

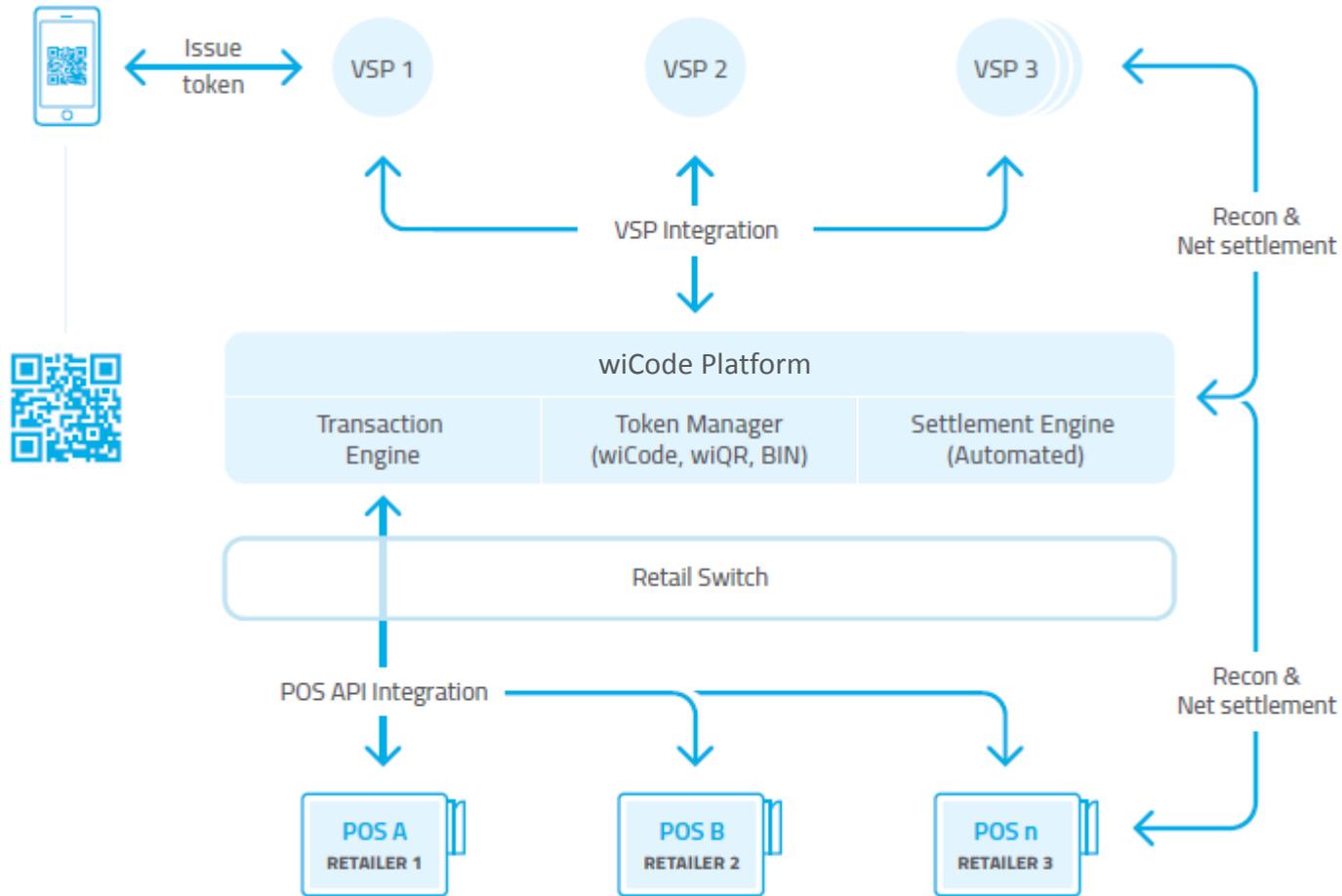
2015

wiGroup wiCode Platform Integration Walkthrough

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wiCode

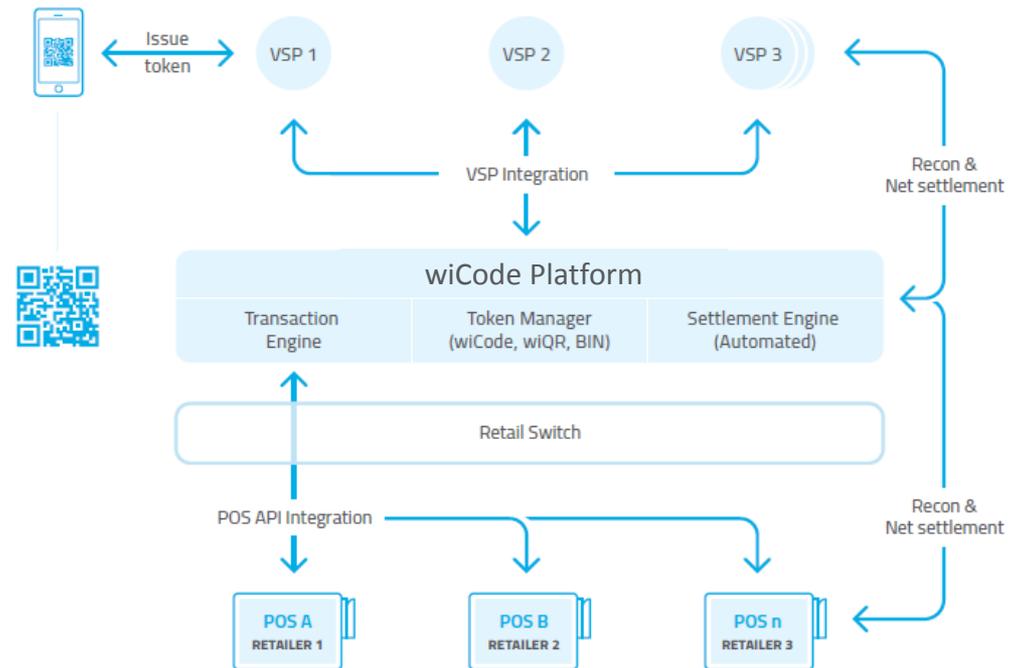
- A transaction token which is generated by the wiCode Platform and issued by a VSP to the consumer.
- Can take the form of a number, QR code or BIN.

Value Store Provider (VSP)

- Any mobile application or digital entity which houses a store of value.
- Could be a bank account, loyalty wallet voucher, etc.

POS

- Any solution which communicates with the wiCode platform to authorise or query transactions



3 wiCode Platform Supported Transaction Protocols



'Over the counter' transactions

- Customer / mobile app user will generate a wiCode using their wiCode-enabled mobile app.
- Point of sale / cashier will scan or manually enter the wiCode.
- Point of sale will authorise the transaction through the wiCode platform.



'Sit down' transactions

- Point of sale will generate a unique wiGroup QR on the till slip
- Customer / mobile app user will scan the wiGroup QR using their wiCode-enabled mobile app.
- App will process payment through the wiCode Platform
- Point of sale will confirm payments made against the unique QR through the wiCode Platform.



4 'Over the counter' integration walkthrough



The following walkthrough will detail the point of sale user interface and technical webservice flows required to perform an over the counter transaction, where a customer will present a QR code (app or card) or a mobile voucher number (called a wiCode).



