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## IMPULS 2021

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# Eliminate SAP S/4HANA project delays with Service virtualization and SAP EDI testing



## ● Key outcomes/ Objectives

1. Find out what is service virtualization and testing of SAP EDI/APIs
2. Learn why it's not necessary to test non-SAP applications during S/4HANA projects
3. Find out how much time you can save by using SAP Interface testing solutions

## ● Agenda

- Who we are
- Int4 IFTT solution introduction
- SAP API testing vs API testing
- How does SAP EDI/API testing and virtualization work? - DEMO
- More education on SAP API testing

## ● **About Int4 AG**

Int4 AG is an SAP Partner and a market leader in test automation of SAP systems integration. We have proven field experience in consulting and delivery of the biggest integration projects.

**Int4 IFTT – No Code/Low Code, citizen automation, SAP API testing and virtualization solution (including iPaaS migration edition)**

**10+**

**Years of Int4**

Sometimes we still can't believe it but our journey started 10 years ago! We are proud of it but also excited for the next decades. New challenges and opportunities motivate us to be stronger and better. The best is yet to come!

**Founded in: 2010**

**116+**

**Projects**

We have successfully executed 116 international megaprojects, not counting (what we like to call) small scale projects.

**40+**

**Employed specialists**

We are proud to say that we have over 48 prominent experts in the SAP industry and it's just the beginning.



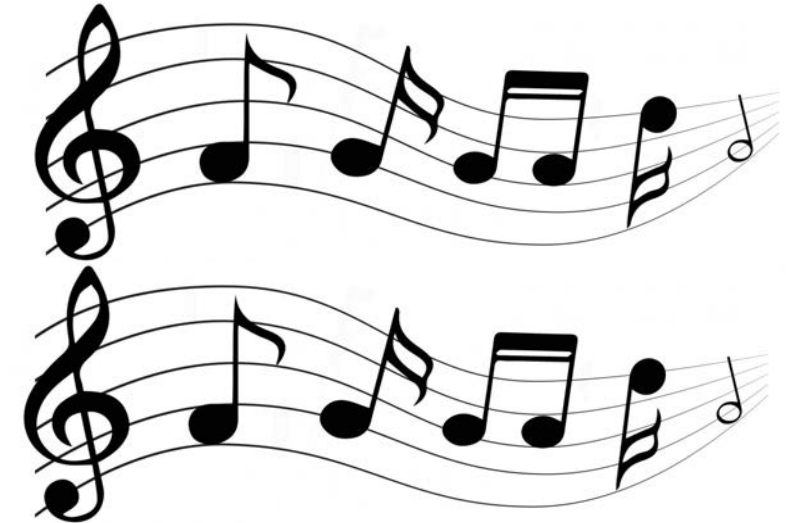
## SAP S/4HANA conversion – Testing of SAP integration



Perfect run of your  
business processes



Repeat

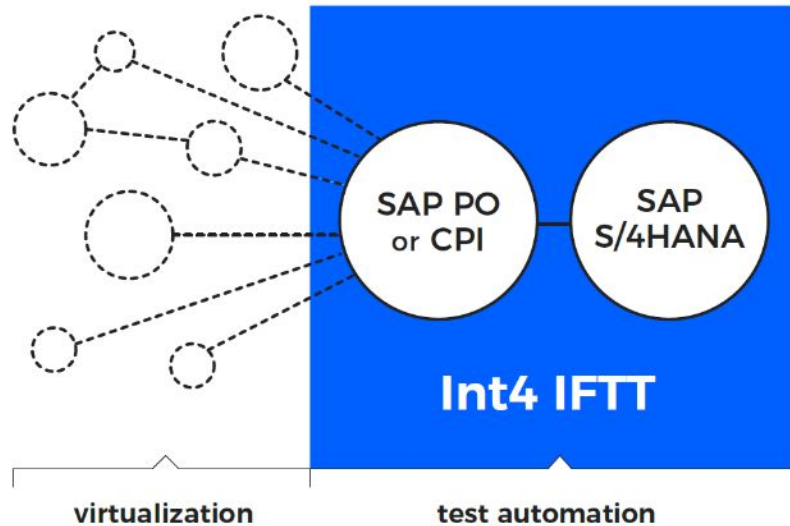


### Challenges

- Digital Transformation – SAP is not standalone system. It is connected to multiple business partners and non-SAP systems
- Full end to end testing requires a lot of dependencies outside the SAP teams. The additional complexity is multiple SAP environments
- All integrations with SAP must work in the same way while the SAP core system changes

