

# General EDI Topics

General EDI Topics - 1 Hour

1

1

What is EDI ?

2

General EDI Architecture

3

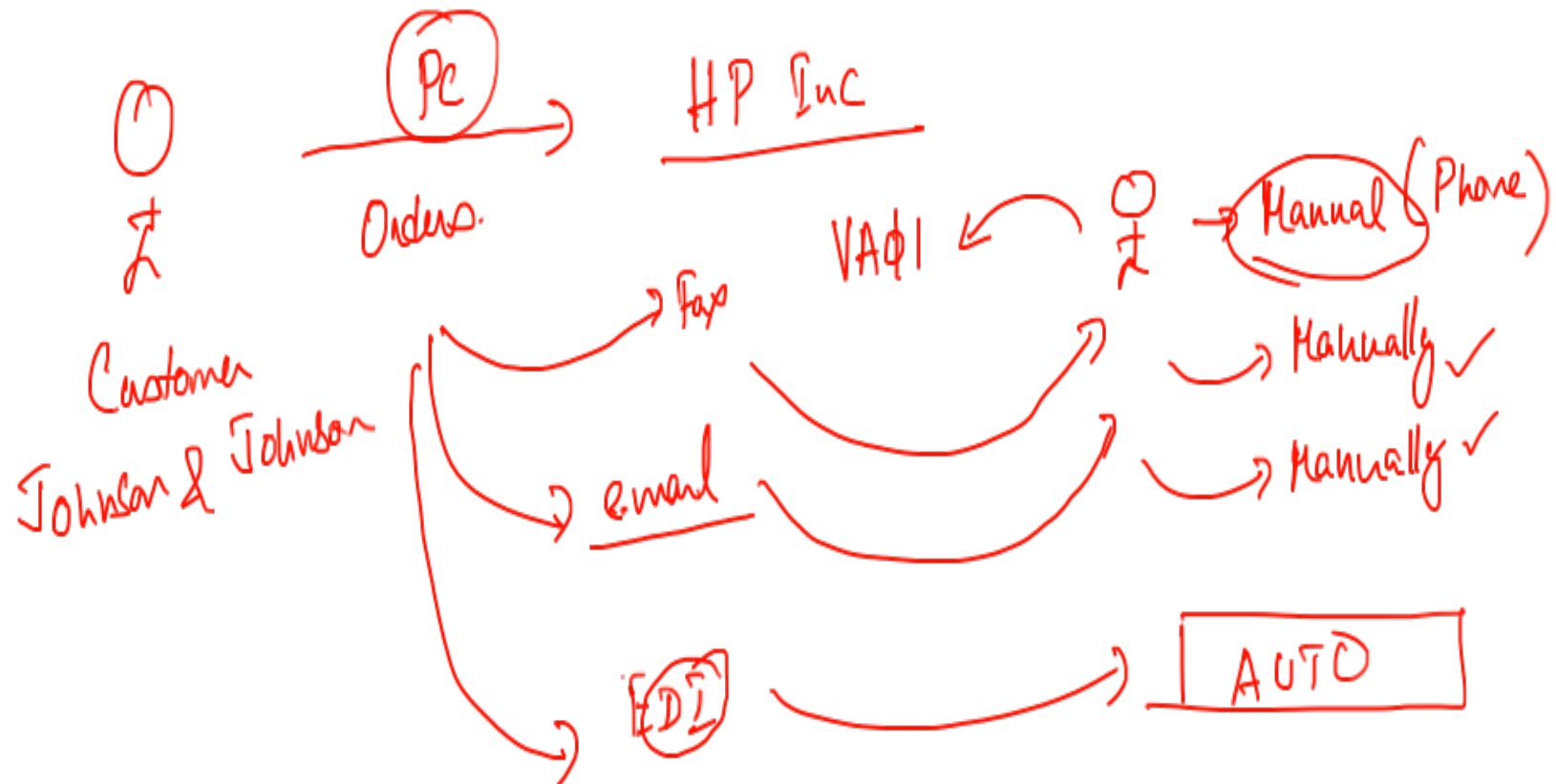
EDI Sub-Systems & Middleware

4

EDI Use Cases

# What is EDI ?

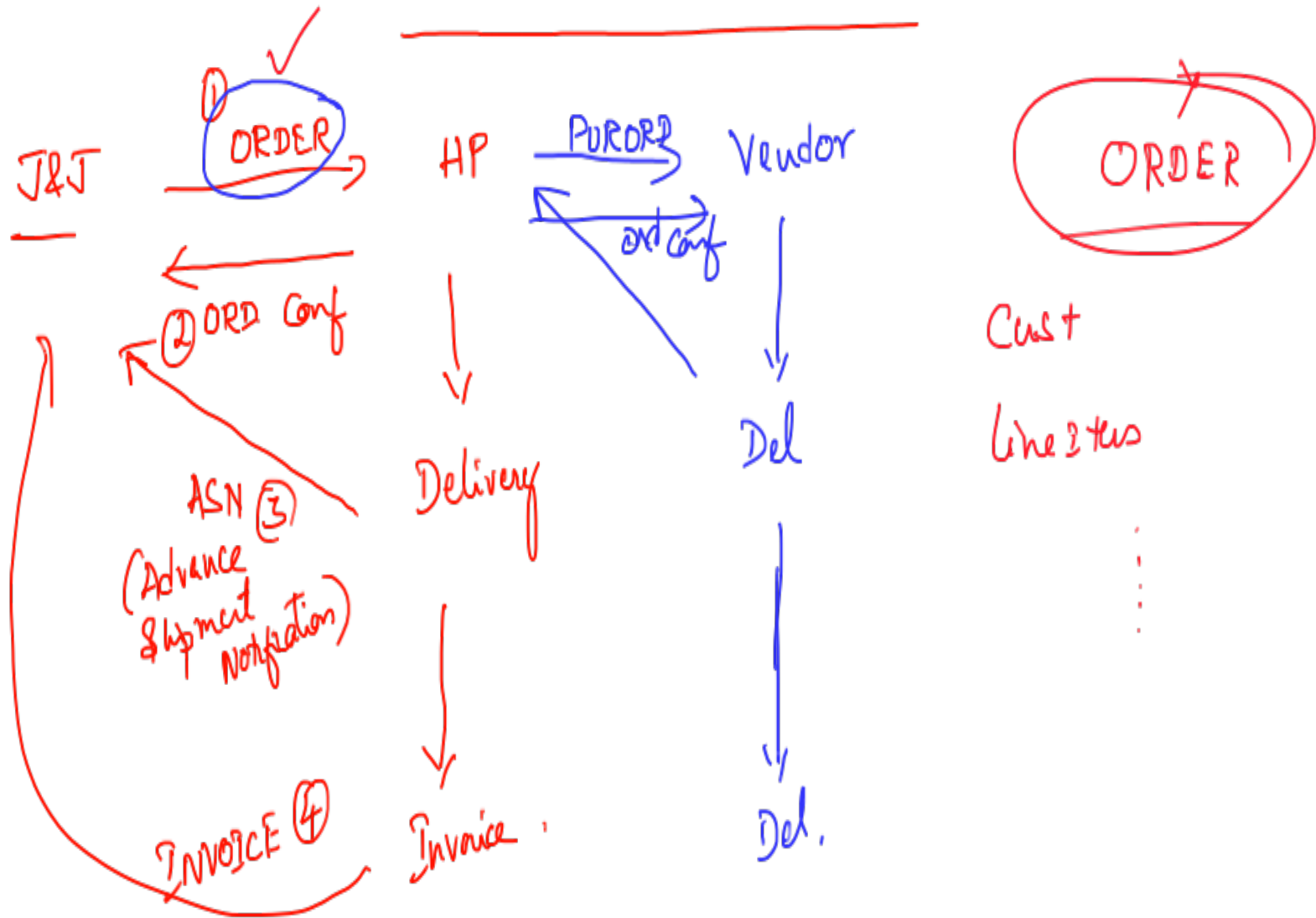
(Electronic Data Interchange)



