



BD Rowa™ Self-Checkout Interface with WWKS 2+

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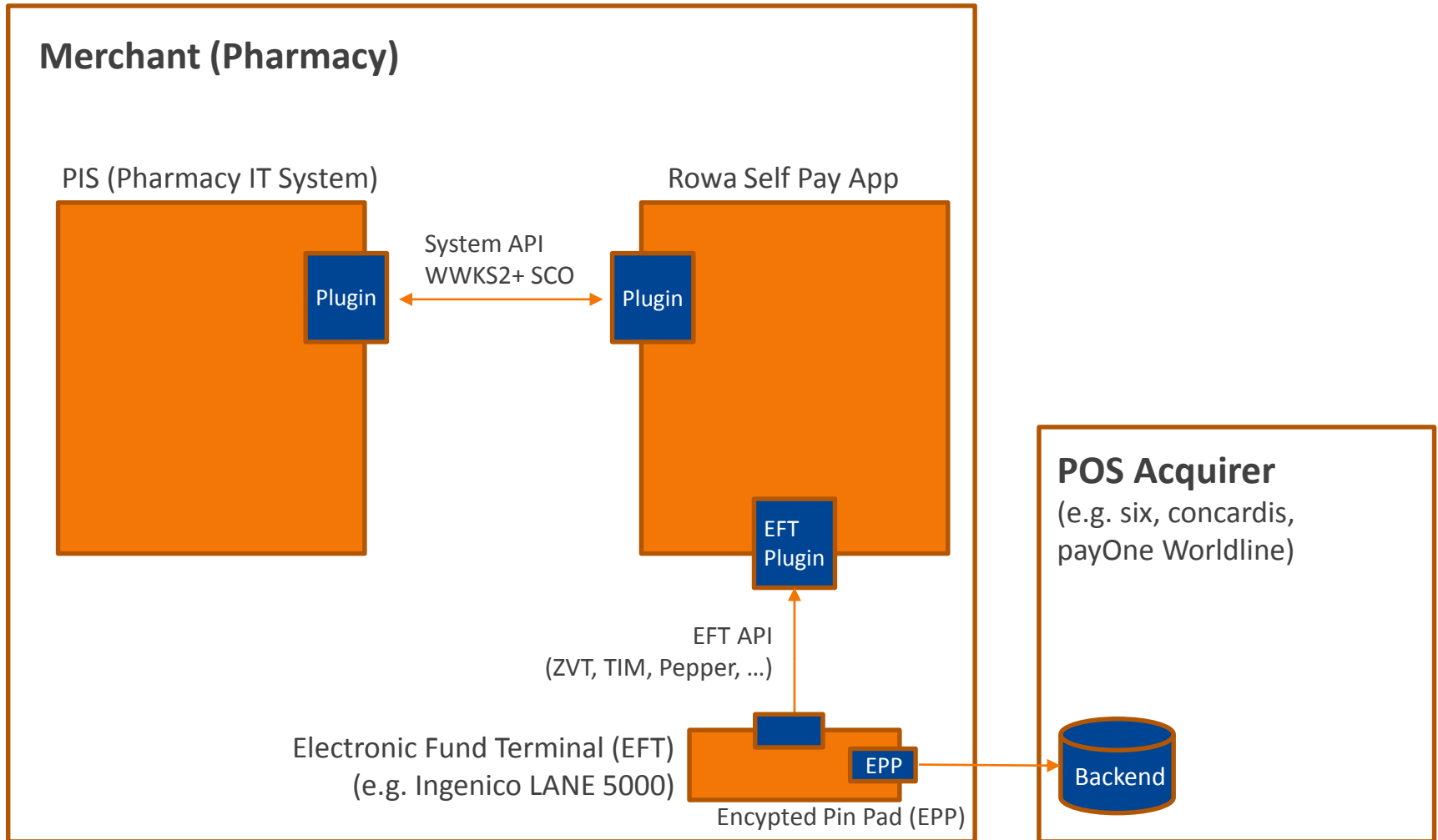
March 22nd, 2021

BD Rowa™ Self-Checkout



- Customer scans and pays items himself
- Consultation for Rx and OTC happens before handing over items to customer

