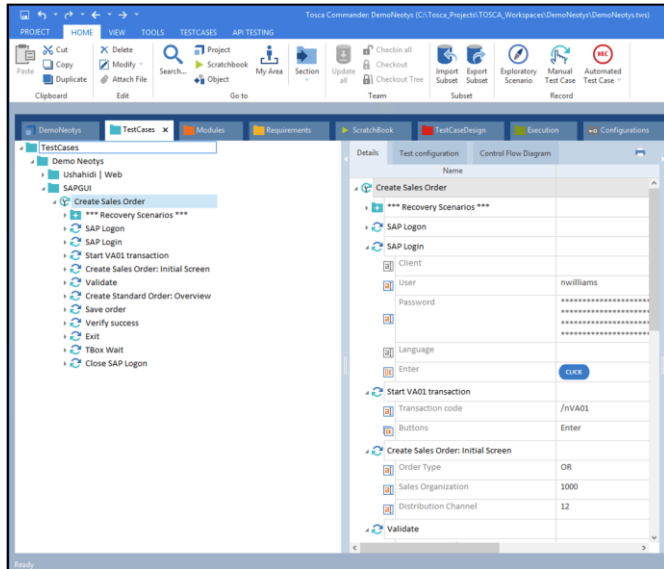
HITS → Test Automation (Regression)

- ▼ IW32 - Change
- ▼ MM01 - Create
- ▼ MIGO - Goods Receipt
- ▼ IW51 - Create (General)
- ▼ MD04 - Stock/Requirements List
- ▼ MB52 - Warehouse Stock
- ▼ IE03 - Display
- ▼ MMBE - General
- ▼ VT03N - Display
- ▼ MB5B - Stock for Posting Date
- ▼ CV03N - Display
- ▼ AS02 - Asset
- ▼ MM06 - Immediately
- ▼ ME28 - Collective Release
- ▼ ME2K - General
- ▼ MI24 - Physical Inventory List
- ▼ MRBR - Release Blocked Invoices
- ▼ Order2Cash - WinGUI
- ▼ VF01 - Create
- ▼ VA01 - Create Sales Order - EMEA
- ▼ VA01 - Create Sales Order - APAC
- ▼ VA01 - Create Sales Order - US