4 'Over the counter' integration walkthrough



The interface is divided into several sections:

- Receipt (Top Left):** Lists items and prices: Chips 1 R10.00, Coke 1 R5.00.
- Running Total (Bottom Left):** Running Total R15.00.
- Store logo (Top Right):** A large empty rectangular box labeled "Store logo".
- Product selections (Middle Right):** A large empty rectangular box labeled "Product selections".
- Keypad (Bottom):** A grid of buttons for various functions.

SPLIT	INFO	VOID	PREPAID	DISC	CUST	ORDER	PRINT BILL	ENTER
TABLES	EDIT	ORD MSG	LOYALTY	GIFT	WIGROUP			

4 'Over the counter' integration walkthrough



Chips 1 R10.00
Coke 1 R5.00

Store logo

Running Total R15.00

SPLIT INFO
TABLES EDIT ORD MSG LOYALTY GIFT WIGROUP

ORDER PRINT BILL ENTER



Two products have been added to the basket. Let's assume the SKUs are 1111 and 2222.

The total basket amount is 1500 cents.

4 'Over the counter' integration walkthrough



The screenshot shows a POS system interface with a receipt on the left, a callout box in the center, and a keypad at the bottom. The receipt lists 'Chips 1 R10.00' and 'Coke 3 R5.00', with a 'Running Total R15.00' at the bottom left. The callout box contains a right-pointing arrow icon and the text: 'Let's proceed to the tender screen now to process some wiCode transactions.' The keypad includes buttons for 'SPLIT', 'INFO', 'VOID', 'PREPAID', 'DISC', 'CUST', 'TABLES', 'EDIT', 'ORD MSG', 'LOYALTY', 'GIFT', 'WIGROUP', 'ORDER', 'PRINT BILL', and 'ENTER'. A 'Store logo' label is visible at the top of the main display area.

