

START SESSION

This command is used to start a new session. The session can be for a payment transaction or to display line item information.

Device UI Required: Yes

Request Packet

Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static Value	N/A	N/A	SESSION	Type of function.
COMMAND	Required	Static Value	N/A	N/A	START	Command name
INVOICE	Required	Character		40		Merchant invoice number. Maximum 40 characters supported (A-Z, a-z, 0-9) and this not case sensitive. All the special characters are supported in INVOICE field. NOTE: POS system should handle the maximum character limit for invoice, based on the respective end host used in the environment in case the limit is less than 40. Worldpaly allows numeric only; th value may not b all zeroes. Example: TA1234



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
SWIPE_AHEAD	Optional	Binary		1	Possible values: • 0 - d is a b l e d • 1 - e n a b l	SWIPE_AHEAD is used to enable preswipe functionality. NOTE: Value being sent in SWIPE_AHEAD will have precedence over IDLECARDENTRY ENABLED parameter value (Application Parameters).
STORE_NUM	Optional	Character	1	6		Store number. Example: 203
LANE	Optional	Numeric	1	8		Used to identify the retail lane. Example: 1
CASHIER_ID	Optional	Character	1	10		Cashier performing the transaction. Example: 560
SERVER_ID	Optional	Numeric	1	10		Server performing the transaction. NOTE: FD RC Engage allows maximum of 5 digits. Example: 560
SHIFT_ID	Optional	Character	1	1		Shift at the store. Example: 2



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
TABLE_NUM	Optional	Numeric	1	5		Table number. Collected for receipts. Example: 10
BUSINESSDATE	Optional	Numeric	8	8		YYYYMMDD format Example: 20161129
PURCHASE_ID	Conditional	Character	1	25		Required for Level II processing. P.O. Number or Customer Code. NOTE: All the special characters are supported in PURCHASE_ID. Example: 1
USER_DEFINED1	Optional	Character	1	35		User defined field. This is applicable to Worldpay Only.
USER_DEFINED2	Optional	Character	1	35		User defined field. This is applicable to Worldpay Only. NOTE: Will be truncated to 20.
USER_DEFINED3	Optional	Character	1	35		User defined field. This is applicable to Worldpay Only. NOTE: Will be truncated to 20.



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
POS_IP	Optional	Character				For Consumer Unsolicited Responses to POS. POS IP listening address. Example: 192.168.31.100
POS_PORT	Optional	Numeric	4	4		For Consumer Unsolicited Responses to POS. POS listening port. Example: 5016
TRAINING_MODE	Optional	List			Valid values: • O F F • O N	Include this field to turn on Training Mode for the session. Transactions are routed to HIF Test for host simulation and results are mocked for approvals. NOTE: Refer to TestHost.XML Used for specifics. This is not supported by Worldpay SCA 4.0. When DEMO parameter is 1 (enabled), transactions will be performed in Training Mode without the need to pass < TRAINING_MODE> from POS.



Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
NOTIFY_SCA_EVE NTS	Optional	Binary			Valid Values: • T R U E • F A L S E	If TRUE, return event broadcasts as play by play of what is occurring on the device when interacting with consumer and host as Unsolicited Consumer Selection response. NOTE: POS_IP and POS_PORT must be sent. Broadcast events should be used as information only and not as a condition for stopping or resuming a transaction. The exception would be in case where consumer interaction has lapsed for certain duration and POS elects to CANCEL on secondary port.
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS1

Field	Rule	Туре	Minimum	Maximum	Value(s)	Description
COUNTER	Required	Numeric	1	10		COUNTER is used for a given MAC label. Each COUNTER should be higher than the last one. This is used to authenticate the POS. Example: 100
MAC	Required	Base64 Encoded Data				Message Authentication Code. This is used to authenticate the POS.
MAC_LABEL	Required	Character	1	50		Associated label that tells the device which MAC_KEY to use to decrypt the value of MAC. This is used to authenticate the POS. Example: REG1

Example

Following is an example of request packet

<TRANSACTION> <FUNCTION_TYPE>SESSION</FUNCTION_TYPE> <COMMAND>START</COMMAND> <COUNTER>1</COUNTER> <MAC> ... </MAC>
<MAC_LABEL>REG2</MAC_LABEL> CHAC_LABELPREGZ
<LANE>3</LANE>
<STORE_NUM>203</STORE_NUM>
<INVOICE>TA1234</INVOICE>
<SWIPE_AHEAD>1</SWIPE_AHEAD>
</TRANSACTION>



Response Packet

Field	Туре	Value	Description
RESPONSE_TEXT	Character		Processor response text. Example: Session started / SESSION started
RESULT	Character	ок	This indicates the Result details.
RESULT_CODE	Numeric	Expected result code: -1, 59003	This indicates the result code. Refer to Result/Error Codes for details.
TERMINATION_STATUS	Character	SUCCESS or FAILURE	This indicates the transaction termination status. This is the overall status of the transaction irrespective of approved or declined. Like, if the output is generated then the status is SUCCESS and if no output is generated then the status will be FAILURE.
POS_RECON	Character		POS reconciliation field echoed back if sent in request. Example: RetailPOS1
COUNTER	Numeric		Echoes counter sent in the request. Example: 100

Transaction Performance Metric

Note

These fields are returned, if SCAPERFMETRIC parameter ($\underline{\text{Application Parameters}}$) is enabled.

