



beyond
payment

PC Simulator for Semi-integrated Solution
(WINTSI)

USER'S GUIDE

0120-08180-0107

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1. Introduction

This document describes the installation steps and the use of Window Telium Semi-Integrated Application.

In this document, the «WINTSI» abbreviation will be used to designate Window Telium Semi-Integrated Application.

WINTSI application is a PC application that is used as Electronic Cash Register (ECR) simulator.

To install and use this application follow the different steps described below:

- Software installation
- Connecting a terminal to your PC.
- Using WINTSI

2. Environment requirement

In order to work correctly, WINTSI Application requires .NET framework 2.0 SP2 to be installed in your computer.

WINTSI application is Windows XP and Windows 7 compatible.

3. How to install WINTSI

You must have administrative privileges to install and uninstall this program. This includes having administrative privileges the first time you start your computer after installing or uninstalling.

Before installing WINTSI application, make sure that all WINTSI applications are closed.

Once you have completed the setup process, you can launch WINTSI by double-clicking on WINTSI icon or from Start button Choose: Programs >> WINTSI >> Run WINTSIxx.yy.

- Double-click on the setup executable file "setup.exe":
If .Net Framework 2.0 SP2 is not installed on the machine, WINTSI installation will be canceled and a message will appear asking user to download and install .Net Framework 2.0 SP2.



Click « Yes » button to download the required Framework. Your PC must be connected to the INTERNET.

- Once .Net Framework is installed, you can proceed with the installation of WINTSI application.

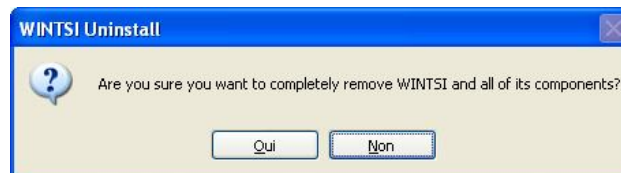


- Follow setup steps until getting WINTSI installed on the PC.



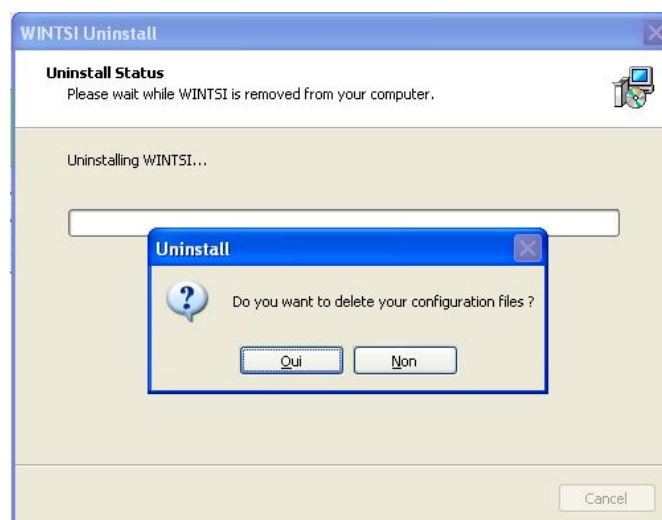
4. How to uninstall WINTSI

From task bar, click Start and choose Programs -> WINTSI-> Uninstall WINTSI xx.yy.



Click "yes" to uninstall WINTSI application or "No" to abort.

When "yes" is chosen, you are asked about deleting your configuration files. Click "yes" to delete configuration files or "No" to abort.

