



https://verifone.cloud/docs/sca-functional-specification/processor_implementn/processor_auth

Updated: 20-May-2025

Authorize

This command requests a payment authorization at the processor or adds a voice authorization code.

Device UI Required: Yes

Request Packet

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|---------------|-------------|-----------------------|---------|---------|---|--|
| FUNCTION_TYPE | Required | Static value | N/A | N/A | PAYMENT | Type of function |
| COMMAND | Required | Static value | N/A | N/A | AUTH | Command name |
| TRANS_AMOUNT | Required | Floating point number | 1(2) | 6(2) | | Transaction amount. Example: 5.00 |
| PAYMENT_TYPE | Optional | List | | | <ul style="list-style-type: none">• CREDIT• GIFT | When present, will bypass the consumer payment selection screen. NOTE: PAYMENT_TYPE field is mandatory for card token based transactions. |
| AUTH_CODE | Conditional | Character | 1 | 6 | | When present, the authorization is performed offline as a VOICE_AUTH. NOTE: This is applicable for Credit card only. Example: TA1260 |
| MANUAL_ENTRY | Optional | Binary | | | <ul style="list-style-type: none">• TRUE• FALSE | Instructs Point to collect the account information through the keypad on the device. |

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|-------------------|----------|-----------|---------|---------|---|--|
| CUSTOMER_STREET | Optional | Character | 1 | 20 | | Applicable when MANUAL_ENTRY = TRUE. CUSTOMER_STREET or CUSTOMER_ZIP required for Amex card validation when using FDRC Engage. |
| CUSTOMER_ZIP | Optional | Character | | 9 | | Applicable when MANUAL_ENTRY = TRUE. Merchants should send this field only when required by the processor. FDRC Engage Only. Customer Service Phone Number for use when CARD_PRESENT=FALSE (will override what is in CustomerSvcPhone parameter). Example: 8001234567 |
| MER_SVC_PHONE_NUM | Optional | Numeric | | 10 | | |
| CARD_PRESENT | Optional | Binary | | | <ul style="list-style-type: none"> • TRUE - Card present (POS Condition Code 71) (Default) • FALSE - Card not present (POS Condition Code 08) | FDRC Engage Only. Card Present Indicator. |
| ORDER_TYPE | Optional | List | | | <ul style="list-style-type: none"> • 1 - Mail Order • 2 - Telephone Order (default) | This is for FDRC Engage Only. Order Type for Card not present (MOTO) transactions (when CARD_PRESENT = FALSE). |

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|---------------|-------------|---------------------|---------|---------|---------------|---|
| RECURRING | Optional | B | 1 | 1 | Yes or No | This is for UGP only. This is used when Payment Type is Credit. This field denotes Recurring Billing Flag to indicate the transaction is recurring. |
| BILLPAY | Optional | Binary | 1 | 1 | TRUE or False | This is for UGP and Vantiv Direct. This is used to indicate a bill payment. |
| FORCE_FLAG | Conditional | Binary | | | TRUE or False | This is applicable for FDRC and UGP. This field is used to override duplicate checking (dupcheck) for the transaction. |
| USER_DEFINED1 | Optional | Character | 1 | 35 | | This is for Vantiv Direct Only. This is a user defined field (will override START session). |
| USER_DEFINED2 | Optional | Character | 1 | 35 | | This is for Vantiv Direct Only. This is a user defined field (will override START session). NOTE: This will be truncated to 20. |
| USER_DEFINED3 | Optional | Character | 1 | 35 | | This is for Vantiv Direct Only. This is a user defined field (will override START session). NOTE: This will be truncated to 20. |
| 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 | N/A | N/A | | 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 |

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|------------|-------------|-----------------------|---------|---------|--|-------------------------------------|
| TAX_AMOUNT | Conditional | Floating point number | 1(2) | 6(2) | | Tax amount. Example: 5.00 |
| TAX_IND | Conditional | List | | | <ul style="list-style-type: none"> 0 – Tax not provided 2 - Tax amount equals 0.00 1 - Tax amount not equal to 0.00 | Tax indicator. |
| CMRCL_FLAG | Conditional | List | | | <ul style="list-style-type: none"> B - Business C - Corporate P - Purchasing | Commercial flag. |

Keyed Account Information for Gift Card Payment Type Only

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|----------------|----------|---------|---------|---------|----------|--|
| ACCT_NUM | Optional | Numeric | 1 | 25 | | Account number. Example: 67823456781313 |
| CARD_EXP_MONTH | Optional | Numeric | 2 | 2 | | Card expiry month. Example: 12 |
| CARD_EXP_YEAR | Optional | Numeric | 2 | 2 | | Card expiry year. Example: 49 |
| PIN_CODE | Optional | Numeric | 1 | 10 | | Pin code. |
| CVV2 | Optional | Numeric | 1 | 10 | | CVV2 number. |

