

## Verifone Fraud Protect

### Overview

Verifone's Fraud Protect provides a risk score and up to five risk insights with the ability to set up an automatic 'Accept for Further Processing' or 'Deny Transaction' fraud score range. The Fraud Score is the indicator of the likelihood or probability of a transaction being fraudulent. The Fraud Score ranges from 0 to 100, where a Fraud Score value of 0 means that the transaction is for sure not fraudulent, and a Fraud Score value of 100 means that the transaction is for sure fraudulent. In practice, as with all probability calculations, the likely value of any given Fraud Score will be in the range of 0 to 100.

Fraud Insights provides you with key indicators on why the transaction was given the score it was given, For example, a key indicator can be 'Email address links to too many accounts' or 'Purchaser has long good order history'.

Based on the transaction's fraud score and the set threshold for accepting or denying a transaction, Fraud Protect will automatically decide the action taken for each transaction.

### Availability

Verifone's Fraud Protect can be used for credit card transactions initiated by shoppers on the Hosted Checkout (either the redirect or the Iframe integration), Payment Links, or via the server-to-server API integrations. The Card Verification, Sale, Pre-Authorization, and Final Authorization Transactions are supported.

### Activation

To set up Fraud Protect, you need to have a Merchant Admin role and contact Verifone Support. Fraud Protect can only be viewed for the merchant entity for which they were set up, and every child entity inherits the Fraud Protect of the parent entity.

### Workflow

#### Fraud Protect in Verifone Central

To view the Fraud Protect-related information in Verifone Central, you **need to have a Merchant Admin role** and follow these steps:

1. Log in to your Verifone Central account.
2. Navigate to **Administration** and click on **Added Value Services**.
3. In the next window, you can see available Fraud Protect and their statuses.

You can also view the Fraud Protect-related information in the **Transaction details** tab of all the transactions that use the Fraud Protect service:

- State - Will be "Failed" for orders blocked by Fraud Protect
- Response code - The response code will be 9997 in case of an order that was blocked due to its fraud score
- Response description - A human-readable description of the reason why the transaction received its response. In case of a blocked transaction, this will be "Transaction blocked by fraud validation rules"
- Fraud Risk Score - the total score indicating fraud risk
- Fraud Insights - the list of reasons relevant for the Fraud Risk Score

### Notifications

Based on the result of the transaction, a webhook notification will be sent, if configured. The `eventTypes` that will be used are "TxnSaleDeclined" or "TxnSaleApproved", depending on the result of the transaction. More information can be retrieved via a read transaction API call based on the transaction\_id returned in the "eventId" property of the webhook's body.

For email-based notifications, the ID of the transaction will be available in the `TRANSACTIONID`, which can be used in the `GET` transaction API call. Depending on the transaction result, the transaction event can be either "Sale Approved" or "Sale Declined". This information is available in the `EVENTTYPE` property.

## Hosted checkout (HPP/Iframe)

To have a transaction processed by Fraud Protect, the `fraud_protection_contract` needs to be sent in the card object at the root level.

```
{
  "amount": 10000,
  "currency_code": "GBP",
  "entity_id": "c0d79cbd-8427-4510-8a4d-164bb9fbb150",
  "customer": "6e6adad0-4244-49db-a7df-4c6264efd71f",
  "configurations": {
    "card": {
      "card_capture_mode": "v2",
      "capture_now": false,
      "payment_contract_id": "9fd4fec6-6881-4b00-8287-beaf8b0d4e6f",
      "fraud_protection_contract": "a159cac3-f913-4a82-9e8f-70b307dac1c6",
      "dynamic_descriptor": "HTTPS TEST",
      "threed_secure": {
        "enabled": false,
        "threeds_contract_id": "9b172036-229c-4280-b125-213c6c3e1bbb",
        "total_items": "01",
        "transaction_mode": "S"
      }
    }
  },
  "merchant_reference": "122222{{RandomNumber}}",
  "return_url": "{{merchantReturnUrl}}",
  "il8n": {
    "default_language": "en",
    "show_language_options": true
  }
}
```