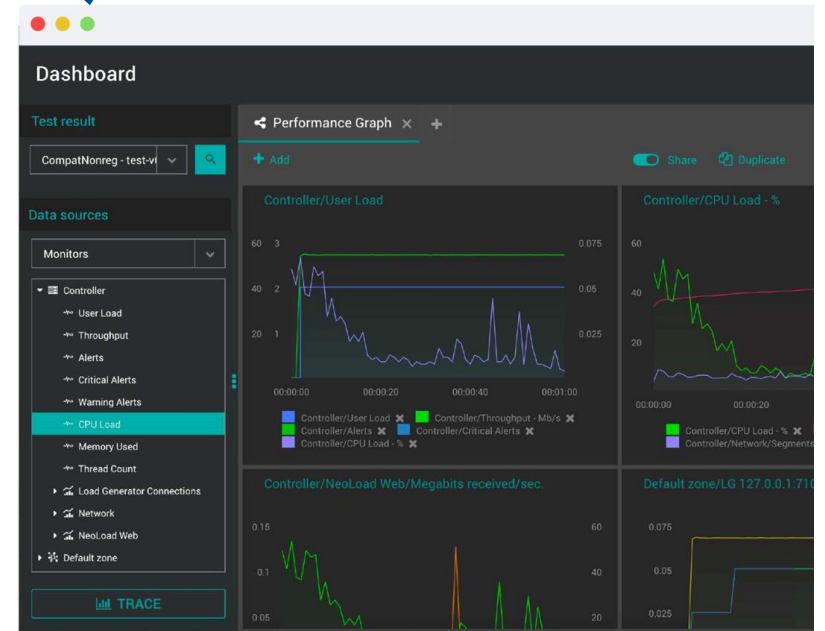
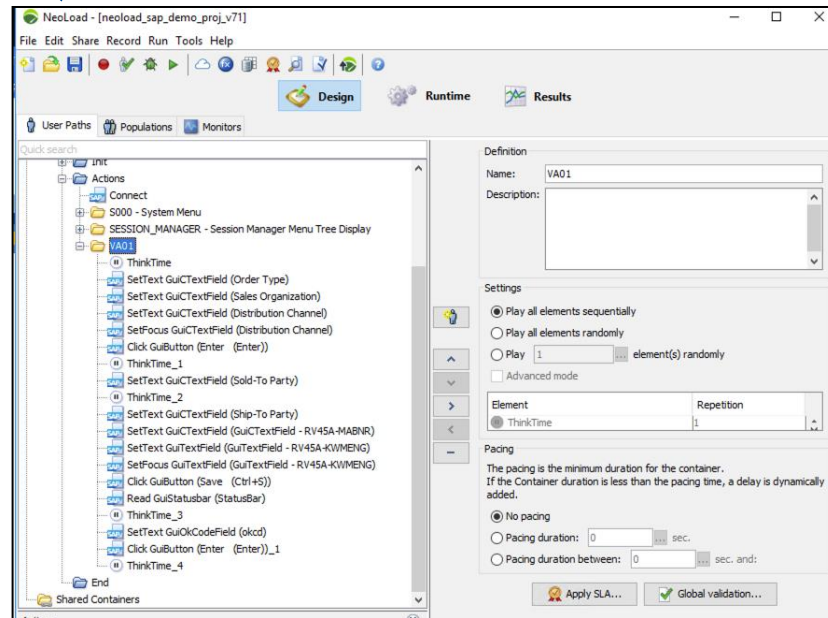
The screenshot shows the SAP Tosca TestCases interface. The left pane displays a tree view of test cases under 'TestCases > LC_SAP_tests > Business Processes > Order2Cash - WinGUI'. A blue arrow points from the 'Order2Cash - WinGUI' entry in the list to the right pane. The right pane shows the configuration for the selected test case, 'Order2Cash - WinGUI', with a table of parameters and actions.

Name	Value	ActionMode
Order2Cash - WinGUI		
LogOn & Login SAP Win GUI_Reference		
Business Parameters		
LogonPath	C:\Program Files (x86)\SAP\FrontEnd\SAPgui\saplogon.exe	Input
SAP Connection	103	Input
User	robsh	Input
Password	tosca123	
Create Quotation		
Start Transaction		
Enter Tcode		
Transaction code	/nVA21	Input
Buttons	Enter	Input
Business Process		
Create Sales Order		
Create Outbound Delivery		
Create Billing Document		
Logoff		

