



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

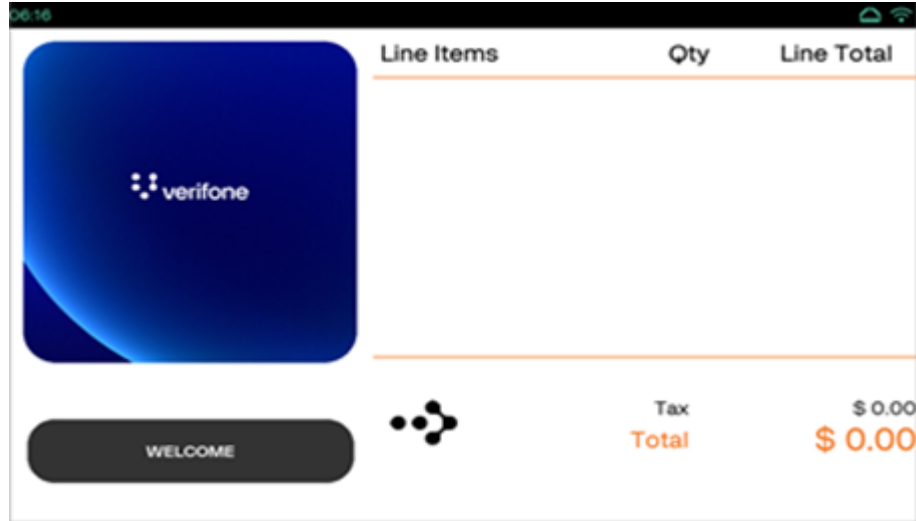
Updated: 23-Jul-2025

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

Display



User Action Terminal Action

No Action

Request Packet

Field	Rule	Type	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.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
INVOICE	Required	Character	1	40		Merchant invoice number. Maximum 40 characters supported (A-Z, a-z, 0-9) this not case sensitive. All special characters are supported in INVOICE field. NOTE: system should handle the maximum character limit in invoice, based on the response end host used in the environment in case the limit is less than 40. Worldpay allows numeric only; the value must be all zeroes. Example: TA1234
SWIPE_AHEAD	Optional	Binary	1	1	Possible values: <ul style="list-style-type: none"> • 0 – disabled • 1 – enabled 	SWIPE_AHEAD is used to enable preswipe functionality. NOTE: Value being sent in SWIPE_AHEAD will have precedence over IDLECARDENTRYENABLE parameter value (Application Parameters).
STORE_NUM	Optional	Character	1	6		Store number. Example: 1
LANE	Optional	Numeric	1	8		Used to identify the retail location. 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 R Engage allows maximum 10 digits. Example: 560
SHIFT_ID	Optional	Character	1	1		Shift at the store. Example: 1
TABLE_NUM	Optional	Numeric	1	5		Table number. Collected from 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 special characters are supported in PURCHASE_ID. Example: 1
USER_DEFINED1	Optional	Character	1	35		User defined field. This is applicable to Worldpay O

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
USER_DEFINED2	Optional	Character	1	35		User defined field. This is applicable to Worldpay O NOTE: Will be truncated
USER_DEFINED3	Optional	Character	1	35		User defined field. This is applicable to Worldpay O NOTE: Will be truncated
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: 5
TRAINING_MODE	Optional	List			Valid values: • OFF • ON	Include this field to turn on Training Mode for the session. Transactions are routed to 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>ON<. If TRUE, return event broadcasts as play by play 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.
NOTIFY_SCA_EVENTS	Optional	Binary			Valid Values: • TRUE • FALSE	Broadcast events should be sent as information only and not a condition for stopping or resuming a transaction. The exception would be in cases where consumer interaction has lapsed for certain duration and POS elects to CANCEL on the secondary port.

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS
COUNTER	Required	Numeric	1	10		COUNTER is used for a g MAC label. Each COUNTER should be higher than the one. This is used to authenticate the POS. Example: 100
MAC	Required	Base64 Encoded Data				Message Authentication Code. This is used to authenticate POS.
MAC_LABEL	Required	Character	1	50		Associated label that tells device which MAC_KEY to decrypt the value of MAC. This is used to authenticate 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>
<LANE>3</LANE>
<STORE_NUM>203</STORE_NUM>
<INVOICE>TA1234</INVOICE>
<SWIPE_AHEAD>1</SWIPE_AHEAD>
</TRANSACTION>
```

Response Packet

Field	Type	Value	Description
RESPONSE_TEXT	Character		Processor response text. Example: Session started / SESSION started
RESULT	Character	OK	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.

Field	Type	Value	Description
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 ([Application Parameters](#)) is enabled.

Field	Type	Value	Description
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</HOST_TIME>
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

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
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</CTROUTD>
<PAYMENT_TYPE>CREDIT</PAYMENT_TYPE>
<APPROVED_AMOUNT>1.01</APPROVED_AMOUNT>
<TRAINING_MODE>ON</TRAINING_MODE>
<COUNTER>17</COUNTER>
</RESPONSE>
```