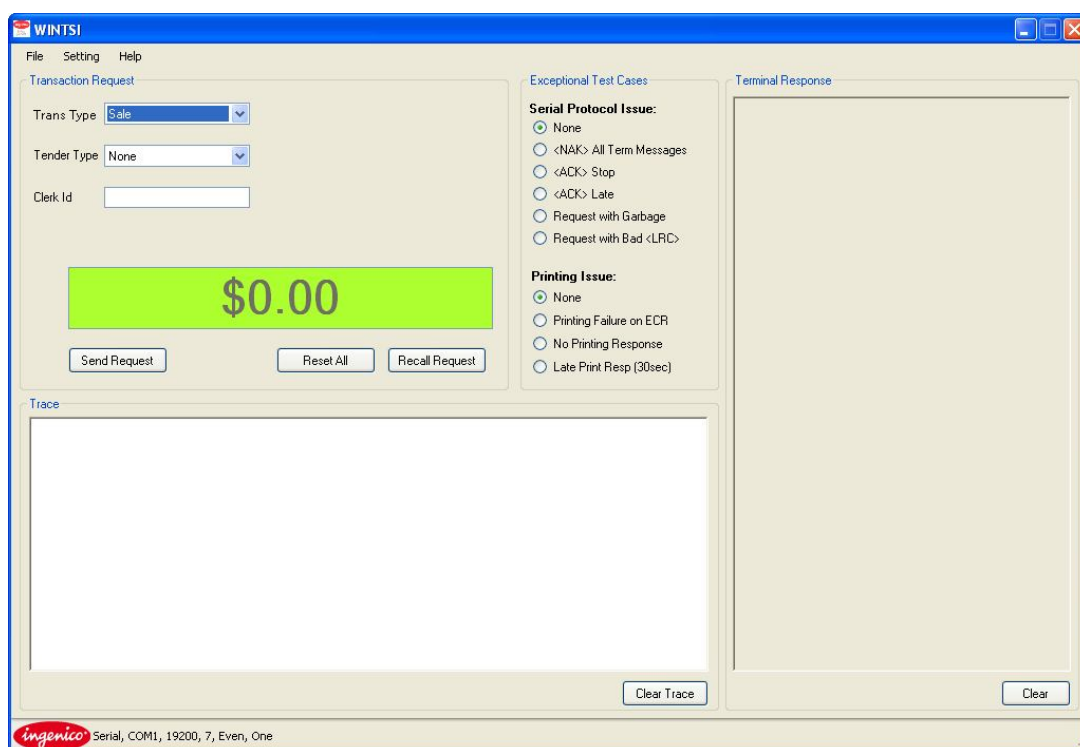


5. Using WINTSI

5.1. WINTSI main view

When WINTSI application is started, the main view appears and it is composed of:

- File menu: allows importing/exporting configuration and exporting Traces and Terminal Responses into a file.
- Setting menu: allows the modification of the communication settings, configuration of Tender and transaction type and enabling/disabling trace area.
- Help menu: gives the access to user help.
- Transaction Request: contains the required ECR transaction inputs.
- Terminal Response: allows displaying receipt/Transaction Response incoming from terminal.
- Trace area: trace all transmitted and received messages.
- Exceptional Test Cases



5.2. File Menu

The file menu gives the access to:

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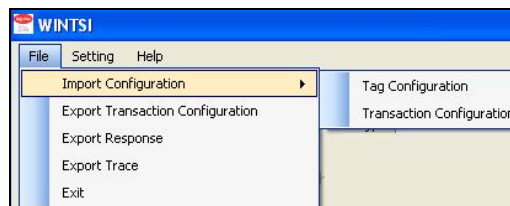
- Import configuration files.
- Export transaction Configuration in XML file format.
- Export the Trace in text file format.
- Export the Transaction/Receipt response in text file format.
- Exit WINTSI Application.



5.2.1. Import Configuration

This submenu allows importing the configuration files:

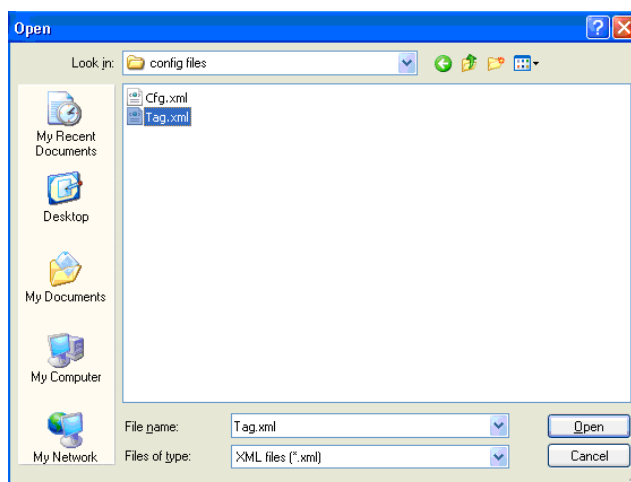
- Tag Configuration file: this file contains the List of tags that will be used by WINTSI application.
- Transaction Configuration file: this file contains the list of transaction and tender type that will be used by WINTSI application.