Enterprise Continuous Performance Testing



One Test Definition

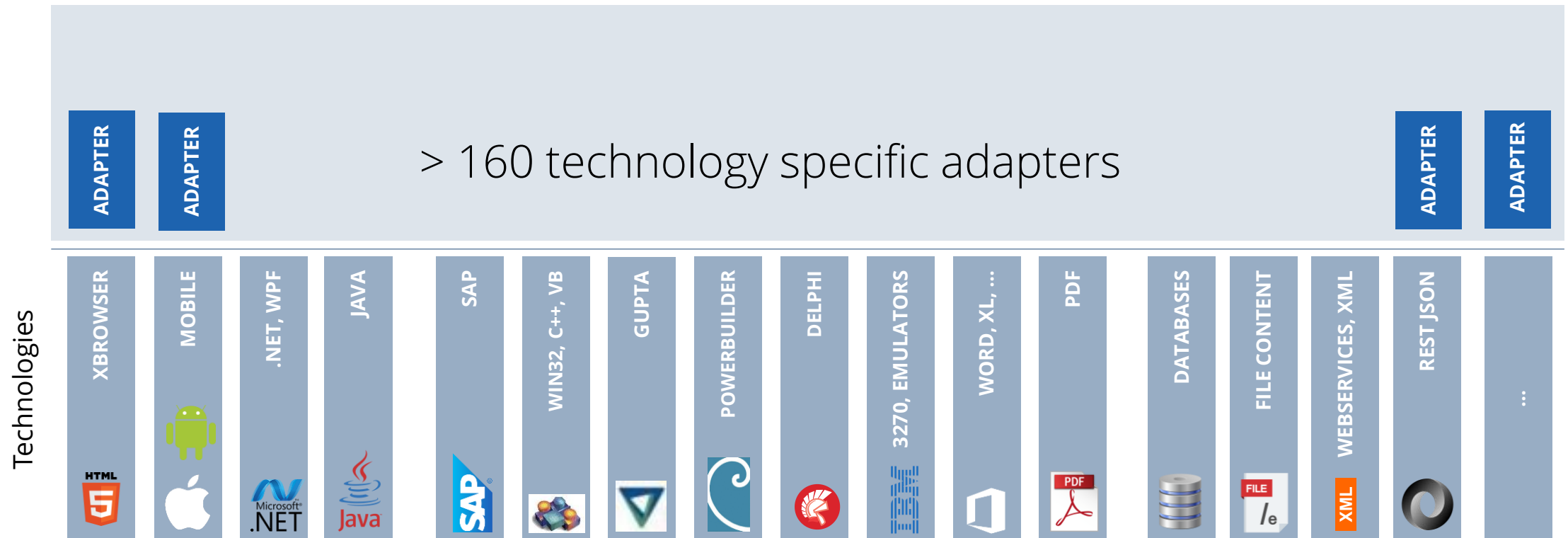


ECT – End2End Testing

The screenshot displays the SAP Test Case Designer interface. The top navigation bar includes tabs for SAP, End2End, ExecutionLists, Modules, and TestCaseDesign. The active window is titled 'WEB + SAP + SOAP + Fiori - End2End Testcase'. The left sidebar shows a tree view of test cases, with '02 SAP Order2Cash - WinGUI - with PDF Verification' selected. The main area shows a 'Test configuration' table with a single column 'Name' containing the same list of test cases.

Name
WEB + SAP + SOAP + Fiori - End2End Testcase
01 WEB Insurance Calculator Quote Generate
02 SAP GUI Order VA01 and VA02 (replaced by next one)
02 SAP Order2Cash - WinGUI - with PDF Verification
03 SAP Fiori on S/4 HANA
04 .NET CRM System
05 API SOAP XML Verification
05 SOAP API Service - Cloud Calculator
06 PDF File Verification
07 File Compare
08 XML File Validation

You need to Test End2End, also outside SAP



codeless automation across **any technology!**



Sample – Compare GUI with PDF

04 Export to PDF and Validate		
Save Quote		
Sync on PDF Print		
Verify PDF		
Target PDF	C:\Temp\ B QuotationNumber .pdf	Input
Sold-To-Party	* 570 Bourke Street MELBOURNE VIC 3000 AUSTRALIA	Verify
Ship-To-Party	*570 Bourke Street MELBOURNE VIC 3000 AUSTRALIA	Verify
Quote Number	B QuotationNumber	Verify
Customer Number	1000000040	Verify
Currency	AUD	Verify
Start Date	DATE	Verify
End Date	DATE +10d	Verify
Purchase Order Number	Test Reference	Verify
Gross Weight	2 KG	Verify
Material	1000000000	Verify
Quantity	2	Verify
Final Amount	66.00	Verify