Once the transaction is completed by the shopper, the Fraud Score will be available in the response for the get Checkout by ID call:

```
{
  "id": "string",
  "amount": 9007199254740991,
  "entity_id": "string",
  "currency_code": "AED",
  "customer": "string",
  "expiry_time": "2019-08-24",
  "merchant_reference": "string",
  "return_url": "string",
  "configurations": {
    "card": {
      "dynamic_descriptor": "string",
      "account_validation": false,
      "capture_now": true,
      "cvv_required": false,
      "authorization_type": "PRE_AUTH",
      "shopper_interaction": "ECOMMERCE",
      "payment_contract_id": "string",
      "token_preference": {
```

```
"token_scope": "string",
"token_expiry_date": "2019-08-24",
"token_type": "REUSE"
},
"threed_secure": {
  "account_age_indicator": "01",
  "account_create_date": "2019-08-24",
  "account_change_indicator": "01",
  "account_change_date": "2019-08-24",
  "account_pwd_change_indicator": "01",
  "account_pwd_change_date": "2019-08-24",
  "account_id": "string",
  "account_purchases": 9999,
  "acs_window_size": "01",
  "add_card_attempts": 999,
  "address_match": "Y",
  "alternate_authentication_method": "01",
  "alternate_authentication_date": "2019-08-24",
  "alternate_authentication_data": "string",
  "threeds_contract_id": "string",
  "authentication_indicator": "01",
  "category_code": 9999,
  "challenge_indicator": "01",
  "delivery_email": "string",
  "delivery_time_frame": "01",
  "enabled": true,
  "fraud_activity": "01",
  "gift_card_amount": 9999999999999999,
  "gift_card_currency_code": "str",
  "gift_card_count": 99,
  "installment": 2,
  "message_category": "01",
  "payment_use_case": "01",
  "payment_account_indicator": "01",
  "payment_account_age": "2019-08-24",
  "pre_order_indicator": "01",
  "pre_order_date": "2019-08-24",
  "prior_authentication_data": "string",
  "prior_authentication_method": "01",
  "prior_authentication_time": "2019-08-24",
  "prior_authentication_ref": "string",
  "product_code": "PHY",
  "recurring_end": "2019-08-24",
  "recurring_frequency": 9999,
  "reorder_indicator": "01",
  "requestor_id": "string",
  "requestor_name": "string",
  "shipping_address_usage_indicator": "01",
  "shipping_address_usage_date": "2019-08-24",
  "shipping_method_indicator": "01",
  "shipping_name_indicator": "01",
  "total_items": "string",
  "merchant_score": "string",
  "transaction_count_day": 999,
  "transaction_count_year": 999,
  "transaction_mode": "M",
  "version": "1.0.2"
},
"mode": "CARD_CAPTURE",
"card_capture_mode": "v1",
"card_token": "string",
"card_last_four": "stri",
"card_expiry_year": "string",
"card_expiry_month": "string",
"card_brand": [
  "string"
],
```

```
"card_encryption_key_alias": "string",
"threads_authentication_id": "string",
"token_details": {
  "reuse_token": "string",
  "analytics_token": "string"
},
"credit_term": "DEBIT",
"credit_term_used": "DEBIT",
"instalment": {
  "max_number_of_instalments": 1,
  "down_payment_amount": 9007199254740991
},
"input_overrides": {
  "CVV": {
    "validation_rule": "NONE",
    "usage": "REQUIRED"
  },
  "CREDIT_TERM": {
    "validation_rule": "NONE",
    "usage": "REQUIRED"
  },
  "IDENTITY_CARD_NUMBER": {
    "validation_rule": "NONE",
    "usage": "REQUIRED"
  }
},
"instalment_used": {
  "instalment_amount": 9007199254740991,
  "down_payment_amount": 9007199254740991,
  "number_of_instalments": 0
},
"stored_credential": {
  "stored_credential_type": "SIGNUP",
  "first_payment": true,
  "consent_text": "string",
  "consent_text_dynamic_values": [
    "string"
  ],
  "processing_model_details": {
    "processing_model": "RECURRING",
    "total_payment_number": 9007199254740991,
    "total_payment_amount": 9007199254740991,
    "first_payment_amount": 9007199254740991,
    "payment_frequency": {