# General EDI Architecture

# EDI Subsystems & Middleware

# EDI Use Cases



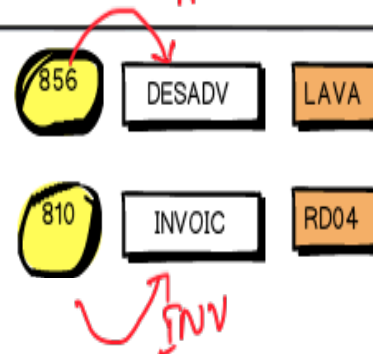
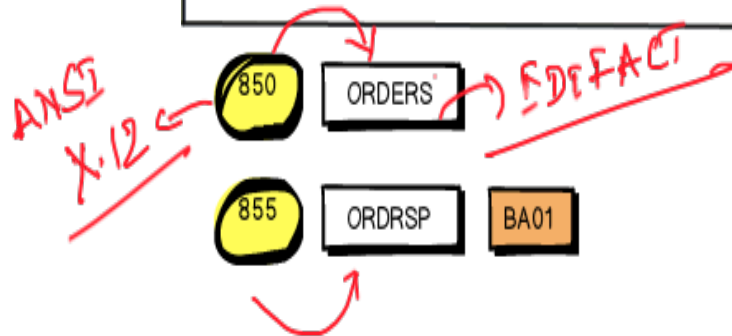
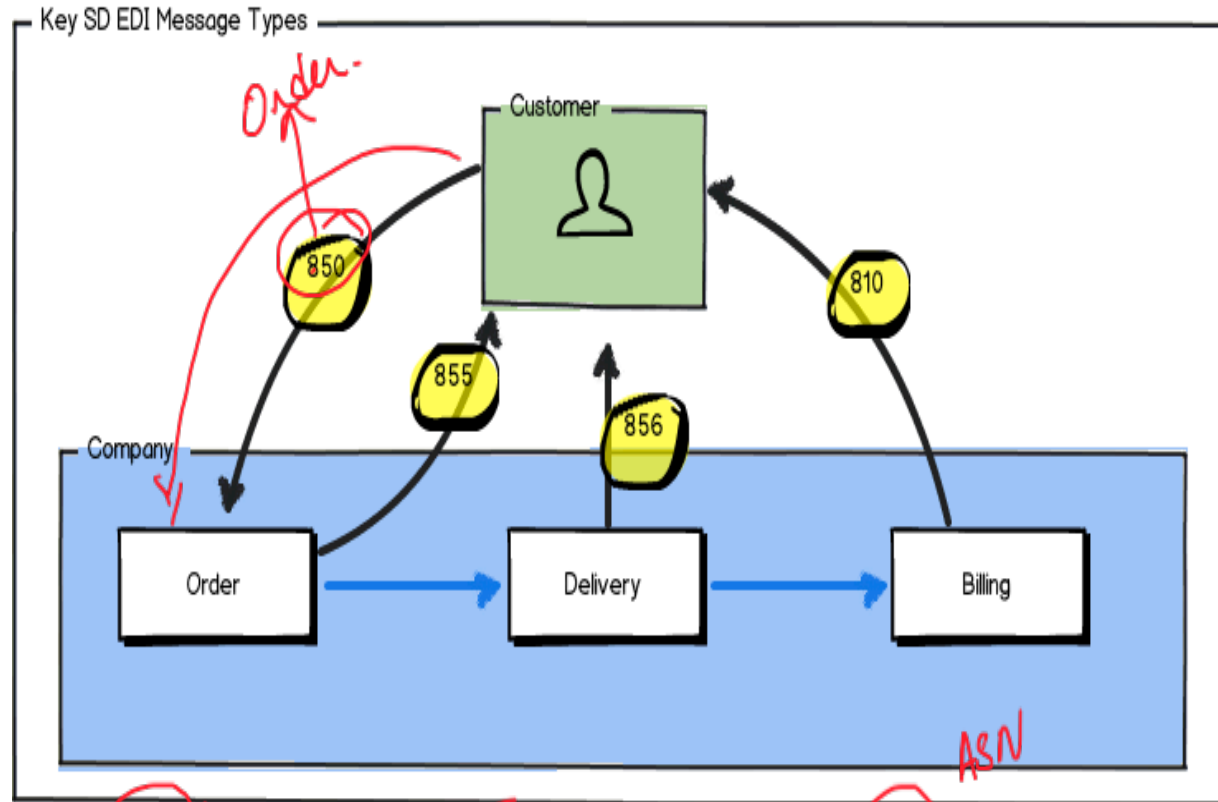
e-mail (Standard)  
gmail  
hotmail  
ymail  
...

# Key Sales **EDI** Processes

ANSI X.12

Standard

X.12 (US)  
EDIFACT (EU & ROW)



# IDOCs

IDOCs - 1 Hour

2

1

Message Types & IDOC Types

2

General IDOC Structure

3

IDOC Modeling

4

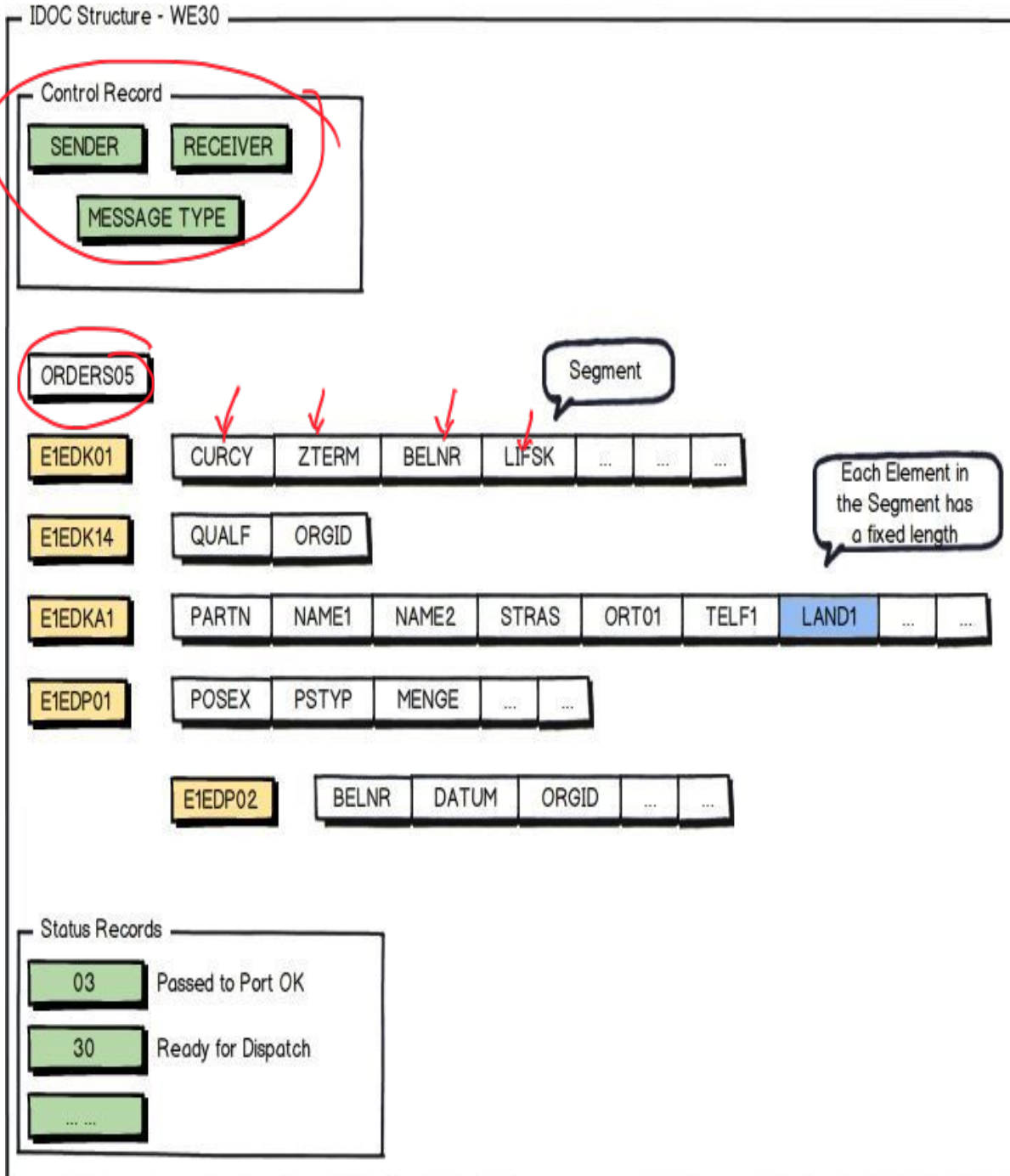
Partner Profile , Ports and more

# Message Types & IDOC Types



# General IDOC Structure

J&S  
1











# IDOC Type to Message Type Mapping

Message Type < to > IDOC Type - WE82

<input checked="" type="checkbox"/>	ORDERS	ORDERS04
<input checked="" type="checkbox"/>	ORDERS	ORDERS05
<input checked="" type="checkbox"/>	ORDCHG	ORDERS05
<input checked="" type="checkbox"/>	PURCHG	ORDERS05

IDOC Types and Message Types have a ONE-TO-MANY Relationship

Output Types and Assignment to IDoc Types				
	Message Type	Basic type	Extension	Release 
	ORDERS	ORDERS01		30A
	ORDERS	ORDERS02		30D
	ORDERS	ORDERS03		40A
	ORDERS	ORDERS04		45A
	ORDERS	ORDERS05		46A

# IDOC Modeling

IDOC Type  
Documentation

WE60

## Extending IDOCs - WE30

- ☒ Standard IDOC Types CANNOT be modified
- ☒ Z IDOC Types can be created
- ☒ Extended Segments can ONLY be added as Child Segments
- ☒ ABAP Consultant can do all of these and more.

