EMV Device Guide for Everest

Verifone EMV Device communication Card Devices browser Pairing device Unpair device Configure payment processor and method Supported Operations Processing credit/debit card transactions Processing existing batch payment(s) Receive New Payment Refund Appendix A - Pairing Example

Appendix B - Troubleshooting

Verifone EMV Device communication

Everest communicates with the device from the Everest Server, here is the image showing the communications:



- Black arrows shows physical connections to the network
- Blue arrows shows which parts of the system communicates with each other. Client would not have direct access to the device, instead it will instruct Server to do a transaction and in turn Server will talk to the device.

Card Devices browser

In order to pair a device the following needs to be done:

1. File > Setup > Miscellaneous > Card Devices

- 2. Card Devices browser will be shown (see image below) listing all the devices for the current session, the following operations will be available in the browser:
 - a. Pair Wizard executes Card Device pairing wizard
 - b. Discontinue unpair the device
 - c. Refresh refresh the list of the devices (might be useful after device just added)

Card Devices								<u></u>	×
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Pairing device

Navigate File > Setup > Miscellaneous > Card Devices to open device browser and use Pair Wizard button in the toolbar (or INS key) to start the pairing wizard.

Card Device Pairing Wizard form contains the following pages:

- 1) General here the user will need to specify general details of the device and click Pair
 - a) Fields:
 - i) Name name of the device as it will be shown in the Everest UI
 - ii) **IP Address/Host name** this will be used by Everest to access the device, name must be know to Everest Server since only Everest Server will be communicating with the device
 - iii) Command port by default device listen on 5015 port
 - iv) **System port** by default device listen on 5016 port (currently Everest not communicate to system port)
 - Workstation workstation name which can access the device. Available for modification only if user has *extended mode permission* (EXTENDED_MODE) which allows for Everest administrator execute pairing from their own workstation for the end user workstation
 - vi) **Pairing Code:** <code> code is randomly generated When pairing is executed the device will ask for the pairing code and <code> needs to be typed on the device by the end user.
 - b) Buttons
 - Pair initiate the pairing with the device, in case any error happens the message box with the explanation will be shown. If pairing succeeds the confirmation page will be shown. The device will ask to provide pairing code which is shown on that page.
 When a user enters the code and it matches the entry code in the pairing request, the device will respond with an acknowledgment of success.
 - ii) Cancel closes the wizard
- 2) Confirmation page this is just informational page which contains text saying the device is paired

a) Buttons - Close

See Appendix A for the pairing example and screenshots.

Unpair device

Navigate File > Setup > Miscellaneous > Card Devices to open device browser. Highlight the device in the list you want to discontinue and click Discontinue button in the toolbar and confirm discontinue in the popup window. Device should be removed from the list if no error happens¹.

Card Devices						10.000.000		_		×
Options Help	Discontinue	Refresh	Expert Style Filter	Properties	Export	Print	Chart Setup	Expand Grouping		.>>
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/ Type Name		Works BOXPOS	ation User Paired T 51 super 6/7/201	īme 8 8:52:05 AM						
			Cor	nfirm	ou want to	o deacti	vate the currer	× nt record?		
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2								Q	Record	: 1/1

Configure payment processor and method

Navigate File > Setup > Accounting > Processors - processor browser will be opened. Click New > In New Window to bring up empty profile for the new processor:

- 1. General tab fill details as needed. If processor will be used only for the communication with the device² then make sure all the checkboxes in the Fraud Prevention section are unchecked
- 2. Settings tab select VeriFone/Remote CC for the service and mark *Use Device* checkbox. You may also fill in other fields if you wish to use the same processor for online Verifone payments. Save the profile

¹ Known issue: device can be discontinued only from the workstation it is linked to

² Same processor can be used to communicate with Verifone payment gateway in which case the gateway details must be provided (client code, merchant key and etc)

ptions Help	Options Help
Image: Save and dose Image: Save and dose <th>Image: New Save and dose Image: New Save and dose Image:</th>	Image: New Save and dose Image:
neral Settings Currencies	General Settings Currencies
ieneral These are the parameters for this processor	Settings Specify the credit card processor settings
Code	Service VeriFone/Remote CC
Processor Name DeviceProc Help desk telephone	I⊽ Use Device Client Code
Voice Authorization telephone	Merchant Key
Fraud Prevention	User Name
Supports address verification (AVS)	Password
Supports security code verification (CVV2) Supports zero dollar authorization (ZDA)	Integration URL

In order to link created payment processor with the payment method navigate to File > Setup > Accounting > Payment method > New

Fill General tab as shown below - important is to select the following fields (the rest fields can be configured as appropriate for your system setup):

- 1. Type as "Credit/Debit card"
- 2. Used for Collections
- 3. Card Type is Others

On the Settings tab mark Use Payment Processor checkbox and select in the Processor drop down the one you created for handling device communication. Save profile.

