

Extreme Transaction, Query and Direct

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WINSHUTTLE USER GROUP BRUSSELS | 2014



Today's agenda

9:00 – 11:00

Transaction

11:00 – 11:30

Break | Patio

11:30 – 12:30

Transaction (continued)

12:30 – 13:30

Lunch | Forum A

13:30 – 15:00

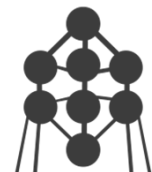
Query

15:00 – 15:30

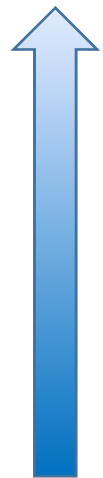
Break | Patio

15:30 – 17:00

Direct & Questions



Transaction Agenda



Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			



Transaction Agenda



Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			




How to succeed with Transaction

- ✓ Know your SAP transaction well
- ✓ Prepare your data in advance
- ✓ Make your recording repeatable
- ✓ Always use a non-production environment to record a script



Transaction Agenda



Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			

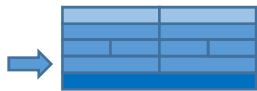


Publishing scripts and Add-In

Scenario: Sharing scripts with Transaction Runners

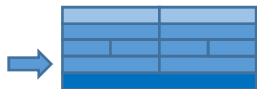
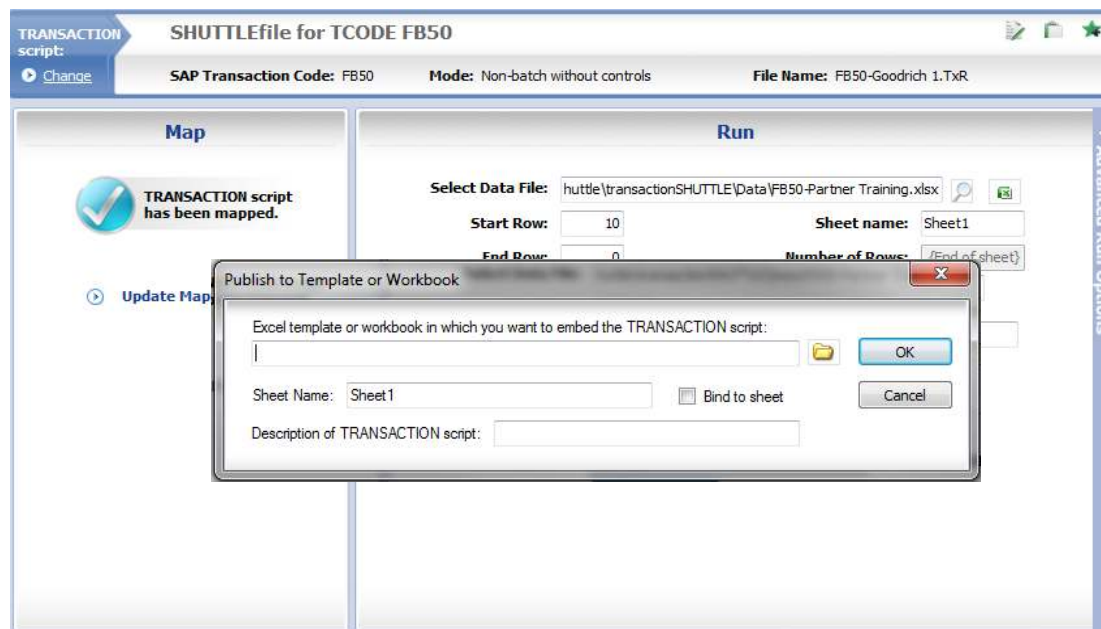
With Connect:

- Solution 1: make available the script and the Excel file
- Solution 2: publish the script(s) onto the Excel file and run the script from the Add-in



Publishing scripts and Add-In

Scenario: Sharing scripts with Transaction Runners

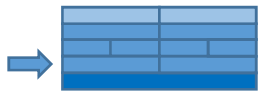


Publishing scripts and Add-In

Scenario: Sharing scripts with Transaction Runners

With Central: after publishing the script and template

- Solution 1: use the Runner application and open the script from Central
- Solution 2: save the template locally and run the script from the Excel Add-In



How to link multiple transactions ?

Scenario:

- Create an order in VA01 and an outbound delivery for this order in VL01N

Item	Material	Order Quantity	SU	Description	S	Customer Material Numb	ItCa	DG...	HgLVlt	D First date	Plnt	Batch	CnTy	Amou
										27.05.2014				
										27.05.2014				
										27.05.2014				
										27.05.2014				

Shipping point 1000 Shipping Point Hamburg

Sales order data

Selection date 16.05.2014

Order 44510

From item

To item

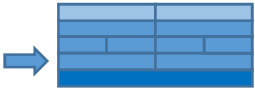
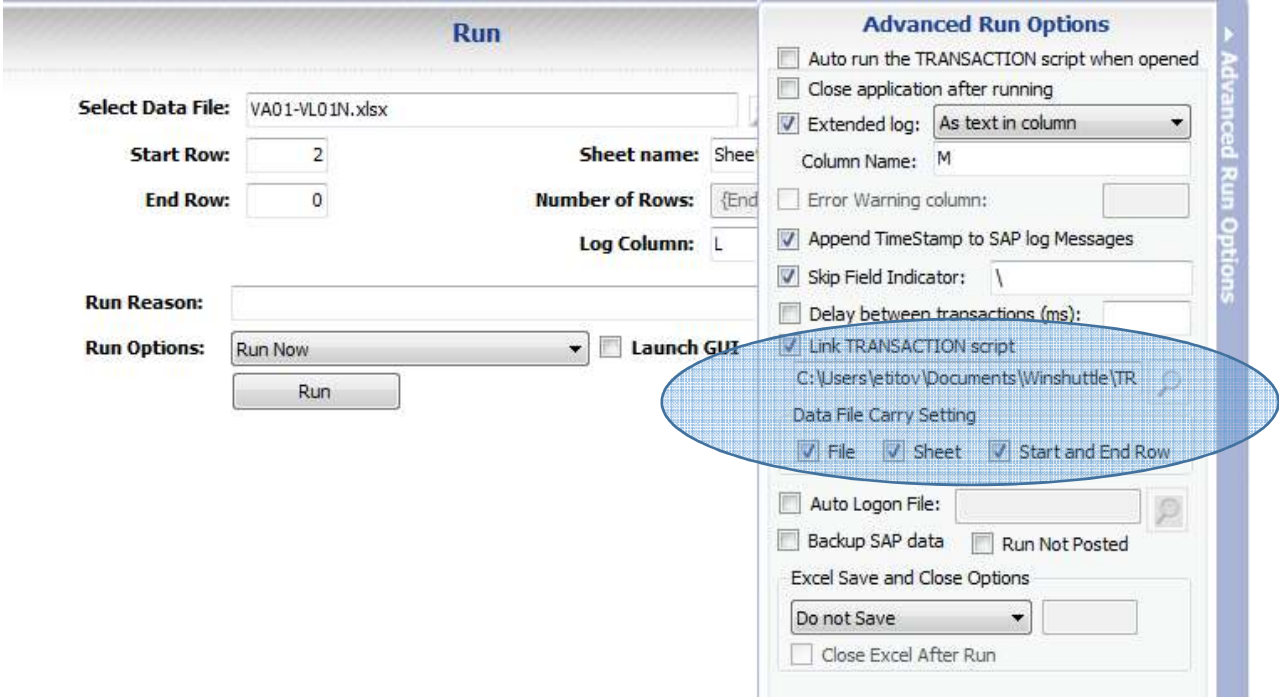
Predefine delivery type

Delivery Type



Linking scripts

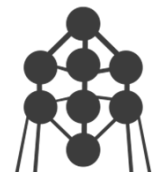
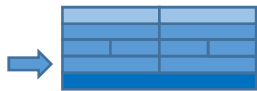
Solution: [Linking Scripts](#)



Linking scripts

When to use linked scripts ?

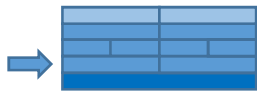
- Linked transactions
- Different recording modes in one transaction
- Long recordings (for easier maintenance)
- Scheduled runs



How to reuse the same script ?

Scenario:

- Existing script to update gross weight and net weight
- The packaging weight has increased so you want to update only the gross weight and leave the net weight as is
- You want to reuse the same script



Skip Field Indicator

Solution: [Skip Field Indicator](#)

The screenshot shows the Winshuttle 'Run' dialog box. The 'Advanced Run Options' panel is open on the right. The 'Skip Field Indicator' checkbox is checked and highlighted with a blue oval. Other options include 'Extended log' (checked), 'Append TimeStamp to SAP log Messages' (checked), and 'Link TRANSACTION script' (checked). The 'Data File Carry Setting' section has 'File', 'Sheet', and 'Start and End Row' all checked. The 'Excel Save and Close Options' section has 'Do not Save' selected.

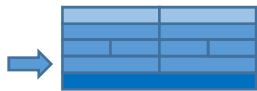


Skip Field Indicator

When to use the skip field indicator ?

- In some cases, a field is not present in the screen
- You do not want to update a recorded field
- According to the need, a condition can be used instead

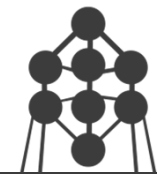
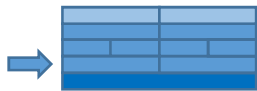
Tip: the skip field indicator can be also set by a formula in Excel



Save SAP data before run

Scenario:

- Updating addresses in customer master (XD02)
- You want to automatically keep track of the original data before the update
- You want to be able to restore the original data later for a subset of records



Save SAP data before run

Solution: [Backup SAP Data](#)

The screenshot shows the 'Run' dialog box in SAP. The 'Advanced Run Options' panel is expanded, and the 'Backup SAP data' checkbox is highlighted with a blue circle. The 'Run' button is visible at the bottom of the dialog.