## Create basic type: ZORD05

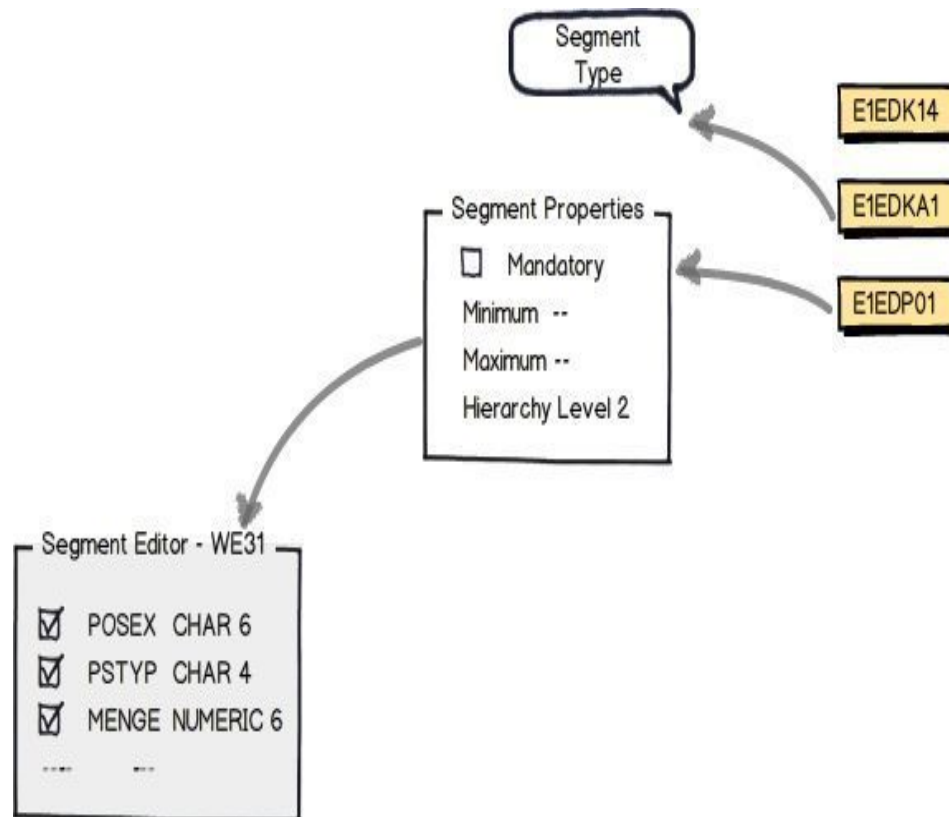


ZORD05

Custom Inb Order IDOC Type

E1EDK01	IDoc: Document header general data
E1EDK14	IDoc: Document Header Organizational Data
E1EDK03	IDoc: Document header date segment
E1EDK04	IDoc: Document header taxes
E1EDK05	IDoc: Document header conditions
+ E1EDKA1	IDoc: Document Header Partner Information
E1EDK02	IDoc: Document header reference data
E1EDK17	IDoc: Document Header Terms of Delivery
E1EDK18	IDoc: Document Header Terms of Payment
E1EDK35	IDoc: Document Header Additional Data
E1EDK36	IDOC: Doc.header payment cards
+ E1EDKT1	IDoc: Document Header Text Identification
+ E1EDP01	IDoc: Document Item General Data
+ E1CUCFG	CU: Configuration data
+ E1EDL37	Handling unit header
E1EDS01	IDoc: Summary segment general

# Segment Editor



# Partner Profile

Partner Profile - WE20

Partner

Inbound Parameters

☒ ORDERS

☒ ORDCHG

☐ XXX

Outbound Parameters

☒ INVOIC

☒ DESADV

☒ ORDRSP

☐ XXX

Partner	Description
▼ Partner Profiles	
▶ Partner Type B	Bank
▶ Partner Type BP	Benefits provide
▶ Partner Type GP	Business Partner
▼ Partner Type KU	Customer
100	RON'S CIA
1000	Becker Berlin
1110	I.D.O.C. GmbH
1111	P.S.G. GmbH
1171	Hitech AG
1185	Werk Hamburg 1
1187	Werk 1200 (Dres
2001	SAPSOTA AG
2002	Sapsota AG
2222	Cust Customer
3000	Thomas Bush In
3070	William G. Smith
3100	Arrowspace
3400	Hershay Corpor
3560	IDES Furnitures
3750	Fast Food Inc.
3910	Infix Co.
3995	Happy Store Los
4130	Compu Tech
6604	Intercompany R
22000	IDES France SA
30000	IDES US Inc.
30010	test 30010
30099	Smart Mart

Partner No. 1000 Becker Berlin

Partn.Type KU Customer

Post processing: permitted agent Classification

Ty. 0 ☐ Organizational unit

Agent 50010120 EDI Department

Lang. EN English

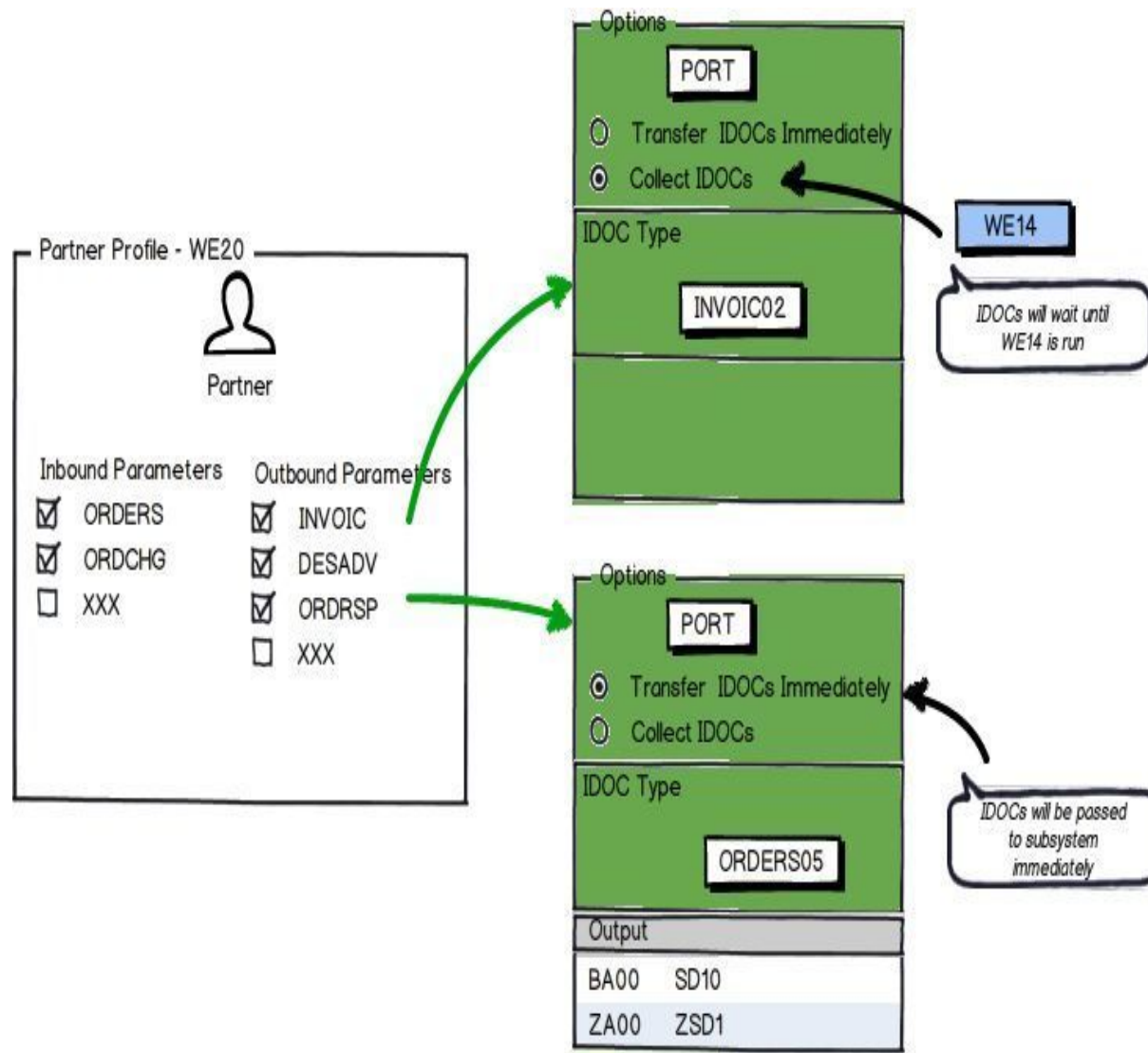
Outbound parmtrs.

Partner Role	Message Type	Message va...	MessageFu...	Test
SP	ORDRSP			<input type="checkbox"/>
BP	INVOIC			<input type="checkbox"/>
SH	DESADV			<input type="checkbox"/>

Inbound parmtrs.

