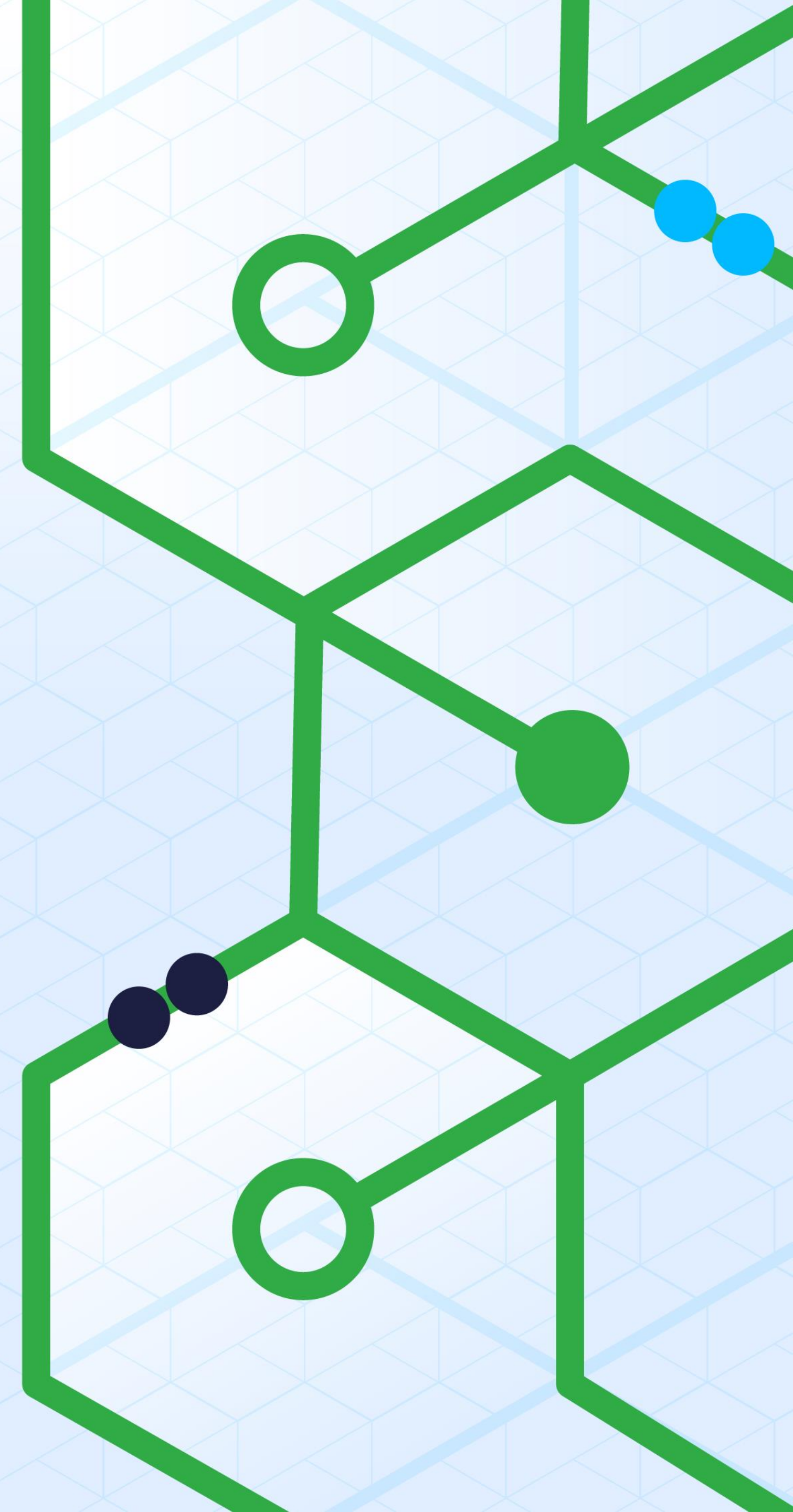


# SAP Best Practices: BAPI Technology



# Meet Your Presenter



**Tony Cregg**

SAP Solutions Engineering Manager

# Agenda

1

## Welcome & Introduction

Get to know insightsoftware, who we are, what we do, and how we empower SAP users

2

## Unlocking Efficiency with Process Runner

A clear overview of the tool and how it streamlines SAP data management

3

## Understanding BAPI Technology

Learn the fundamentals of BAPI and why it matters for automating SAP processes

4

## Live Demonstration: BAPI Technology in Action

Watch a step-by-step walkthrough showing how these technologies work together to save time and reduce errors