Payment Method[To be Generated] — 🗌 🗙	🛅 Payment Method[To be Generated] — 🗌 🗙
Options Help	Options Help
Image: Save Image: Save Image: Save Image: Save Image: Save New Save Save Save Contents What's This?	Image: Save Image: Save Image: Save Image: Save Image: Save Mew Save Save Save Cancel Contents What's This?
General Card Processing Miscellaneous General These are the parameters for this Payment method Code DEV Image: Code DEV Image: Code Description Description Device Account Account Image: Code Image: Code Image: Credit Card - Visa/Master Card Image: Code Image: Code Type Card Type Card Type CREDIT/DEBIT CARD Others Image: Code Used for Image: Web enabled Image: Create Batch Payment for web orders Create Batch Payment for web orders Image: Create Batch Payment for web orders	General Card Processing Miscellaneous Card Processing Define the card processing details for this payment method Image: Card Processor Define the card processor Processor Processor DeviceProc Image: DeviceProc Image: DevicePr

Supported Operations

Following table summarize what operations are supported depending on the card type:

	Credit Card	Debit Card
Sale	Yes	Yes
Authorization	Yes	No
Use Prior Authorization - Capture	Yes	No
Use Prior Authorization - Voice	No	No
Refund	Yes	Yes

Processing credit/debit card transactions

During transaction processing, the user should select the payment method created to process credit/debit cards via a device. Below are the screenshots of the forms which shown when Receive operation is executed on a Sales Order.

DEV payment method selected on the first form, this method is created as explained in previous sections. After OK is clicked on the first page (Receipt for SO-...) the Card Verification page will be shown. *Use Device* checkbox needs to be marked and desired device needs to be selected (dropdown will be filled with the names of the devices as were specified during a device pairing). After transaction type is selected and OK button is clicked the communication with the device will be executed.

ceipt for	SO-200228 [USD]		?	×	Card Verification for Device ?
<u>G</u> eneral					Credit Card Details
	Please enter the follow	ving <mark>details for Paymen</mark>	t		Specify the card details
	Document Amount		\$1.31		Processing Amount \$1.3
	Already paid		\$0.00	-	
	Payment Info. Excha	an <mark>ge <u>I</u>nfo.</mark>			
	Democratical				Card Number Expiration (MMY
		Cash <u>R</u> egister	-		
	Credit Card <u>#</u>	Date			Card <u>H</u> older
	Approval Code	6/7/2018	-		Transaction Tumo
	Approvalcode	Narration 🦉			Sale
	Amount		\$1.31	-	Authorization Use Prior Authorization
		,			
					Some payment processors linked to Verifone, like Payment-Ter require the address field to be maximum of 20 characters
	Advance Applied		\$0.00	-	
	Discount available		\$0.00		
	Discount Applied		\$0.00	-	
			\$1.31	-	
	Total Paid	-	100 C 20 C 20		
	Total Paid Balance		\$0.00		

Once device receive request from the Everest it will execute its own wizard³ to process the transaction:

Select a Tip Amount Total Amount Due: \$1.31	Select Payment Type Total Amount Due: \$1.31	Transaction Amount: \$1.31
5% 10% 15% 20% \$0.07 \$0.13 \$0.20 \$0.26 0 0 0 10% 10%	CREDIT CREDIT DEBIT DEBIT GIFT CARD	Insert Tap Swipe
Do You Want It All On This Card? Total Amount Due: \$1.31	Device Progress,Result Requesting Line Connecting and verifying Received Response (click on OK to continue) Executing SALE transaction CAPTURED (code: 4)	

³ Wizard screens depends on the device type as well as on its configuration. Current screenshots are taken on MX915 device with factory default settings

Sales and Authorization transactions are similar in terms of UI - required operation needs to be selected in the *Transaction Type*. However if Sale operation transfer funds to merchant account the Authorization operation just blocks them on a customer credit card. In order to finalize the transaction *Use Prior Authorization* type of transaction needs to be executed.