Partner Role	Message Type	Message va...	MessageFu...	Test
SP	ORDERS			<input type="checkbox"/>

# Partner Profile



# Partner Profile

Partner No.	1000	Becker Berlin
Partn.Type	KU	Customer
Partner Role	SP	Sold-to party
Message Type	ORDRSP	Purchase order / order confirmation
Message code		
Message function		<input type="checkbox"/> Test


Outbound Options	Message Control	Post Processing: Permitted Agent
------------------	-----------------	----------------------------------

Receiver port	SUBSYSTEM	File	Port für ein EDI-Subsystem via Dat
Output Mode			
<input type="radio"/> Transfer IDoc Immed.	<input type="radio"/> Start subsystem	Output Mode 4	
<input checked="" type="radio"/> Collect IDocs	<input checked="" type="radio"/> Do not start subsystem		
IDoc Type			
Basic type	ORDERS05	Purchasing/Sales	
Extension			
View			
<input checked="" type="checkbox"/> Cancel Processing After Syntax Error			
Seg. release in IDoc type		Segment Appl. Rel.	




# Partner Profile

Partner No.	1000	Becker Berlin
Partn.Type	KU	Customer
Partner Role	SP	Sold-to party
 Message Type	ORDRSP	Purchase order / order confirmation
Message code		
Message function		<input type="checkbox"/> Test


Outbound Options

Message Control


Post Processing: Permitted Agent

 Application:

V1 : Sales

 Message Type:

BA01 : EDI Order Response

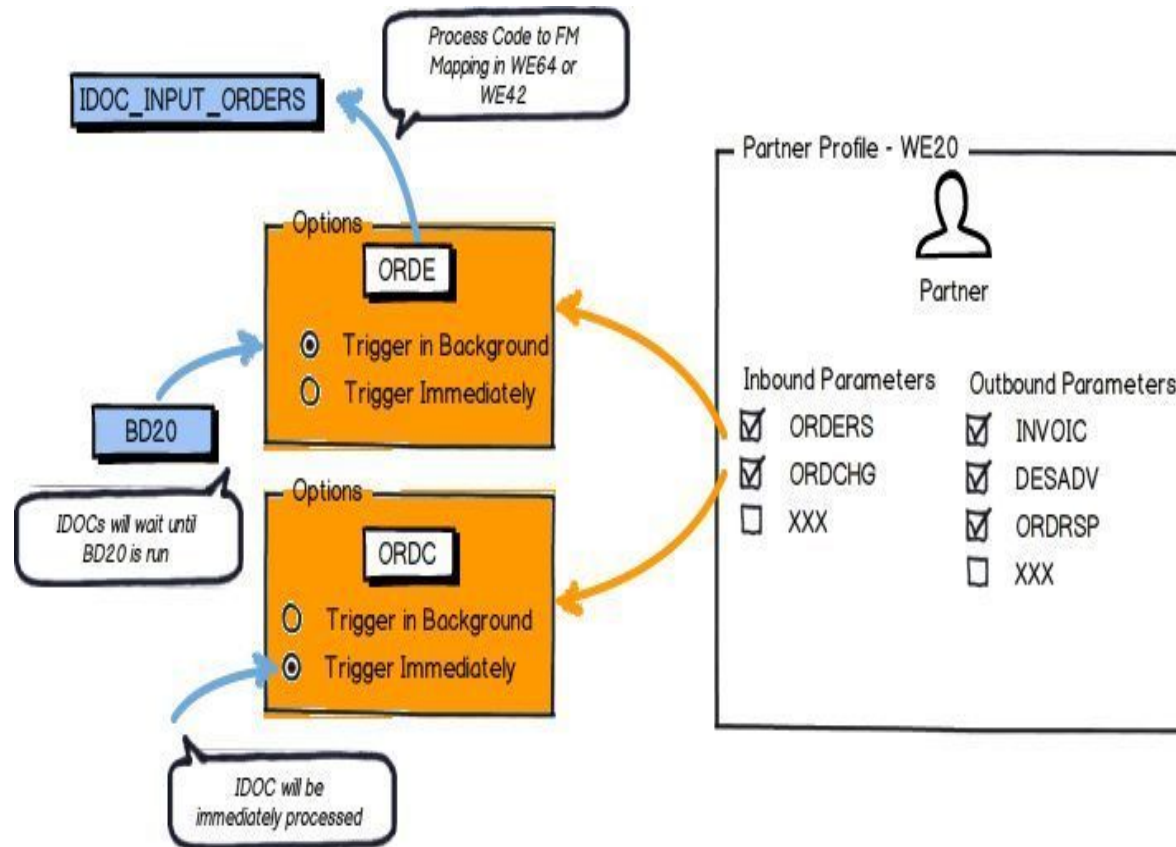
 Process Code:

SD10 : ORDRSP: Sales order confirmation

Application	Message type	Process code	Change...
V1	01	SD10	<input type="checkbox"/>

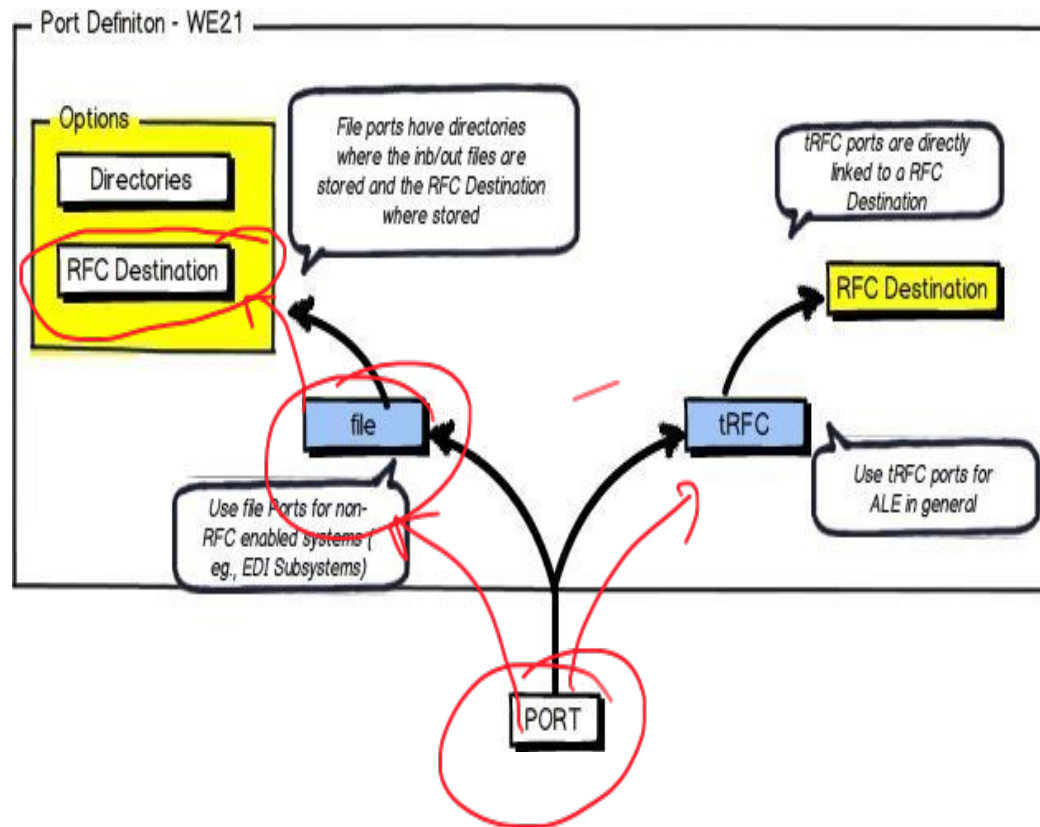


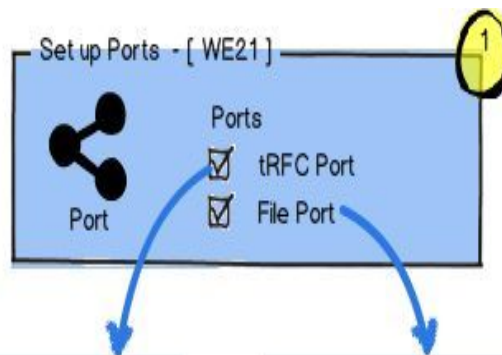
# Partner Profile



# Port

SMS9





Port: A000000056

Description:

Version

- ☐ IDoc rec.types SAP Release 3.0/3.1
- ☒ IDoc record types SAP Release 4.x

RFC destination: SAPXI

Screenshot is Copyright of SAP AG

Port: SUBSYSTEM

Description: Port für ein EDI-Subsystem via Dateischnittstelle

Version

- ☐ IDoc rec.types SAP Release 2.0/2.1
- ☐ IDoc rec.types SAP Release 3.0/3.1
- ☒ IDoc record types SAP Release 4.x

System Setting

- ☐ Unicode format
- ☐ Continue despite conversion error
- Replacement char.:

Outbound file | Outbound: Trigger | Inbound file | Status file

☒ Logical directory Access Test

☐ physical directory

Directory: EDI\_GLOBAL\_PATH

Function module: EDI\_LPATH\_CREATE\_USERNAME

Description: Logical directory, file name in SY-UNAME format

Outbound file:

Screenshot is Copyright of SAP AG

# Inbound / Outbound Processing Scenarios in SD

Inbound / Outbound Processing Scenarios in SD - 30 Mins

1

Full fledged Inbound Processing Flow

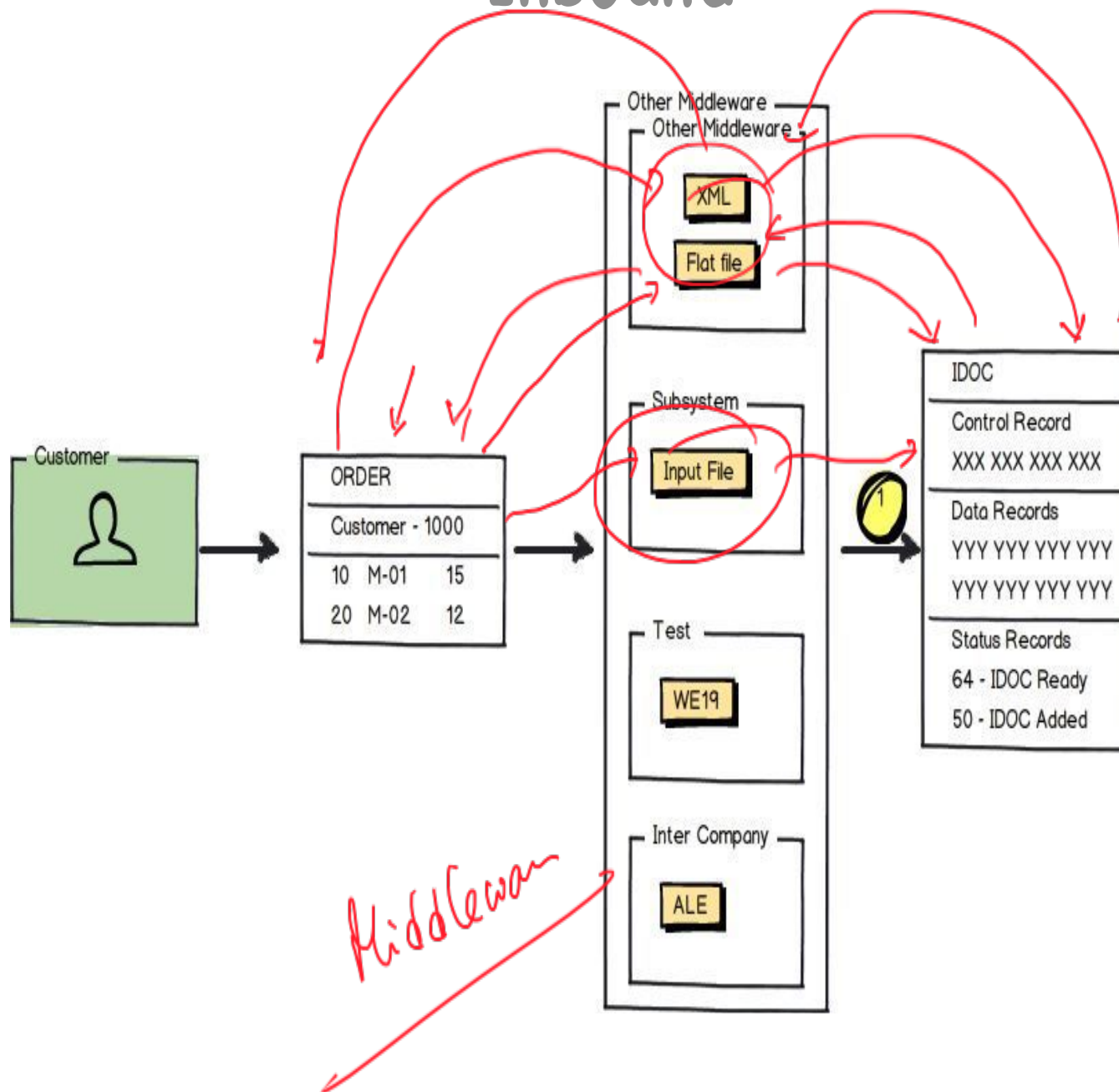
2