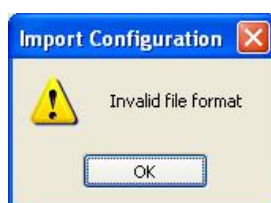
5.2.1.1. Tag Configuration

To import Tag configuration file:

- Select File >> Import Configuration>>Tag Configuration
- Choose the Tag file you want to import
- Press "Open" button



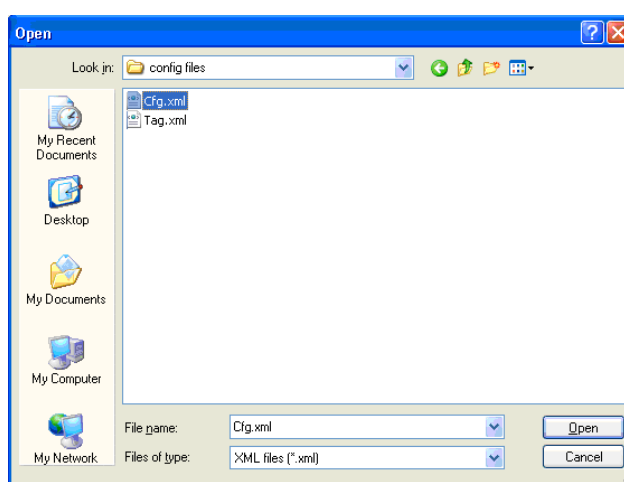
If the selected file has an invalid format, the following warning message will be displayed.



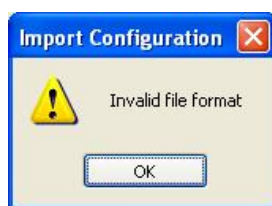
5.2.1.2. Transaction Configuration

To import Transaction configuration file:

- Select File >> Import Configuration>>Transaction Configuration
- Choose the transaction configuration file
- Press “Open” button



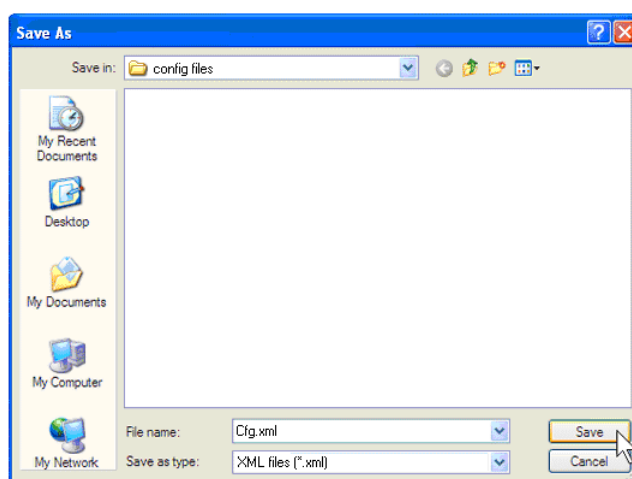
If the selected file has an invalid format, the following warning message will be displayed.



5.2.2. Export Transaction Configuration

To save the transaction configuration settings:

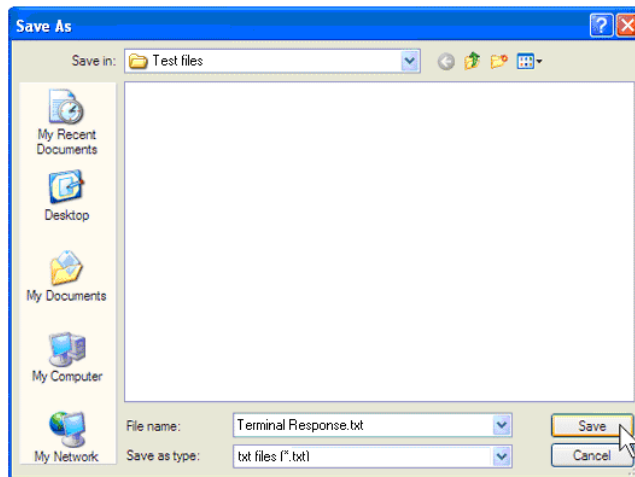
- Select File >> Export Transaction Configuration>>
- Choose the repository
- Enter the file name
- Press "Save" button



5.2.3. Export Response

To save Transaction/Receipt response data in text file format:

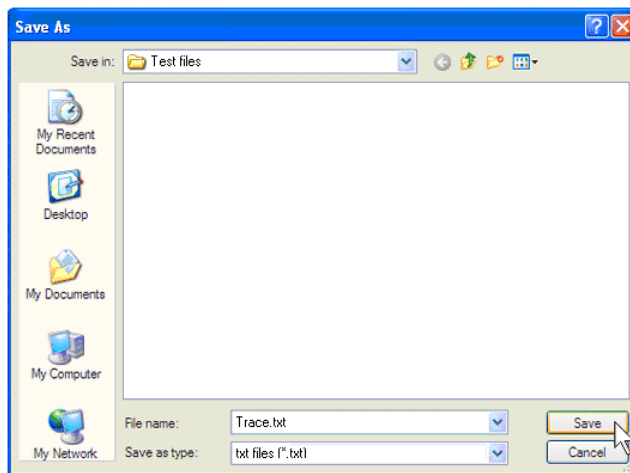
- Select File >> Export Response>>
- Choose the repository
- Enter the file name
- Press "Save" button



5.2.4. Export Trace

To save trace:

- Select File >> Export Trace>>
- Choose the repository to save in file
- Enter the file name
- Press “Save” button



5.3. Setting Menu

5.3.1. Communication

WINTSI application supports the configuration of communication settings that can be either Serial (RS232/USB) or Ethernet.

