

SAF REMOVE

This command clears all SAF transactions from the database as specified. If a range is specified, only that range is affected.

The application has settings to purge the queue after the transactions have been processed. You do not need to initiate that process. The safpurgedays parameter controls how many days the transactions are kept before purging.

Warning

To avoid potential conflicts, never run FUNCTION_TYPE SAF transactions during an 'open' session between the POS and the payment device.

Note

Removal of an ELIGIBLE transaction essentially voids the offline transaction. Removal of a PROCESSED transaction simply removes the SAF record.

Device UI Required: No

Request Packet

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
FUNCTION_TYPE	Required	Static Value			SAF	Type of function
COMMAND	Required	Static Value			REMOVE	Command name
SAF_NUM_BEGIN	Optional	Numeric	1	4		SAF transaction beginning numbers. Example: 1235
SAF_NUM_END	Optional	Numeric	1	4		SAF transaction ending numbers. Example: 1236
POS_RECON	Optional	Character	1	30		POS reconciliation. POS Reconciliation field to be echoed back in response to POS. Example: RetailPOS1

Field	Rule	Type	Minimum	Maximum	Value(s)	Description
SAF_STATUS	Optional	List			Valid values: <ul style="list-style-type: none"> • E L I G I B L E - Q u e u e d / w a i t i n g t o b e p r o c e s s e d . • I N - P R O C E S S 	If specified, SAF transactions returned will be filtered by this status.

https://verifone.cloud/docs/sca-functional-specification/html/protocol_spec/saf_remove

Updated: 04-Dec-2024

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Field	Rule	Type	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. Used to authenticate the POS. Example: 100
MAC	Required	Base64 Encoded Data				Message Authentication Code. 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. Used to authenticate the POS. Example: REG1

Example (Clear Range)

Following is an example of request packet

```

<TRANSACTION>
<FUNCTION_TYPE>SAF</FUNCTION_TYPE>
<COMMAND>REMOVE</COMMAND>
<COUNTER>1</COUNTER>
<MAC> ... </MAC>
<MAC_LABEL>REG2</MAC_LABEL>
<SAF_NUM_BEGIN>1235</SAF_NUM_BEGIN>
<SAF_NUM_END>1236</SAF_NUM_END>
</TRANSACTION>

```

Response Packet

Field	Type	Value	Comments
RESPONSE_TEXT	A	SAF RECORD(S) REMOVED	
RESULT	C	OK or Error Code	Refer to <Error Section>
RESULT_CODE	N	-1 59046 59047 59048 59043	
TERMINATION_STATUS	C	SUCCESS or Error Codes	
MERCHID	N	Ex: 900000000123	Merchant ID
TERMID	N	Ex: 001	Value to be stored by POS
COUNTER	N	Echoes COUNTER sent in the request	Sent in response for POS to validate for REV_VER=2. Appears as Base64 encoded.
RECORD_COUNT	N	Ex: 5	Number of stored records
TOTAL_AMOUNT	F	Ex: 5.0	Total amount of all SAF records
RECORDS			See RECORD(s) section for child elements
Record(s)			
ACCT_NUM N Ex: 400555*****0019 Conditional			
TRANS_AMOUNT	F	Ex: 5.0	Conditional
INVOICE	C	Ex: 123456	Conditional
PAYMENT_TYPE	C	Ex: CREDIT	Conditional
PAYMENT_MEDIA	C	Ex: VISA	Conditional
SAF_NUM	N	Ex: 0045	Conditional
SAF_STATUS	C	Ex: QUEUED	Conditional

Field	Type	Value	Comments
CTROUTD	N	Ex: 45	CTROUTD is a sequence number for PAYMENT transactions (always enabled) that is generated per Client ID. Each Client ID has its own CTROUTD sequence counter. This is a conditional field.
TROUTD	N	Ex: 435674	Conditional
CARD_TOKEN	C	Ex: 7987654321098765	Conditional
TOKEN_SOURCE	C	Ex: PWC	Conditional
AUTH_CODE	C	Ex: TA1561	Conditional
BANK_USERDATA	C	/CustData`JANE`K`DOE`~~~~`00`	Conditional
CVV2_CODE	C	Ex: M	Conditional - applicable to direct-to-processor (DHI) implementations only

Example 1

Following is an example when there are SAF records to be removed

```

<RESPONSE>
<RESPONSE_TEXT>2 SAF RECORDS REMOVED</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<COUNTER>1</COUNTER>
<RECORD_COUNT>2</RECORD_COUNT>
<TOTAL_AMOUNT>10.40</TOTAL_AMOUNT>
<RECORDS>
<RECORD>
<RECORD>
<ACCT_NUM>523456*****1594</ACCT_NUM>
<TRANS_AMOUNT>5.20</TRANS_AMOUNT>
<INVOICE>123456</INVOICE>
<PAYMENT_TYPE>CREDIT</PAYMENT_TYPE>
<PAYMENT_MEDIA>MASTERCARD</PAYMENT_MEDIA>
<SAF_STATUS>QUEUED</SAF_STATUS>
<SAF_NUM>1235</SAF_NUM>
<CTROUTD>124</CTROUTD>
<AUTH_CODE>17760K</AUTH_CODE>
<CARD_TOKEN>8834134431340010|0AB5DD</CARD_TOKEN>
<CVV2_CODE>M</CVV2_CODE>
<BANK_USERDATA>/CustData`JANE`K`DOE`~~~~`00`</BANK_USERDATA>

```

```
</RECORD>
<RECORD>
<ACCT_NUM>400555*****0019</ACCT_NUM>
<TRANS_AMOUNT>5.20</TRANS_AMOUNT>
<INVOICE>123456</INVOICE>
<PAYMENT_TYPE>CREDIT</PAYMENT_TYPE>
<PAYMENT_MEDIA>VISA</PAYMENT_MEDIA>
<SAF_STATUS>QUEUED</SAF_STATUS>
<SAF_NUM>1236</SAF_NUM>
<CTROUTD>123</CTROUTD>
<AUTH_CODE>17760K</AUTH_CODE>
<CARD_TOKEN>8834134431340010|0AB5DD</CARD_TOKEN>
<CVV2_CODE>M</CVV2_CODE>
<BANK_USERDATA>/CustData`JANE`K`DOE````00`</BANK_USERDATA>
</RECORD>
</RECORDS>
</RESPONSE>
```

Example 2

Following is an example when there are SAF records are not present

```
<RESPONSE>
<RESPONSE_TEXT>NO SAF RECORDS REMOVED</RESPONSE_TEXT>
<RESULT>OK</RESULT>
<RESULT_CODE>-1</RESULT_CODE>
<TERMINATION_STATUS>SUCCESS</TERMINATION_STATUS>
<COUNTER>1</COUNTER>
<RECORD_COUNT>0</RECORD_COUNT>
<RECORDS />
</RESPONSE>
```