Field	Туре	Value	Description
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UI_TIME	Time	This indicates the time duration, for which the device screen is displayed (like error message, prompt screen, remove card screen) till any user action is performed in the command execution flow. This field is not applicable to capture the time for the Processing, Authorizing and transaction status screen. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: <ui_time> 44.028</ui_time>
HOST_TIME	Time	This indicates the time taken for the Connection to the host, sending request and receives data from the host. This field also take the cumulative time for multiple requests which may sent to the host during the transaction including two legged transactions, timeout requests, Auto Last Tran requests, DCC, Credit app proxy. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000 value, will not be returned in the response. Example: < HOST_TIME>1.389



CMD_TIME	Time	This field indicates the total amount of time for a command, which is executed by the application from request received to the response sent. The format of the returned value would be S.sss, where S is seconds (this can be 0 to any positive integer) and sss is milliseconds. In case of any insignificant time or 0.000
		value, will not be returned in the response. Example: <cmd_time>70.765</cmd_time>

Example

<RESPONSE>
<RESPONSE_TEXT>SESSION started</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<COUNTER>2</COUNTER>
</RESPONSE>

TestHost.XML Used in TRAINING_MODE

TRAINING_MODE can be included either in the START session request (where it would be ON or OFF for the whole session) or in a transaction request. TRAINING_MODE will be echoed in response.

Note

Training mode will return EMV fields in response if applicable.

TestHost XML

https://verifone.cloud/docs/sca-functional-specification/protocol_spec/administration/start_session



Note

As of this publication, all transaction amount values are receiving approvals from test host. This section is for information purposes only and is subject to change.

Operation ID	Command	Transaction Amount	FIELD SET (Expected Response)
1	CAPTURE (Sale)	1.01	1
1	CAPTURE (Sale)	Other	1
4	AUTH	20.00	2
4	AUTH	Other	2
5	CLOSE_TAB NOTE: Use with OPEN_TAB amount 1.01	1.01	Refer to CLOSE_TAB Response.
5	CLOSE_TAB	Other	
7	SETTLE	Any	3
16	CREDIT	Any	2
45	VOID	Any	2
106	ADD_VALUE	Any	2
107	ACTIVATE	Any	2

Field set 1

Field	Value
AUTH_CODE	TAS684
INTRN_SEQ_NUM	50407
RESPONSE_TEXT	APPROVAL TAS684
RESULT	CAPTURED
RESULT_CODE	4
TERMINATION_STATUS	SUCCESS
TRANS_DATE	YYYY.MM.DD

https://verifone.cloud/docs/sca-functional-specification/protocol_spec/administration/start_session



Field	Value
TRANS_TIME	HH:MM:SS
TROUTD	50409
APPROVED_AMOUNT	Equals transaction amount
AVAILABLE_BALANCE	0.00
TRAINING_MODE	ON

Field set 2

Field	Value
AUTH_CODE	TAS316
INTRN_SEQ_NUM	50408
TRANS_SEQ_NUM	7
RESULT	CAPTURED
RESULT_CODE	4
TERMINATION_STATUS	SUCCESS
TRANS_DATE	YYYY.MM.DD
TRANS_TIME	HH:MM:SS
TROUTD	50408
APPROVED_AMOUNT	varies
AVAILABLE_BALANCE	If applicable
TRAINING_MODE	ON

Field set 3

Field	Value
RESPONSE_TEXT	Settlement Scheduled
TERMINATION_STATUS	SUCCESS



Example Request (TRAINING MODE = ON in START session request)

```
<TRANSACTION>
<FUNCTION_TYPE>PAYMENT</FUNCTION_TYPE>
<COMMAND>CAPTURE</COMMAND>
<PAYMENT_TYPE />
<TRANS_AMOUNT>1.01</TRANS_AMOUNT>
<MAC_LABEL>P_7RZOMW</MAC_LABEL>
<COUNTER>2</COUNTER>
<MAC> ... </MAC>
</TRANSACTION>
```

Example Response

```
<RESPONSE>
<RESPONSE TEXT>APPROVAL TAS684</RESPONSE TEXT>
<RESULT>CAPTURED</RESULT>
<RESULT_CODE>4</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<TROUTD>50409</TROUTD>
<CTROUTD>1</CTROUTD>
<INTRN_SEQ_NUM>50407</INTRN_SEQ_NUM>
<TRANS_DATE>2016.11.22</TRANS_DATE>
<TRANS_TIME>13:50:25</TRANS_TIME>
<PAYMENT_TYPE>CREDIT</PAYMENT_TYPE>
<PAYMENT_MEDIA>MASTERCARD</PAYMENT_MEDIA>
<acct_num>545454*****5454</acct_num>
<AUTH_CODE>TAS684</AUTH_CODE>
<aPPROVED_AMOUNT>1.01</aPPROVED_AMOUNT>
<AVAILABLE_BALANCE>0.00</AVAILABLE_BALANCE>
<CARDHOLDER>FDCS TEST CARD MASTERCARD</CARDHOLDER>
<CARD_EXP_MONTH>04</CARD_EXP_MONTH>
<CARD_EXP_YEAR>20</CARD_EXP_YEAR>
<TRAINING_MODE>ON</TRAINING_MODE>
<COUNTER>2</COUNTER>
</RESPONSE>
```

Example CLOSE_TAB Response

```
<RESPONSE>
<RESPONSE_TEXT>Transaction Approved</RESPONSE_TEXT>
<RESULT>APPROVED</RESULT>
<RESULT_CODE>5</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<TRANS_DATE>2016.11.22</TRANS_DATE>
<TRANS_TIME>13:56:39</TRANS_TIME>
<CTROUTD>1</TROUTD>
<PAYMENT_TYPE>CREDIT</PAYMENT_TYPE>
<APPROVED_AMOUNT>1.01</APPROVED_AMOUNT>
<TRAINING_MODE>ON</TRAINING_MODE>
```

https://verifone.cloud/docs/sca-functional-specification/protocol spec/administration/start session



<COUNTER>17</COUNTER></RESPONSE>