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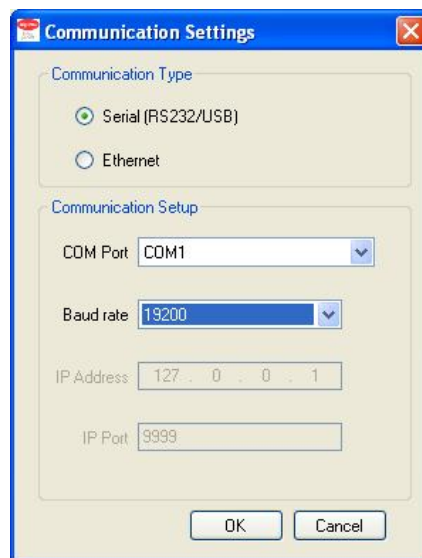
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If the communication is correctly configured, the communication settings will be saved in configuration file. Thus, when user opens the Communication Menu again the old communication settings will displayed.

5.3.1.1. Serial (RS232/USB)

If terminal is connected to PC through Serial link RS232/USB, you might:

- Select "Serial (RS232/USB)" communication type.
 - ➔ The application displays all ports available on your machine.
- Select the COM Port.
- Select the baud rate.
- Press "OK" button.



5.3.1.2. Ethernet

If the terminal is connected to PC through Ethernet, you might:

- Select "Ethernet".
- Enter terminal "IP address" (it's a mandatory field).
- Enter the listening "IP Port" (it's a mandatory field).
- Press "OK"



The 'Communication Settings' dialog box has two sections. The 'Communication Type' section has two radio buttons: 'Serial (RS232/USB)' and 'Ethernet', with 'Ethernet' selected. The 'Communication Setup' section contains four fields: 'COM Port' (a dropdown menu showing 'COM1'), 'Baud rate' (a dropdown menu showing '19200'), 'IP Address' (a text box with '10 . 3 . 1 . 1'), and 'IP Port' (a text box with '7777'). At the bottom are 'OK' and 'Cancel' buttons.

When a mandatory field is not correctly set, WINTSI will display a warning message.

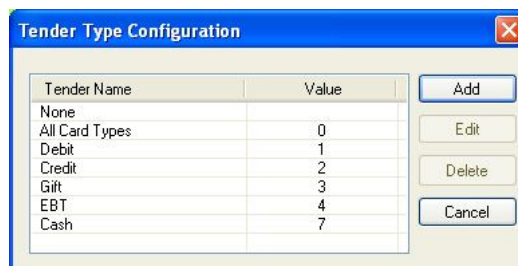


The 'Warning Message' dialog box features a yellow warning triangle icon on the left. To its right, the text reads 'Communication setup data should be filled'. An 'OK' button is centered at the bottom.

5.3.2. Tender

WINTSI application supports Tender type configuration. The Tender configuration window allows:

- Adding a Tender
- Editing an existing Tender
- Deleting an existing Tender



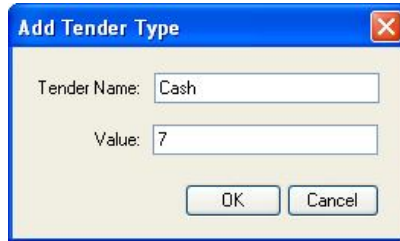
The 'Tender Type Configuration' dialog box contains a table with two columns: 'Tender Name' and 'Value'. The table lists several tender types with their corresponding values. To the right of the table are four buttons: 'Add', 'Edit', 'Delete', and 'Cancel'.

Tender Name	Value
None	
All Card Types	0
Debit	1
Credit	2
Gift	3
EBT	4
Cash	7

5.3.2.1. Adding Tender

To add new Tender, you should:

- Click "Add" button, the below dialog window will be displayed



The "Add Tender Type" dialog box has a blue title bar with a close button. It contains two text input fields: "Tender Name:" with the value "Cash" and "Value:" with the value "7". At the bottom are "OK" and "Cancel" buttons.