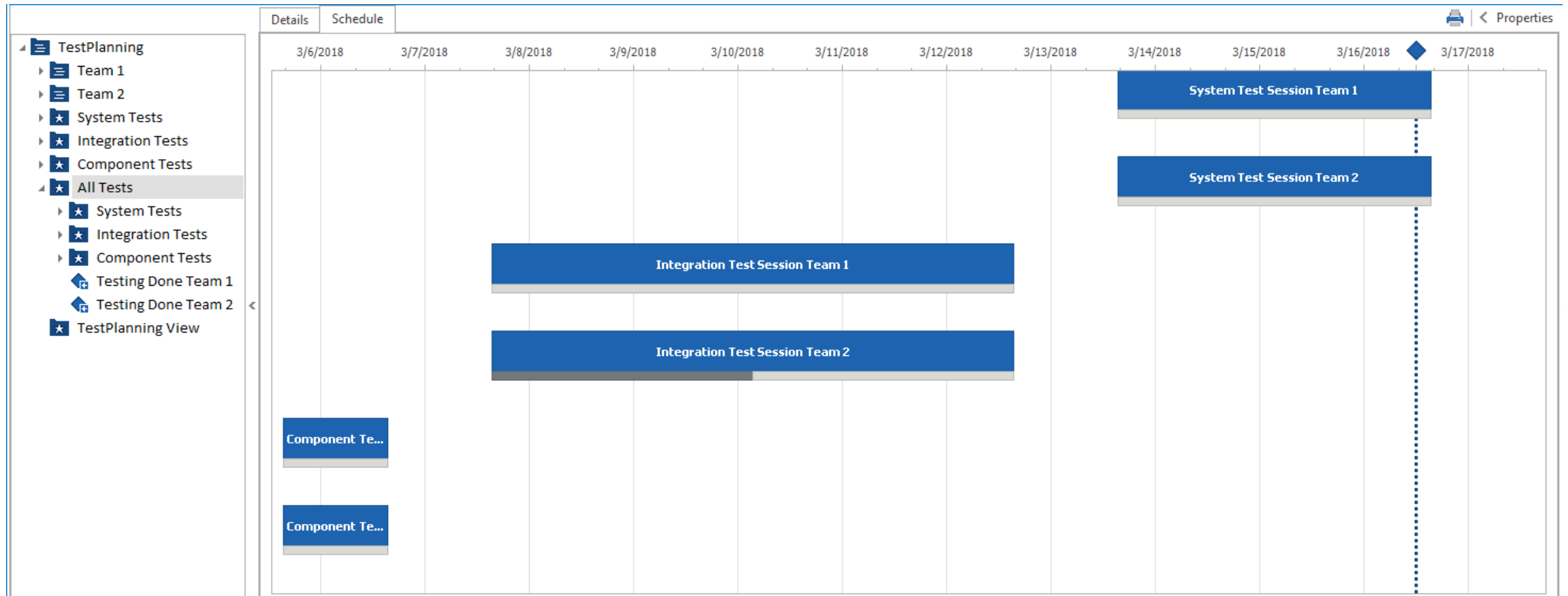
Invoice

Bill-To-Party
Mr. Spectar Mel Cust
570 Bourke Street
MELBOURNE VIC 3000
AUSTRALIA

Information
Invoice No. 90044885
Invoice Date 28.05.2021
Delivery No. (Date) 80029237 (27.05.2021)
Ref Sales Order No. (Date) 52958 (27.05.2021)
Customer PO No. (Date) Test (27.05.2021)
Customer No. 1000000040
Currency AUD
Term of Payment Net 30
Incoterm EXW From plant
Gross Weight 2 KG
Net Weight 2 KG
Volume 0.200 M3

Item	Material/Description	Quantity	Unit Price	Value
10	1000000000 Spectar Cheese SPECTAR CHEESE	2 EA	30.00	60.00
G.S.T. 10.00%				6.00
Total Before Tax				60.00
Total Tax				6.00
Total Amount (AUD)				66.00

Test Management – Test Planning



Test Management – Test Planung

PROJECT HOME VIEW TOOLS TEST PLANNING API TESTING

Paste Cut Copy Duplicate Clipboard Delete Modify Attach File Edit Create Folder Create Object Create Jump to Parent Test Planning

TestPlanning

- TestPlanning_XBrowser
 - TestCases XBrowser
 - Dusan Scott
 - Jane Hunt
 - Jonas Jones
 - Kaya Tonks
 - Marie Stokes
 - Patrik Hicks