      "time_unit": "DAY",
      "value": 0
    }
  },
  "merchant_signup_code": "string"
},
"reference": "string",
"scheme_reference": "string",
"reuse_token": "string",
"encrypted_card": "string",
"additional_business_data": {
  "addendum1": "string",
  "addendum2": "string"
},
"gpp2": {
  "payment_contract_id": "string",
  "shopper_interaction": "ECOMMERCE",
  "card_encryption_key_alias": "string"
},
"paypal": {
  "dynamic_descriptor": "string",
  "capture_now": true,
```

```
"payment_contract_id": "string",
"description": "string",
"application_context": {
  "landing_page": "BILLING",
  "brand_name": "string",
  "locale": "string"
},
"google_pay": {
  "dynamic_descriptor": "string",
  "capture_now": true,
  "account_validation": false,
  "card": {
    "sca_compliance_level": "NONE",
    "threed_secure": {
      "account_age_indicator": "01",
      "account_create_date": "2019-08-24",
      "account_change_indicator": "01",
      "account_change_date": "2019-08-24",
      "account_pwd_change_indicator": "01",
      "account_pwd_change_date": "2019-08-24",
      "account_id": "string",
      "account_purchases": 9999,
      "acs_window_size": "01",
      "add_card_attempts": 999,
      "address_match": "Y",
      "alternate_authentication_method": "01",
      "alternate_authentication_date": "2019-08-24",
      "alternate_authentication_data": "string",
      "threeds_contract_id": "string",
      "authentication_indicator": "01",
      "category_code": 9999,
      "challenge_indicator": "01",
      "delivery_email": "string",
      "delivery_time_frame": "01",
      "enabled": true,
      "fraud_activity": "01",
      "gift_card_amount": 9999999999999999,
      "gift_card_currency_code": "str",
      "gift_card_count": 99,
      "installment": 2,
      "message_category": "01",
      "payment_use_case": "01",
      "payment_account_indicator": "01",
      "payment_account_age": "2019-08-24",
      "pre_order_indicator": "01",
      "pre_order_date": "2019-08-24",
      "prior_authentication_data": "string",
      "prior_authentication_method": "01",
      "prior_authentication_time": "2019-08-24",
      "prior_authentication_ref": "string",
      "product_code": "PHY",
      "recurring_end": "2019-08-24",
      "recurring_frequency": 9999,
      "reorder_indicator": "01",
      "requestor_id": "string",
      "requestor_name": "string",
      "shipping_address_usage_indicator": "01",
      "shipping_address_usage_date": "2019-08-24",
      "shipping_method_indicator": "01",
      "shipping_name_indicator": "01",
      "total_items": "string",
      "merchant_score": "string",
      "transaction_count_day": 999,
      "transaction_count_year": 999,
      "transaction_mode": "M",
      "version": "1.0.2"
```

```
{
  "authorization_type": "FINAL_AUTH",
  "shopper_interaction": "ECOMMERCE",
  "payment_contract_id": "string",
  "token_preference": {
    "token_scope": "string",
    "token_expiry_date": "2019-08-24",
    "token_type": "REUSE"
  },
  "card_encryption_key_alias": "string",
  "threads_authentication_id": "string",
  "token_details": {
    "reuse_token": "string",
    "analytics_token": "string"
  },
  },
  "apple_pay": {
    "dynamic_descriptor": "string",
    "capture_now": true,
    "account_validation": false,
    "card": {
      "sca_compliance_level": "NONE",
      "threed_secure": {
        "account_age_indicator": "01",
        "account_create_date": "2019-08-24",
        "account_change_indicator": "01",
        "account_change_date": "2019-08-24",
        "account_pwd_change_indicator": "01",
        "account_pwd_change_date": "2019-08-24",
        "account_id": "string",
        "account_purchases": 9999,
        "acs_window_size": "01",
        "add_card_attempts": 999,
        "address_match": "Y",
