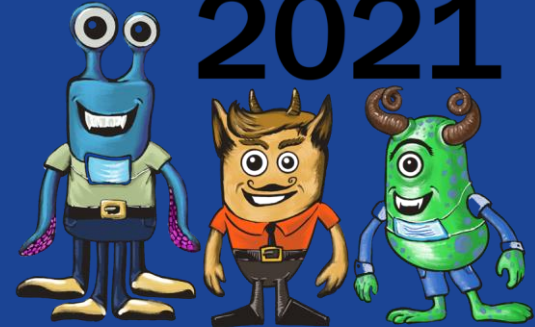




# Automate SAP PI to CPI Migrations

**PI**MON  
2021



# Figaf makes SAP Integration easy



We create automation tools for managing  
SAP Integration

- Testing
- Transport/Governance
- Migration
  - Seeburger to B2B migrations
  - PI to CPI

# Hack2Build



2 Week hackathon to create a tool to automate migrations

200 development hours when into the process

We won the competition with our tool

Build on the Figaf Platform



# Why automating the migration process

Too many integrations running at the moment that needs to be migrated within 2030 years. That is a lot of integrations.

10.000+ SAP PI customers with 100+ ICOs is 1.000.000 iflows that needs to be created

Save time on the migration, so you can focus on other areas to create value

Ensure all iflows are created the same way and require minimal maintenance

# Should you redesign your integration



- There are cases where a 1:1 migration would not be recommended.
  - Where a redesign can simplify the process
  - APIs have changed
  - Methods can be improved
  - Interface is deprecated

Figaf Tool can still be helpful for the process

# Migration Automation Beta scope

- Generate SAP CPI iFlow based on asynchronous ICO/RD with
  - Multiply Receivers and conditions
  - Multiply Interfaces and conditions
  - Support for Message Mappings
  - Support for Function Libraries (shared artifacts)
  - Support for Channel conversion with templates and external properties
  - Test case migration

# PI to CPI migration process



## Configuration

XSLT preparation based on provided templates for channels

## Required data collection

ICO and dependent objects information is automatically fetched from Figaf Tool, that uses SimpleQuery API, Integration Directory WS API etc.

## PI -> Graph model conversion

Graph model provides a flexible way to store relationship between components and keep additional information that should be used for generation of BPMN model and other parts of IFlow

## Graph model -> IFlow BPMN and bundled model

- BPMN model generation
- BPMN diagram generation
- Message mapping conversion
- Schemas extraction
- Functional library conversion
- Post processing on each step that can handle requested dynamic updates
- Push prepared bundled model to the chosen CPI system

# Current status

Tool was released in Beta in August 2021

We we are currently running a migration with a client on 7.1

There is a lot more complicated scenarios than we have on our own system. We are having progress.

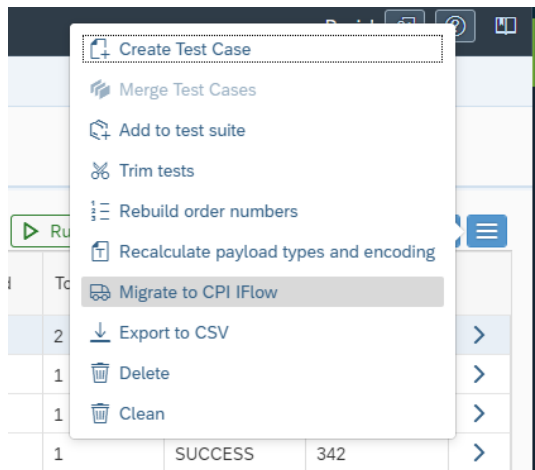


# Demo



- Show ICO
- Migrate the ICO to IFlow
- Handle manual task and configurations
- Migrate a test case
- Run and validate the test case
- Transport in Landscape

# Test automation



Test Run info

Run date: 30/05/2021 15:23  
Last report generation date: 30/05/2021 15:25  
Test Case: default--  
Agent Object: S04\_e2e\_1 (figafawscf-CPI)  
Test Object: S04\_e2e\_1 (figafawscf-CPI), executed on S04\_e2e\_1  
Ignore list: Applied items ignore expressions  
Applied Message properties ignore expressions  
Open actual test configuration