Details Properties

Session Owner: Dusan Scott

Session Start: 10/12/2017 8:54 AM

Session End: 10/25/2017 8:54 AM

Task Duration: 20:00

Status: In Progress

43% 57%

Session Participants

Add Delete

Name	Time Spent	Status	Assignee
Add TestCases to Com.Repository	01:45	Planned	Patrik Hicks
Create ExecutionList Desktop	00:00	Completed	Marie Stokes
Create ExecutionList Mobile	01:30	Completed	Marie Stokes
Create Requirements	01:15	Completed	Jane Hunt
Create TestCases	00:30	Completed	Patrik Hicks
Do the Handover	04:00	Planned	Jonas Jones
Plan HandOver to XTeam	00:45	Planned	Dusan Scott
Plan Release Party	01:30	In Progress	Kaya Tonks
Run Regression	01:30	Planned	Jonas Jones
Schedule CI_Tests	01:00	Planned	Jonas Jones
Send out TestReport	01:45	Planned	Dusan Scott
Test Responsiveness	02:00	Planned	Jane Hunt
Update TestCaseDesign	00:00	Completed	Marie Stokes
Update TestEnvironment	02:30	Completed	Jane Hunt

Different Test Data Combinations

SAP Standard Demo

TestCases | TestCaseDesign | Requirements | Execution | Modules | SAP Fiori

SAP Standard Demo

- Attachments (5)
- ARA Automation Recording As...
- Execution
- Issues
- Modules
- Replace
- Requirements
- TestCaseDesign
 - Attachments (2)
 - VA01 Transaction with Veri...
 - SalesOrderTDM
 - GetCar Sample Data (Busin...
 - TCD: WW Insurance Calcula...
 - Business Processes
 - Business Processes2
 - Solutions
 - Sales Order (TCD)
 - Car Parts Shipment
- TestCases
- TestPlanning

Name	StraightThrough	Frankfurt, Dist ...	Frankfurt, Dist ...	Frankfurt, Divisi...	Frankfurt, Divisi...
Sales Order (TCD)	StraightThrough	Frankfurt, Dist C...	Frankfurt, Dist C...	Frankfurt, Divisi...	Frankfurt, Divisi...
Instances					
Sales Organizations	Standard Sal...	Frankfurt, Di...	Frankfurt, Di...	Frankfurt, Di...	Frankfurt, Di...
Instances					
Sales Organization	1000	1000	1000	1000	1000
Distribution Channel	12	10	16	12	12
Division	00	00	00		02
Sales Office and Group	Office Frankf...	Office Frankf...	Office Frankf...	Office Frankf...	Office Frankf...
Party					
Materials	Standard Ma...	Standard Ma...	Standard Ma...	Standard Ma...	Standard Ma...
Customers	Customer EU	Customer EU	Customer EU	Customer EU	Customer EU
Order types	Standard ord...	Standard ord...	Standard ord...	Standard ord...	Standard ord...
Instances					
Order Type	OR	OR	OR	OR	OR

Different Test Data Combinations (Instances and Users)

SAP x Multi User Test Case x

- Multi User Test Case
 - Execution
 - Modules
 - TestCaseDesign
 - SAP Demo Instances
 - Car Parts Shipment
 - SAP Difference Instances
 - TestCases

Name	Falscher Benutzername	Falsches Passwort	Glattläufer	Instanz Z001 existiert nicht
SAP Difference Instances	Falscher Benutzername	Falsches Passwort	Glattläufer	Instanz Z001 existiert nicht
Instances				
SAP Verbindung	IDES R3 (intern and exter...	IDES R3 (intern and ext...	IDES R3 (intern and ex...	IDES R3 (intern and exter...
Instances				
IDES R3 (intern and extern)				
Fiori (Private Cloud)				
S/4 on SAP GUI Test				
Login	Falscher Benutzername	Falsches Passwort	Default User	Default User
Instances				
Benutzername	PAUEM	BAUEM	BAUEM	BAUEM
Passwort	Tosca123	Test123	Tosca123	Tosca123
Logon Language	DE	DE	DE	DE
Transaktion	N/A	N/A	VA01	Z001
Verifikation	Name oder Kennwort ist ...	Name oder Kennwort i...	Kundenauftrag anlegen	Transaktion Z001 existier...