5

## Key Takeaways + Q&A

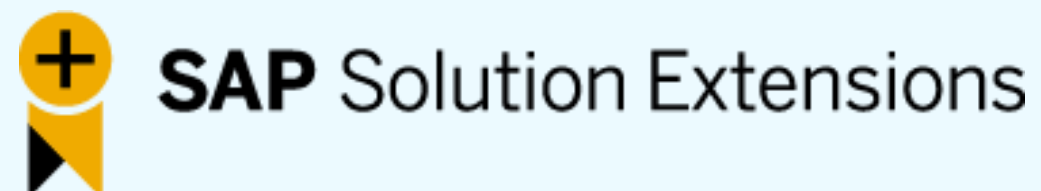
Recap the most important insights from the session and get answers to your specific questions

# Company Facts & Figures

insightsoftware is the most comprehensive provider of solutions for the Office of the CFO. We turn information into insights, empowering business leaders to strategically drive their organization.



**SAP®** Certified  
Integration with SAP® S/4HANA



**\$600M+** Revenue

**500,000+** Users

**34,000+** Customers

**2,600+** Team Members

**1,500+** Partners

**150+** Countries

Rev. Jan 2025

# Process Runner

## Drive Out Tedious, Manual, Error-Prone Processes

- Run Tcodes, BAPIs, GUI Scripting, and Data Extractor technology right from Excel
- Deep automation capabilities for all SAP modules including FI/CO, SD, HR/HCM, MM, PP, SM, QM, and PS
- Full support for SAP S/4HANA
- More than 1,900 ready-to-run templates
- Easy to use with no back-end integration required