Run

Select Data File: VA01-VL01N.xlsx

Start Row: 2

End Row: 0

Sheet name: Sheet1

Number of Rows: {End}

Log Column: L

Run Reason:

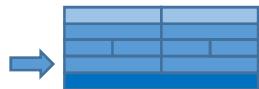
Run Options: Run Now

Launch GUI

Run

Advanced Run Options

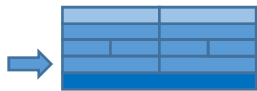
- Auto run the TRANSACTION script when opened
- Close application after running
- Extended log: As text in column
- Column Name: M
- Error Warning column:
- Append TimeStamp to SAP log Messages
- Skip Field Indicator: \
- Delay between transactions (ms):
- Link TRANSACTION script
- C:\Users\jetitov\Documents\Winshuttle\TR
- Data File Carry Setting
- File Sheet Start and End Row
- Auto Logon File:
- Backup SAP data
- Run Not Posted
- Excel Save and Close Options
- Do not Save
- Close Excel After Run



Run on selected or filtered rows

Scenario:

- A transaction script needs to be run on rows 3, 7, 9, 15, 55, 104
- Sometimes you want to apply a filter in Excel and run the rows that are filtered



Run on selected or filtered rows

Solution: Use the Transaction Excel Add-In

- Run Selected Rows
- Run Filtered Rows

Winshuttle TRANSACTION

Select
TRANSACTION script:
C:\Users\pverbeek\Documents\Winshuttle\TRANSACTION
Title: MM01-DevCert PLV Test

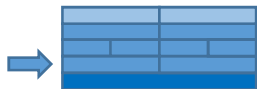
Run Settings
Run Rows: As Specified Below
Start Row: 2 No of Rows: {End of sheet}
End Row: 0 Log Column: AC

Run Reason:

Run Options: Run Now

Run Stop

Tools
Write Headers Look Up Values



Which recording mode to use ?

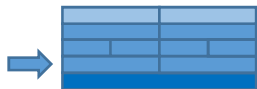
Batch input mode

Non-batch input mode

- With controls / without controls

GUI scripting

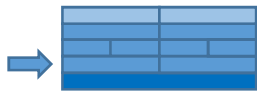
Function module



Which recording mode to use ?

Batch input mode

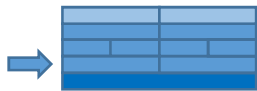
- Faster
- Personal settings are not taken into account
- Screens might be different
- Upload only



Which recording mode to use ?

Non-Batch input mode / Function Module

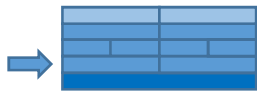
- Most flexible
- Personal settings are taken into account
- Upload / Read
- Long text and extended logging (select WITH controls)



Which recording mode to use ?

GUI scripting

- Runs in foreground (slower)
- Sensitive to changes
 - Resolution
 - Personal settings
 - SAP patch
- Takes into account scrolling
- Needs specific authorizations



Transaction Agenda



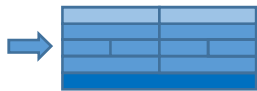
Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			



Loops

Scenario:

- Using a loop in a Transaction script
- H/D in one sheet is unpractical because data is coming in a different format (header data apart from detail data)
- You are hesitating to write a macro to combine header and detail data together to be able to run



Loops

Solution: [Multi sheet loop](#)

Mapping: Change Source Type

Do While Properties

Mapper

Start Row: 9 End Row: 19

Note: Rows are inclusive.

Apply Multi Sheet

MS Excel

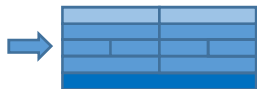
Use identifiers Specify row range

ID Column: A

Line Item ID: D

OK Cancel

Sno.	Enable	Screen
7	<input checked="" type="checkbox"/>	
8	<input checked="" type="checkbox"/>	
9	<input checked="" type="checkbox"/>	
10	<input checked="" type="checkbox"/>	SAPMV45A-0251
11	<input checked="" type="checkbox"/>	
12	<input checked="" type="checkbox"/>	
13	<input checked="" type="checkbox"/>	
14	<input checked="" type="checkbox"/>	SAPMV45A-4001
15	<input checked="" type="checkbox"/>	
16	<input checked="" type="checkbox"/>	
17	<input checked="" type="checkbox"/>	
18	<input checked="" type="checkbox"/>	
19	<input checked="" type="checkbox"/>	
20	<input checked="" type="checkbox"/>	SAPMV45A-4001

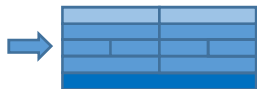


Run one transaction at a time

Scenario:

- Running one transaction at a time
- Using a rich Excel form

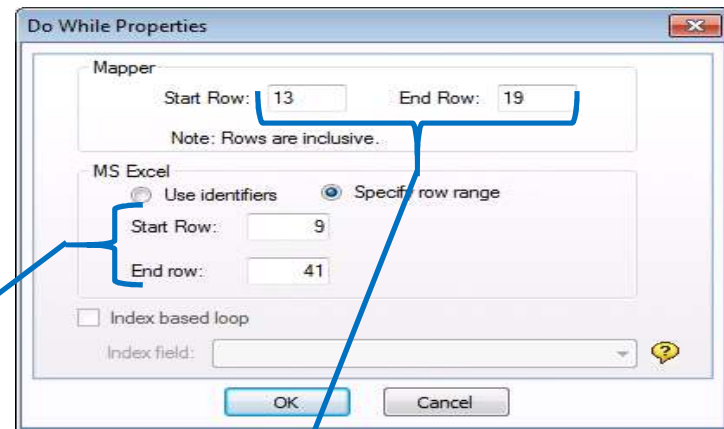
Qty	Part Number	Description	Unit	Price	Total



Run one transaction at a time

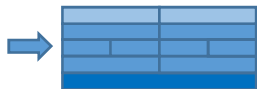
Solution:

- Use Cell based mapping
- Use Cell based loops



Qty	Part Number	Description	Unit	Price	Total

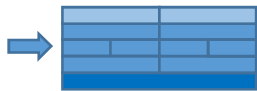
Sno.	Enable	Screen	Field Description	Field Name	Mapping
5	<input checked="" type="checkbox"/>		Sales Document Type	VBAK-AUART	
6	<input checked="" type="checkbox"/>		Sales Organization	VBAK-VKORG	
7	<input checked="" type="checkbox"/>		Distribution Channel	VBAK-VTWEG	
8	<input checked="" type="checkbox"/>		Division	VBAK-SPART	
9	<input checked="" type="checkbox"/>	SAPMV45A-4001	4.0: Screen Contain...		
10	<input checked="" type="checkbox"/>		OK Code for this screen	BDC_OKCODE	
11	<input checked="" type="checkbox"/>		Indicates cursor posi...	BDC_CURSOR	
12	<input checked="" type="checkbox"/>		Sold-to party	KJAGV-KUNNR	
13	<input checked="" type="checkbox"/>				
14	<input checked="" type="checkbox"/>	SAPV45A-4001	4.0: Screen Contain...		
15	<input checked="" type="checkbox"/>		OK Code for this screen	BDC_OKCODE	
16	<input checked="" type="checkbox"/>		Indicates cursor posi...	BDC_CURSOR	
17	<input checked="" type="checkbox"/>		Material Number	RV45A-MABNR(02)	
18	<input checked="" type="checkbox"/>		Cumulative Order Qua...	RV45A-KWMENG(02)	
19	<input checked="" type="checkbox"/>				



Dynamic screens

Scenario:

- Recording the classification view in MM02
- The screen with the class selection appears only once per SAP session
- A static script does not permit this behaviour



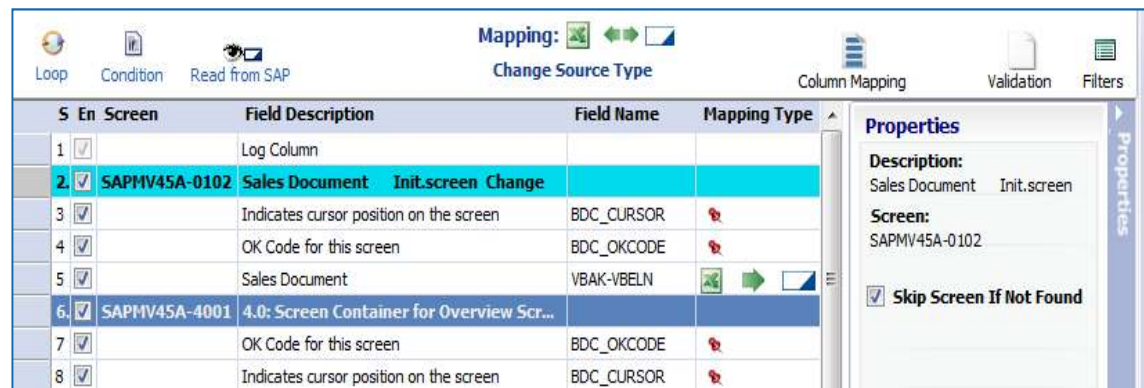
Dynamic screens

Solutions:

- Use IF First Transaction

OR

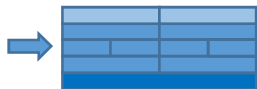
- Use [Skip Screen If Not Found](#)



The screenshot shows the SAP BDC mapping tool interface. At the top, there are icons for Loop, Condition, Read from SAP, Mapping, Change Source Type, Column Mapping, Validation, and Filters. Below these is a table with the following columns: S, En, Screen, Field Description, Field Name, and Mapping Type. The table contains 8 rows of data. Row 2 is highlighted in blue and has a checkmark in the 'En' column. The 'Properties' panel on the right shows the following details:

S	En	Screen	Field Description	Field Name	Mapping Type
1	<input checked="" type="checkbox"/>		Log Column		
2	<input checked="" type="checkbox"/>	SAPMV45A-0102	Sales Document Init.screen Change		
3	<input checked="" type="checkbox"/>		Indicates cursor position on the screen	BDC_CURSOR	
4	<input checked="" type="checkbox"/>		OK Code for this screen	BDC_OKCODE	
5	<input checked="" type="checkbox"/>		Sales Document	VBAK-VBELN	
6	<input checked="" type="checkbox"/>	SAPMV45A-4001	4.0: Screen Container for Overview Scr...		
7	<input checked="" type="checkbox"/>		OK Code for this screen	BDC_OKCODE	
8	<input checked="" type="checkbox"/>		Indicates cursor position on the screen	BDC_CURSOR	

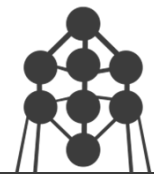
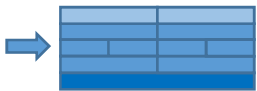
Properties
Description: Sales Document Init.screen
Screen: SAPMV45A-0102
 Skip Screen If Not Found



Dynamic screens

Scenario:





- Record transaction FB01
- Depending on the posting key for the next item, the screen displayed after validation could be different
- We need a way to tell Winshuttle to expect different screens depending on the posting key

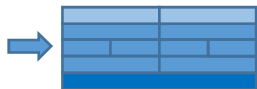


Dynamic screens

Solution:

- Use multiple IF condition inside the loop

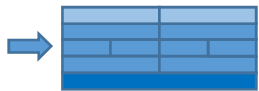
Sno.	Enable	Screen	Field Description	Field Name
9	<input checked="" type="checkbox"/>			
10	<input checked="" type="checkbox"/>			
11	<input checked="" type="checkbox"/>	SAPMF05A-0310	G/L account items (1 line)	
12	<input checked="" type="checkbox"/>		Marque la position du curseur sur l'écran	BDC_CURSOR
13	<input checked="" type="checkbox"/>		Code OK pour cet écran	BDC_OKCODE
14	<input checked="" type="checkbox"/>		Posting Key for the Next Line Item	RF05A-NEWBS
15	<input checked="" type="checkbox"/>		Account or Matchcode for the Next Lin...	RF05A-NEWKO
16	<input checked="" type="checkbox"/>	SAPMF05A-0302	Vendor line item	
17	<input checked="" type="checkbox"/>		Marque la position du curseur sur l'écran	BDC_CURSOR
18	<input checked="" type="checkbox"/>		Code OK pour cet écran	BDC_OKCODE
19	<input checked="" type="checkbox"/>		Amount in document currency	BSEG-WRBTR
20	<input checked="" type="checkbox"/>			
21	<input checked="" type="checkbox"/>			
22	<input checked="" type="checkbox"/>	SAPMF05A-0700	Document Posting: Overview	
23	<input checked="" type="checkbox"/>		Marque la position du curseur sur l'écran	BDC_CURSOR
24	<input checked="" type="checkbox"/>		Code OK pour cet écran	BDC_OKCODE
25	<input checked="" type="checkbox"/>		Posting Key for the Next Line Item	RF05A-NEWBS



Dynamic screens

Scenario:

- Changing weights in transaction MM02
- If the material classification is equal to 00102 take weights from columns B and C
- If it is equal to 00103 take weights from columns E and F



Dynamic screens

Solution:

- Use IF on SAP field

If Condition Properties

Start Row: 10 End Row: 20 Else Row:

IF first transaction
 IF NOT first transaction
 IF on SAP field
 IF on Index Field
 IF to Verify Text
 IF

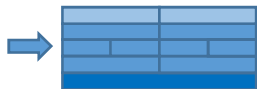
Select SAP Field: Operator: = Value: 25 Compare with Column

number datatype.

OK Cancel

OR

- Create a linked script in non batch mode which will read the data from SAP first



How to manage dynamic screens and fields ?

Different screens or fields depending on a value in Excel

- IF condition

Different screens or fields depending on a value in SAP

- IF on SAP field

Screen or field does not appear in some cases

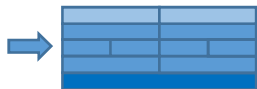
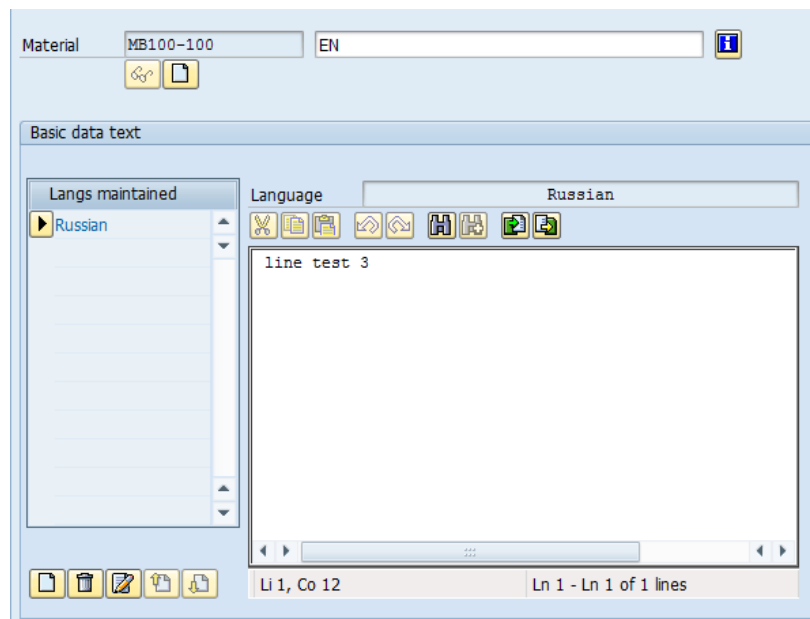
- IF condition
- IF on SAP field
- IF First Transaction / IF Not First Transaction
- Skip Screen If Not Found (for screens only)
- Skip Field Indicator (for fields only)



Long text

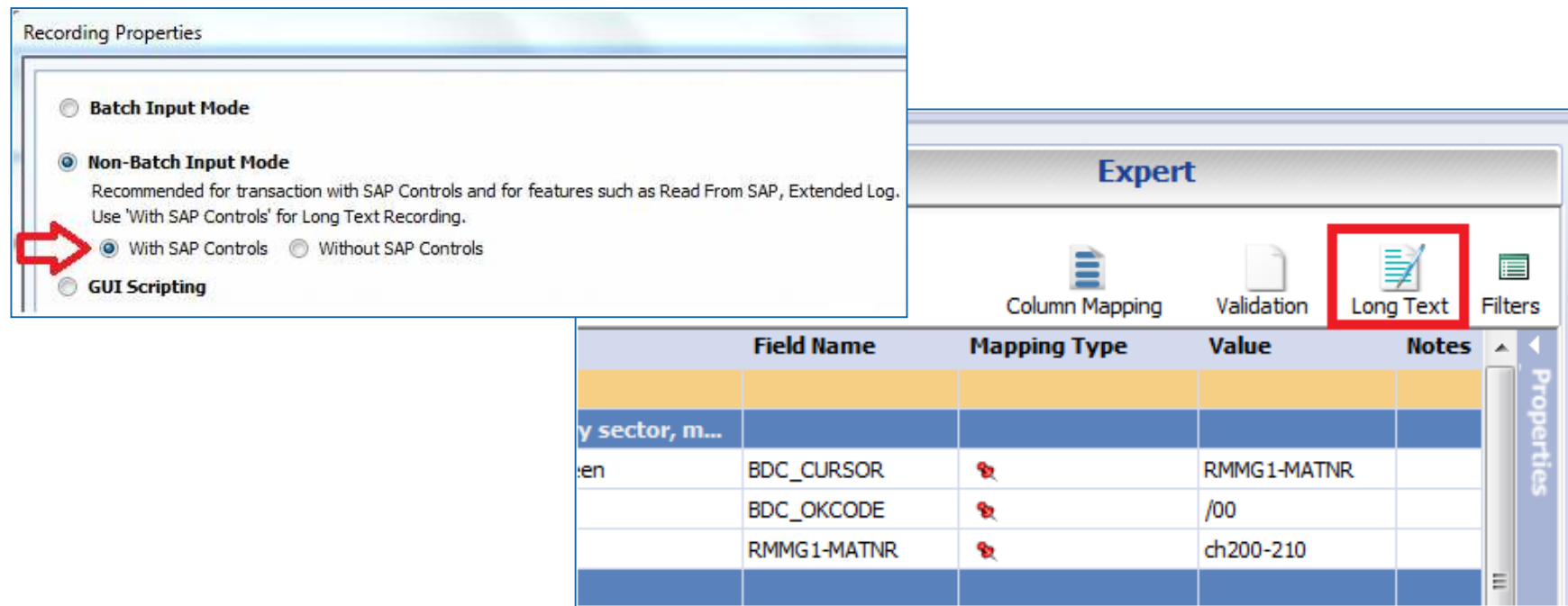
Scenario:

- Update text in the Long Text SAP Control
- Material description long text in MM02



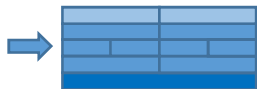
Long text

Solution: use Non Batch Input recording mode With SAP Controls



The screenshot shows the SAP Expert interface. On the left, the 'Recording Properties' dialog is open, with 'Non-Batch Input Mode' selected. Under this mode, 'With SAP Controls' is selected, indicated by a red arrow. On the right, the 'Expert' view shows a table of field mappings. The 'Long Text' icon in the top navigation bar is highlighted with a red box. Below the navigation bar is a table with the following data:

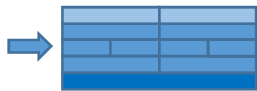
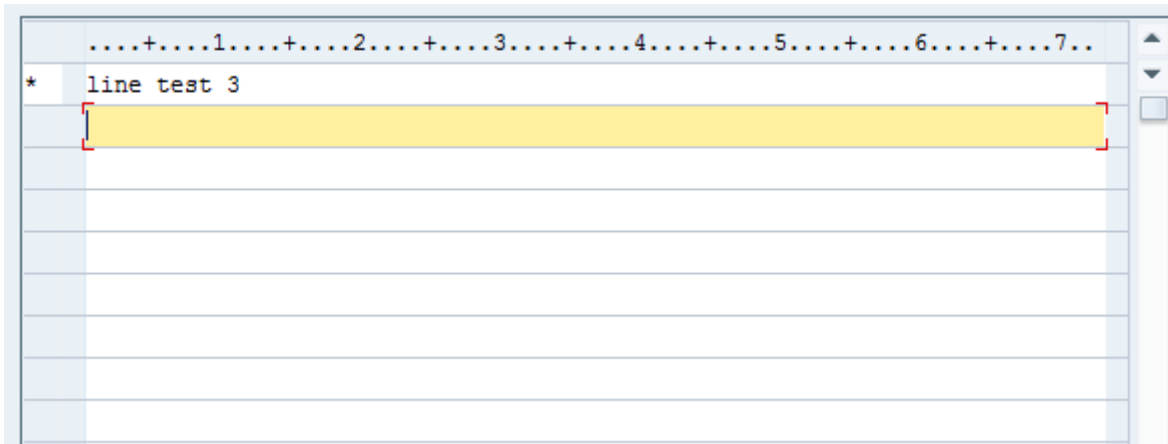
Field Name	Mapping Type	Value	Notes
y sector, m...			
en	BDC_CURSOR	RMMG1-MATNR	
	BDC_OKCODE	/00	
	RMMG1-MATNR	ch200-210	



Long text

Scenario:

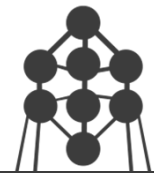
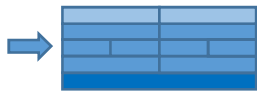
- Update text in the Long Text editor
- Material description long text in MM02



Long text

Solution:

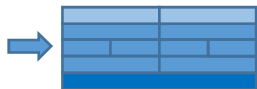
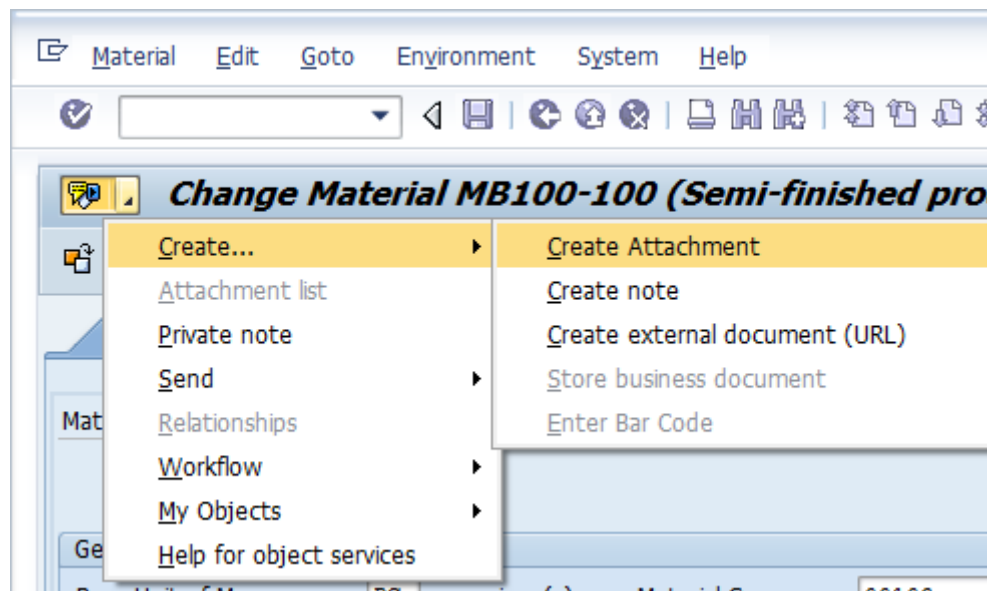
- Change the editor to the Basic Editor
- Record in any recording mode
- First add empty lines
- Use the buttons Next Page / Last Page if needed
- Adjust the mapped fields



Attach a file

Scenario:

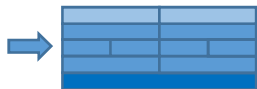
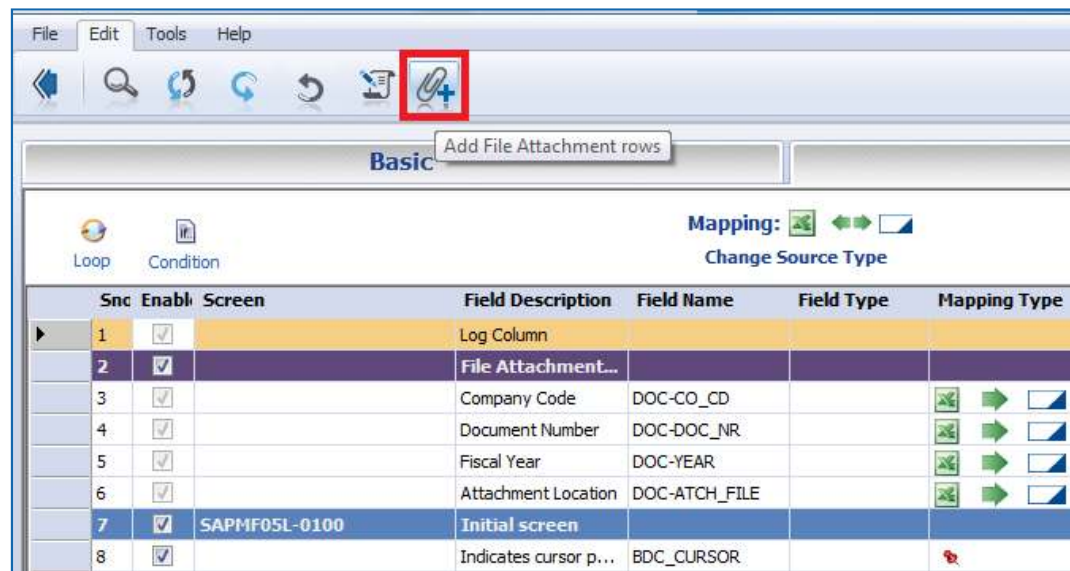
- How to attach a file without using GUI scripting ?
- Transaction MM02:



Attach a file

Solution: Use the [File Attachment button](#)

- Added in version 10.4
- Works only with specific transactions



Transaction Agenda



Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			

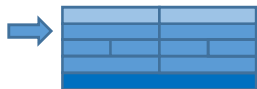


Alternative units of measure

Scenario:

- Create alternative units of measure in transaction MM02
- There can be more than 20 units per material
- No Next Page button

X	AUn	Measu...	<... Y	BUn	Measu...	EAN/UPC	Ct	Au	A	Length
1	PC	piece(s)	<=:1	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
3	CRT	Crate	<=:1	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
2	BT	Bottle	<=:1	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
5	005	One	<=:5	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
1	LB	US poun..	<=:1	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
1	PAL	Pallet	<=:1	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	
2	EA	Each	<=:5	PC	piece(s)			<input type="checkbox"/>	<input type="checkbox"/>	

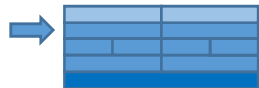


GUI scripting

Solution: Use IF on Index Field

The screenshot shows the Winshuttle TRANSACTION interface. A table with columns 'Sno.', 'Enable', and 'Screen' is visible. An 'If Condition Properties' dialog box is open, showing the following configuration:

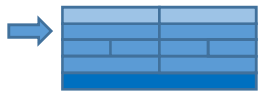
- Start Row: 14
- End Row: 17
- Else Row: (empty)
- Selected condition: IF on Index Field
- Select Field: Alternative Unit of Measure 1
- Operator: {BLANK}
- Value: (empty)
- Compare with Column:
- Find All:
- Note: Select column with text or number datatype.



GUI scripting

When to use IF on Index Field ?

- Need to add / change entries in a table
- The only way to control the screen is to use scroll bars
- The index field needs to be editable
- If other recording modes do not work
- Possibility to change several table entries at once:
Find All checkbox



Data validation before run

Scenario:

- How to pre-validate the data before running the script ?
- Limit the plant to 1000 for Runners

Solution:

- Use the Validation button in the mapper
- Use option [Validate By List](#) in the properties



Data validation before run

Source Type

Column Mapping Validation Filters

Field Name	Mapping Type
BDC_CURSOR	
BDC_OKCODE	
VBAK-VBELN	
BDC_OKCODE	
BDC_CURSOR	
BDC_CURSOR	
BDC_OKCODE	
RV45A-POSNR	

Properties

Description:
Sales Document

Field:
VBAK-VBELN

Source:
Excel, Col. A

Destination:
SAP

Skip Transaction If Empty

Loop Column

Validate by List

Values

Validate by List

Import Values from File
Select file to import list values from :

Value List

	Value	Description	Delete
	1000		X
	1001		X
	1002		X
▶*			

OK Cancel



Transaction Agenda



Manual additions		Script commands	
GUI scripting		Mapper properties	
Loops	Conditions	Long text	Attach a file
Publishing scripts and Add-In		Advanced Run Options	
How to succeed with Transaction			



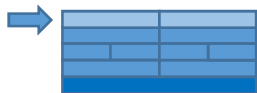
Adding a new field to a recording

Scenario:

- Changing an existing MM02 script to include an extra field which does not appear in the mapper

Solution: [Show disabled fields](#)

Sno.	Enable	Screen	Field Description	Field Name
56	<input type="checkbox"/>		Date from which the cross-plant material status is valid	MARA-MSTDE
57	<input type="checkbox"/>		Assign effectivity parameter values/ override change numbers	MARA-KZEFF
58	<input type="checkbox"/>		General item category group	MARA-MTPOS_MARA
59	<input checked="" type="checkbox"/>		Indicates cursor position on the screen	BDC_CURSOR
60	<input checked="" type="checkbox"/>		Gross Weight	MARA-BRGEW
61	<input type="checkbox"/>		Weight Unit	MARA-GEWEI
62	<input checked="" type="checkbox"/>		Net Weight	MARA-NTGEW
▶ 63	<input type="checkbox"/>		Volume	MARA-VOLUM
64	<input type="checkbox"/>		Volume unit	MARA-VOLEH



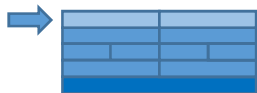
Adding a new field to a recording

Scenario:

- Changing an existing ME21N script to include an extra field which does not appear in the mapper
- The field does not show in the disabled fields

The screenshot shows the SAP ME21N script interface. At the top, there are fields for 'Standard PO' (4500012164), 'Vendor' (3000 C.E.B. New York), and 'Doc. date' (09.10.2001). Below this are tabs for 'Delivery/Invoice', 'Conditions', 'Texts', 'Address', 'Communication', 'Partners', 'Additional Data', 'Org. Data', and 'Status'. The 'Conditions' tab is active, showing 'Payment Terms' (2B01), 'Currency' (USD), 'Exchange Rate' (1,00000), and 'Incoterms' (FOB New York). Below the conditions, there is a table with columns: S., Itm, A, I, Material, Short Text, PO Quantity, O..., C, Deliv. Date, Net Price, Curr..., Per, O... The table contains one row with item 10, material 'Elevator', quantity 2 PC, and delivery date 09.10.2001.

S.	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...
	10	A			Elevator		2 PC	D	09.10.2001	100.000,00	USD	1	PC

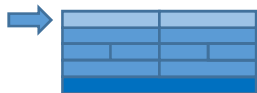


Adding a new field to a recording

Solutions:

- Re-record
- Manual edit : insert a field

The screenshot shows the SAP Performance Assistant interface. On the left, a search criteria list includes 'Purchase Order No.', 'Sold-to party', 'Delivery', 'Billing Document', and 'WBS Element'. A red box highlights an empty input field in the 'Order' section. The 'Performance Assistant' window is open, displaying the 'Sales Document' section with a red arrow pointing to the 'Use' section. The 'Technical Information' window is also open, showing 'Screen Data' with 'Program Name' set to 'SAPMV45A' and 'Screen number' set to '0102', both highlighted with red boxes and arrows. Below 'Screen Data' is the 'GUI Data' section with 'Program Name' set to 'SAPMV45B' and 'Status' set to 'A02'. The 'Field Data' section shows 'Table Name' as 'VBAK', 'Field Name' as 'VBELN', 'Search Help' as 'VMVA', 'Data Element' as 'VBELN_VA', 'DE Supplement' as '0', and 'Parameter ID' as 'AUN'. The 'Field Description for Batch Input' section shows 'Screen Field' as 'VBAK-VBELN', highlighted with a red box and arrow. At the bottom right of the 'Technical Information' window, there are 'Navigate' and 'Close' buttons.