ECT – Test Data Service

Test Data Management ▶ data


Types + Add Type

Select Type (4)

- Order2Cash (8)
- OTC_SAPGUI (0)
- SAP_Orders (100)
- user (100)

Order2Cash ✎ 🗑

Search... 🔍 📄 Export 📄 Import + Add Item

 OrderID	Status	Delivery number	Document number
2144	Invoiced order	80001068	90000951
2145	Invoiced order	80001069	90000952
2146	Invoiced order	80001071	90000954
2148	Invoiced order	80001072	90000955
2149	Invoiced order	80001077	90000960
2154	New order		
2155	New order		
2151	Delivered	80001074	

Business Process Comparison and Validation in different Environments

SAP | SAP Migration from R3 to S4 HANA | Order2Cash | Requirements | ExecutionLists | TestCases

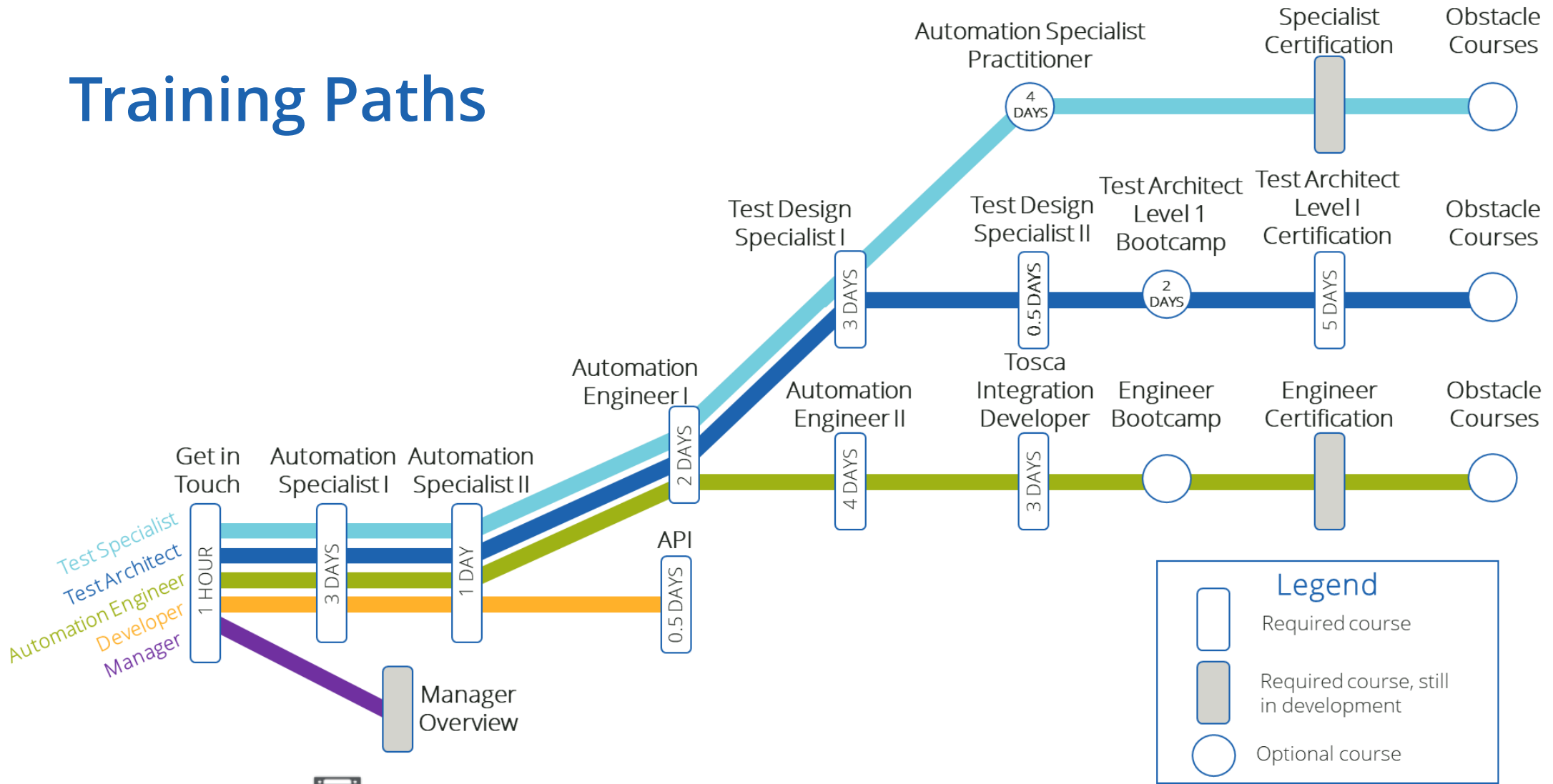
Requirements

- Virtual folders
- SAP Migration Plan

Details

Name	Frequ...	Dama...	Weight	Contribution (%)	Coverage Specified (%)	Execution State (%)
▲ SAP Migration Plan - Business Process Validation					100	100
▶ 01. Order2Cash - ECC 6.0 WinGUI			1			
▶ 02. Order2Cash - S/4 Hana WinGUI			1			
▶ 03. Order2Cash - S/4 Hana Fiori			1			
▲ Order2Cash - ECC 6.0 WinGUI - AS IS	2	2	16	2,44	100	100
▶ 01. Order2Cash - WinGUI			1	2,44		
▲ Order2Cash - S/4 Hana WinGUI - TO BE	5	4	512	78,05	100	100
▶ 02. Order2Cash - S/4 Hana WinGUI			1	78,05		
▲ Order2Cash - S/4 Hana Fiori - TO BE	4	3	128	19,51	100	100
▶ 03. Order2Cash - S/4 Hana Fiori			1	19,51		