Chips	1	R10.00
Coke	3	R5.00
Running Total		R15.00

Store logo

Let's proceed to the tender screen now to process some wiCode transactions.

SPLIT INFO VOID PREPAID DISC CUST
TABLES EDIT ORD MSG LOYALTY GIFT WIGROUP
ORDER PRINT BILL ENTER

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201					
TOTAL R15.00					
Cash	EFT/Cards	wiCode	7	8	9
			4	5	4
			1	2	3
			ESC	0	ENTER

4 'Over the counter' integration walkthrough



The screenshot shows a POS system interface with a purple background. At the top, it displays 'Table: 100' and 'B/No: INV201'. Below this, there is a 'TOTAL' label on the left and a numeric keypad on the right with buttons for 9, 4, 3, 0, and ENTER. At the bottom, there are buttons for 'Cash', 'EFT/Cards', 'wiCode', 'ESC', and '0'. A white information popup is centered over the keypad, containing an information icon (a lowercase 'i' in a circle) and the following text: 'In your list of available tenders, you will now have an additional tender type called wiCode. All wiCode payment, loyalty and redemption transactions will be processed using this tender type.'

4 'Over the counter' integration walkthrough



Table: 100	B/No: INV201				
TOTAL	R15.00				
			7	8	9
					4
					3
			1	2	
Cash	EFT/Cards	wiCode	ESC	0	ENTER



Select wiCode tender to process a wiCode transaction.

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201					
TOTAL R15.00					
Cash	EFT/Cards	wiCode	7	8	9
			4	5	4
			1	2	3
			ESC	0	ENTER

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201

TOTAL

wiCode Transaction

Scan or enter wiCode

Total Amount: R 15.00

wiCode / Card #:

Cancel Done

7	8	9	✓
4	5	6	
1	2	3	
C	0	X	

Cash EFT/Cards wiCode ESC 0 ENTER

4 'Over the counter' integration walkthrough



The screenshot shows a POS system interface with a central information box. The interface includes fields for 'Table: 100' and 'B/No: INV201'. A 'Cancel' button is visible. The bottom of the screen shows a keyboard layout with buttons for 'Cash', 'EFT/Cards', 'wiCode', 'ESC', '0', and 'ENTER'. The central information box contains an information icon (a lowercase 'i' in a circle) and a list of instructions.

When the POS is ready to scan the wiCode, the detect function of wiGroupDetect.dll should be invoked. This will:

1. Play a beep when the scan is successfully performed
2. Return the wiCode contained in the customer's QR.

4 'Over the counter' integration walkthrough



Beep!



4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201

TOTAL

wiCode Transaction

Scan or enter wiCode

Total Amount: R 15.00

wiCode / Card #: 1122345

Cancel Done

7	8	9	✓
4	5	6	
1	2	3	
C	0	X	

Cash EFT/Cards wiCode ESC 0 ENTER

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201

Once the wiCode has been scanned, the POS should automatically send the transaction to the wiCode Platform for authorization.

➔ If the wiCode was manually entered, the cashier will need to select 'Go' / 'Next' / 'Send' etc.

Remember to include all required fields. An example of the transaction request which should be sent to the wiCode platform at this point is displayed next.

Cash EFT/Cards wiCode ESC 0 ENTER



```

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap
/envelope/"
xmlns:pos="http://posprovider.te.wigroup.com/">
<soapenv:Header/>
<soapenv:Body>
  <pos:transaction>
    <request>
      <apiCredentials>
        <id>POS_20</id>
        <password>yourpassword/password>
      </apiCredentials>
      <type>PAYMENT</type>
      <basketAmount>1500</basketAmount>
      <cashbackAmount>0</cashbackAmount>
      <tipAmount>0</tipAmount>
      <totalAmount>1500</totalAmount>
      <switchTrxId></switchTrxId>
      <token>
        <id>1122345</id>
        <type>WICODE</type>
      </token>
      <storeTrxDetails>

```

```

      <basketId>INV201</basketId>
      <cashierId>John Smith</cashierId>
      <posId>POS2</posId>
      <remoteStoreId></remoteStoreId>
      <retailerId></retailerId>
      <storeId>1050</storeId>
      <trxId>123456789</trxId>
    </storeTrxDetails>
    <products>
      <product>
        <id>1111</id>
        <pricePerUnit>1000</pricePerUnit>
        <units>1</units>
      </product>
      <product>
        <id>2222</id>
        <pricePerUnit>5000</pricePerUnit>
        <units>1</units>
      </product>
    </products>
  </request>
</pos:transaction>