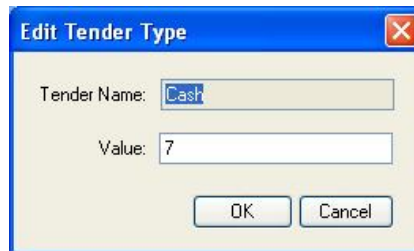
- Enter tender name (duplicate tender Names are not allowed)
- Enter Value (the value must be numeric and one character long)
- Click "OK"

➔ After adding new Tender, the Tender list is updated.

5.3.2.2. Editing Tender

To edit an existing Tender, you might:

- Select the Tender you wish to modify
- Click "Edit" button or double click on the active line, the below dialog will be opened.



The "Edit Tender Type" dialog box has a blue title bar with a close button. It contains two text input fields: "Tender Name:" with the value "Cash" (highlighted) and "Value:" with the value "7". At the bottom are "OK" and "Cancel" buttons.

- Modify tender Value
- Click "OK"

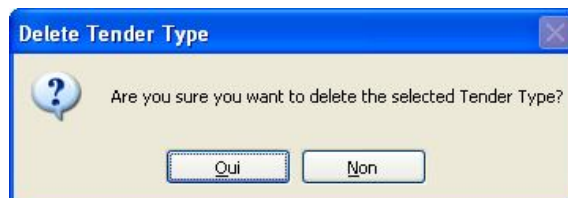
➔ The selected Tender is updated in the Tender list.

5.3.2.3. Deleting Tender

To delete an existing Tender, you might:

- Select the Tender line you wish to delete
- Click "Delete" button

➔ A message is displayed to confirm the Tender deletion.



The "Delete Tender Type" dialog box has a blue title bar with a close button. It features a question mark icon and the text "Are you sure you want to delete the selected Tender Type?". At the bottom are "Oui" and "Non" buttons.

- Click "yes" to confirm

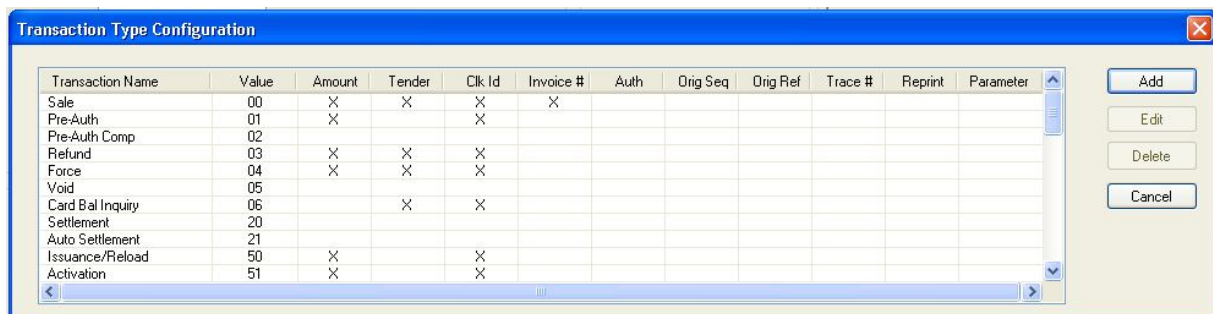
→ The selected tender is removed from the tender list.

5.3.3. Transaction

WINTSI application supports Transaction configuration.

This includes:

- Adding a Transaction
- Editing a Transaction
- Deleting a Transaction



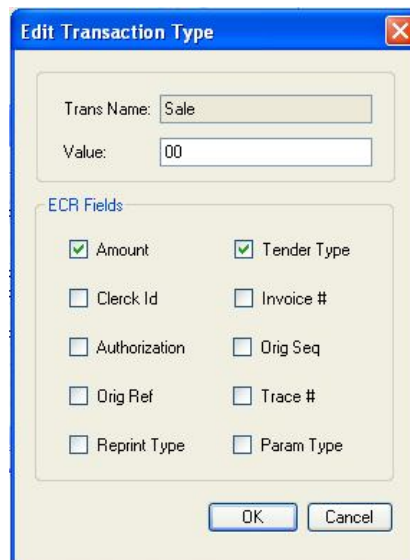
The image shows a 'Transaction Type Configuration' dialog box with a table of transaction types and their associated fields. The table has columns for Transaction Name, Value, Amount, Tender, Clk Id, Invoice #, Auth, Orig Seq, Orig Ref, Trace #, Reprint, and Parameter. The rows list various transaction types like Sale, Pre-Auth, Refund, etc., with their respective values and which fields are active (marked with an 'X').