Training Paths



Earn a certificate at each stop when you complete the course.



All routes are also offered as on-site, instructor-led, boot camps and workshops.

UNRESTRICTED AVAILABILITY

YouTube Courses

User Tutorials

INSTRUCTOR-LED ONLY

Orchestrated Service Virtualization

Automation Specialist Practitioner

Business Intelligence

TDM Studio Level 1

ADDITIONAL COURSES

Tosca Query Language

Automation Specialist for SAP

Exploratory Testing Specialist

Databases Specialist

Why SAP Chose Tricentis as Its Official Testing Solution?

The Global Leader in Enterprise Testing Solutions

- Leader in Gartner Magic Quadrant
- Proven Results in the World's Biggest Brands
- Versatile Platform for Customers at Any Stage of SAP Modernization

Enterprise-Grade Platform for SAP Testing and Beyond

- Model-Based Automation for Resiliency and Scalability
- Risk-Based Approach That Minimizes Business Downtime
- Seamless Integrations for SAP and Non-SAP Testing

Modern, AI-Driven Technology for Easy Adoption

- AI-driven Impact Analysis for Fast, Safe Changes
- Cloud-Supported Architecture
- No-Code, Business Friendly Platform for Easy Adoption

Questions & Answers

Thank you!

Roman Zednik, Tricentis

Backup

What we provide

Deliver higher quality software faster with the Tricentis Continuous Testing Platform