Processor-Based Token (Conditional)

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|----------------|-------------|-----------|---------|---------|----------|---|
| CARD_TOKEN | Conditional | Character | 1 | 40 | | Refer to MESSAGE FORMAT section for more details on Two Way Card Token. Example: 7987654321098765 |
| CARD_EXP_MONTH | Conditional | Numeric | 2 | 2 | | Required when sending AUTH_CODE and CARD_TOKEN. |
| CARD_EXP_YEAR | Conditional | Numeric | 2 | 2 | | Required when sending AUTH_CODE and CARD_TOKEN. |

| Field | Rule | Type | Minimum | Maximum | Value(s) | Description |
|------------------|-------------|-----------|---------|---------|--|--|
| BANK_USERDATA | Conditional | Character | 1 | 50 | | Returned with CARD_TOKEN. Whatever comes back with BANK_USERDATA in the response for the token should also be sent in the request. NOTE: This is applicable to FDRC Engage only. Example: 01/00/02/Visa/ |
| OC_INDUSTRY_CODE | Conditional | Character | 1 | 1 | <ul style="list-style-type: none"> E - eCommerce M - Moto. Default is empty. | This is used to convert a transaction from the Merchants default industry of Retail or Restaurant to E-Commerce or MOTO. NOTE: This is used only in case of UGP host. |

Response Packet

| Field | Type | Value | Description |
|--------------------|-----------|-------------------------------|---|
| RESPONSE_TEXT | Character | | Processor response text. Example: SUCCESS / APPROVE |
| RESULT | Character | | This indicates the Result details, commonly APPROVED or DECLINED. |
| RESULT_CODE | Numeric | Expected result codes: 5 or 6 | This indicates the result code. |
| TERMINATION_STATUS | Character | SUCCESS and 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. |
| COUNTER | Numeric | | Echoes COUNTER sent in the request. Example: 100 |
| TROUTD | Numeric | | STAN number. Example: 000042 |
| CTROUTD | Numeric | | Client-specific Transaction routing ID. Example: 20 |
| PAYMENT_MEDIA | Character | | Medium of payment, commonly VISA/MC/DISC/AMEX/DEBIT. NOTE: Value returned by device for an offline (SAF) response may differ from online. Example: VISA |
| PAYMENT_TYPE | Character | | Type of payment. Example: CREDIT, GIFT |

| Field | Type | Value | Description |
|-------------------|-----------------------|---|--|
| ACCT_NUM | Numeric | | Masked account number. Example: 400555*****0019 |
| AUTH_CODE | Character | | Processor authorization number. Example: TA0156 |
| AVAILABLE_BALANCE | Floating point number | | Available balance on card. Example: 0.01 |
| APPROVED_AMOUNT | Floating point number | | Amount approved on authorization. Example: 5.00 |
| CARD_ENTRY_MODE | Character | | Refer to Card Entry Mode for details on possible values. NOTE: Vantiv Direct also has value Token Example: Swiped |
| CARDHOLDER | Character | | Returned for swiped/insert transactions. Example: Doe/John |
| CARD_EXP_MONTH | Numeric | | Expiry month of the card. Example: 12 |
| CARD_EXP_YEAR | Numeric | | Expiry year of the card. Example: 20 |
| AVS_CODE | Character | | Result of AVS check when sent from host. Example: Z |
| CVV2_CODE | Character | | Result of CVV2 check when sent from host. Example: M |
| REFERENCE | Character | | Returned by some processors. Example: 100007265288 |
| TRACE_CODE | Character | | Returned by some processors for tracking purposes. Example: 119517 |
| AUTH_RESP_CODE | Character | | Processor authorization response code. Example: OK0156 |
| RECEIPT_DATA | Character | | Refer to Receipt Data in Response section for more details on receipt data. |
| TRANS_DATE | Character | | Transaction date. Example: 2018.01.10 |
| TRANS_TIME | Character | | Transaction time. Example: 12:24:30 |
| TRAINING_MODE | Character | ON or OFF | Conditionally returned when session is in Training Mode. |
| TRAN_LANG_CODE | Character | <ul style="list-style-type: none"> • en - English • fr - French • es - Espanol | This field is returned in POS response in case of only payment transactions with card intervention. |