        "alternate_authentication_method": "01",
        "alternate_authentication_date": "2019-08-24",
        "alternate_authentication_data": "string",
        "threads_contract_id": "string",
        "authentication_indicator": "01",
        "category_code": 9999,
        "challenge_indicator": "01",
        "delivery_email": "string",
        "delivery_time_frame": "01",
        "enabled": true,
        "fraud_activity": "01",
        "gift_card_amount": 9999999999999999,
        "gift_card_currency_code": "str",
        "gift_card_count": 99,
        "installment": 2,
        "message_category": "01",
        "payment_use_case": "01",
        "payment_account_indicator": "01",
        "payment_account_age": "2019-08-24",
        "pre_order_indicator": "01",
        "pre_order_date": "2019-08-24",
        "prior_authentication_data": "string",
        "prior_authentication_method": "01",
        "prior_authentication_time": "2019-08-24",
        "prior_authentication_ref": "string",
        "product_code": "PHY",
        "recurring_end": "2019-08-24",
        "recurring_frequency": 9999,
        "reorder_indicator": "01",
        "requestor_id": "string",
        "requestor_name": "string",
        "shipping_address_usage_indicator": "01",
```

```
"shipping_address_usage_date": "2019-08-24",
"shipping_method_indicator": "01",
"shipping_name_indicator": "01",
"total_items": "string",
"merchant_score": "string",
"transaction_count_day": 999,
"transaction_count_year": 999,
"transaction_mode": "M",
"version": "1.0.2"
},
"authorization_type": "FINAL_AUTH",
"shopper_interaction": "ECOMMERCE",
"payment_contract_id": "string",
"token_preference": {
  "token_scope": "string",
  "token_expiry_date": "2019-08-24",
  "token_type": "REUSE"
}
},
"vipps": {
  "payment_contract_id": "string",
  "dynamic_descriptor": "string",
  "capture_now": true,
  "is_app": false,
  "app_phone_number": "string",
  "card": {
    "sca_compliance_level": "NONE",
    "threed_secure": {
      "account_age_indicator": "01",
      "account_create_date": "2019-08-24",
      "account_change_indicator": "01",
      "account_change_date": "2019-08-24",
      "account_pwd_change_indicator": "01",
      "account_pwd_change_date": "2019-08-24",
      "account_id": "string",
      "account_purchases": 9999,
      "acs_window_size": "01",
      "add_card_attempts": 999,
      "address_match": "Y",
      "alternate_authentication_method": "01",
      "alternate_authentication_date": "2019-08-24",
      "alternate_authentication_data": "string",
      "threeds_contract_id": "string",
      "authentication_indicator": "01",
      "category_code": 9999,
      "challenge_indicator": "01",
      "delivery_email": "string",
      "delivery_time_frame": "01",
      "enabled": true,
      "fraud_activity": "01",
      "gift_card_amount": 9999999999999999,
      "gift_card_currency_code": "str",
      "gift_card_count": 99,
      "installment": 2,
      "message_category": "01",
      "payment_use_case": "01",
      "payment_account_indicator": "01",
      "payment_account_age": "2019-08-24",
      "pre_order_indicator": "01",
      "pre_order_date": "2019-08-24",
      "prior_authentication_data": "string",
      "prior_authentication_method": "01",
      "prior_authentication_time": "2019-08-24",
      "prior_authentication_ref": "string",
      "product_code": "PHY",
      "recurring_end": "2019-08-24",
```

```
"recurring_frequency": 9999,
"reorder_indicator": "01",
"requestor_id": "string",
"requestor_name": "string",
"shipping_address_usage_indicator": "01",
"shipping_address_usage_date": "2019-08-24",
"shipping_method_indicator": "01",
"shipping_name_indicator": "01",
"total_items": "string",
"merchant_score": "string",
"transaction_count_day": 999,
"transaction_count_year": 999,
"transaction_mode": "M",