Integration Architecture



Interface BD Rowa™ Self-Checkout with WWKS 2+ Standard Interface



Request shopping cart

Request empty shopping cart for new customer



ShoppingCartRequest

Sales Point Id



ShoppingCartResponse

*Shopping Cart Id, Sales Point Id, Currency,
Status = "Active"*

Empty list of lines



- Shopping cart is always managed by pharmacy IT system
- Device just asks for modifications

Shopping Cart

Data model

Shopping Cart

Shopping Cart							
Id		Status	Sales Point Id		Customer Id		Currency
Line Item							
	Article Id	Description	Ordered Qty	Paid Qty	Price (line)	VAT	
		Line item article master data					
		Article price information (list and offer prices as displayed on a public price tag)					
		Article tags (e.g. age verification, consultation required, ...)					
Payment Item							
	Amount Given		Currency	Amount Paid (in main currency of shopping cart)			
	Transaction Details (of card terminal)						
	Receipt layout						
Information Item (additional information to display to customer or to print on receipt)							

Scan Item

Translation of barcode to item number



ShoppingCartUpdateRequest

Shopping Cart Id, Sales Point Id, Currency

BarcodeScan Barcode

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, Sales Point Id, Currency

*Updated list of lines, added article or
quantity increase*



- PIS translates scanned barcode into article id

Scan Loyalty Card

Customer identification



ShoppingCartUpdateRequest

Shopping Cart Id, Sales Point Id, Currency

BarcodeScan LoyaltyCard Barcode

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, Sales Point Id, Currency

Customer ID

Updated prices in list of lines

Updated infos (e.g. current points account balance)



- Action="BarcodeScan" if scan of customer card is allowed at any time and PIS is able to detect type of barcode
- Action="LoyaltyCard" if device asks for customer card at specific point in workflow

Scan Coupon

Discount coupons



ShoppingCartUpdateRequest

Shopping Cart Id,

BarcodeScan Coupon Barcode

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, *Customer ID*

Updated list of lines (prices, discount item)



- Action="BarcodeScan" if scan of coupon is allowed at any time and PIS is able to detect type of barcode
- Action="Coupon" if device asks for coupons at specific point in workflow

Payment

Device informs PIS about payment



ShoppingCartUpdateRequest

Shopping Cart Id, Sales Point Id,

Payment

Given amount, Transaction Details

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, *Customer ID*

Current list of lines

Payment: Accepted amount

Receipt layout (optional)

- Device has to cancel payment if PIS denies update
- Transaction details include all information provided by card payment device
- PIS may provide receipt layout as JPG, PNG, PDF or ESC/POS

Receipt printing

Option 1: Layout by Self-Checkout

- PIS provides all data required as part of the shopping card
- Device generates receipt layout
- Device prints receipt

Option 2: Layout by PIS

- Device provides all transaction details
- PIS generates receipt layout
- PIS provides receipt layout to device as JPG, PNG, PDF or ESC/POS
- Device prints receipt

POS no. | Receipt no.

Items sold

Total, VAT details,
VAT groups

Customer Loyalty Program

Response from Acquirer/
EFT Terminal

Merchant address &
contact details

zur Rose+

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Selfcheck-Out

La Roche-Posay, Effaclar Lotion milde Hautreinigung 12365788233	39.80	1
1 x CHF 39.99 100% Aktion		
Gratis Dermoplast Apotheke Smart 12365788233	0.00	2
1 x CHF 0.00		
Geburtsstags-Muffin 12365788233	0.00	2
1 x CHF 0.00		

Total inkl. MwSt. CHF 39.80

MasterCard CHF 39.80

inkl. MwSt. 7.7% 3.12
inkl. MwSt. 2.5% 0.00

MWST-Nr.: CHE-101.583.964
MWST-Satz: 1=7.7%, 2=2.5%, 3=0.0%

Cumulus Nr.: 209*****045
Cumuluspunkte aus Einkauf 15

Att-/ECR-Id/-Seq: 0/22/363
EFT Ref-No: 000216
Debit MasterCard Contactless *****7298

07.03.2020 19:32
TID 24149695
Seq/Aut: 00021618/359956
TOTAL-EFT CHF: 39.80

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Payment with bonus points or alternate currency



ShoppingCartUpdateRequest

Shopping Cart Id, Sales Point Id, Currency

Payment

Given amount, Currency=„Points“

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, *Customer ID*

Current list of lines

*Payment: Accepted amount in main
currency of shopping cart*

- PIS transform points given into main currency (e.g. EUR)
- PIS may reduce amount given in case of overpayment
- Device checks if further payment is needed to complete transaction