```

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201

TOTAL

wiCode Transaction

Scan or enter wiCode

Total Amount: R 15.00

wiCode / Card #: 1122345

Cancel Done

7	8	9	✓
4	5	6	
1	2	3	
C	0	X	

Cash EFT/Cards wiCode ESC 0 ENTER

4 'Over the counter' integration walkthrough



Table: 100 B/No: INV201

TOTAL

wiCode Transaction

Scan or enter wiCode

Total Amount: R 15.00

wiCode / Card #: 112234

Cancel Done

7	8	9	✓
4	5	6	
1	2	3	
C	0	X	

Cash EFT/Cards wiCode ESC 0 ENTER

4 'Over the counter' integration walkthrough



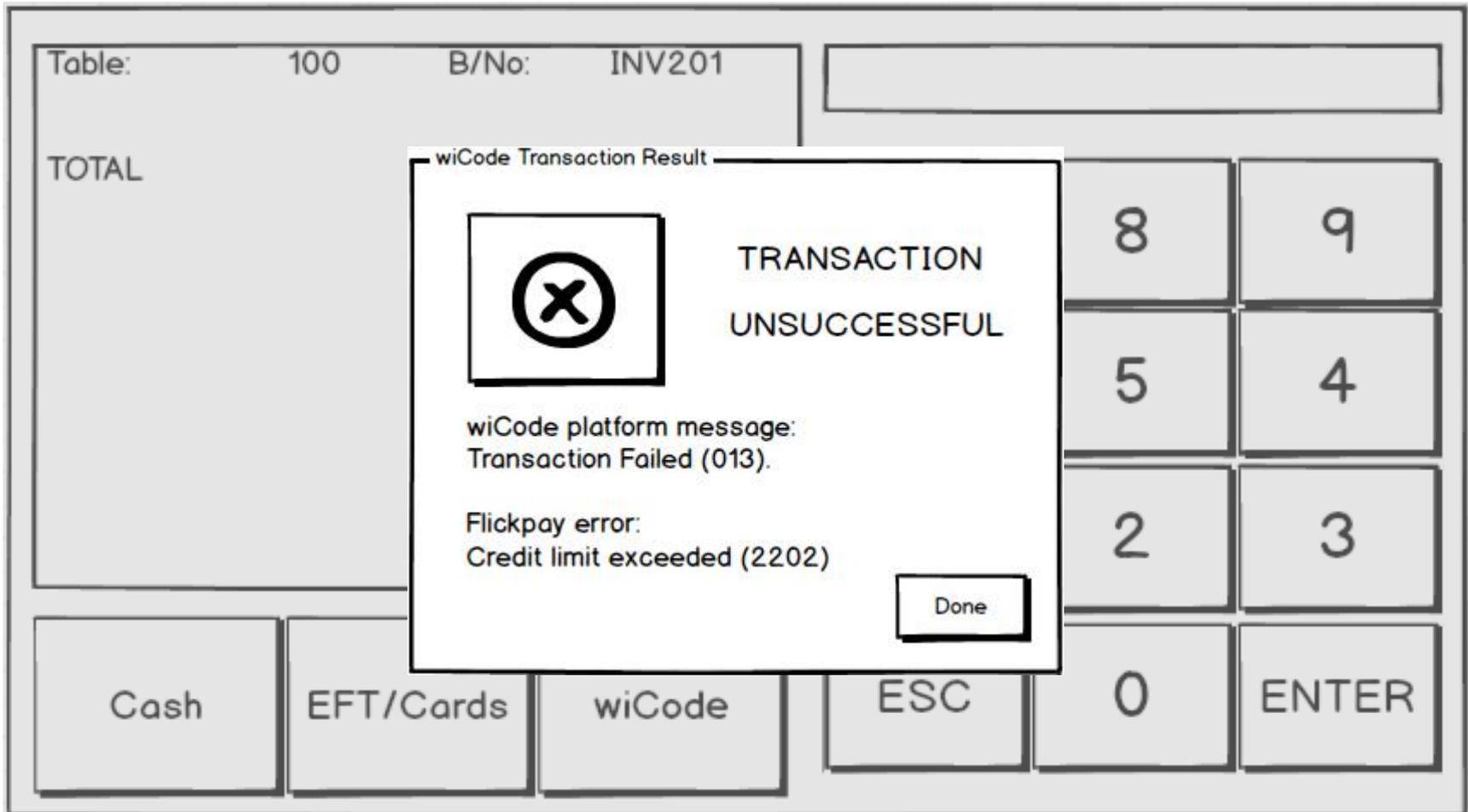
The screenshot shows a POS system interface with the following elements:

- Table: 100 B/No: INV201
- wiCode Transaction
- TOTAL
- Scan or enter wiCode
- Total Amount: \$15.00
- wiCode / O
- Buttons: Cancel, C, 0, X, ✓
- Bottom navigation: Cash, EFT/Cards, wiCode, ESC, 0, ENTER

A modal dialog is displayed in the center with the following content:

- Icon: A circular arrow pointing right.
- Text: Let's see how a failed transaction should be handled...

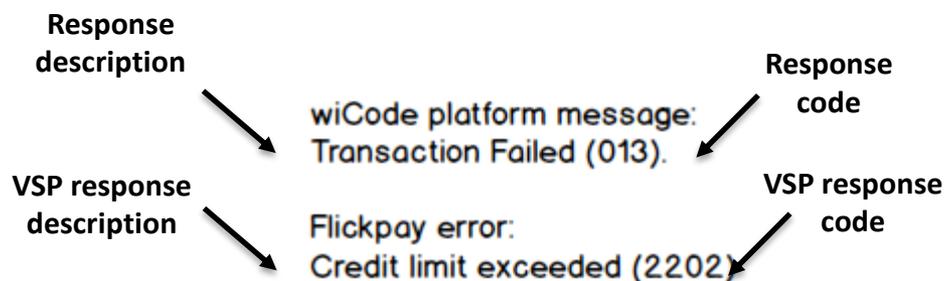
4 'Over the counter' integration walkthrough



4 'Over the counter' integration walkthrough



When a transaction fails, the POS should clearly show (and distinguish between) the platform response description and the VSP response description contained in the VSP object.



This will allow the cashier to more quickly identify what the issue is, and will lead to the correct party being contacted in the case of a support call.

4 'Over the counter' integration walkthrough



When a transaction fails, the POS should clearly show (and distinguish between) the platform response description and the VSP response description contained in the VSP object.



This is the name contained
in the VSP object

wiCode platform message:
Transaction Failed (013).

Flickpay error:
Credit limit exceeded (2202)

This will allow the cashier to more quickly identify what the issue is, and will lead to the correct party being contacted in the case of a support call.

4 'Over the counter' integration walkthrough



The screenshot shows a POS system interface. At the top, it displays 'Table: 100' and 'B/No: INV201'. Below this, there's a 'TOTAL' section. A 'wiCode Transaction' overlay is present, containing the text 'Scan or enter wiCode' and 'Total Amount: \$15.00'. A callout box with a right-pointing arrow icon contains the text 'Now let's see how a success should be handled...'. The interface includes a 'Cancel' button and a 'wiCode / O' field. At the bottom, there are buttons for 'Cash', 'EFT/Cards', 'wiCode', 'ESC', '0', and 'ENTER'. A large checkmark is visible on the right side of the 'wiCode Transaction' overlay.

4 'Over the counter' integration walkthrough



Transaction 1: successful

The screenshot shows a POS system interface with a central dialog box titled "wiCode Transaction Result". The dialog contains a large checkmark icon, the text "Transaction successful!", and transaction details: "Processed amount: R5.00" and "Loyalty name loyalty earned: value type". A "Done" button is at the bottom of the dialog. The background interface includes a "Table:" section with "10" and "TOTAL", a "Cash" button, and a numeric keypad with buttons for "9", "4", "3", and "ENTER".

4 'Over the counter' integration walkthrough



Transaction 1: successful

Table: 10 wiCode Transaction Result

TOTAL

Cash Done ENTER

9
4
3

i

Remember, a successful response does **not** indicate that the total amount has been processed. Some VSPs, such as deal apps, will only process a portion of the requested value. The totalAmountProcessed field will indicate what has been processed.

If loyalty earned is present in the Transaction response, it should be displayed. The blue underlined fields in the example are dynamically populated from the response.

4 'Over the counter' integration walkthrough



Transaction 1: successful

The screenshot displays a POS system interface with a central dialog box titled "wiCode Transaction Result". The dialog box contains a large checkmark icon, the text "Transaction successful!", and the following details: "Processed amount: R5.00" and "Loyalty name loyalty earned: value type". A "Done" button is located at the bottom of the dialog. The background interface includes a "Table:" section with "10" and "TOTAL", a "Cash" button, and a numeric keypad with buttons for "9", "4", "3", and "ENTER".