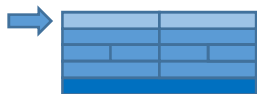


Adding a new field to a recording

Solutions:

- Manual edit : insert a field

Sno.	Enable	Screen	Field Description	Field Name	Mapping Type	Value
1	<input checked="" type="checkbox"/>		Log Column			E
2	<input checked="" type="checkbox"/>	SAPMV45A-0102	Sales Document Init.screen Change			
3	<input checked="" type="checkbox"/>		Indicates cursor position on the screen	BDC_CURSOR		VBAK-VBELN
4	<input checked="" type="checkbox"/>		OK Code for this screen	BDC_OKCODE		/00
5	<input checked="" type="checkbox"/>		Sales Document	VBAK-VBELN		A
6	<input checked="" type="checkbox"/>	SAPMV45A-4001	4.0: Screen Container for Overview Screens			



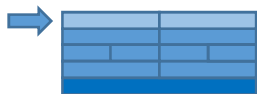
Changing the logic of a recording

Scenario:

- The original logic of a recording has changed
- Need to include one or several extra screens
- For example, going on an extra tab in transaction ME21N and filling additional fields

The screenshot shows the SAP ME21N transaction interface. At the top, there are fields for 'Standard PO' (4500012164), 'Vendor' (3000 C.E.B. New York), and 'Doc. date' (09.10.2001). Below this are several tabs: 'Delivery/Invoice', 'Conditions', 'Texts', 'Address', 'Communication', 'Partners', 'Additional Data', 'Org. Data', and 'Status'. The 'Conditions' tab is active, showing 'Payment Terms' (ZB01), 'Currency' (USD), 'Exchange Rate' (1,00000), and 'Incoterms' (FOB New York). Below the conditions, there is a table with columns: S., Itm, A, I, Material, Short Text, PO Quantity, O..., C, Deliv. Date, Net Price, Curr..., Per, O..., Ma. The table contains one row with 'Elevator' as the material and '2 PC' as the quantity.

S.	Itm	A	I	Material	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...	Ma
	10	A		Elevator		2 PC	D		09.10.2001	100.000,00	USD	1	PC	Ele



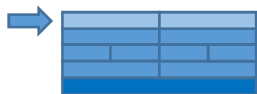
Changing the logic of a recording

Solution:

- Re-record completely

OR

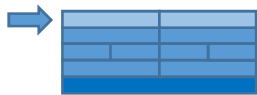
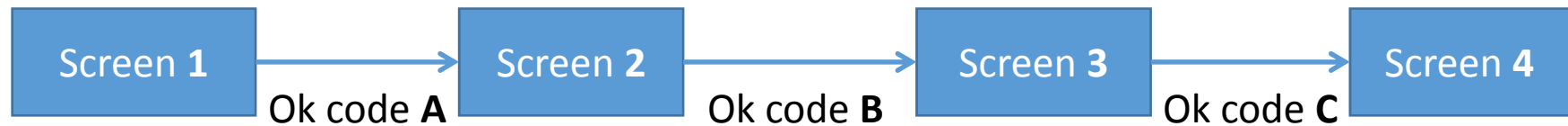
- Re-record partially and copy-paste in the recording
- Adjust the Ok-code before the new sequence
- Check that the screen after the new sequence is correct



Changing the logic of a recording

Solution:

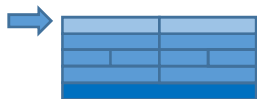
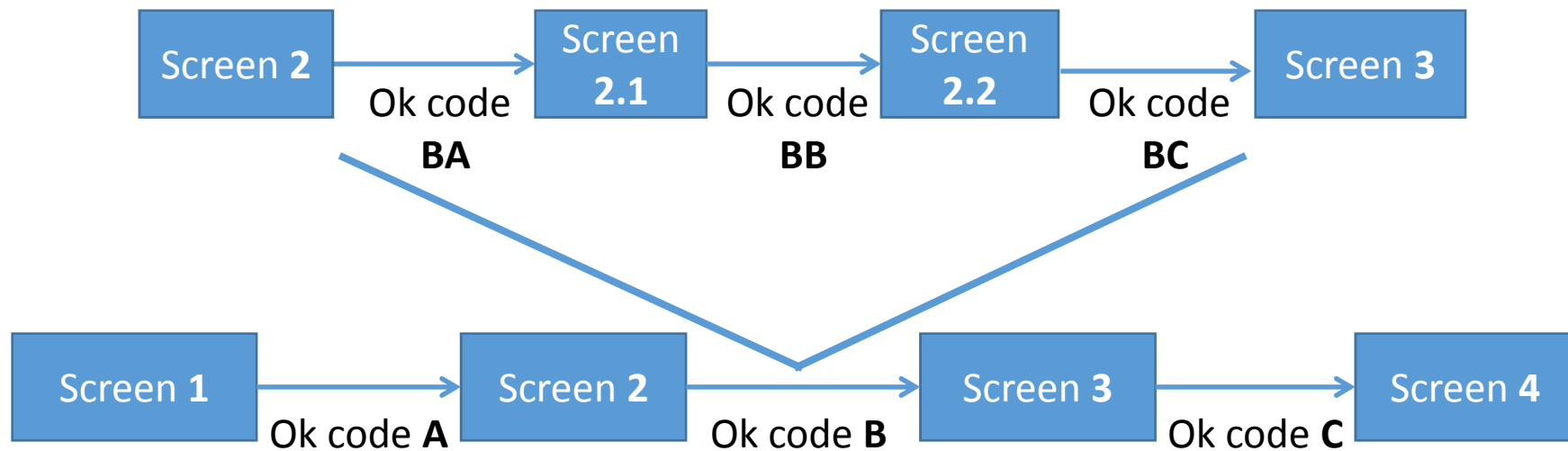
- Re-record partially and copy-paste in the recording



Changing the logic of a recording

Solution:

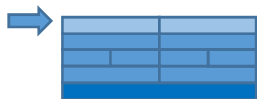
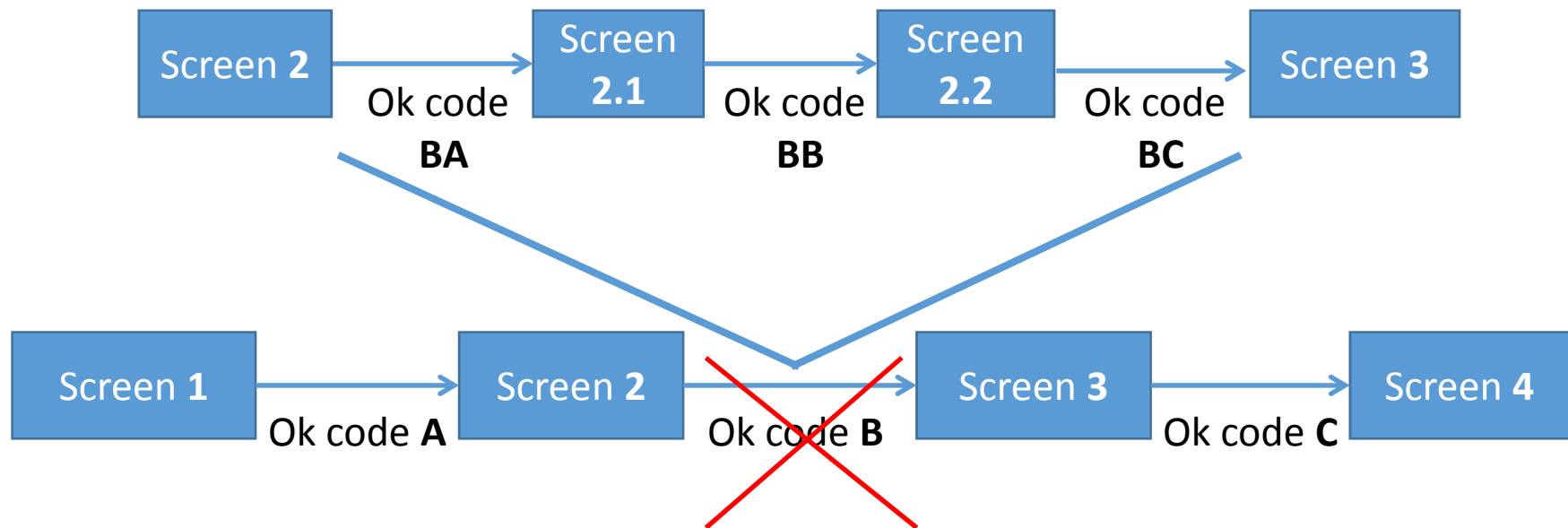
- Re-record partially and copy-paste in the recording



Changing the logic of a recording

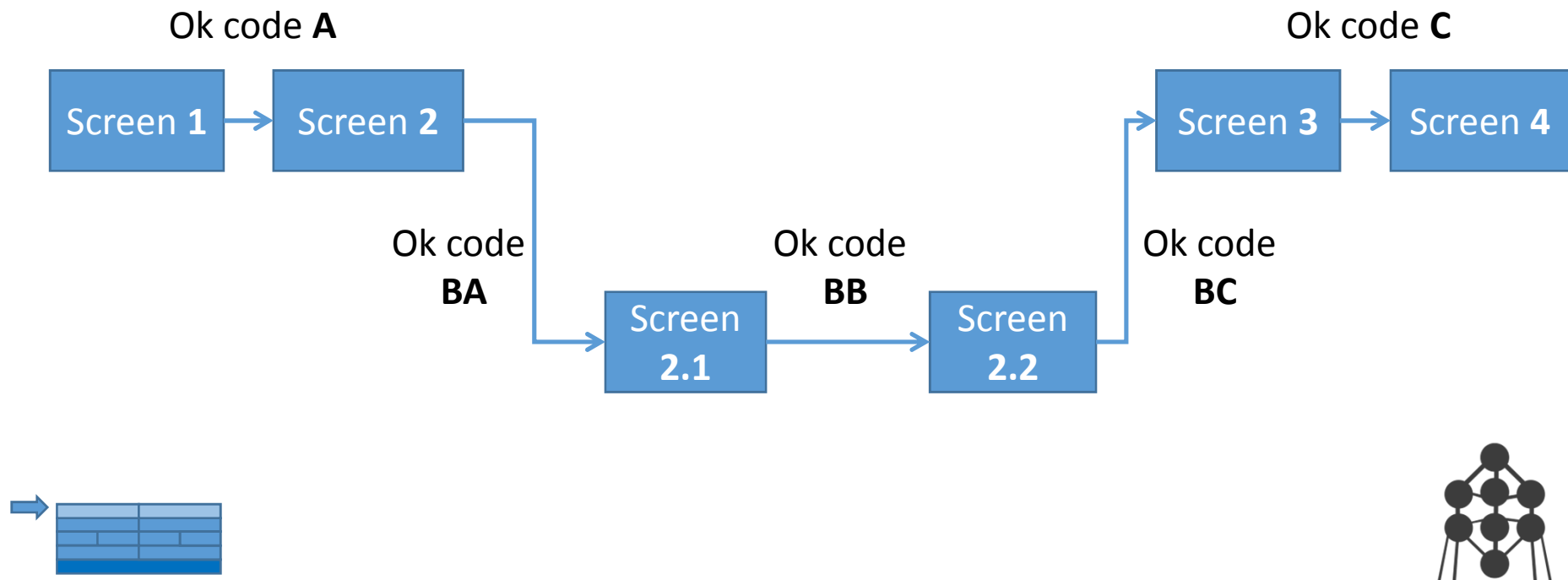
Solution:

- Re-record partially and copy-paste in the recording



Changing the logic of a recording

Be careful! Incorrect placement of fields or screens can cause errors in the script.