When Authorization operation already executed for a sales document and Receive button clicked again the following message is shown:



In order to capture existing authorization any of the method option can be chosen.

Processing existing batch payment(s)

When this option is chosen the batch payment browser will be opened:

Batcl	h Payment Pro	cess [SO-20	00229]											×
Options	Help													
Select A	All P <u>r</u> ocess	ि <u>R</u> efresh	Properties	Export	Print	Expand Groupin	g Coļlapse	C e Grouping	🐙 Lab	el •	Eield Choos	ser <u>C</u> a	(0) ontent	F1
Docur	ment #: S	60-200	229											
Select	Payment Descrip	pt Proces	sor	c	Autho	rized Amt Paym	ent Amount	Payment C	urrency /	Approv	al Code	Transac	tion II	2
- Metho	d : Credit Card ((Count = 1)												
	Device	Device	Proc			\$1.31	\$1.31	USD	C	97545	i	698174	4	
•														•
Search by	Document #		-											
SO-20022	9													
												Rec	ord: 1	/1 //

Mark checkbox against transaction(s) which need to be finalized and click Process. Everest will communicate with the device and execute capture transaction - user interaction is not required in this process.

Receive New Payment

If this option is chosen then usual forms will be shown. Select the payment method which was used to execute Authorization transaction and proceed to the next step. On the Card Verification form select the device which was used to execute Authorization operation and choose Use Prior Authorization in Transaction Type field - additional fields will be shown:

Cred <u>i</u> t Card Details	1 ^
Specify the card details	
Processing Amount	\$1.31
Vise Device POS1	voiration (MMVV)
Card <u>H</u> older	
Transaction Type Approval Code	
Sale Authorization Use Prior Authorization © Voice Author © Capture	rization
Some payment processors linked to Verifone, like require the address field to be maximum of 20 d	e Payment-Tech, haracters.

Select Capture radio button and in the Approval Code dropdown select code for the authorization operation executed previously for the sales document. Once OK button is clicked the capture operation will be executed and no user interaction will be needed.

Refund

Refund operation can be executed exactly the same way as for Sale operation. Card Verification screen will have only Refund operation available in the Card Verification form:

Card Verification for Device

Processing	Amount			1	\$1.31
E By Tran	caction ID				
Use Dev		J			
Card Number	er			<u>E</u> xpirati	on (MMYY
Card <u>H</u> older	r				
Transaction	Туре				
Refund	61940 -				
1					
Some navm	ent processor	s linked to	Verifone	like Pav	ment-Tech
require the	address field	to be maxi	num of 2	20 charac	ters.

Appendix A - Pairing Example

Below are the pairing example - device got 192.168.1.50 IP address assigned. Everest will show this device in UI as POS1 (int various places - device browser, payment details) since we provided POS1 for the Name field. Workstation where Everest Client is running also named POS1 so we provide that name in the Workstation field.

1. Pairing wizard general page

IP address/Host name 192. 168. 1. 50 Command port	
IP address/Host name 192.168.1.50 Command port	
192. 168. 1. 50 Command port	
Command port	
5015	
System port	
5016	
Workstation	
POS1	

3.1 Confirmation page

Everest will show confirmation page if pairing succeeded

Card Device Pairing Wizard	?	×
Device was successfi	ully pai	red!
	Q	lose

2. POS Screen

When Pair button is clicked the device will request to provide PIN code (which is 7924 for our example). PIN is provided and Enter (green on the device) is clicked



3.2 POS Welcome screen

Device will show welcome screen if pairing succeeded



Appendix B - Troubleshooting

It is possible to enable logging all communications between Everest Server and device, in order to do so open *c:\Program Files (x86)\Icode\Everest\Application\application.config* (path is valid when Everest Server installed into *c:\Program Files (x86)\Icode\Everest\Application* which is default) and set full path to the log file into value attribute for EmvTraceFilePath parameter (see screenshot below). Once configuration file is modified restart Everest COM+ application.

If the value is empty or the [add] entry is missing then logging will be disabled.