## What is Int4 IFTT?

## Value proposition



Scriptless testing of SAP API scenarios in days (not weeks/months):

- Certified SAP Addon for SAP Solution Manager
- Test case creation based on existing communication
- Service virtualization of connected systems
- Detailed validation of business documents in SAP S/4HANA
- Complementary with UI test automation

Int4 IFTT's unique **Low Code/No Code, Citizen Automation**, SAP API testing and service virtualization solution which **eliminates S/4HANA project delays caused** by dependencies on external non-SAP systems and EDI providers.

### Target:

- All SAP customers where S/4HANA connects to other systems

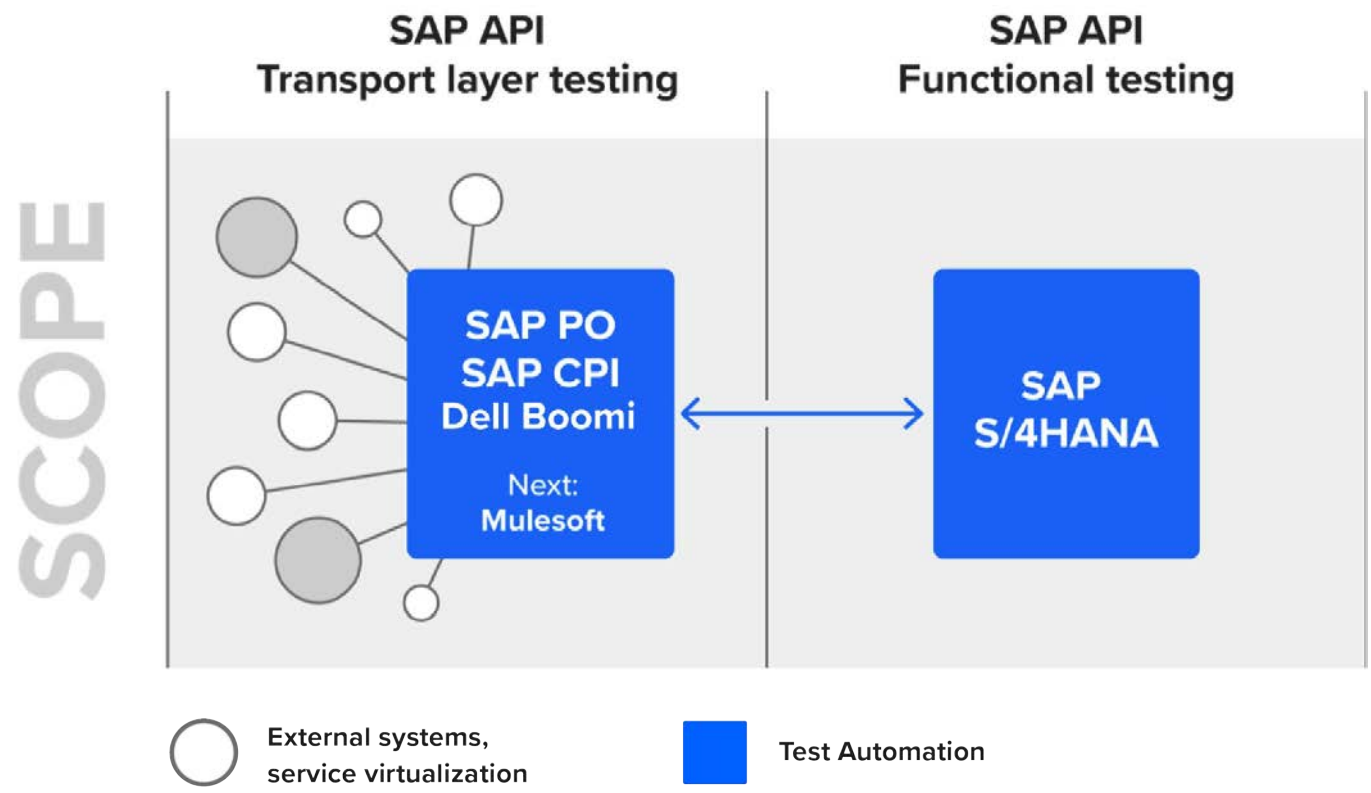
### Typical compelling event:

- Green Field/Selective Data Transition, other complex S/4HANA projects

### Key Benefits:

- Elimination of external dependencies and assurance that entire project control stays in SAP delivery team
- Increased confidence by making sure that the new solution will communicate with all systems in the same manner
- SAP S/4HANA projects delivered within budget and on time

# Testing of the integration scenario in SAP middleware and backend, virtualization



🔑 Key words | **SAP integration functional testing** | **Regression testing** | **Test Driven Development**

# Int4 IFTT – your credit card for SAP testing – Citizen Automation



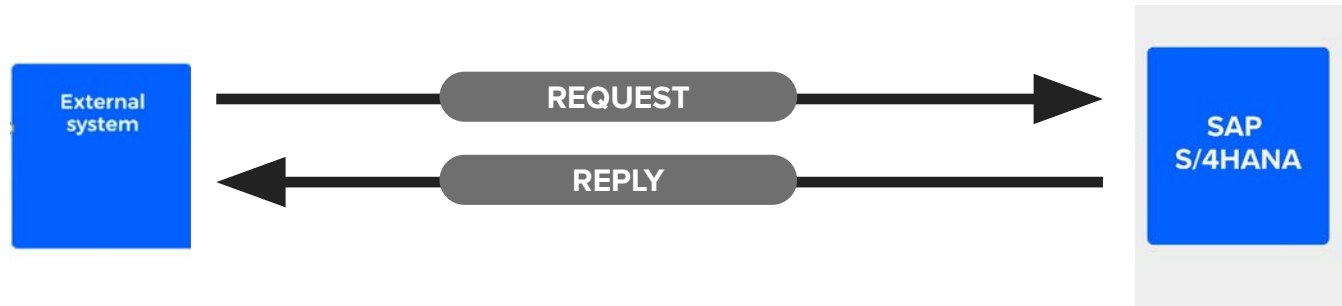
SAP® Certified  
Integration with SAP S/4HANA®

SAP® Certified  
Integration with SAP S/4HANA®

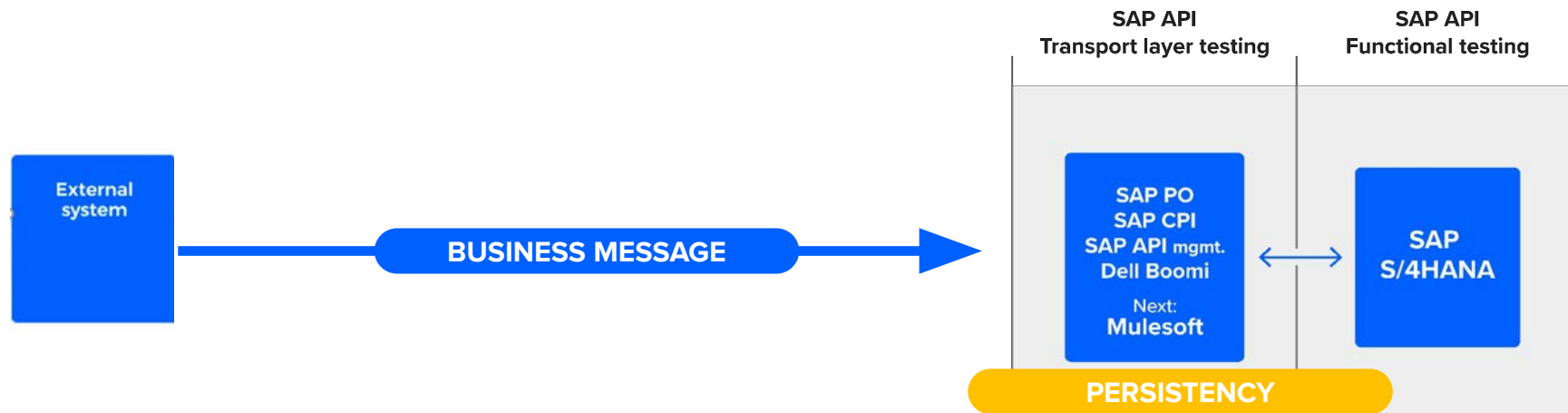
SAP® Certified  
Integration with SAP HANA®