Transaction Name	Value	Amount	Tender	Clk Id	Invoice #	Auth	Orig Seq	Orig Ref	Trace #	Reprint	Parameter
Sale	00	X	X	X	X						
Pre-Auth	01	X		X							
Pre-Auth Comp	02										
Refund	03	X	X	X							
Force	04	X	X	X							
Void	05										
Card Bal Inquiry	06		X	X							
Settlement	20										
Auto Settlement	21										
Issuance/Reload	50	X		X							
Activation	51	X		X							

5.3.3.1. Adding Transaction

To add new Transaction, you might:

- Click "Add" button, the below dialog will be opened



The image shows an 'Edit Transaction Type' dialog box. It contains fields for 'Trans Name' (set to 'Sale') and 'Value' (set to '00'). Below these are 'ECR Fields' with checkboxes for 'Amount' (checked), 'Tender Type' (checked), 'Clerk Id', 'Invoice #', 'Authorization', 'Orig Seq', 'Orig Ref', 'Trace #', 'Reprint Type', and 'Param Type'. At the bottom are 'OK' and 'Cancel' buttons.

- Enter the Transaction name (duplicate Transaction Names are not allowed)
- Enter the Transaction ID (it must be numeric and two characters long)
- Check the required ECR fields that should be active when this Transaction type in WINTSI Transaction is selected.

- Click "OK"
- ➔ After adding the new transaction, the transaction list will be updated.

5.3.3.2. Editing Transaction

To edit an existing Transaction, you might:

- Select the transaction you wish to modify
- Click "Edit" button or double click on this line, the below dialog will be opened.

- Modify the Value or the required ECR fields
- Click "OK"
- ➔ The selected Transaction is up dated in the Transaction list.

5.3.3.3. Deleting Transaction

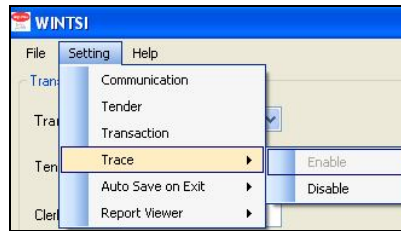
To delete an existing Transaction, you might:

- Select the Transaction line you wish to delete
- Click "Delete" button
- ➔ A message is displayed asking to confirm the deletion

- Click "yes" to confirm
- ➔ The selected Transaction is removed from the Transaction list.

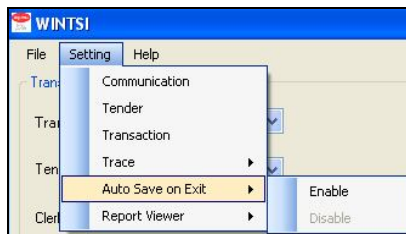
5.3.4. Trace

This submenu contains menu serves to enable or disable the trace.



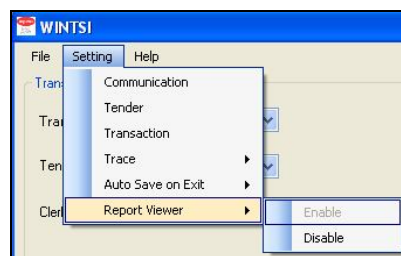
5.3.5. Auto Save on Exit

If “Auto Save on Exit” setting is selected, traces are automatically saved when user exits the WINTSI. The trace files are automatically saved in AutoSaveTrace folder under the installation directory of WINTSI.



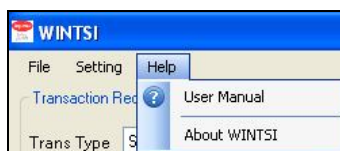
5.3.6. Report Viewer

By default the “Report Viewer” option is enabled. So, if a report response is received from terminal a window appears to display the details of report. “Report Viewer” can be disabled by selecting “Disable” in the sub-menu.



5.4. Help Menu

This menu allows user to access to “User Manual” and see the version of WINTSI application.



5.5. Transaction Request

This section allows user to fill all transaction inputs in order to transmit request to terminal device. It contains:

- Transaction request fields
- "Send Request" button
- "Reset All" button
- "Recall Request" button

5.5.1. Transaction request fields

The possible transaction fields are:

- Transaction type.
- Tender type.
- Clerk Id.
- Invoice #.
- Authorization #.
- Amount.
- Original Sequence #.
- Original Reference #.
- Trace #

Depending on the configuration of transaction, the request fields appear in the main window.