"version": "1.0.2"
},
"authorization_type": "FINAL_AUTH",
"encrypted_card": "string",
"card_encryption_key_alias": "string",
"return_url": "string"
},
"klarna": {
  "capture_now": true
},
"swish": {
  "app_phone_number": "string",
  "shopper_interaction": "ECOMMERCE"
},
"mobile_pay": {
  "dynamic_descriptor": "string",
  "capture_now": true,
  "payment_contract_id": "string",
  "card": {
    "sca_compliance_level": "NONE",
    "threed_secure": {
      "account_age_indicator": "01",
      "account_create_date": "2019-08-24",
      "account_change_indicator": "01",
      "account_change_date": "2019-08-24",
      "account_pwd_change_indicator": "01",
      "account_pwd_change_date": "2019-08-24",
      "account_id": "string",
      "account_purchases": 9999,
      "acs_window_size": "01",
      "add_card_attempts": 999,
      "address_match": "Y",
      "alternate_authentication_method": "01",
      "alternate_authentication_date": "2019-08-24",
      "alternate_authentication_data": "string",
      "threeds_contract_id": "string",
      "authentication_indicator": "01",
      "category_code": 9999,
      "challenge_indicator": "01",
      "delivery_email": "string",
      "delivery_time_frame": "01",
      "enabled": true,
      "fraud_activity": "01",
      "gift_card_amount": 9999999999999999,
      "gift_card_currency_code": "str",
      "gift_card_count": 99,
      "installment": 2,
      "message_category": "01",
      "payment_use_case": "01",
      "payment_account_indicator": "01",
      "payment_account_age": "2019-08-24",
      "pre_order_indicator": "01",
      "pre_order_date": "2019-08-24",
```



```
"prior_authentication_data": "string",
"prior_authentication_method": "01",
"prior_authentication_time": "2019-08-24",
"prior_authentication_ref": "string",
"product_code": "PHY",
"recurring_end": "2019-08-24",
"recurring_frequency": 9999,
"reorder_indicator": "01",
"requestor_id": "string",
"requestor_name": "string",
"shipping_address_usage_indicator": "01",
"shipping_address_usage_date": "2019-08-24",
"shipping_method_indicator": "01",
"shipping_name_indicator": "01",
"total_items": "string",
"merchant_score": "string",
"transaction_count_day": 999,
"transaction_count_year": 999,
"transaction_mode": "M",
"version": "1.0.2"
},
"authorization_type": "PRE_AUTH",
"shopper_interaction": "ECOMMERCE",
"payment_contract_id": "string",
"token_preference": {
  "token_scope": "string",
  "token_expiry_date": "2019-08-24",
  "token_type": "REUSE"
},
"card_encryption_key_alias": "string",
"threads_authentication_id": "string",
"token_details": {
  "reuse_token": "string",
  "analytics_token": "string"
},
"encrypted_card": "string",
"return_url": "string"
},
},
"created_at": "2019-08-24",
"updated_at": "2019-08-24",
"transaction_id": "string",
"customer_ip": "string",
"user_agent": "string",
"i18n": {
  "default_language": "string",
  "fallback_language": "string",
  "show_language_options": true
},
"events": [
  {
    "type": "string",
    "id": "string",
    "timestamp": "2019-08-24",
    "details": {}
  }
],
"status": "string",
"notification_methods": {
  "email": {
    "email_address": "string"
  },
  "sms": {
    "phone_number": "string"
  }
},
},
```

```
display_line_items": true,
"line_items": [
{
"image_url": "string",
"item_url": "string",
"image_id": "string",
"name": "string",
"quantity": 0,
"unit_price": 0,
"unit_price_tax": 0,
"tax_rate": 0,
"total_tax_amount": 0,
"total_amount": 0,
"sku": "string",
"description": "string",
"category": "DIGITAL_GOODS"
}
],
"interaction_type": "HPP",
"payment_method_used": "card",
"url": "string",
"theme_id": "string",
"receipt_type": "INVOICE",
"created_by": "string",
"fraud_analysis_results": {
"score": 0.25,
"reasons": [
"Good online presence",
"Buying from safe product categories"
]
}
}
```

