





#### Contents

1	INTRODUCTION	3
2	HISTORY	3
3	REFERENCE DOCUMENT	3
4	NETWORK REQUIREMENTS	3
5	GENERAL PRINCIPLE	4
6	NETWORK ADCHITECTURE	1
U		-
7	MESSAGE FORMATS	5
7	MEIWORK ARCHITECTURE         MESSAGE FORMATS         7.1       Payment or refund request	<b>5</b>
7	MEIWORK ARCHITECTURE         MESSAGE FORMATS         7.1       PAYMENT OR REFUND REQUEST         7.1.1       Request	<b>5</b> 5 5
7	MEIWORK ARCHITECTURE         MESSAGE FORMATS         7.1       PAYMENT OR REFUND REQUEST         7.1.1       Request         7.1.2       Response	<b>5</b> 5 5 6
7	MEIWORK ARCHITECTORE         MESSAGE FORMATS         7.1       Payment or refund request         7.1.1       Request         7.1.2       Response         7.2       Cancellation request	<b>5</b> 5 5 6 7
7	METWORK ARCHITECTORE         MESSAGE FORMATS         7.1       PAYMENT OR REFUND REQUEST         7.1.1       Request         7.1.2       Response         7.1       CANCELLATION REQUEST         7.2.1       Request	<b>5</b> 5 5 6 7 7



#### **1** Introduction

This document contains the technical documentation for the payment terminal's TCP interface.

## 2 History

Version	Date	Comment
1.0.0	January 28, 2009	Document created.
1.0.1	June 24, 2009	Cancellation request (new message) Refund (payment message extended)
1.0.2	June 08, 2010	Addition of character x'0A' at the end of response messages.
1.0.3	May 30, 2011	Incorrect language code in example "FRF" instead or "FRA". Further details on languages supported.
1.1.0	October 24, 2011	English translation

## **3 Reference Document**

• N/A

# 4 Network requirements

- Open TCP ports (value defined in section ([BUTTON\_SELECT\_PAYMENT\_nn], port in configuration file PayStation.ini). The default values are from 40011 to 40018.
- HTTP 8080 port used for states



# 5 General principle

The principle of the payment terminal is to enable payments made in cash. The terminal operates in client server mode. Each client (cash register, SCO, etc) sends a payment request to the terminal that then sends back the result following the payment operation.

The exchanges take place by the TCP socket.



Figure 1 General principle

## 6 Network architecture

Exchanges between the clients and the terminal are made in TCP. The payment terminal listens for requests using dedicated ports. A dedicated TCP port is opened for each client (port binding is not used in order to avoid firewall configuration problems).



Payment Station Application TCP Interface Technical Documentation



#### Figure 2 TCP exchange principles

The message format is provided below. An exchange is composed of a client application request to which the payment terminal application responds.

## 7 Message formats

Messages are in XML format.

#### 7.1 Payment or refund request

7.1.1 Request

```
<App>
<}
```

```
<Payment Amount="1000" Id= "12" Trx="23456"
Language="FRA"/>
```

```
</App>
```

Figure 3 Example of payment request

Field	Comments
Payment	N/A
Amount	Amount to pay or refund in cents (amount prefixed by '-' for refunds, e.g. Amount="-100", refund of $\in$ 1.00).
Id	The ID code of that making the request (e.g. POS number).
Trx	A unique transaction number used to generate and monitor the



Field	Comments	
	customer receipt.	
Language	<ul> <li>The language selected by the client.</li> <li>FRA= French</li> <li>ENG = English</li> <li>PTG = Portuguese</li> <li>ESN = Spanish</li> </ul>	

#### 7.1.2 Response

#### Figure 4 Example of payment response

Field	Comments
Payment	N/A
Paid	Sum inserted by the client
ChangeDue	The amount of change given by the payment terminal in cents
Trx	Transaction number provided in the request.
ReturnCode	Return code:
	100 = Successful operation
	101 = Client canceled operation
	102 = Successful operation and "CONFIRM_PAYMENT_ON_CLIENT_APP" in "COMMON" section set to TRUE <sup>1</sup>
	201 = Operation impossible

<sup>&</sup>lt;sup>1</sup> No difference between codes 101 and 102 on the payment terminal: it is used for different business process on the client side depending on the terminal settings.

On an SCO, code 102 means that the client must always scan his receipt to end the transaction, which is not necessary if the terminal returns a code 100.



Field	Comments
X'0A'	Marks end of message

## 7.2 Cancellation request

#### 7.2.1 Request

<i><app></app></i>		
<void></void>		

Figure 5 Example of payment request

Field	Comments
<void></void>	N/A

#### 7.2.2 Response

#### Figure 6 Example of payment response

Field	Comments
<void></void>	N/A
ReturnCode	Return code: 100 = Successful operation 201 = Operation impossible
X'0A'	Marks end of message

End of Document	