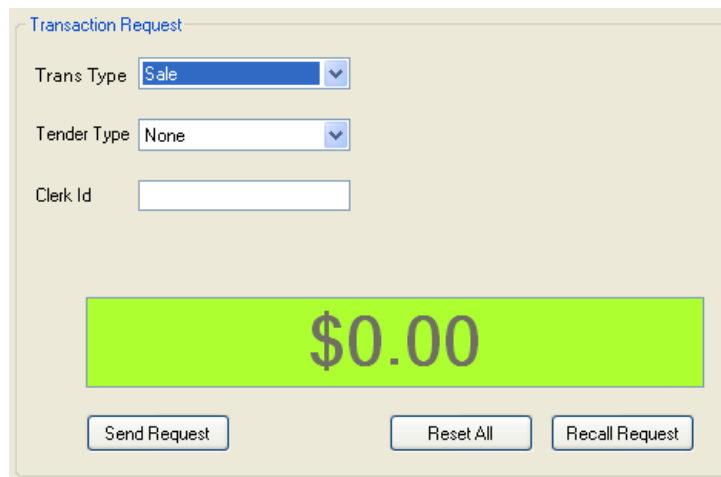
Example:



Transaction Name	Value	Amount	Tender	Clk Id	Invoice #	Auth	Orig Seq	Orig Ref	Trace #	Reprint	Parameter	
Sale	00	X	X	X								Add

The available fields are:

- Tender type
- Clerk Id
- Amount



The image shows a 'Transaction Request' dialog box. It contains three input fields: 'Trans Type' with a dropdown menu showing 'Sale', 'Tender Type' with a dropdown menu showing 'None', and 'Clerk Id' with an empty text box. Below these fields is a large green rectangular area displaying '\$0.00'. At the bottom of the dialog are three buttons: 'Send Request', 'Reset All', and 'Recall Request'.

5.5.2. "Send Request" button

After entering the required transaction request fields, Click "Send request" button to send the ECR request to terminal.

5.5.3. "Reset all" button

"Reset all" button resets all transaction request fields.

5.5.1. "Recall Request" button

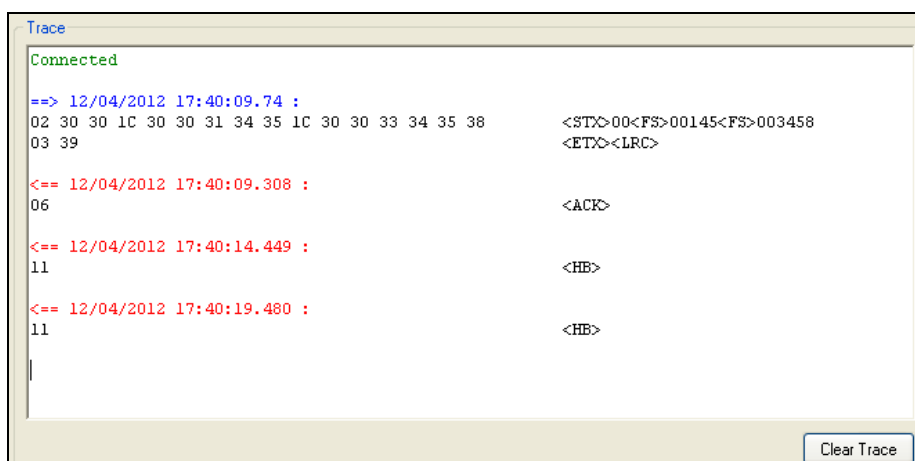
"Recall Request" button is used to request the last Transaction response to be sent to ECR again.

5.6. Trace

WINTSI application supports tracing all the exchanged messages between WINTSI and terminal.

The Trace window includes:

- Connection status: connected or disconnected
- Messages transmitted to the terminal with:
 - "=>" arrow
 - Date and time of the message
 - The Message data
- Received messages:
 - "<=" arrow
 - Date and time of the reception
 - The received message data



5.7. Terminal response

WINTSI application shows all transaction response and receipt messages incoming from the terminal. The Transaction Response window includes:

- Receipt message data: This section contains all received data field and record field information. It contains:
 - Data Fields:
 - Tag value
 - Tag description
 - The field data
 - Record Fields:
 - Record index
 - Tag value
 - Tag description
 - The field data
 - ECR Printing response (Printing Accepted, Printing Rejected, etc.)