Inside the response object, a new property named `fraud_analysis_results` provides the score (as a value between 0 and 1), as well as the list of returned insights for the score (under the `reason` property).

If the shopper reached the Checkout page but did not complete the transaction, then the `fraud_analysis_results` property will not be available when reading the checkout session information.

If the transaction is automatically blocked by the configured score threshold, the status of the transaction will be FAILED.

## Server-to-server API

To have a transaction processed by Fraud Protect, the `fraud_protection_contract` needs to be sent in a request for [creating a new transaction](#), at the root level.

```
{
  "sca_exemption": "6",
  "encrypted_card": "
    LS0tLSlCRUdJTiBQRlAgTUVUd0FHRs0tLS0tDQpWZXJzaW9uOiBpcGVuUeDQlmpzIHY0LjEwLjknCkNvbWllbnQ6IGh0dHBzOi8vb3B1bnBncGp
    zLm9yZW90KDQp3WDREnVRzCElrTlYvMWNTQWdNRtVsSWdVdHMS2Fhc0p3V2lqSHNkNlRSQ3ZzenNxSlzkamhWZTVrTnQNCnFREhPNUQ3OG9wa0d
    4RU1ReU9eGzHERBTHZ5L3pGZkdWbWxhJSVUwdDQ2N0xRk3pESlZjd3lkYyttWHFxcQ0KQ2lVOUExMm5vbTEybGZaZW9sakh3OTVYdG9MN3pLT05mUvP
    wZjYvbXg0WUUYd0krR0pyU3JBVR5R2JlDQplc3dGRy9lVD13R0pMaFJlQjZ3YUFIvGQzdFFsQXBodG5JR2YrSHFUcHdRbDhxWkxIRjVhaWh0enV
    jVmQNCjEUEB5obnVbTtVSFNPqcVhndu0XRc9TWEpiYXZGGEhCRke3S3RsuUVk5S1RmZElJMUdnamlJSGROSvdZQ0KZza1cWQwVUVYZzjzjQ0QRn2R
    DmUjDGZGZwejZRNFEZGZpZW5wVMTVY7FjLzJlZGhkaXNCRm61YtkLhVUdUWd0Q0YWpicGpndU9hbW9ntGhkaEgybjFpbnXN2d1Pt1i9GYU1FNHA3bu1
    aQWpVPQ0KPTVsM24NCi0tLS0tRU5EIFBUcBNRVNTQudF0tLS0tLS0NCg==",
  "amount": 100,
  "auth_type": "FINAL_AUTH",

```

```
"payment_provider_contract": "9fd4fec6-6881-4b00-8287-beaf8b0d4e6f",
"public_key_alias": "K1896",
"capture_now": false,
"customer_ip": "127.0.0.1",
"currency_code": "GBP",
"brand_choice": "MERCHANT",
"shopper_interaction": "ECOMMERCE",
"fraud_protection_contract": "a159cac3-f913-4a82-9e8f-70b307dac1c6",
"merchant_reference": "5678",
"dynamic_descriptor": "TEST AUTOMATION ECOM",
"card_brand": "VISA",
"user_agent": "string",
"threed_authentication": {
  "cavv": "MTIzNDU2Nzg5MDEyMzQ1Njc4OTA=",
  "additional_data": {
    "reason_code": "001",
    "challenge_indicator": "01",
    "reason_desc": "sh",
    "acs_operator_id": "MerchantACS",
    "acs_url": "https://0merchantacsstag.cardinalcommerce.com/MerchantACSWeb/creq.jsp",
    "total_items": 1,
    "device_channel": "BROWSER"
  },
  "threeds_version": "2.1.0",
  "signature_verification": "Y",
  "ds_transaction_id": "ea5e8cb3-69c1-4229-b484-2def1be9952c",
  "error_desc": "Success",
  "eci_flag": "05",
  "pares_status": "Y",
  "enrolled": "Y",
  "error_no": "0"
},
"line_items": [
  {
    "name": "Testone",
    "quantity": 1,
    "tax_rate": 0,
    "total_amount": 1000,
    "total_tax_amount": 0,
    "category": "PHYSICAL_GOODS",
    "description": "productDescription",
    "discount_amount": 0,
    "image_url": "imageUrl",
    "sku": "productSKU",
    "unit_price": 1000,
    "unit_price_tax": 0
  }
]
}
```