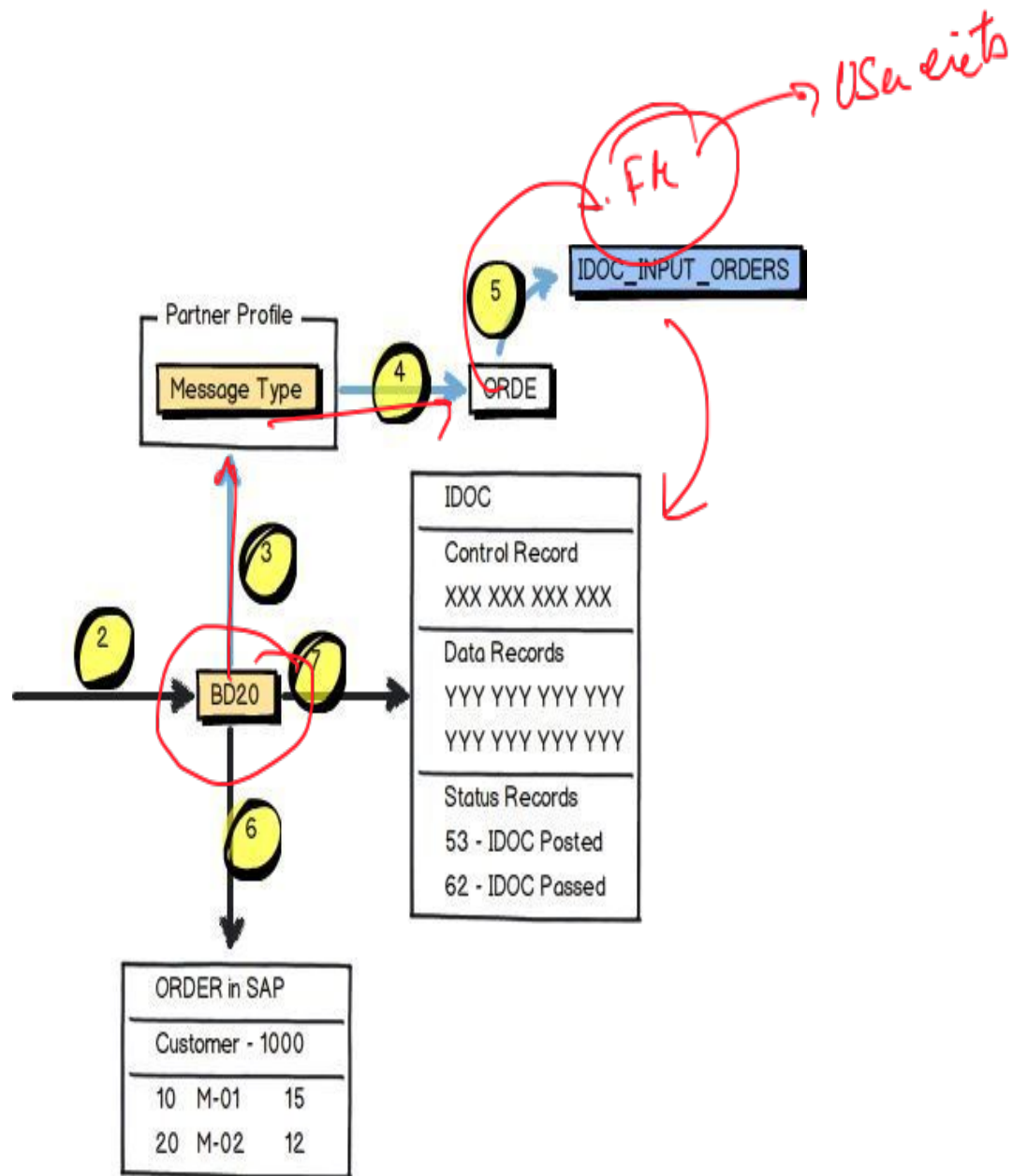
Full Fledged Outbound Processing Flow

3



Middleman



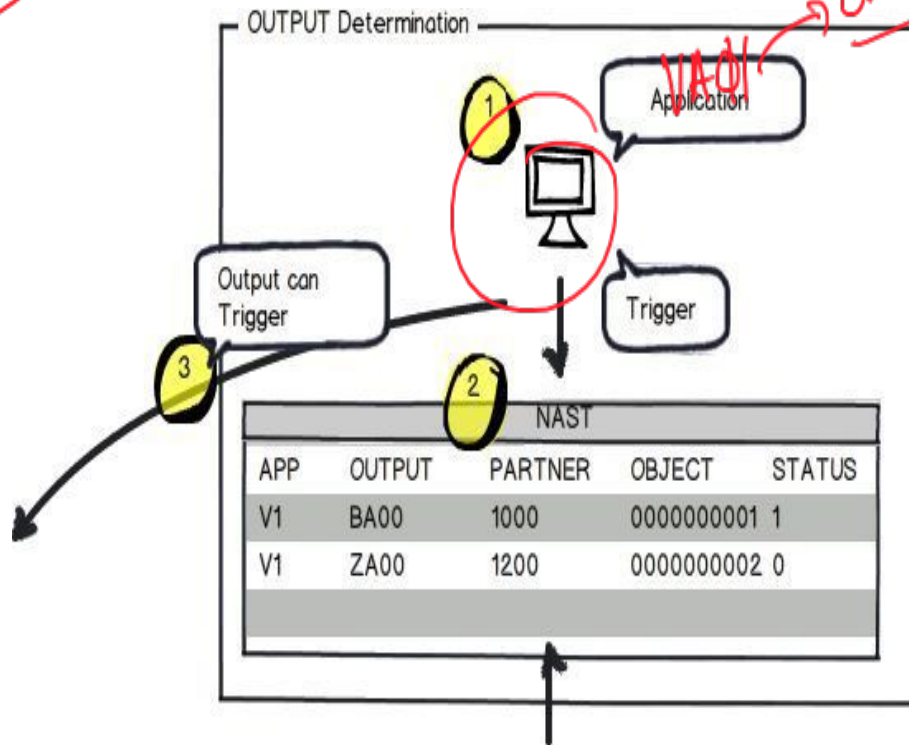


~~Inbound~~

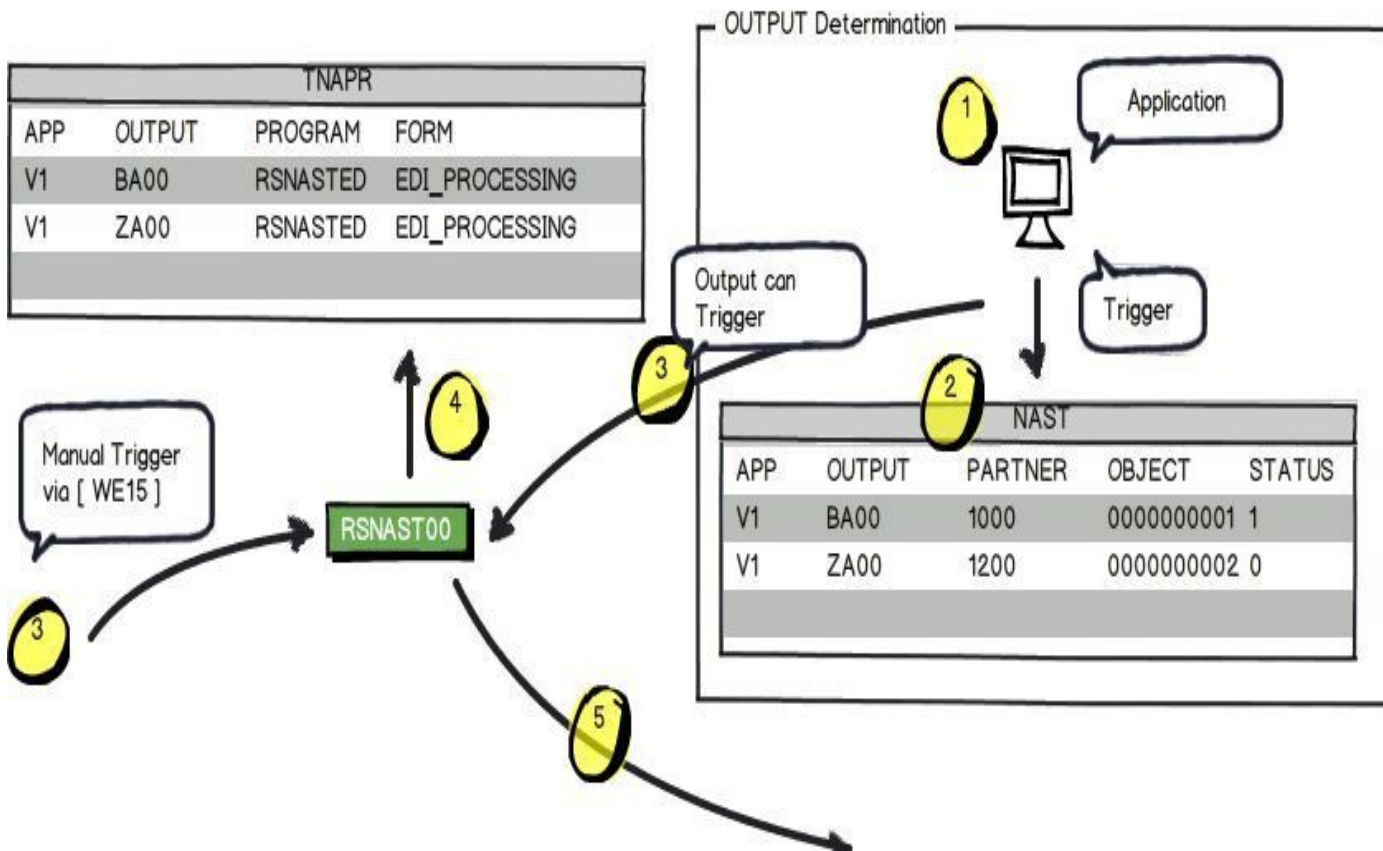
OUTPUT  
Determination

Read it.