Manage  
SAP data



Validate  
before  
uploading  
to SAP



Meet all  
SAP security  
protocols



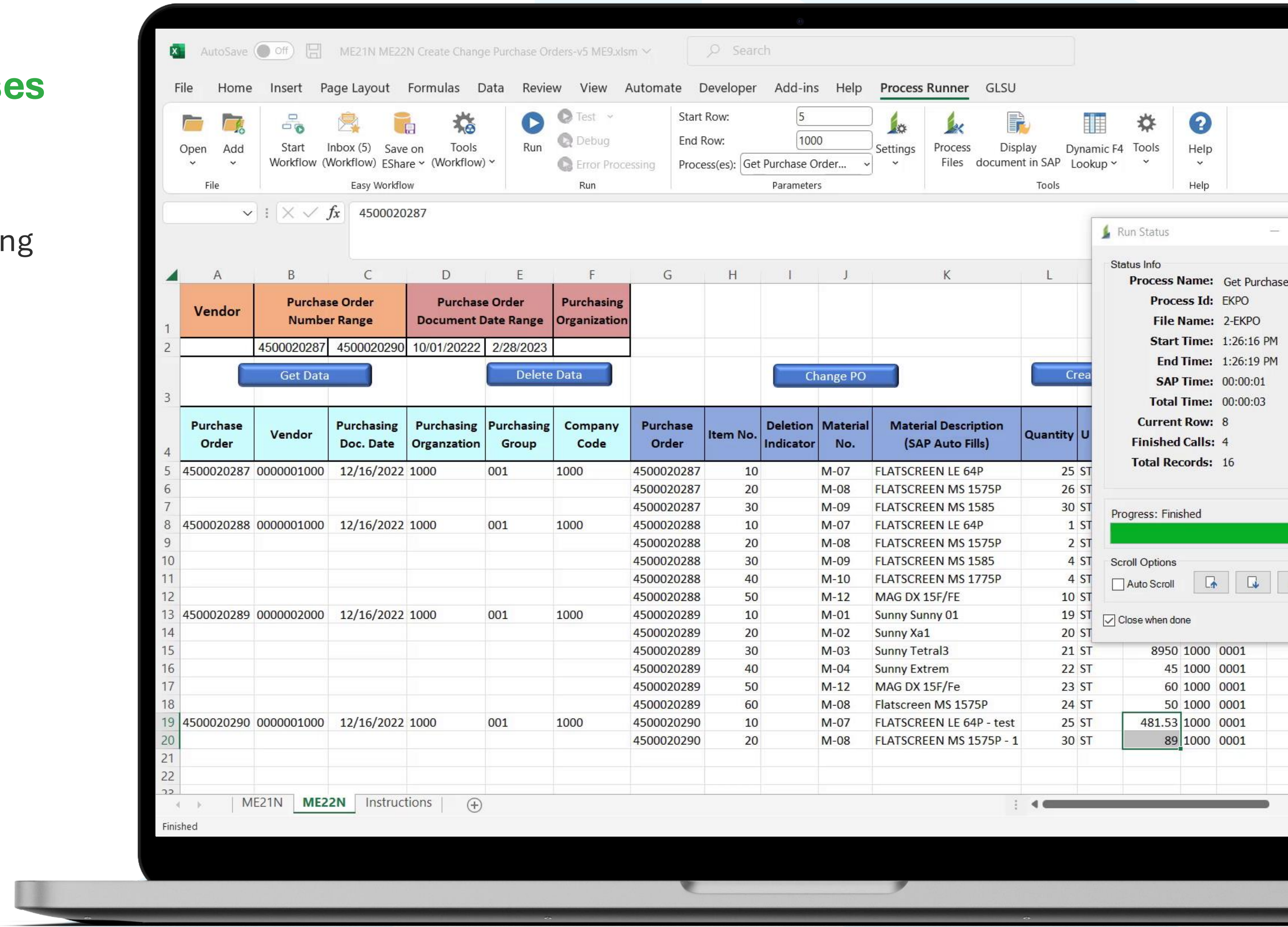
1900+  
ready-to-run  
templates



Powerful  
workflows  
out-of-the-box

 **Process Runner**

from insightsoftware



The screenshot displays the Process Runner application interface within an Excel environment. The main window shows a spreadsheet with columns for Vendor, Purchase Order Number Range, Purchase Order Document Date Range, and Purchasing Organization. Below the spreadsheet, there are buttons for 'Get Data', 'Delete Data', 'Change PO', and 'Create'. A 'Run Status' dialog box is open on the right, providing details about the current process run, including the process name, ID, file name, start and end times, SAP time, total time, current row, finished calls, and total records. The status is 'Finished'.

Purchase Order	Vendor	Purchasing Doc. Date	Purchasing Organization	Purchasing Group	Company Code	Purchase Order	Item No.	Deletion Indicator	Material No.	Material Description (SAP Auto Fills)	Quantity	U
4500020287	0000001000	12/16/2022	1000	001	1000	4500020287	10		M-07	FLATSCREEN LE 64P	25	ST
4500020287						4500020287	20		M-08	FLATSCREEN MS 1575P	26	ST
4500020287						4500020287	30		M-09	FLATSCREEN MS 1585	30	ST
4500020288	0000001000	12/16/2022	1000	001	1000	4500020288	10		M-07	FLATSCREEN LE 64P	1	ST
4500020288						4500020288	20		M-08	FLATSCREEN MS 1575P	2	ST
4500020288						4500020288	30		M-09	FLATSCREEN MS 1585	4	ST
4500020288						4500020288	40		M-10	FLATSCREEN MS 1775P	4	ST
4500020288						4500020288	50		M-12	MAG DX 15F/FE	10	ST
4500020289	0000002000	12/16/2022	1000	001	1000	4500020289	10		M-01	Sunny Sunny 01	19	ST
4500020289						4500020289	20		M-02	Sunny Xa1	20	ST
4500020289						4500020289	30		M-03	Sunny Tetral3	21	ST
4500020289						4500020289	40		M-04	Sunny Extrem	22	ST
4500020289						4500020289	50		M-12	MAG DX 15F/Fe	23	ST
4500020289						4500020289	60		M-08	Flatscreen MS 1575P	24	ST
4500020290	0000001000	12/16/2022	1000	001	1000	4500020290	10		M-07	FLATSCREEN LE 64P - test	25	ST
4500020290						4500020290	20		M-08	FLATSCREEN MS 1575P - 1	30	ST



## What is a “**B**API”?

- **Business Application Programming Interface**
  - ✓ Standard Interface for 3<sup>rd</sup> party applications to interact with SAP
  - ✓ Ensures all business logic, validations & authorizations are executed
  - ✓ Implemented as Remote Function Modules (RFM) that call SAP internal code
- Used for data extracts & full automation of a business process

# 400+ BAPIs already automated in Process Runner

ME8 (1) 800

SAP Function Builder: Initial Screen

SE37 Search Results

Function Module Name	Short text for function module
BAPI_CUSTOMER_GETCONTACTLIST	Read contact persons from customers
BAPI_CUSTOMER_GETDETAIL	Only for ONLINE Store!!! Customer: Read Customer
BAPI_CUSTOMER_GETDETAIL1	Only to ONLINE Store!!! BAPI Read Cstmr to BO Cstmr (KNA1) - with
<b>BAPI_CUSTOMER_GETDETAIL2</b>	Customer Detail Information
BAPI_CUSTOMER_GETINTNUMBER	Provides Internal Customer Numbers
BAPI_CUSTOMER_GETLIST	Reads customers and addresses
BAPI_CUSTOMER_GETPWREG	Read entry for customer password
BAPI_CUSTOMER_GETSALESAREAS	Create List of Sales Areas for the Customer
BAPI_CUSTOMER_GET_CHILDREN	BAPI Customer Hierarchy GetChildren() Implementation
BAPI_CUSTOMER_GET_ROOT	BAPI Customer Hierarchy getRoot() Implementation

See all search results...