4 'Over the counter' integration walkthrough



Transaction 1: successful

Table: 100		B/No: INV201				
SUB TOTAL		R15.00				
<u>VSP Name</u>		-R5.00				
DUE:		R10.00				
				7 8 9		
				4 5 4		
				1 2 3		
				ESC 0 ENTER		
Cash		EFT/Cards		wiCode		

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful

Table: 100 B/No: INV201		
SUB TOTAL R15.00		
<u>VSP Name</u> -R5.00		
<u>VSP Name</u> -R10.00		
DUE: R00.00		
Cash	EFT/Cards	wiCode
7	8	9
4	5	4
1	2	3
ESC	0	ENTER

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful

Table: 100 B/No: INV201

SUB TOTAL	R15.00
VSP Name	-R5.00
VSP Name	-R10.00

DU

Cash EFT/Cards wiCode

ESC 0 ENTER

7 8 9

4

3

1 2

Once the total amount due has been tendered, the cashier can close or complete the bill

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful

Table: 100 B/No: INV201					
SUB TOTAL R15.00					
<u>VSP Name</u> -R5.00			7 8 9		
<u>VSP Name</u> -R10.00			4 5 4		
DUE: R00.00			1 2 3		
Cash	EFT/Cards	wiCode	ESC	0	ENTER

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful

Table: 100 B/No: INV201		
SUB TOTAL R15.00		
<u>VSP Name</u> -R5.00		
<u>VSP Name</u> -R10.00		
DUE: R00.00		
Cash	EFT/Cards	wiCode
7 8 9		
4 5 4		
1 2 3		
ESC 0 ENTER		

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful

Store logo

Product selections

Running Total R15.00

SPLIT	INFO	VOID	PREPAID	DISC	CUST	ORDER	PRINT BILL	ENTER
TABLES	EDIT	ORD MSG	LOYALTY	GIFT	WIGROUP			

4 'Over the counter' integration walkthrough



Transaction 1: successful

Transaction 2: successful



Now that the **real-world** transaction has been completed, the point of sale should send a Transaction Advice to the wiCode platform, finalising the wiCode transactions. There should be an advice sent for each transaction performed, using the wiTrxId received in the transaction response. In this example, the POS would send 2 transaction advice requests, as there are two wiCode transactions that should be finalized.

```
<pos:advise>
  <request>
    <apiCredentials>
      <id>TEST</id>
      <password>0873d391e987982fbbd3</password>
    </apiCredentials>
    <action>FINALISE</action>
    <originalTrx>
      <storeTrxDetails>
        <basketId>12</basketId>
        <cashierId>ADMIN</cashierId>
        <posId>0011</posId>
        <storeId>1050</storeId>
        <trxId>12</trxId>
      </storeTrxDetails>
      <type>PAYMENT</type>
      <wiTrxId>3843</wiTrxId>
    </originalTrx>
  </request>
</pos:advise>
```

4 'Over the counter' integration walkthrough



Transaction 1: successful, finalised

Transaction 2: successful , finalised

The interface is divided into several sections:

- Left Panel:** A large vertical rectangle, likely for a barcode scanner or receipt printer, with a smaller horizontal rectangle below it.
- Store logo:** A large rectangular area at the top right, labeled "Store logo".
- Product selections:** A large rectangular area below the logo, labeled "Product selections".
- Function Buttons:** A grid of 12 buttons at the bottom left:

SPLIT	INFO	VOID	PREPAID	DISC	CUST
TABLES	EDIT	ORD MSG	LOYALTY	GIFT	WIGROUP
- Action Buttons:** Three larger buttons at the bottom right:
 - ORDER
 - PRINT BILL
 - ENTER

5

'Sit down' integration walkthrough



The following walkthrough will detail the point of sale user interface and technical webservice flows required to perform a sit down transaction, where a customer will scan a QR printed on the bill to make a payment.

In the following example, two customers order a pizza and a pasta, and make two separate payments against the bill.