Tricentis Continuous Testing Platform

Supports 160+ enterprise applications and technologies

Tricentis
LiveCompare

Smart impact
analysis

Tricentis
Tosca

Intelligent test
automation

Tricentis
NeoLoad

Enterprise
performance

Tricentis
Data Integrity

End-to-end data
testing

Tricentis
qTest

Unified test management and analytics



Fully
automated



AI
powered



Completely
codeless



Cloud
enabled



Risk
optimized



Enterprise
DevOps



Open and
extensible

Tricentis Services



Business value
roadmap



Continuous maturity
assessment



Continuous testing
framework



Tricentis
Academy

Supports All Cloud Solutions



SAP SuccessFactors

Details	Test configuration	Name	Value
SuccessFactor Demo			
Create Position and New Recruitment			
Login_Reference			
OpenUrl			
Url		https://salesdemo.	
Login			
Enter the Input Data			
Enter Data to be Used			
ManagerID		Geoff Hill	
SearchPerson		Maykala Chapman	
Create Position			
GoTo Position Org Chart			
Wait on TILL screen loads			
Click on Home Button			
Home Button		{Click}	
Click on Home DropDown			
Click on Org Chart			
Click on Position Org Chart			
Search By Employee Name			
Create New Position			
New Recruitment			
Click on Add New Employee			
Add New Employee		{Click}	
Enter Values for Recruitment			
Enter Company Name			
Enter Event Reason			
Enter First Name Last Name			
Enter Date of Birth			
Enter Country of Birth			
Enter National ID details			
Enter Personal Info Data			
Enter Email Information			
Enter Job Info			
Enter Compensation Information			
Verify New Employee is created			

SAP Concur

Details	Test configuration	Control Flow Diagram	Name	Value
Create New Reservation				
Connect to Corporate Traveller				
OpenUrl_Reference				
Client Portal Login				
Corporate Traveller				
Search Concur for Flights				
Set flight info				
From			MCO	
To			LAX	
Concur Home				
Hello			Exists == True	
One Way			{Click}	
From			{B[From]}(TAB)	
To			{B[To]}(TAB)	
fltDate0			07/07/2018	
timeSideSet0			depart	
fltTime0			09:00 am	
windowBeforeSet0			± 3	
Search			{Click}	
Wait for Search Results				
Select United and validate airport codes				
View, Validate and Select Fares				
View Fares				
Provide screenshot of flight choices				
Select Fare				
Concur: Flight Review and Reserve				
Flight Table				
\$header				
DEPART Sat, Jul 7 – Orlando, FL ...			*{B[From]}*{B[

SAP Hybris

Details	Test configuration	Control Flow Diagram	Name	Value
C4C - PreSales Cycle				
Login				
Create Customer				
Set Customer Name				
C4CUSState			AA	
C4CIncoTermsLoc			San Francisco Bay Dockyard	
C4CCustNo			{RND[4]}_{RANDOMTEXT[3]}Custor	
Go to Customer				
Customers			X	
Wait for page to load				
New			Exists == True	
Click on New Button				
New			{Click}	
Customers - SAP Hybris Cloud for Customer				
Name:			{B[C4CCustNo]}	
ABC Classification:			A-Account	
State:			{Click}	
Wait for State to be loaded				
Enter State				
Keys			{B[C4CUSState]}	
Wait for dropdown to be loaded				
Select State from Dropdown				
Click on Save				
Save			{Click}	
Wait for Customer creation				
Click on Refresh				
Refresh			{Click}	
Wait for page refresh				
Verify Customer Created				
Accounts table				
Start				

SAP Ariba

Details	Test configuration	Control Flow Diagram	Name	Value	ActionMode
End-to-End Case im Einkauf					
ARIBA					
Ariba User 1					
Open Ariba Guided Buying and Login rwagner					
Erfassung Request					
Request Ad hoc item					
Ariba Guided Buying Request ad hoc item					
Request ad hoc item			{Click}		Input
Request ad hoc item Product name + Category					
Product name			Tastatur		Input
Category			{CLICK}		Input
Hardware			{Click}		Input
Request ad hoc item Quantity, Unit price					
LanSoft Technologies			Visible == True		WaitOn
LanSoft Technologies			{CLICK}		Input
Description			Tastatur German		Input
Quantity			1		Input
Unit price			25		Input
Add to cart			{Click}		Input
Checkout					
Logout					
Ariba Admin					
Open Ariba Guided Buying and Login Admin-Oberfläche					
Workflow anpassen Genehmiger löschen					
Logout					
Ariba Supervisor					
Open Ariba Guided Buying and Login Supervisor					