Once a transaction is received via the create transaction API call, the response will contain the result of the Fraud Protect review together with the insights. The status of the transaction will reflect if the transaction was accepted or denied automatically:

```
{
  "id": "76944d4b-89e6-48d2-ac04-675383c3eedf",
  "payment_provider_contract": "30b8bec8-5042-4e67-939c-5453fbe41711",
  "amount": 10000,
  "blocked": false,
  "created_at": "2021-08-24T14:15:22Z",
  "customer": "string",
  "merchant_reference": "string",
  "payment_product": "string",
}
```

```
"payment_product_type": "string",
"processor_reference": "string",
"processor_details": {},
"status": "AUTHORIZED",
"status_reason": "string",
"shipping_information": {
  "address": "3732 Metz Lane",
  "city": "West Roxbury",
  "country": "US",
  "postal_code": "1114",
  "email": "user@example.com",
  "first_name": "Thelma",
  "last_name": "Tatro",
  "phone": "8577532706",
  "state": "MA"
},
"arn": "string",
"authorization_code": "5B1D4C",
"avs_result": "5",
"card": "string",
"created_by": "string",
"cvv_present": true,
"cvv_result": "1",
"cavv_result": "99",
"stored_credential": {
  "contract": "ONE_CLICK",
  "reference": "string",
  "name": "string",
  "processing_model": "CREDENTIAL_ON_FILE",
  "stored_credential_type": "string",
  "details": "CREDENTIAL_ON_FILE"
},
"details": {
  "auto_capture": true,
  "mid": "363162200000049"
},
"reason_code": "stri",
"rrn": "200211654321",
"shopper_interaction": "ECOMMERCE",
"stan": "string",
"threed_authentication": {
  "eci_flag": "02",
  "enrolled": "Y",
  "cavv": "stringstringstringstringstri",
  "cavv_algorithm": "string",
  "pares_status": "A",
  "xid": "string",
  "threeds_version": "1.0.2",
  "ds_transaction_id": "string"
},
"reversal_status": "NONE",
"geo_location": [
  "52.370216",
  "4.895168"
],
"city": "West Roxbury",
"country_code": "US",
"additional_data": {
  "acquirer_response_code": "stri",
  "initiator_trace_id": "000001"
},
"fraud_analysis_results": {
  "score": 0.25,
  "reasons": [
    "Good online presence",
    "Buying from safe product categories"
  ]
}
```

```
{
  "token_details": {
    "reuse_token": "LS0tLS1CRUdJTiBQR1AgTUVU0FHRS0tLS0tDQpWZXJzaW9uOiBPcGVuUeDQLmpzIHY0LjEwLjgnNkNvbW11bnQ6IGh0dHBzOi8vb3B1bnBncGpzMm9yZW0KDQp3WDRENVRzcElrTlYvMWNTQWdNRXd2ODltY3NaZnVLbnJsZ1JjZHZJzelBVZVJjQVoveGh1d2tkUU1QM1ENCmpOUjZJbEkrckRicUdFbEZwbzc4OTRtUmFqdEg3OFBqBg4zZ01ZbkY2aVUvdmpEY3czclVHZEsvMETZMg0KQWJ0clJCMY9KQULRdTRsZ2gxa2ZnRXArVlJFVWpVMWJvOVI4Um9SV01BUGI3TlpXUXVmU3JBShJCTkNqDQo3Qkp6all4VWZYMGPbHbG1sWHNuUkpnZ3Q3WEVueGd6VkZ5d0pkaXFXSmNCT3REb2JvQjd5c0F4TG5vMWINC1JPbnZVnUxR04yeVdHK2E5eWYrZWZTcGZkUjZQK2tdWd3hLdTLGMmMwWHcwBETZMmZNZVJVeEcyQWs3Yw0KYkZGUkZWcmxhU2pucFpVd01ERFhZYzczb3o3U1RVbFkzWmZ5WjFjZXlsYktqeEFozGVFNzRzUWQyVDJoDQpySU40bTN6OW1jMWlxREVqRkxOSVlwZ3hhZW52eUU2YmRpelldldGxrWTZJPQ0KPUxXWVQNCi0tLS0tRU5EIFBHUCBNRVNTQUdFLS0tLS0NCg==",
    "analytics_token": "string",
    "token_expiry_date": "2022-08-24",
    "token_scope": "0e48425a-flbc-431a-b7d8-f866de8ba276",
    "token_status": "DELETED",
    "created_at": "2019-08-24",
    "updated_at": "2019-08-24",
    "variant": "NEW_WORLD",
    "type": "CREDIT",
    "issuer_name": "HSBC",
    "issuer_country": "ZZZ",
    "brand": "VISA",
    "expiry_year": 2021,
    "expiry_month": 12,
    "card_holder_name": "MR JOHN DOE",
    "last_four": "3127",
    "bin": "492912",
    "currency_code": "USD"
  }
}
```