5

'Sit down' integration walkthrough



Pizza 1 R70.00
Pasta 1 R85.00

Running Total R155.00

Store logo

Product selections

SPLIT	INFO	VOID	PREPAID	DISC	CUST	ORDER	PRINT BILL	ENTER
TABLES	EDIT	ORD MSG	LOYALTY	GIFT	WIGROUP			

5 'Sit down' integration walkthrough



The screenshot shows a POS system interface with the following elements:

- Transaction Summary:**

Pizza	1	R70.00
Pasta	1	R85.00
Running Total		R155.00
- Store logo:** A placeholder for the store's logo.
- Keyboard:** A grid of buttons including SPLIT, INFO, TABLES, EDIT, ORD MSG, LOYALTY, GIFT, WIGROUP, ORDER, PRINT BILL, and ENTER.

Information Box:

 Unlike 'over the counter' transactions, which are initiated by the point of sale, sit down transactions are initiated by the customer's mobile. Once the customer is ready to pay, the cashier will print a till slip

5 'Sit down' integration walkthrough



The screenshot shows a POS system interface with the following elements:

- Menu:** Pizza 1 R70.00, Pasta 1 R85.00
- Store logo:** A large empty box labeled "Store logo".
- Running Total:** Running Total R155.00
- Keyboard:** A grid of buttons including SPLIT, INFO, VOID, PREPAID, DISC, CUST, TABLES, EDIT, ORD MSG, LOYALTY, GIFT, WIGROUP, ORDER, PRINT BILL, and ENTER.

A callout box with a right-pointing arrow icon and the text "Let's print a bill for the customer..." is positioned over the "PRINT BILL" button.

5 'Sit down' integration walkthrough



When the POS prints a proforma invoice, a QR code should be included below the bill information. The contents of this QR code should be (including new lines):

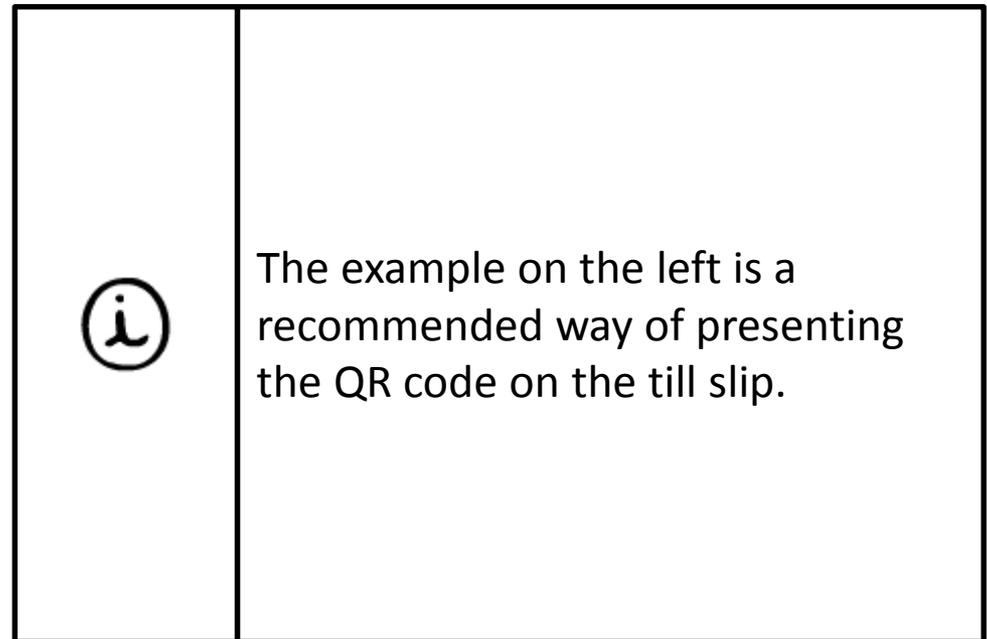
BILL
BasketID
wiGroup StoreID
Bill value in cents

5 'Sit down' integration walkthrough



	<p>An example would be:</p> <p>BILL INV201 1050 15500</p> 
--	--

5 'Sit down' integration walkthrough



5 'Sit down' integration walkthrough



The customers will process payments by scanning the QR code and selecting the amount to pay on their payment apps.

5 'Sit down' integration walkthrough



Once the customers have paid, the waitron will confirm payment at point of sale



5

'Sit down' integration walkthrough



The interface is divided into several sections:

- Receipt Area (Top Left):** Displays the current order items and their prices.

Pizza	1	R70.00
Pasta	1	R85.00
- Running Total (Bottom Left):** Shows the total amount for the current order.

Running Total R155.00
- Store Logo (Top Right):** A large rectangular area labeled "Store logo" for displaying the business's branding.
- Product Selections (Middle Right):** A large rectangular area labeled "Product selections" for displaying available menu items.
- Function Buttons (Bottom):** A grid of buttons for navigating and processing the order.