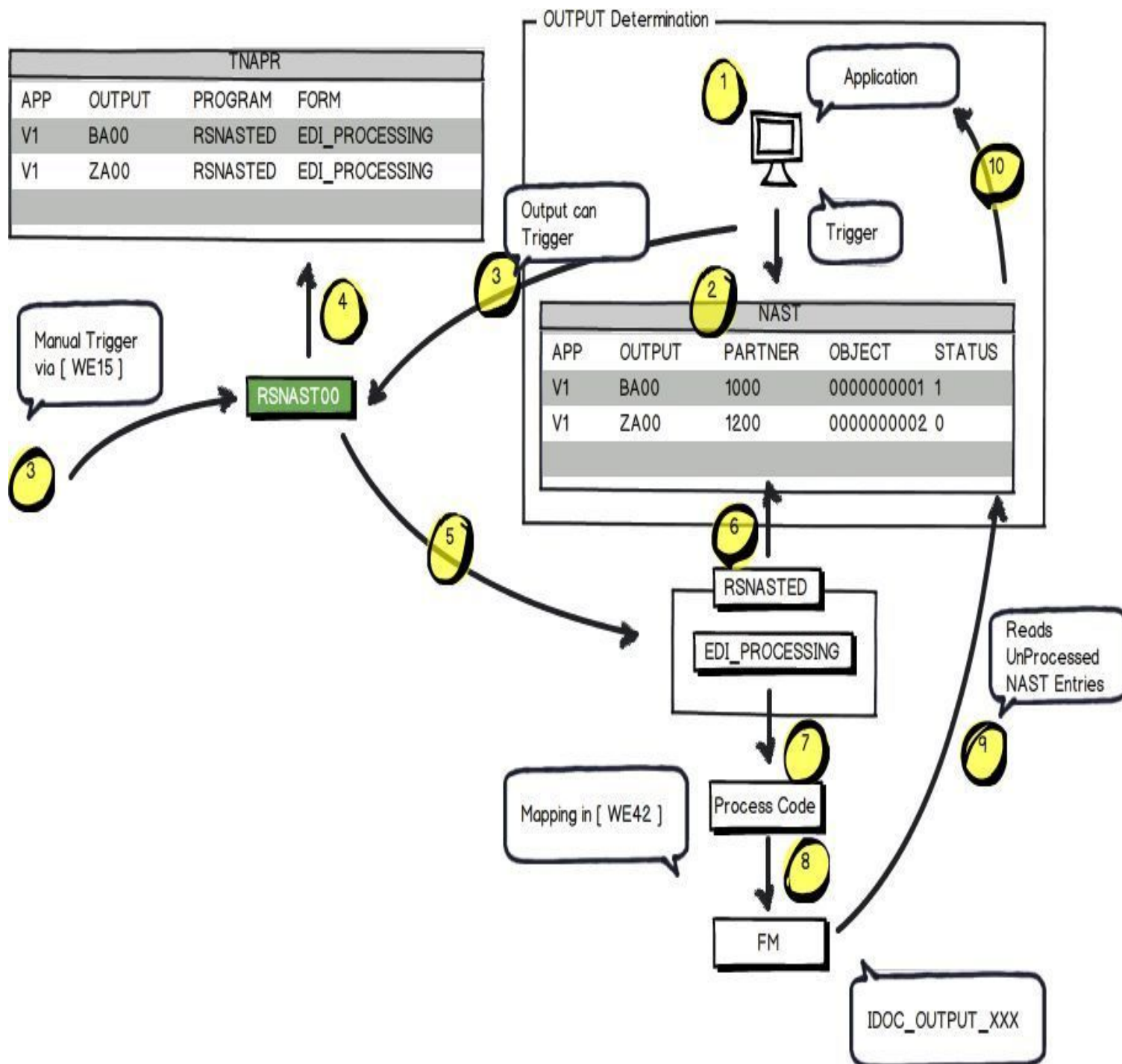
Order Response



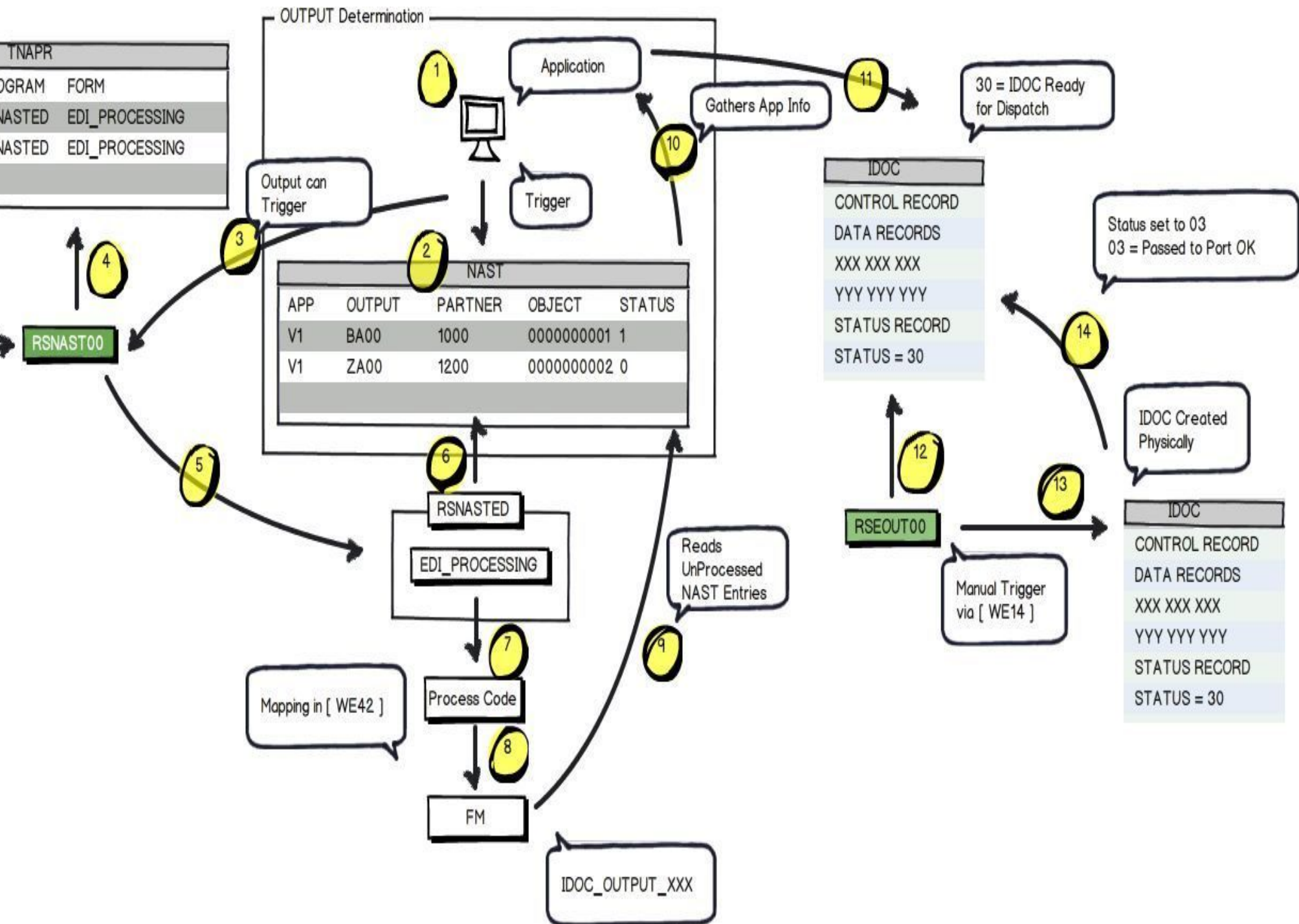




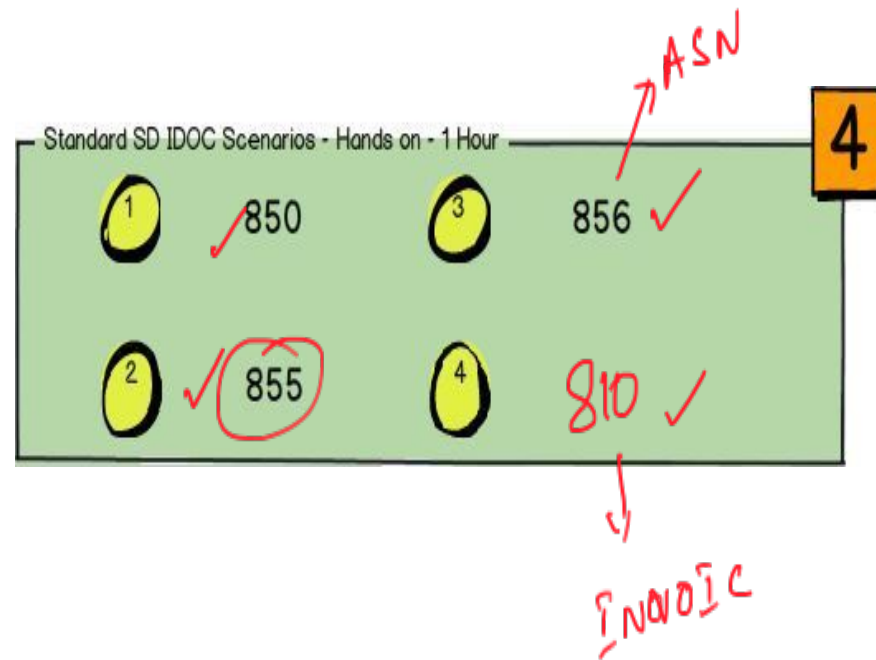




PROGRAM	FORM
WASTED	EDI_PROCESSING
WASTED	EDI_PROCESSING



# Standard SD EDI Scenarios - Hands On



# EDI Customization

EDI Customization - 30 Mins

5

1

EDI Conversions

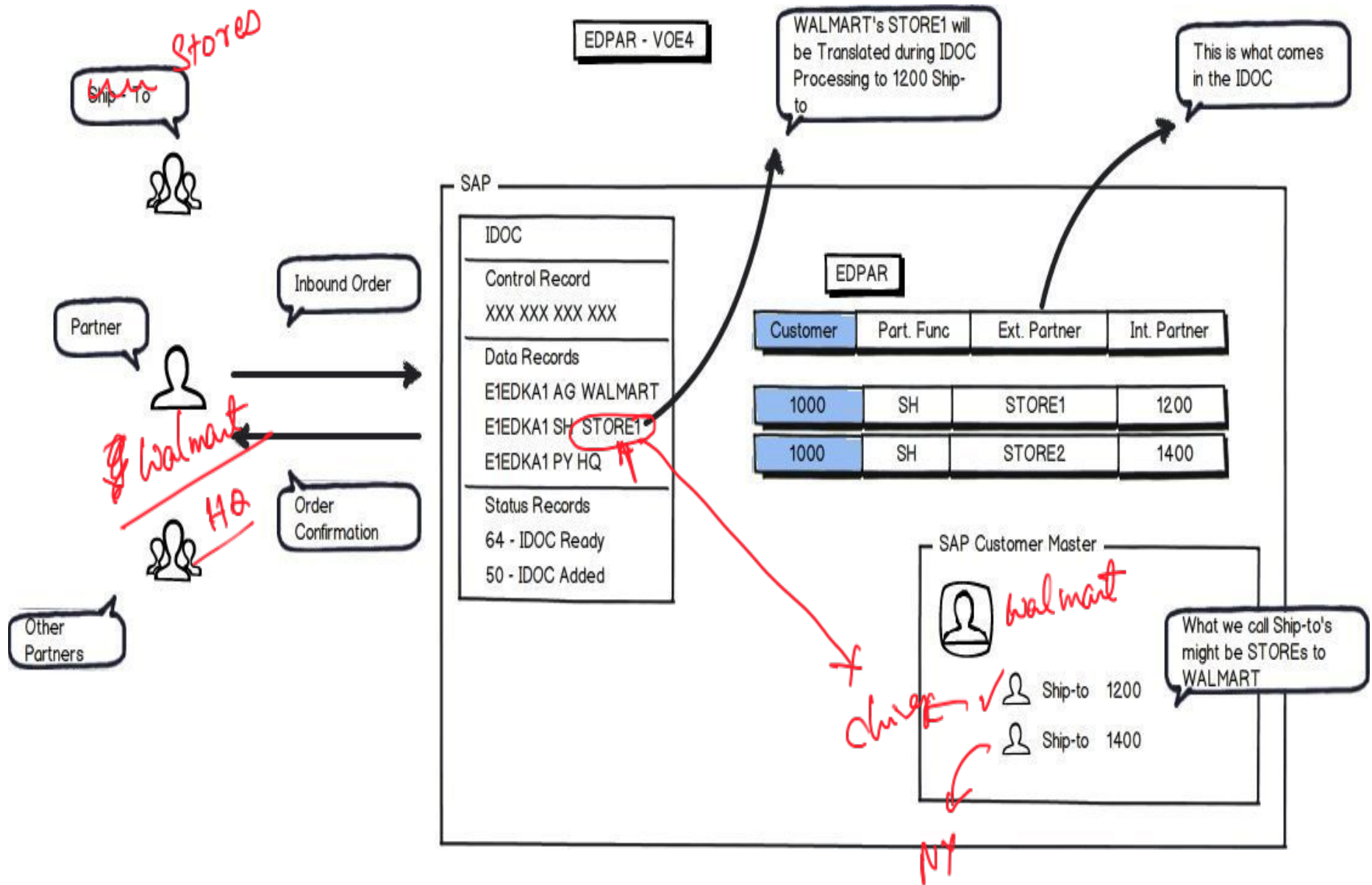
2

IDOC Customization Scenarios

3

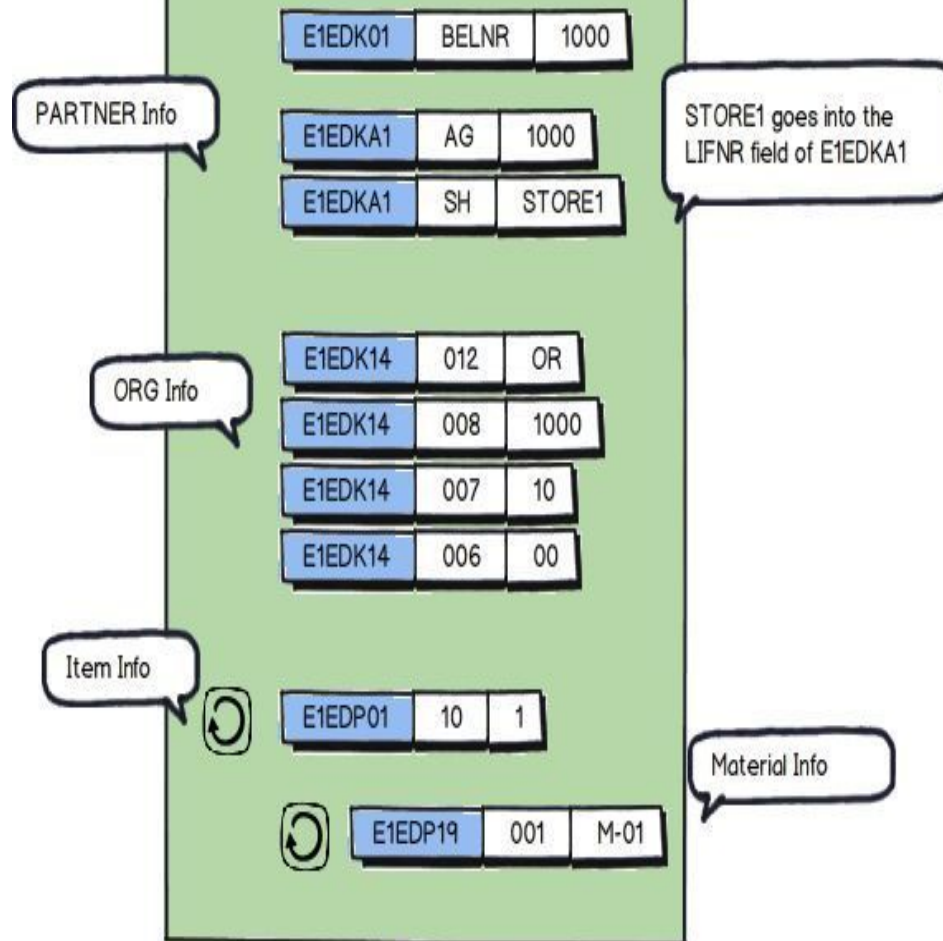
IDOC User Exits

# EDI Conversion Example





# ORDERS05 IDOC Segments



# IDOC Customization Scenarios

# IDOC User Exits *→ Mostly Technical in nature*

- 1 Identify the main FM
- 2 Search for Call Customer
- 3 Identify the Brief purpose in 'Attributes' and the data that is available in 'Tables'



# ALE

---

ALE - 1 Hour

6

1

ALE vs EDI vs IDOC

2

Master Data Distribution Model



3

Change Pointers



# ALE vs EDI vs IDOC

# MDM Model

# Change Pointers

BD50 - Activate by Message Type

1

Activate Change pointers for Message Type

Messg.Type	active
DEBMAS	<input checked="" type="checkbox"/>
DOCMAS	<input checked="" type="checkbox"/>
ECMMAS	<input type="checkbox"/>
ECMREV	<input type="checkbox"/>
PRE_ART_SITE	<input type="checkbox"/>

Screenshot is Copyright of SAP AG



Select Fields that trigger IDOCs

2

Message Type: DEBMAS

Change document items for message type

Object	Table Name	Field Name
DEBI	KNA1	ORT01
DEBI	KNA1	ORT02
DEBI	KNA1	PERIV
DEBI	KNA1	PFACH

Screenshot is Copyright of SAP AG



BD21

# SURPRISE !!

BONUS

7

✓  
30

Most Commonly asked Interview Questions in SAP EDI

20

Points that can be put in SAP EDI Resume

# Most Commonly asked EDI Questions

- ✓ 1 What are some of the Sub-Systems you have worked on ?
- ✓ 2 What are the Message Types you have worked on ?
- 3 What is the difference between IDOC Type and Message Type ?
- 4 What are the IDOC Types that you have worked on ?

5

How do you Translate Customer # to SAP Internal Customer # ?

6

Can you edit an errored out IDOC ?

7

What is the difference between editing an IDOC in WE02 and WE19 ?

8

Can you give some examples of the IDOC Statuses that you know of ?

9

What is the difference between ALE and EDI ?

10

What is the difference between EDI and IDOC

11

How can you see the documentation behind a segment in an IDOC ?

12

What are some of the batch programs you have used during EDI/ALE Processing ?



13

How to trigger order response as soon as an order is saved ?

14

Can BD87 be used for outbound procesing also ?

15

What is a Partner Profile ? Where and why do you maintain it ?

16

What is Master Data Distribution model ? Where do you configure it ?

17 Have you worked on Master Data Distribution model ? What scenarios have you worked on ?

18 During Order processing, lets say the Customer Material Number needs to be translated to SAP Material Number. How do you approach this problem ?

19 During Order Processing, lets say the Customer Store needs to be translated to SAP Customer Ship-to. How do you approach this problem ?

20 Legacy System has 1000 Partner Profiles. How do you recreate them in SAP ?