1 of 1 Total count: 3

	Inb. Group	Order	Run Status	Result Status	Msg. Type	Step	Model Step Id
<input type="checkbox"/>	d08a0501-56c4-4d10-8c54-771addcd25cb	1	COMPARED	ERROR	XML	17	EndEvent_5
<input type="checkbox"/>	d08a0501-56c4-4d10-8c54-771addcd25cb	1	COMPARED	ERROR	XML	16	EndEvent_3
<input type="checkbox"/>	d08a0501-56c4-4d10-8c54-771addcd25cb	1	COMPARED	ERROR	XML	14	EndEvent_1

Differences

SAP PI Test case is converted into a CPI test case with one click

Thereafter you can find potential differences between the platforms

Expected Result

created changed deleted ignored

```
1 <ns0:Invoice xmlns:ns0="http://figaf/pitocpi">
2   <No>$B2B_UEBNR_BEFOREINVOICENUMBER$B2B_END_UEBNR</No>
3   <Date>29/05/2021 13/36/47</Date>
4   <Seller>3</Seller>
5   <Purchaser>PUR-2</Purchaser>
6   <Lines>
7     <newfield/>
8     <ID>10</ID>
9     <ProductNo>10</ProductNo>
```

Actual Result

created

```
1 <ns0:Invoice xmlns:ns0="http://figaf/pitocpi">
2   <No>$B2B_UEBNR_BEFOREINVOICENUMBER$B2B_END_UEBNR</No>
3   <Date>30/05/2021 13/23/49</Date>
4   <Seller>3</Seller>
5   <Purchaser>PUR-2</Purchaser>
6   <Lines>
7     <newfield/>
8     <ID>10</ID>
9     <ProductNo>10</ProductNo>
```

# Transport, configuration and documentation



Transport ID: TRANSPORT-418  
Name: Transport of Cpi objects  
Landscape: CPI CF prd  
Platform: CPI  
Registry Type: CLOUD\_INTEGRATION  
Tickets: [ISSUE-268: Hack2Build Transport](#)  
Status: IN\_PROGRESS  
Active:   
Valid:   
Transports from the same group:  
Creation Date: 30/05/2021 15:32  
Created By: Daniel (dgr@figaf.com)  
[Create Transport with the latest versions](#)

## Transport Items

Object Type	figafawscf-CPI (Dev)	figafawscf-CPI (QA) <a href="#">Import</a>	4fd6481ctrial (PRD)
PACKAGE	<a href="#">Hack2Build (rev1) - SOURCE</a>	NOT_IMPORTED_YET	NOT_IMPORTED_YET
CPI_IFLOW	<a href="#">S04_e2e_1 (v1.0.0 rev1) - SOURCE</a>	NOT_IMPORTED_YET	NOT_IMPORTED_YET

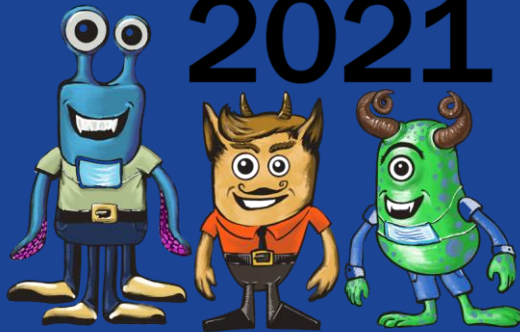
Figaf Tool moves and documents the iFlows to productions in an easy way

	Object Name	Exists on target system
	S04_e2e_1	
figafawscf-CPI (QA)	S04_e2e_1_QA	
4fd6481ctrial (PRD)	S04_e2e_1	

## iFlow external configuration

Inherit (source)	Security content reference	Parameter Name	figafawscf-CPI (Dev)	figafawscf-CPI (QA)	4fd6481ctrial (PRD)
<input checked="" type="checkbox"/>	None	FTP_DIRECTORY	demo	demo	demo
<input checked="" type="checkbox"/>	None	FTP_FILENAME	invoice.xml	invoice.xml	invoice.xml
<input type="checkbox"/>	None	FTP_HOST	ftp.appmembersite.com	qaftp.appmembersite.com	prdfp.appmembersite.com
<input checked="" type="checkbox"/>	None	FTP_PASSWORD	APPMEMBERSITE_USER	APPMEMBERSITE_USER	APPMEMBERSITE_USER
<input type="checkbox"/>	None	REST_URL	http://demo2578315.mockable.i...	http://qa.figaf.com/demourl	http://qa.figaf.com/prdurl

# PI MON 2021



Figaf

QA

Signup at [Figaf.com/devops](https://figaf.com/devops)