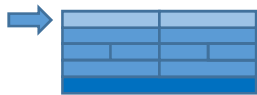
Changing the standard log messages

Scenario:

- The log messages received from SAP do are not always clear
- How to customize these messages?

Solution:

- [Use script commands](#)



Questions



Query Agenda

Introduction

Potential uses

Quick demo

Function module

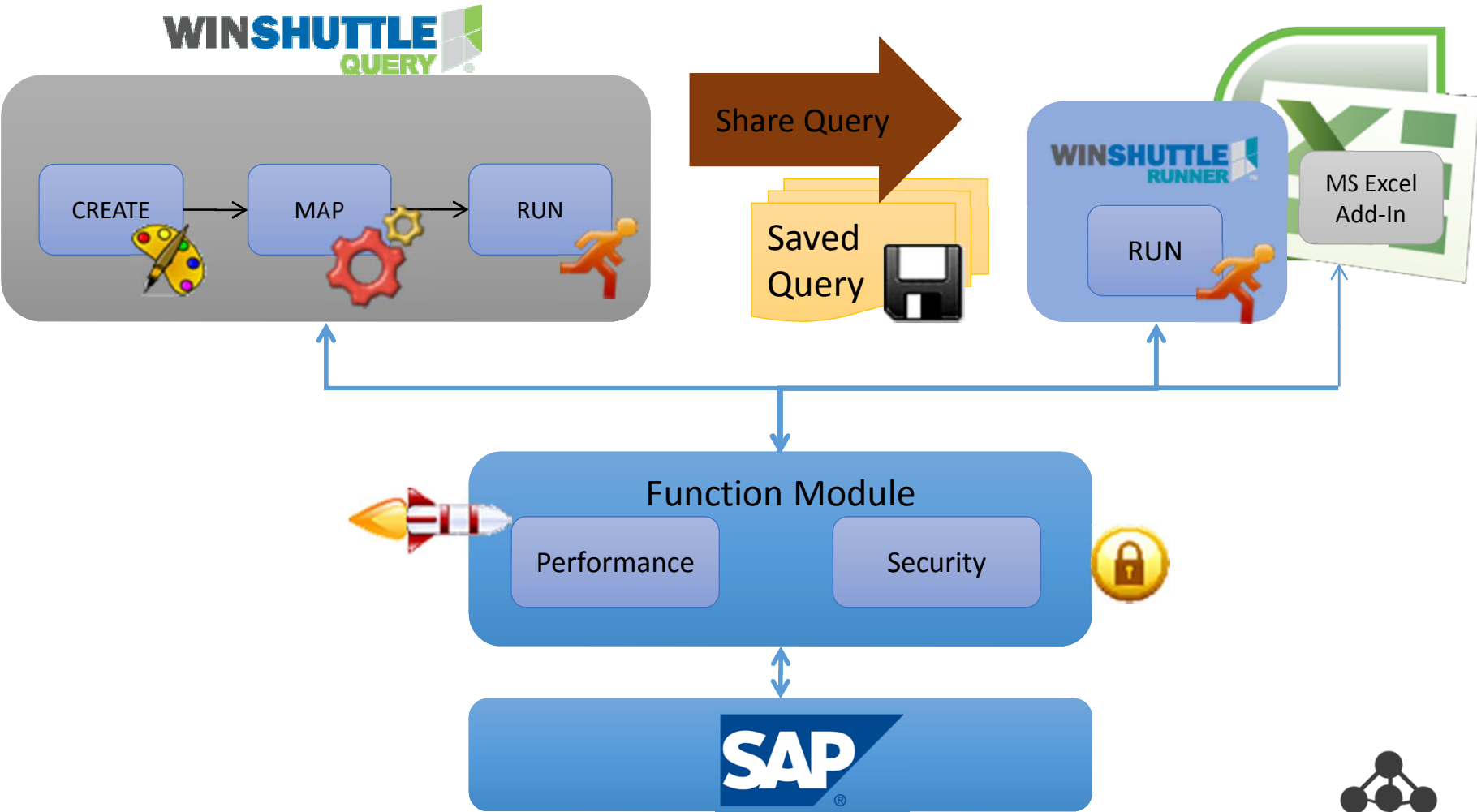
Joining tables

Background processing

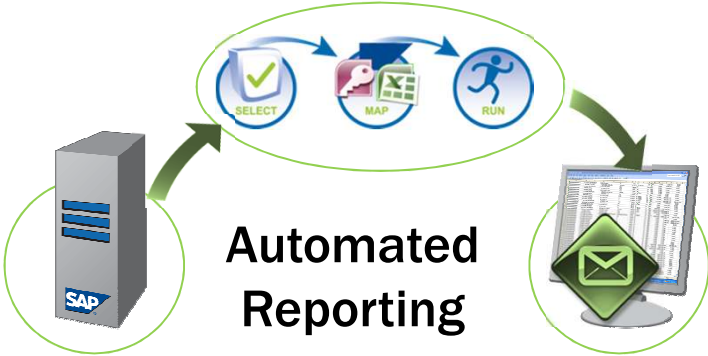
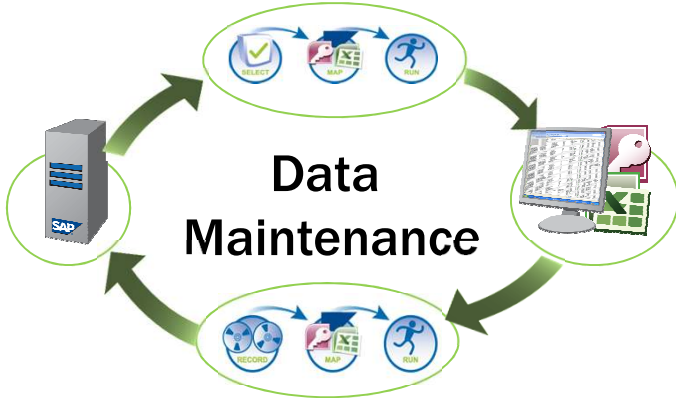
Tips for success



Query introduction



Potential uses



Query quick demo

Simple example of query creation

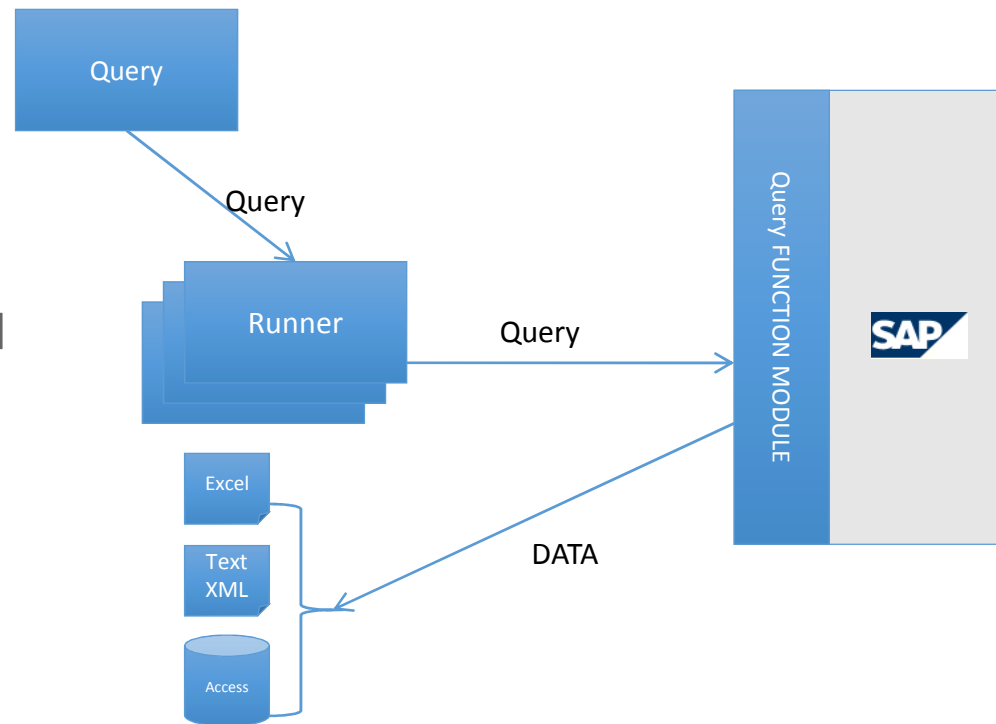
- Selection from table
- Where clause
- Joining
- Mapping
- Execution



Function module

Function Module

- Securely extract information
- Minimal impact on SAP
- Run as SAP Background Process
- Data Chunking
 - Excel
 - Text
 - XML
- Create scripts
 - Logical Databases
 - Using SAP Recording



Joining tables

Joining table auto-finder

“Joining table” Auto-Finder

- Identify tables that can be used as a “connector” in order to get a join created between two tables that are not naturally linked in SAP

The screenshot shows the SAP interface with the 'Auto Join Table' dialog box open. The dialog box has a title bar 'Auto Join Table' and a search bar. A callout bubble points to the search bar with the text 'Search for Joining Table'. The dialog box contains two main sections: 'Select any two tables:' and 'Auto Join Tables'. The 'Select any two tables:' section has a list of tables with checkboxes. The tables listed are EBKN and T16FC, both of which are checked. The 'Auto Join Tables' section is currently empty. At the bottom of the dialog box, there are two buttons: 'Find Auto Join Tables' and 'Add Selected Tables To Query Builder'. In the background, two SAP tables are visible: '[EBKN (Purchase Requisition Acc...)]' and '[T16FC (Release Codes)]'. The '[EBKN (Purchase Requisition Acc...)]' table has fields: BANFN (Purchase), BNFPO (Item Num), ZEBKN (Serial num), KOSTL (Cost Cen), VBELN (Sales and), VBELP (Sales Doc), ANLN1 (Main Ass), AUFNR (Order Num), KOKRS (Controllir), PS_PSP_PNR (Work Bre), NPLNR (Network), AUFPL (Routing), LOEKZ (Deletion In), and ERDAT (Date on M). The '[T16FC (Release Codes)]' table has fields: FRGGR (Release group), FRGCO (Release code), and FRGWF (Role resolution fi).