- 21 What is the typical volume of IDOCs you handled ?
- 22 Do IDOCs have number ranges ?
- 23 How did you handle errored out IDOCs in your last client ?
- 24 Can you use same IDOC type for multiple message types ?

- 25 Why would you ever have to create a new process code ?
- 26 What is the process code you used for standard inbound order processing ?
- 27 If you want to introduce a new IDOC type for a particular Partner for Order Processing. What are the steps you would have to do ?
- 28 When change pointers are enabled, do IDOCs get triggered during Master data Creation ?

29

If materials require Serial Numbers and let's say it is NOT available in standard ORDRSP idoc type. How do you handle this ?

30

What is the difference between creating an Order via IDOC vs BAPI ?

31

If you want custom fields in Additional data B to go in ORDRSP , how to you handle it ?

32

How do you search an IDOC ?

# SAP EDI Resume Points

## Highlights

1

Hands-on expertise in building interfaces using EDI, ALE and IDOCs

OR

2

Experience in SAP ALE, EDI and IDOCs configuration and customization

OR

3

Hands-on configuration experience with 850 , 855, 856 and 810

OR

4

Hands-on experience in designing, configuring , testing and troubleshooting standard and custom EDI/ALE based interfaces

OR

5

Experienced in building ALE/EDI interfaces between SAP and external systems

A red curly brace is positioned on the left side of the list, grouping all four items.

1

Involved with middleware mapping of legacy fields with SAP EDI segments

2

Built custom IDOC interfaces between SAP and 3PL systems for stock updates

3

Worked on LSMW scripts to migrate Partner Profiles to SAP

4

Worked with EDI Subsystem consultants in field level mapping of 850/855 fields with SAP EDI segments

5

Lead the Integration testing efforts for EDI set-up with major EDI customers

6

Designed Custom IDOC interfaces between SAP and non-SAP Systems

7

Performed GAP Analysis to map current processes with standard EDI processes to come up with recommendations for implementation

8

Configured Partner Profiles, output determination and co-ordinated Ports and RFC destination with Basis



- 9 Configured EDPAR for EDI Conversion of Ship-to's and Payers for large Customers
- 10 Configured Change Pointers for master data distribution between SAP US and APAC instances
- 11 Configured Change Pointers for Master Data Distribution between SAP and Peoplesoft
- 12 Set up batch processes for standard inbound/outbound IDOC processing Programs

PDF

- 13 Trained End Users on IDOC Editing, Correction and Re-Processing
- 14 Configured standard ( ORDERS/ORDRSP/DESADV/INVOIC ) and custom message types
- 15 Configured standard ( ORDERS/ORDRSP/DEBMAS/CREMAS/MATMAS ) and custom message types
- 16 Built custom interfaces with 3rd Party Systems via Flat File, XML and IDOCs

\$149  
5 hrs

SAP Access

Friday → Demo

{ Saturday - 9:00 PM - 1 1/2  
Sunday - 9:00 PM - 1 1/2  
Tue - 9:00 PM EST - 1 1/2  
~~Wed~~  
Thu  
Fri