Display

Magnitude Process Runner - (Innowera Internal, insightsoftware.lan)

Home customer

Process File Type: All Transaction BAPI/RFM GUI Script Data Extractor Create New Process File... Cloud Sample 1942

Id	Type	Lock	File Name	Process Name	SAP Version
148			BAPI_CUSTOMER_CONTROL_AREA_DATA_FR	CUSTOMER_CONTROL_AREA_D...	ECC
150			BAPI_Download Customer Master-XD03(ECC_HANA)	BAPI_CUSTOMER_GETDETAIL2	ECC, HANA
178			BAPI_CUSTOMER_CREATEFROMDATA1- Create Customer - XD01	BAPI_CUSTOMER_CREATEFRO...	ECC
379			CRM-Create Opportunity with details tab and Partner Function	BAPI OPPORTUNITY_CREATEM...	ECC
1378			List of all Sales Orders for Customer - VA05(ECC_HANA)	BAPI_SALESORDER_GETLIST	ECC, HANA
2131			Attach - Upload Document in Customer Master XD02,XD03	BDS_BUSINESSDOCUMENT_CRE...	ECC
2274			Download Partner Function for given Customer - VOPAN(ECC_HANA)	CUSTOMER_PARTNERFS_GET	ECC, HANA
2300			BAPI_CUSTOMER_CHANGEFROMDATA1 - Customer Change Information - XD02	BAPI_CUSTOMER_CHANGEFRO...	ECC
2682			BAPI_AR_ACC_GETOPENITEMS - Customer account open items at a key date	BAPI_AR_ACC_GETOPENITEMS	ECC
2754			BAPI_CR_ACC_GETDETAIL - FD33 (Display Customer Credit Management)	BAPI_CR_ACC_GETDETAIL	ECC
2756			BAPI_DEBTOR_GETDETAIL-Customer Display-XD03(ECC_HANA)	BAPI_DEBTOR_GETDETAIL	ECC, HANA
2767			WSOA2 - Delete Assortment CustomerSite (WRF_WSOA2)	BAPI_ASSORTMENT_MAINTAIN...	ECC
2828			BAPI_CUSTOMER_GETCONTACTLIST - List of Customer Contact Persons- VAP3(EC...	BAPI_CUSTOMER_GETCONTAC...	ECC, HANA
2829			BAPI_CUSTOMER_GETCONTACTLIST - List of Customer Contact Persons- VAP3(EC...	BAPI_CUSTOMER_GETLIST	ECC, HANA
2899			BAPI_CUSTOMER_GETSALESAREAS - List Of Sale Area for Customer	BAPI_CUSTOMER_GETSALESAR...	ECC
2900			BAPI_CUSTOMERCONTRACT_CHANGE - Change Contract (VA42)	BAPI_CUSTOMERCONTRACT_C...	ECC
3048			BAPI_CUSTMATINFO_GETLIST - List of Customer Material (using Selection Criteria)	BAPI_CUSTMATINFO_GETLIST	ECC
3049			BAPI_CUSTOMERQUOTATION_CHANGE - Change Customer Quotation (VA22)	BAPI_CUSTOMERQUOTATION_...	ECC
3062			BAPI_CUSTOMER_GETDETAIL1 - Read Customer details(Only to Online) - XD03	BAPI_CUSTOMER_GETDETAIL1	ECC
3095			BAPI_CUSTOMER_CHANGEFROMDATA - Change Customer Address (XD02)	BAPI_CUSTOMER_CHANGEFRO...	ECC
3096			BAPI_CUSTOMER_GETDETAIL - Extract Customer Details - XD03	BAPI_CUSTOMER_GETDETAIL	ECC

Total Files = 23

# Process Runner includes fields from BAPI in Excel

Upload Customer Nr from Excel column

The screenshot displays the Magnitude Process Runner interface. At the top, there is a menu bar with options like FILE, HOME, EDIT, MAPPER, NOTE, SCHEDULER, TOOLS, MY DASHBOARD, and HELP. Below the menu is a toolbar with various icons for actions like Run, Stop, Error Processing, Data Governance, Undo, Redo, Row(s) Action, Fast Map, Other Action, Side Panel, Simple View, Advanced View, Tab View, Active Rows, Inactive Rows, All Rows, Excel View, and Test F4 Lookup.