# API testing reinvented for SAP systems

## API testing - synchronous

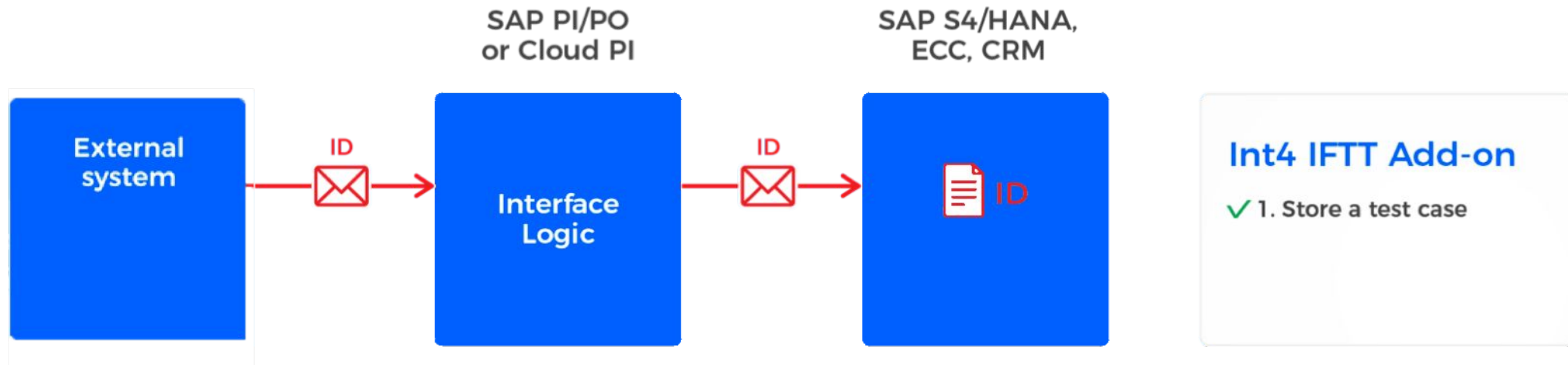


## SAP API testing – asynchronous – EDI, Business networks, EAI

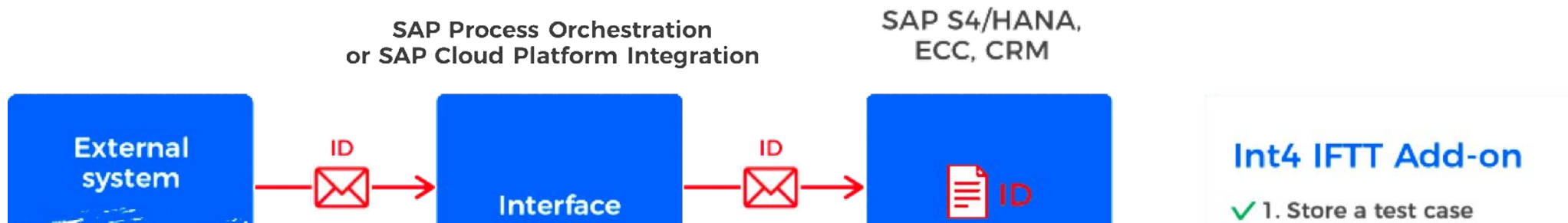


# Automatic end-to-end execution in SAP Landscape [EDI SALES ORDER]

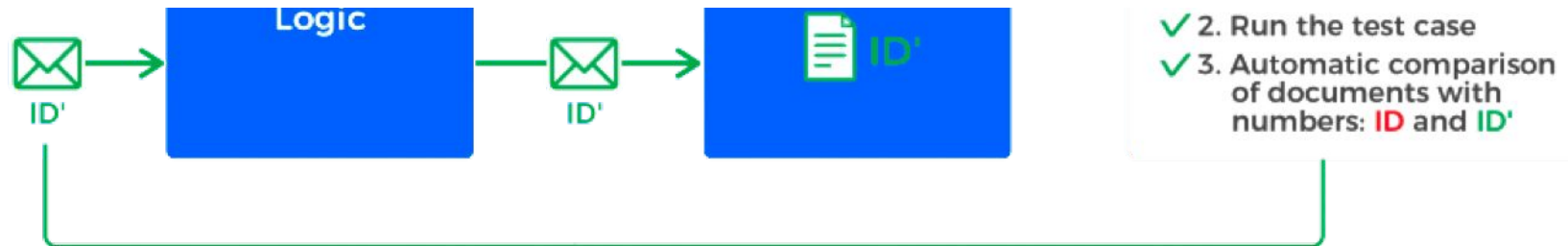
## Inbound test execution flow



# Automatic end-to-end execution in SAP Landscape



## Running on different systems and on different landscapes



# Automatic end-to-end execution in SAP Landscape

## Validation of documents not interface messages

### Reference document:

Screenshot of SAP Sales Document 37087 (Reference document). The document is titled "Change Standard Order 37087: Overview". It shows a Net Value of 117,850.00 EUR. The document is associated with Sold-To Party 10100002 (Inlandskunde DE 2 / Platnerstraße 45 / 09119 Chemnitz) and Ship-To Party 10100002 (Inlandskunde DE 2 / Platnerstraße 45 / 09119 Chemnitz). The Cust. Reference is 59007790. The document is in the "Sales" tab, and the "Item overview" table is visible. The table shows the following items:

Item	Material	Description	Order Q...	First date	Deliver
10	MZ-RM-M525-04	M-525 WHEELS	30	08.11.2017	2
20	MZ-FG-C900	BKM-C900 BIKE	20	08.11.2017	2
30	MZ-RM-M525-04	BKM-525 WHEELS	50	08.11.2017	2
40	MZ-FG-C900	BKM-C900 BIKE	5	08.11.2017	2
50	MZ-RM-M525-04	BKM-525 WHEELS	15	08.11.2017	2

The "Plnt" column in the table is circled in red, showing the value "DE10".



### Current document:

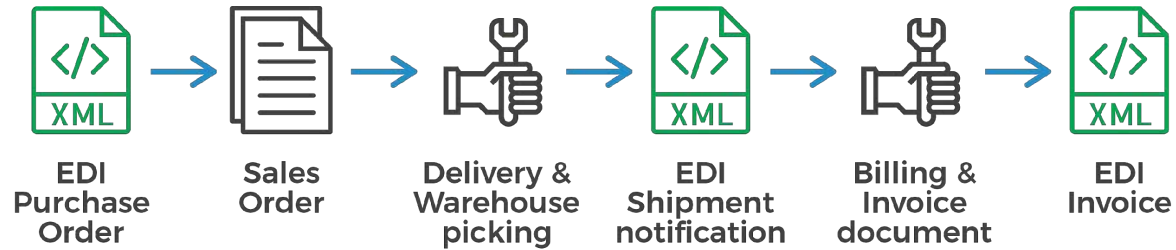
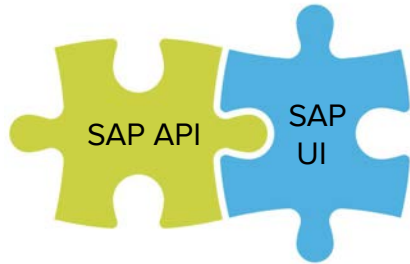
Screenshot of SAP Sales Document 37088 (Current document). The document is titled "Change Standard Order 37088: Overview". It shows a Net Value of 117,850.00 EUR. The document is associated with Sold-To Party 10100002 (Inlandskunde DE 2 / Platnerstraße 45 / 09119 Chemnitz) and Ship-To Party 10100002 (Inlandskunde DE 2 / Platnerstraße 45 / 09119 Chemnitz). The Cust. Reference is SORD00848. The document is in the "Sales" tab, and the "Item overview" table is visible. The table shows the following items:

Item	Material	Description	Order Q...	First date	Delivery
10	MZ-RM-M525-04	M-525 WHEELS	30	08.11.2017	2
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40	MZ-FG-C900	BKM-C900 BIKE	5	08.11.2017	2
50	MZ-RM-M525-04	BKM-525 WHEELS	15	08.11.2017	2

The "Plnt" column in the table is circled in red, showing the value "1710".

# Testing S/4HANA business processes – UIPath and Int4 IFTT working together

## Full automation requires integration of API + UI testing



Total		5 passed	2 failed	71.43 % pass rate	
Scenario	Environment	Passed	Failed	Pass rate	<a href="#">HIDE DETAILS</a>
Company 1/Business Flows Testing/Order to Invoice (ID:197)	TEST	5	2	71.43 %	...
Test case	Ver.	Interface type	IFTT Automation Object	Predecessor	Result
4754 : Sales Order: CALIFORNIA69766	1	PI GUID E2E Inbound	IF0102_SYS_B_SO		PASSED
4755 : Sales Order Confirmation: CALIFORNIA69766	1	PI E2E Outbound	IF0104_SALES_ORDER_CONF	4754	PASSED
4756 : Delivery creation	1	ECATT Test Config.	ESD_VL01N	4754	PASSED
4757 : ASN: CALIFORNIA69766	1	PI E2E Outbound	IF0107_SHIPMENT_OUT	4756	PASSED
4759 : Invoice creation	1	ECATT Test Config.	ESD_VF01_FROM_DELIVERY	4756	FAILED
4760 : Invoice interface validation	1	PI E2E Outbound	IF0108A_INVOICE_OUT	4759	FAILED

Int4 IFTT supports testing whole business flows. The data is passed between messages and manual steps are automated by SAP CBTA or other recordings.

## Int4 IFTT clients are satisfied! - Ingka/Ikea – 580 times faster

### Before:

- Communication with external partner or system supplier
- Validation in integration platform
- Validation of business documents & EDI messages

### After:

- Quick test case setup and single-click execution
- Automatic validation of messages and business documents

### Testing is more accessible:

- Virtualization enables developers to test already in sandbox
- Easy access to test execution thru chat-bot and test management integration

### Key Benefits:

- Elimination of external dependencies and assurance that entire project control stays in SAP delivery team
- Increased confidence by making sure that the new solution will communicate with all systems in the same manner
- SAP S/4HANA projects delivered within budget and on time



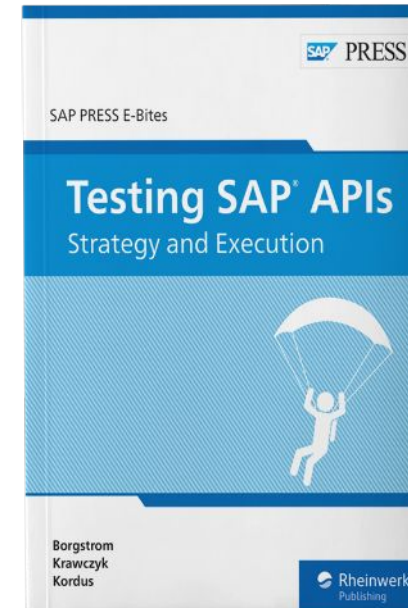
## Int4 education for SAP API testing



### Virtualize and Automate Your SAP Testing Using Int4 IFTT

Over 7.700 participants

<https://open.sap.com/courses/iftt1-pc>



### Testing SAP APIs: Strategy and Execution