Running Query scripts

Query Background Scheduling in SAP

- Reduces performance impact on the system
- Preserves Dialog Work Processes

Job Overview

Job	Ln	Job CreatedB	Status
<input type="checkbox"/> /WINSHTLQ/20120110202632050000		MARCR	Finished
<input type="checkbox"/> /WINSHTLQ/20120110203529226000		MARCR	Finished
<input type="checkbox"/> /WINSHTLQ/20120110204019176000		MARCR	Finished
*Summary			

Process Overview

No.	Type	PID	Status	Reason	Start	Err	S...	CPU
0	DIA	2172	Waiting		Yes	2		
1	BGD	736	Running	GWMOT	Yes	2		

Run

Select result file: C:\Users\marcr\Documents\WinShuttle\querySH

Sheet: Sheet1 Log column or cell: L

Start row: 2

Extract all records:

No. of records to be extracted: 500 [No. of entries](#)

Run reason:

Run as SAP Background Process:

Run options: Run Now

Run

Tips for success



Only include necessary Table, Fields, and Joins

Joins between Primary Key fields have the best performance

Run a Preview to verify that the results are what is required



Direct Agenda

Introduction

SAP Overview

Quick demo

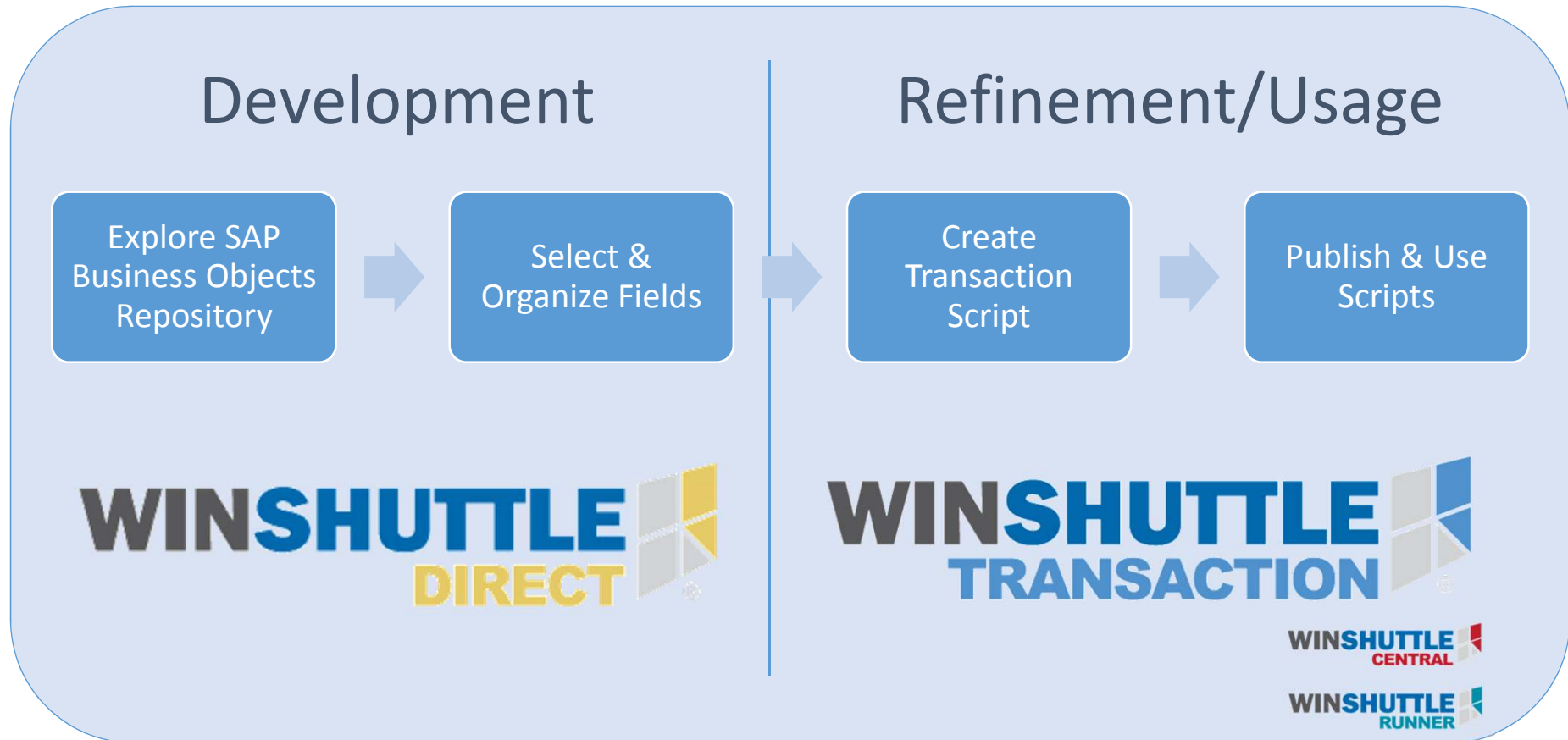
Direct Essentials

Creating a Transaction script

Tips for success



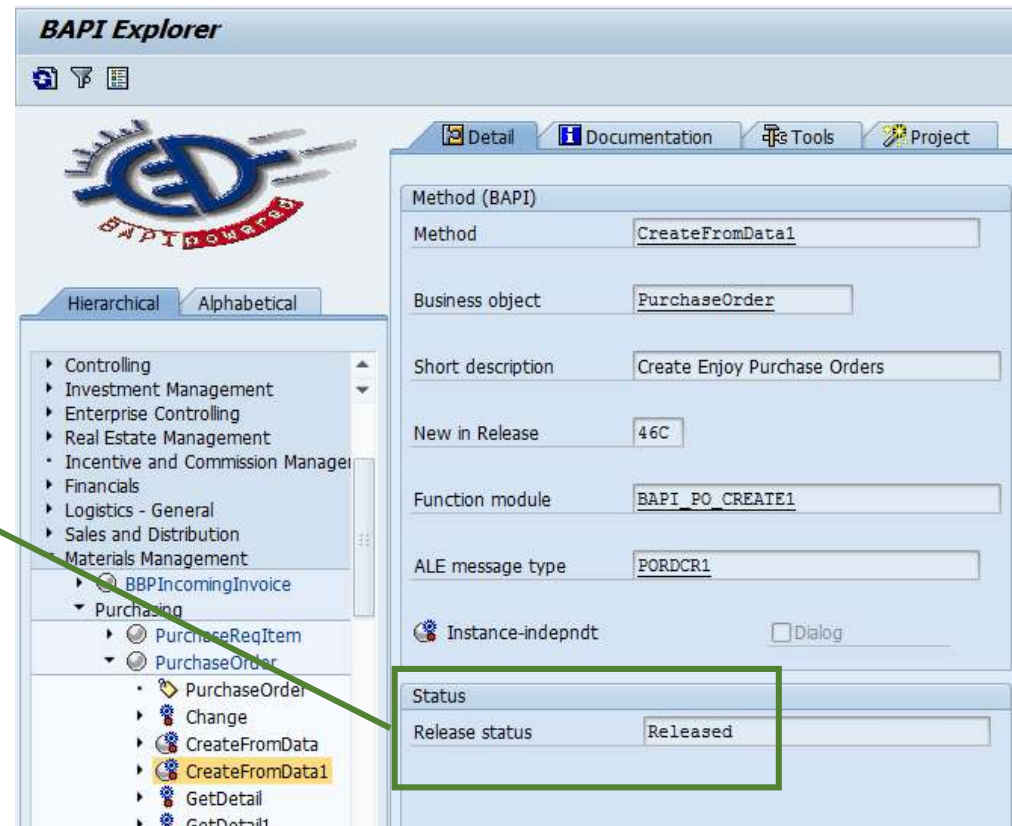
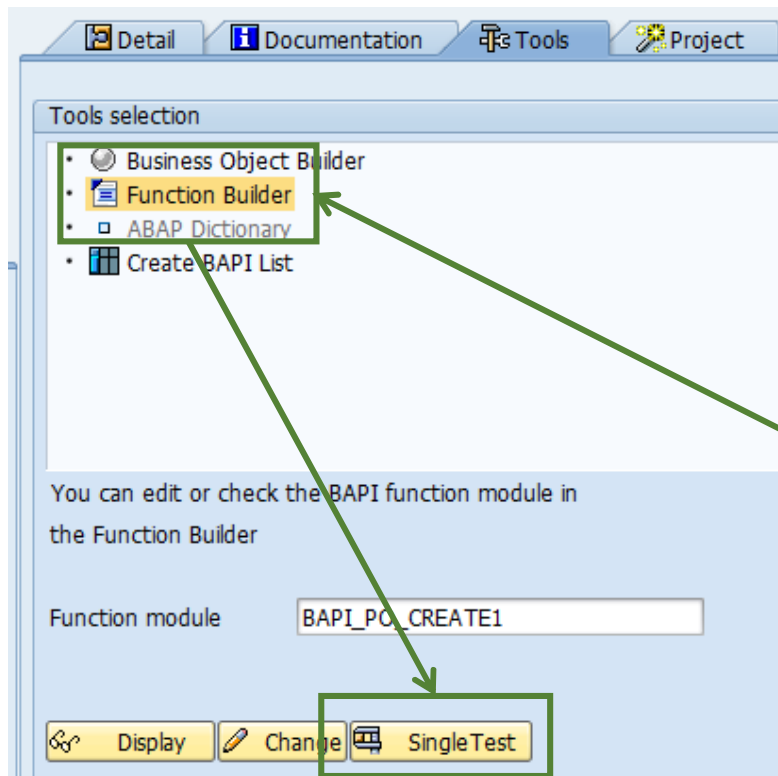
Direct Introduction



SAP Overview

View and Test the BAPI/RFM

- BAPI Transaction



SAP Overview

Test the BAPI/RFM

- Enter values
- Can also be accessed via SE37

Test Function Module: Initial Screen

Debugging Test data directory

Test for function group: 2012
Function module: BAPI_PO_CREATE1
Uppercase/Lowercase:

RFC target sys: _____

Import parameters	Value
POHEADER	00/00/0000 0000
POHEADERX	
POADDRVENDOR	
TESTRUN	
MEMORY_UNCOMPLETE	
MEMORY_COMPLETE	
POEXPIMPHEADER	
POEXPIMPHEADERX	
VERSIONS	00/00/0000
NO_MESSAGING	
NO_MESSAGE_REQ	
NO_AUTHORITY	
NO_PRICE_FROM_PO	