Inside the response object, a new property named `fraud_analysis_results` provides the score (as a value between 0 and 1), as well as the list of returned insights for the score (under the `reason` property).

If the transaction is automatically blocked by the configured score threshold, the status of the transaction will be `FAILED`.

## Making the fraud score more accurate

For the fraud score to be more accurate, it is recommended for server-to-server API checkout pages to also include Behavioral Analytics and Device Fingerprinting.

## Starting a new session

To initialize the Behavioral Analytics and Device Fingerprinting library, a session token must be obtained by calling `/init`. Authentication can be done both with the [API keys](#) as well as [bearer token](#).

The endpoints for the `/init` call are:

- <https://emea.gsc.verifone.cloud/oidc/fraud-protection-service/init>
- <https://na.gsc.verifone.cloud/oidc/fraud-protection-service/init>
- <https://nz.gsc.verifone.cloud/oidc/fraud-protection-service/init>

```
{
  "fraudProtectionContract": "a159cac3-f913-4a82-9e8f-70b307dac1c6"
}
```

The response of the request will look like:

```
{
  "clientSideParameters": {
    "orgId": string // for the SDK,
    "webSessionId": string // for the SDK,
  },
  "fraudProtectionToken": string // to be passed in Card Payment Initiation
}
```

## Initializing the JS library

To initialize the JS library, the `orgId` and the `webSessionId` parameters from the `/init` response are needed. When triggering the transaction via the API, the `fraudProtectionToken` needs to be used to connect the data gathered by the library to the transaction.

The library can be included in the checkout HTML by including it at the following URL:

[https://fp.ecustomerpayments.com/DF/fp/check.js?org\\_id=\\${orgId}&session\\_id=\\${webSessionId}](https://fp.ecustomerpayments.com/DF/fp/check.js?org_id=${orgId}&session_id=${webSessionId})

Once the library has been included in the page, tags need to be added according to the library's documentation [here](#).

## Creating the transaction

When the transaction is created via the eCommerce API, the `fraudProtectionToken` needs to be provided at the root level. In a brief example, this would look like:

```
{
  "payment_provider_contract": "30b8bec8-5042-4e67-939c-5453fbe41711",
  [...],
  "fraud_protection_contract": "30b8bec8-5042-4e67-939c-5453fbe41711",
  "fraud_protection_token": "N2ExZGI3YTgtNmYyNC00YmMlLWE1MWItY2VmMzNmYzAlMTQwLjQ1bmIzNDViMzRiazUzMi41NjQzNjM2NQ==",
  "customer": "0a57b387-2ba7-4f65-be2f-e176bb49d2ce",
  "customer_ip": "127.0.0.1",
  [...],
}
```