The main area shows a mapping table with the following columns: Parameter Name, Field, Field Description, Mapping Type, and Map Value. The table lists several parameters related to CUSTOMERADDRESS, such as NAME, NAME\_2, CITY, DISTRICT, PO\_BOX, POSTL\_CODE, REGION, COUNTYCODE, and STREET, each mapped to a corresponding field in the BAPI output.

Below the mapping table, there is an Excel File section showing the file path and the current sheet (HANA). The Excel spreadsheet is open, showing a table with columns for Customer Number and Address. The Address column is expanded to show sub-columns for Name 1, Name 2, City, District, PO Box, Postal Code, Region (State, Province, County), County Code, House number and street, Country Key, Language Key, Telebox number, and Second telephone number.

Red arrows point from the text 'Upload Customer Nr from Excel column' to the 'Customer Number' column in the Excel spreadsheet and to the 'Map Value' column in the mapping table. Another red arrow points from the 'Map Value' column in the mapping table to the 'Customer Number' column in the Excel spreadsheet.

Download fields using BAPI outputs

# Full SAP documentation available within Process Runner

The screenshot shows the SAP Function Builder interface. The title bar indicates the function module is **BAPI\_CUSTOMER\_GETDETAIL2**. The main area displays the source code for the function `bapi_customer_getdetail2`. The code includes a local interface with the following parameters:

```
1 FUNCTION bapi_customer_getdetail2.  
2 ***  
3 ***"Local Interface:"  
4 ** IMPORTING  
5 **   VALUE(CUSTOMERNO) LIKE BAPICUSTOMER  
6 **   VALUE(COMPANYCODE) LIKE BAPICUSTOMER  
7 ** EXPORTING  
8 **   VALUE(CUSTOMERADDRESS) LIKE BAPICUST  
9 **   BAPICUSTOMER_04  
10 **   VALUE(CUSTOMERGENERALDETAIL) LIKE BA  
11 **   BAPICUSTOMER_KNA1  
12 **   VALUE(CUSTOMERCOMPANYDETAIL) LIKE BA  
13 **   BAPICUSTOMER_05  
14 **   VALUE(RETURN) LIKE BAPIRET1 STRUCTUR  
15 ** TABLES  
16 **   CUSTOMERBANKDETAIL STRUCTURE BAPICU  
17 **   CUSTOMERIBANDETAIL STRUCTURE BAPICU  
18 **   CUSTOMERSEPADETAIL STRUCTURE BAPICU  
19 **  
20
```

The screenshot shows the SAP Documentation interface for the function `BAPI/RFM (BAPI_CUSTOMER_GETDETAIL2)`. The documentation is displayed in a sidebar on the right side of the SAP Function Builder window. The documentation includes the following sections:

- FUNCTIONALITY**  
Use this method to read detailed data for a customer.  
The following data is retrieved:
  - Address data
  - General data
  - A table from bank data
  - Company code-specific data (if you enter a company code)
- PARAMETERS**
  - CUSTOMERADDRESS
  - CUSTOMERCOMPANYDETAIL
  - CUSTOMERGENERALDETAIL
  - RETURN
  - CUSTOMERNO
  - CUSTOMERBANKDETAI



# Live Demonstration: BAPI Technology in Action

# Key Takeaways

BAPI Technology

Streamline repetitive tasks to boost productivity

Combine multiple processes in single application

Pre-built templates in cloud library

2-way data flow from same BAPI

Intuitive for the business user to create their own automation

Efficiency: Only extract the data you need

**Questions?**





Don't forget to complete our exit survey so we can continue to bring you the content you want to see.

To schedule a demo, visit <https://insightsoftware.com/schedule-a-meeting/>



## About insightsoftware

insightsoftware is a global provider of comprehensive solutions for the Office of the CFO. We believe an actionable business strategy begins and ends with accessible financial data. With solutions across financial planning and analysis (FP&A), accounting, and operations, we transform how teams operate, empowering leaders to make timely and informed decisions. With data at the heart of everything we do, insightsoftware enables automated processes, delivers trusted insights, boosts predictability, and increases productivity.

Learn more at [insightsoftware.com](https://www.insightsoftware.com).