SPLIT	INFO	VOID	PREPAID	DISC	CUST	ORDER	PRINT BILL	ENTER
TABLES	EDIT	ORD MSG	LOYALTY	GIFT	WIGROUP			

5

'Sit down' integration walkthrough



The screenshot displays a POS system interface. On the left, a receipt lists items: Pizza 1 for R70.00 and Pasta 1 for R85.00. Below this, the Running Total is R155.00. A callout box with a right-pointing arrow icon contains the text: "Let's proceed to the tender screen now to process confirm payment." The interface also features a "Store logo" field and a keypad with buttons for SPLIT, INFO, VOID, PREPAID, DISC, CUST, TABLES, EDIT, ORD MSG, LOYALTY, GIFT, WIGROUP, ORDER, PRINT BILL, and ENTER.

Pizza 1	R70.00
Pasta 1	R85.00
Running Total R155.00	

Store logo

Let's proceed to the tender screen now to process confirm payment.

SPLIT INFO VOID PREPAID DISC CUST
TABLES EDIT ORD MSG LOYALTY GIFT WIGROUP
ORDER PRINT BILL ENTER



Table: 100 B/No: 1					
TOTAL R155.00					
Cash	EFT/Cards	wiCode	7	8	9
			4	5	4
			1	2	3
			ESC	0	ENTER



The screenshot shows a POS system interface with a central information popup. The background interface includes a top section with 'Table: 100' and 'B/No: 1', a 'TOTAL' label on the left, and a numeric keypad on the right with buttons for 9, 4, 3, 0, and ENTER. At the bottom, there are buttons for 'Cash', 'EFT/Cards', 'wiCode', 'ESC', and '0'. The central popup is white with a black border and contains an information icon (a lowercase 'i' in a circle) on the left and the following text on the right:

In your list of available tenders, you will now have an additional tender type called wiCode. All wiCode payment, loyalty and redemption transactions will be processed using this tender type.

4 'Over the counter' integration walkthrough



The screenshot shows a POS interface with a header bar containing 'Table: 100' and 'B/No: INV201'. Below the header is a large white dialog box with a circular arrow icon on the left. The dialog box contains two paragraphs of text. At the bottom of the interface, there are several buttons labeled 'Cash', 'EFT/Cards', 'wiCode', 'ESC', '0', and 'ENTER'.

Table: 100 B/No: INV201

For the 'sit down' implementation, when the wiCode tender has been selected, the POS should perform a *transaction history request* using the same information which was imbedded in the QR code that was generated specifically for this table / bill.

Remember to include all required fields, and to use the same information that was used to create the bill's QR code. An example of the *transaction history request* which should be sent to the wiCode platform at this point is displayed next.

Cash EFT/Cards wiCode ESC 0 ENTER



```

<soapenv:Envelope
xmlns:soapenv="http://schemas.xmlsoap.org/soap
/envelope/"
xmlns:pos="http://posprovider.te.wigroup.com/">
<soapenv:Header/>
<soapenv:Body>
  <pos:transaction>
    <request>
      <apiCredentials>
        <id>POS_20</id>
        <password>yourpassword/password>
      </apiCredentials>
      <type>PAYMENT</type>
      <basketAmount>1500</basketAmount>
      <cashbackAmount>0</cashbackAmount>
      <tipAmount>0</tipAmount>
      <totalAmount>1500</totalAmount>
      <switchTrxId></switchTrxId>
      <token>
        <id>1122345</id>
        <type>WICODE</type>
      </token>
      <storeTrxDetails>

```

```

      <basketId>INV201</basketId>
      <cashierId>John Smith</cashierId>
      <posId>POS2</posId>
      <remoteStoreId></remoteStoreId>
      <retailerId></retailerId>
      <storeId>1050</storeId>
      <trxId>123456789</trxId>
    </storeTrxDetails>
    <products>
      <product>
        <id>1111</id>
        <pricePerUnit>1000</pricePerUnit>
        <units>1</units>
      </product>
      <product>
        <id>2222</id>
        <pricePerUnit>5000</pricePerUnit>
        <units>1</units>
      </product>
    </products>
  </request>
</pos:transaction>

```



wiGroup

Sit down payments made by customers will appear here

Confirmed payments

Total Amount	Tip Amount	Time	App
R25.00	R5.00	18:35	Flickpay
R25.00	R5.00	18:34	MTN Mobile Money

TOTAL: R 50.00

Refresh

Done

Enter/Scan wiCode



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