Processor-Based Token (Conditional)

| Field | Type | Value(s) | Description |
|-------|------|----------|-------------|
|-------|------|----------|-------------|

| | | |
|---------------|-----------|--|
| CARD_TOKEN | Character | Refer to MESSAGE FORMAT section for more details on Message Format, Responses from Point. Example: 7987654321098765 |
| BANK_USERDATA | Character | Bank User Data, normally returned with CARD_TOKEN. NOTE: This is applicable for FDRC Engage only. Example: 01/00/02/Visa/ |

Direct to Processor Implementation Response Fields (Conditional)

| Field | Type | Value(s) | Description |
|---------------|-----------|--|---|
| HOST_RESPCODE | Numeric | | Host response code. Example: 000 |
| MERCHID | Numeric | | Returns the merchant ID. |
| TERMID | Numeric | | Returns the terminal ID. |
| LANE | Numeric | | Lane number. |
| EMV_CVM | Character | <ul style="list-style-type: none"> • SIGNATURE • PIN • NONE | NOTE: Vantiv Direct returns for both EMV and MSR transactions. |

Possible values:

| | | | |
|-------------------|---------|---|--------------------|
| EMV_REVERSAL_TYPE | Numeric | <ul style="list-style-type: none"> • 401-Host Approved but EMV Card Removed Before Completing (auto-voided) • 402-Host Approved but EMV Card Rejected Current Transaction (auto-voided) • 403-Host Approved but Error Occurred before completing Current Transaction (auto-voided) | EMV reversal type. |
|-------------------|---------|---|--------------------|

BANK_USERDATA Information

Note

For FDRC Direct to Processor Implementations, the BANK_USERDATA field is required when submitting keyed account information for GIFT transactions. The BANK_USERDATA field must contain the following /- delimited values: PosEntryMode/PosCondCode/TermEntryCapability/CardType/ , where CardType = Payment Media. **Example:** 01/00/02/Visa/

POS Entry Mode

Part I – Account Number Entry Mode

| POS Entry Mode | Description |
|-----------------------|--|
| 00 | Unspecified |
| 01 | Manual (key entered) |
| 03 | Barcode |
| 04 | OCR (Optical Character Reader) |
| 05 | Integrated Circuit Read (CVV data Reliable) |
| 07 | Contactless Integrated Circuit Read (Reliable) |
| 08 | Amex Digital Wallet |
| 09 | MasterCard remote chip entry |
| 10 | Credentials on file |
| 79 | EMV fallback to manual entry |
| 80 | EMV fallback to magnetic stripe entry |
| 82 | Contactless Mobile Commerce |
| 90 | Magnetic Stripe – Track Read |
| 91 | Contactless Magnetic Stripe Read |
| 95 | Integrated Circuit Read (CVV data unreliable) |

Part II – Electronic/PIN Authentication Capability

| POS Entry Mode | Description |
|-----------------------|---------------------------------|
| 0 | Unspecified |
| 1 | PIN entry capability |
| 2 | No PIN entry capability |
| 3 | PIN pad inoperative |
| 4 | PIN verified by terminal device |

POS Condition Code

| POS Cond Code | Description |
|----------------------|---|
| 00 | Cardholder Present, Card Present |
| 01 | Cardholder Present, Unspecified |
| 02 | Cardholder Present, Unattended Device |
| 03 | Cardholder Present, Suspect Fraud |
| 04 | Cardholder Not Present - Recurring |
| 05 | Cardholder Present, Card Not Present |
| 06 | Cardholder Present, Identity Verified |
| 08 | Cardholder Not Present, Mail Order/Telephone Order |
| 09 | Cardholder Not Present |
| 59 | Cardholder Not Present, Ecommerce |
| 71 | Cardholder Present, Magnetic Stripe Could Not be Read |

| POS Cond Code | Description |
|---------------|-------------|
|---------------|-------------|

| | |
|----|----------------------------|
| 73 | Visa recurring transaction |
|----|----------------------------|

Terminal Entry Capability

| POS Entry Mode | Description |
|----------------|-------------|
|----------------|-------------|

| | |
|----|--|
| 00 | Unspecified |
| 01 | Terminal not used |
| 02 | Magnetic stripe only |
| 03 | Magnetic stripe and key entry |
| 04 | Magnetic stripe, key entry, and chip |
| 05 | Barcode |
| 06 | Proximity terminal – contactless chip/RFID |
| 07 | OCR |
| 08 | Chip only |
| 09 | Chip and magnetic stripe |
| 10 | Manual entry only |
| 11 | Proximity terminal – contactless magnetic stripe |

Card Type (Payment Media)

Card Type (case-sensitive)

- Visa
- MasterCard
- Amex
- Discover
- JCB
- Diners
- PPayCL