Receipt Data	
100	Trans Type : 00
101	Trans Status : 00
102	Trans Date : 120412
103	Trans Time : 131417
104	Trans Amount : 78
109	Total Amount : 78
112	Reference # : 30
118	Clerk ID : 789
300	Payment Type : 2
301	Card Description : Visa
302	Account number : *****8291
303	Language : 0
304	Customer Name : CHASE PAYMENTECH
306	Card Entry Mode : 0
312	EMV App Name : 2
400	Auth # : 999999
401	Response Code : 000
402	Host Resp Text : APPROVED
403	Host Resp ISO code : 00
503	Batch Number : 002
600	Demo indicator : 1
601	Terminal ID : 999
602	Merch ID /Visa ID/ MC ID :
VISAMID0123	
707	Receipt Footer1 : Thank You
708	Receipt Footer2 : Please Come Again
714	Ender L1 : I AGREE TO PAY ABOVE TOTAL
AMOUNT	
715	Ender L2 : IN ACCORDANCE WITH CARD
ISSUER'S	
716	Ender L3 : AGREEMENT
717	Ender L4 : (MERCHANT AGREEMENT IF
CREDIT VOUCHER)	
718	Ender L5 : RETAIN THIS COPY FOR

- Transaction Result data: This section contains all received Tag data field and record field information. It contains:
 - Multi Transaction Flag value(0 or 1)
 - Data Fields:
 - Tag value
 - Tag description
 - The field data
 - Record Fields:
 - Record index
 - Tag value
 - Tag description
 - The field data

```

Transaction Result
***Multi Trans Flag : 0
101 Trans Status : 00
100 Trans Type : 00
102 Trans Date : 120412
103 Trans Time : 131417
300 Payment Type : 2
109 Total Amount : 78
104 Trans Amount : 78
302 Account number : *****8291
306 Card Entry Mode : 0
118 Clerk ID : 789
112 Reference # : 30
400 Auth # : 999999
401 Response Code : 000
403 Host Resp ISO code : 00
402 Host Resp Text : APPROVED
501 Terminal ID : 999
500 Demo indicator : 1

```

5.8. Reports

Depending on the xml configuration, the WINTSI application may supports generating several reports (Detail report, Summary report...) incoming from the terminal.

Below is an example of a generated rapport (Summary report).

Summary Report			
CREDIT			
MASTERCARD			
Sales	3		\$ 55.22
Tips			\$ 0.00
Returns			\$ 0.00
Total	3		\$ 55.22
VISA			
Sales	3		\$ 30.00
Tips			\$ 0.00
Returns			\$ 0.00
Total	3		\$ 30.00
TOTAL CREDIT			
Sales	6		\$ 85.22
Tips			\$ 0.00
Returns			\$ 0.00

5.9. Exceptional Test Cases

WINTSI application allows doing some exceptional tests in order to test the terminal behavior when some issues are occurred.

The Exceptional Test Cases are composed of:

- Serial Protocol Issues:
 - None
 - <NACK> All Term Messages: WINTSI applications will NACK all Terminal responses.
 - <ACK> Stop: WINTSI application stops acknowledging Terminal responses.

- <ACK> Late: WINTSI application acknowledges lately the Terminal responses.
- Request with Garbage: WINTSI application sends the messages with garbage data to the terminal.
- Request with bad <LRC>: WINTSI application sends the messages with incorrect <LRC>.
- Printing Issues:
 - None: When WINTSI receives a receipt response, the user is asked to accept or refuse printing on ECR.



- Printing Failure on ECR: WINTSI application will refuse the Terminal receipt response by sending "Printing NOK".
- NO Printing Response: WINTSI application will not send a printing response to the Terminal.
- Late Print Resp (30s): WINTSI application will send accepting printing response lately (After 30 sec of receiving receipt data).

5.10. Error Messages

This section describes the different error messages that can be displayed by WINTSI Application during various operations.

Message text	Description	Action
Invalid file format	When the imported configuration file is not conform to the allowed XML format.	Click Ok
Invalid Tender Name!	This message is displayed if the entered tender Name is invalid.	Click Ok
Invalid Tender Value!	This message is displayed if the entered Tender Value is invalid.	Click Ok
Tender Type already used!	This message is displayed if the entered Tender Name already exists in configuration file.	Click Ok
Invalid Transaction Type!	This message is displayed if the	Click Ok

	entered Transaction type is invalid.	
Invalid Transaction value Format!	This message is displayed if the entered Transaction value is invalid.	Click Ok
Transaction Name already used!	This message is displayed if the entered transaction type already exists in configuration file.	Click Ok
Invalid IP Address!	This message is displayed if the IP Address field contains blank.	Click Ok
Invalid IP Port!	This message is displayed if the IP Port field is empty.	Click Ok
An error was occurred, check your PDF reader!	This message is displayed if user guide cannot be read.	Click Ok
Connection failed: Terminal not found!	This message is displayed when: -Terminal not Connected to the pc. -Communication Settings are incorrect	Click Ok
COM port not Found	This message is displayed if COM Port is no more available.	Click Ok
Error occurs when writing in log file!	This message is displayed when an error in writing log file was occurred.	Click Ok