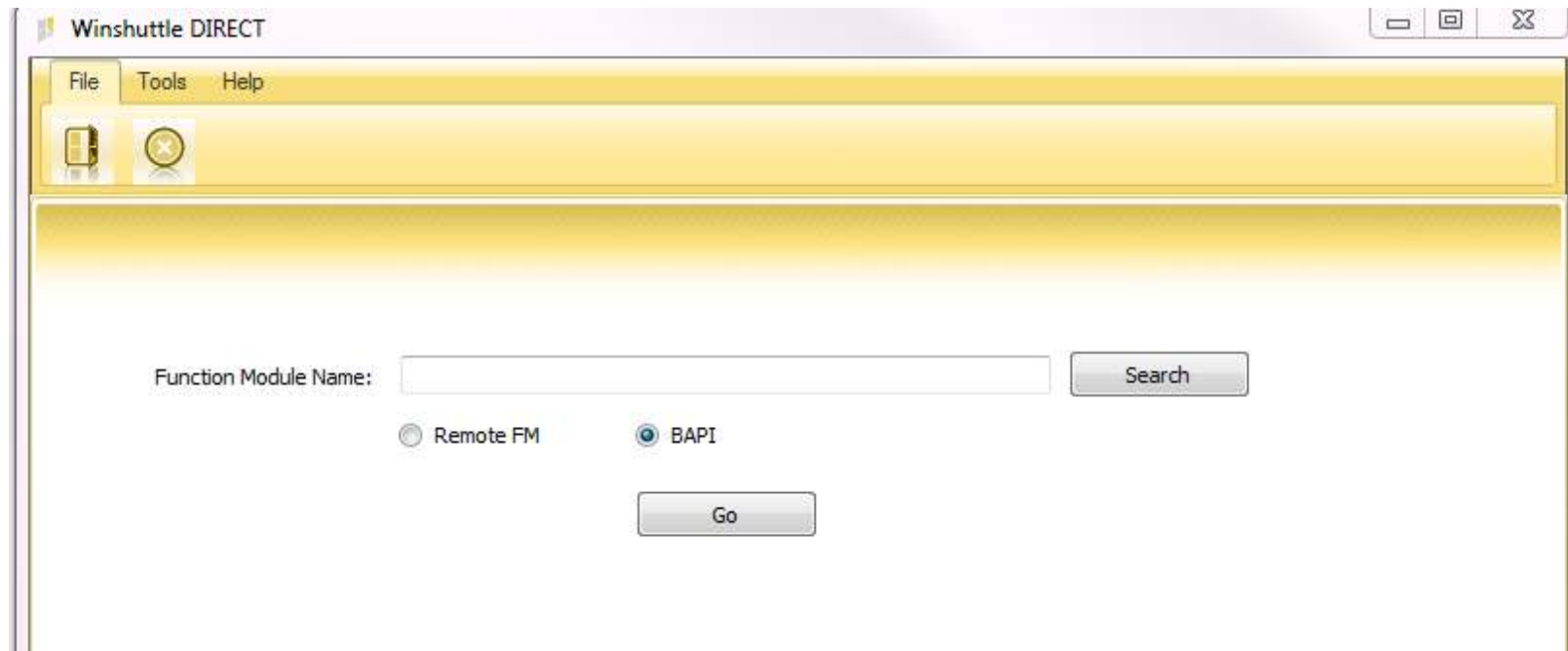
Tables	Value
RETURN	0 Entries
POITEM	0 Entries
POITEMX	0 Entries
POADDRDELIVERY	0 Entries
POSCHEDULE	0 Entries
POSCHEDULEX	0 Entries
POACCOUNT	0 Entries
POACCOUNTPROFITSEGMENT	0 Entries
POACCOUNTIX	0 Entries
POCONDHEADER	0 Entries
POCONDHEADERX	0 Entries



Direct Essentials

BAPIs and Function modules

- Enter name
- Search



The screenshot shows the Winshuttle DIRECT application window. The title bar reads "Winshuttle DIRECT". Below the title bar is a menu bar with "File", "Tools", and "Help". The main area contains a search interface with the following elements:

- A text input field labeled "Function Module Name:".
- A "Search" button to the right of the input field.
- Two radio buttons below the input field: "Remote FM" (unselected) and "BAPI" (selected).
- A "Go" button centered below the radio buttons.

Direct Essentials

BAPIs and Function modules

- Must be remote-enabled
- RFM might call a BAPI but not vice versa
- Can use a Z BAPI / RFM



Direct Essentials

BAPI and RFM documentation

BAPI Documentation: BAPI_SALESORDER_CREATEFROMDAT2

Functionality

You can use this method to create sales orders.

You must enter at least sales order header data (via ORDER_HEADER_IN structure) and partner data (via the ORDER_PARTNERS table) as input parameters.

Enter the item data via the ORDER_ITEMS_IN table. You can allocate item numbers manually, by filling in the relevant fields, or the system does it, according to the settings for Customizing, by leaving the relevant fields blank.

If you have configurable items, you must enter the configuration data in the ORDER_CFGS_REF, ORDER_CFGS_INST, ORDER_CFGS_PART_OF and ORDER_CFGS_VALUE tables.

Credit cards can be transferred via the BAPICCARD structure, on the one hand, data for card identification, on the other, data for a transaction which has taken place in an external system.

Once you have created the sales order successfully, you will receive the document number (SALESDOCUMENT field). Any errors that may occur will be announced via the RETURN parameter.

If no sales area has been created in the sales order header, then the system creates the sales area from the sold-to party or ship-to party, who has been entered in the partner table. If a clear sales area cannot be created, you will receive a system

Print Copy to clipboard

Get module documentation

Module Name : BAPI_SALESORDER_CREATEFROMDAT2

Name : Sales order: Create Sales Order

Object Type : BUS2032

System : Created By : pverbeek SAP Version : 46A Date of Creation : 12/13/2012

Commit Required Enqueue and Dequeue (for HR BAPIs/RFMs only)

OK Cancel

Direct Essentials

Create Direct template

MetaData ✕

[Get module documentation](#)

Function Module Name :

BAPI Name : BAPI Description :

Method Name : Object Type :

SAP System : Created By : SAP Version : Date of Creation :

Properties

Commit Required Enqueue and Dequeue (for HR BAPIs/RFMs only)



Direct Essentials

Create BAPI template

- Select fields

The screenshot shows the SAP Direct Essentials interface for creating a BAPI template. The left pane displays a tree view of tables under 'BAPI_SALESORDER_C', with 'Tables' expanded. The main table lists fields with their properties:

Enable	MR80	Field Name	Field Description	Field Type	Padding	Pad With
<input checked="" type="checkbox"/>	Mandatory	CLASS_TYPE	Class Type	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	None	OBJ_KEY	CUJB: Key of Referencing Object	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input checked="" type="checkbox"/>	Recommended	OBJ_TXT	Language-Dependent Object Description	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	None	QUANTITY	Instance Quantity	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	None	AUTHOR	Statement was Inferred	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	Recommended	QUANTITY_UNIT	Unit of Measure	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	Eighty Percentile	COMPLETE	General Indicator	CHAR	<input checked="" type="checkbox"/>	Zero (0)
<input type="checkbox"/>	None	CONSISTENT	General Indicator	CHAR	<input checked="" type="checkbox"/>	Zero (0)

At the bottom of the interface, there are links for 'Field Documentation', 'Table/Structure Documentation', and 'Get module documentation'.



Direct Essentials

Launching Transaction

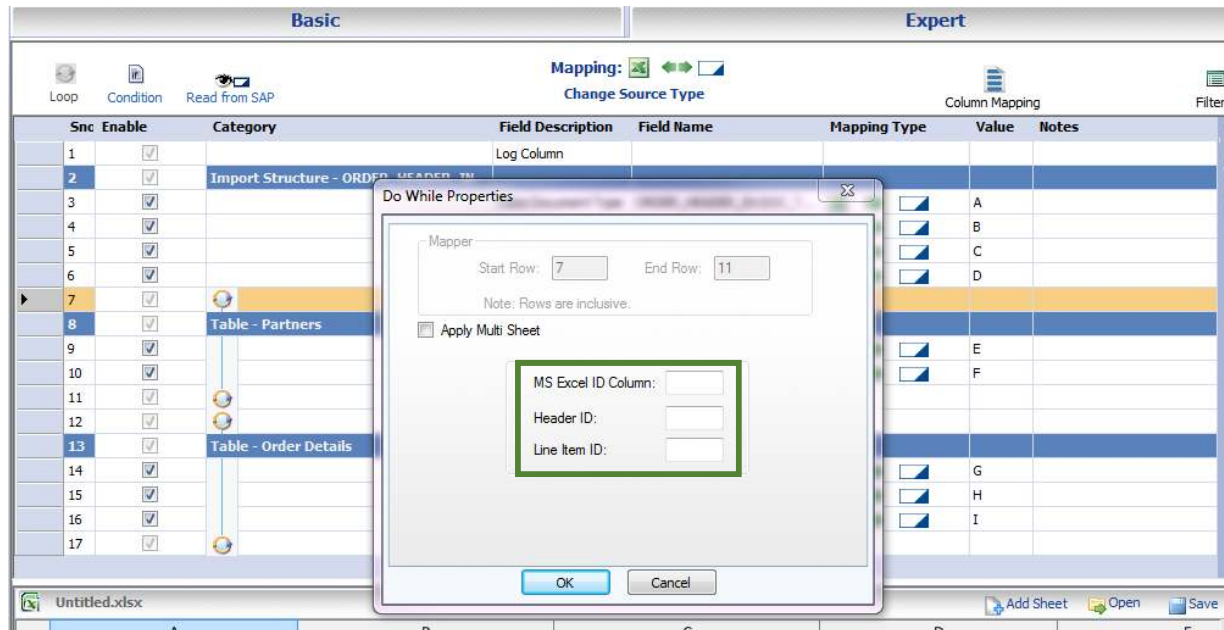
- From Direct
- From Transaction

A screenshot of the 'Record' dialog box in Winshuttle. The title bar is grey with the word 'Record' in blue. Below the title bar, there is a grey gradient bar. The main area has a white background with the text 'Enter the SAP Transaction code to begin a new recording.' Below this text is a label 'Transaction Code:' followed by a text input field. To the right of the input field is a 'Go' button. At the bottom, there are two blue links with right-pointing arrows: 'Create recording from template' and 'Select Fields from a DIRECT template'.

Creating Transaction script

Map as usual

- Expert tab
- Loops will be created automatically for tables



Tips for success

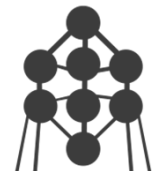


Review the BAPI documentation and know the BAPI requirements

Prepare your data in advance

Test with at least 2-3 rows of data

Always use a non-production system when creating a new script



How to get help

Help ribbon

- Web based help
- User manual
- Release notes

View Knowledge Base & Submit a support ticket:

- <http://support.winshuttle.com>



Questions