Payment

Card payment device handled by PIS (optional)



ShoppingCartUpdateRequest

Shopping Cart Id, Sales Point

PaymentRequest

Current list of lines



ShoppingCartUpdateResponse

Shopping Cart Id, *Customer ID*

Current list of lines

Payment: Amount given

Transaction details

Receipt layout (optional)



- PIS informs device about payment success and provides transaction details for receipt printing

Finish transaction



ShoppingCartUpdateRequest

Shopping Cart Id,

Close



ShoppingCartUpdateResponse

Shopping Cart Id

Final state of shopping cart



Connection of several terminals

with WWKS 2+



Several terminals may share one WWKS 2+ connection.
They identify themselves via different point of sale numbers.

Sales Points

in WWKS 2+

Sales point in a pharmacy:

Place where exactly one customer is served at a time by equipment.

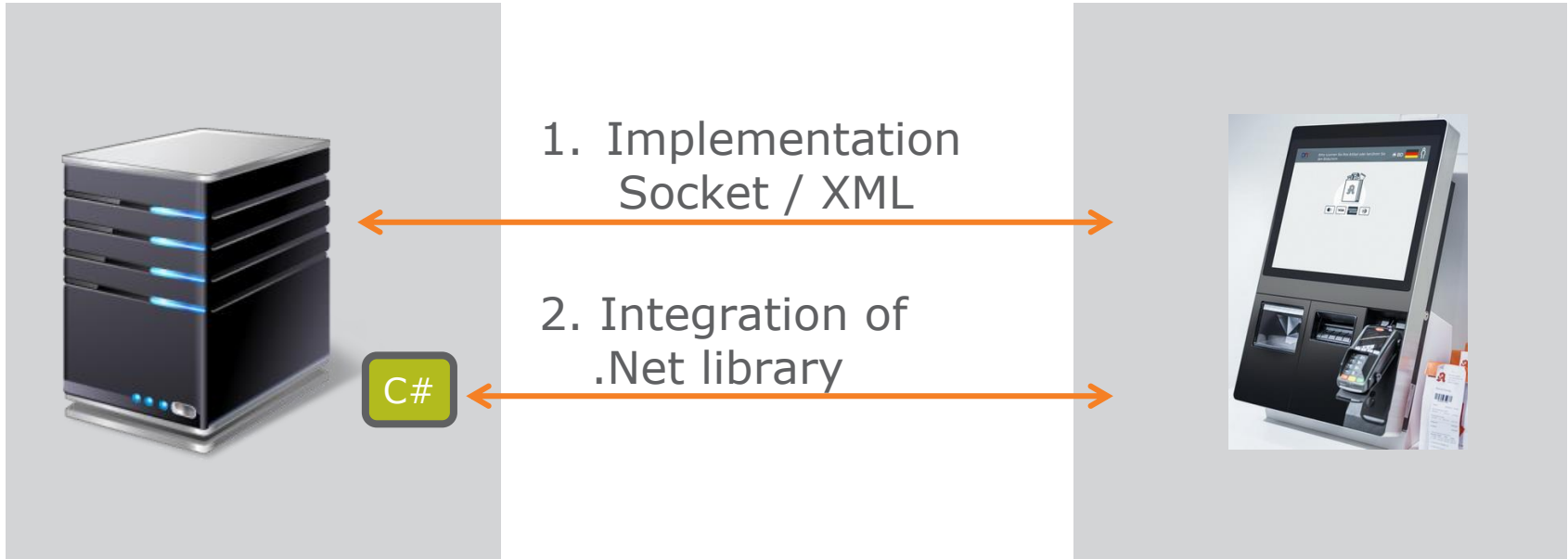
A self-checkout terminal is usually a point of sale on its own.



1	Cash register with digital shelves
2	Tablet with consultation software
3	Digital self-service shelf
4	Advertisement screen
5	Pick-up Terminal
6	Self-Checkout Terminal

Options Implementation

WWKS 2+



Further Information

Internet

<http://www.rowa.de/wwks2/>

- WWKS 2+ Reference Manuals
- WWKS 2+ SDK (with Testing Tools)

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