

## Apple Pay

### Overview

Checkout can be used to accept Apple Pay payments. Apple Pay payments are card payments, so they require an acquiring connection.

This guide requires familiarity with [Accepting payments](#).

### Apple Pay processing fields

- `customer` – Id of a Customer created via the [Customer API](#). A customer object can be created and attached to a Checkout. The customer object can store relevant customer details. Some of these details might be required, depending on the payment method and/or authentication mechanisms (e.g. 3DS) used in the Checkout.
- `configurations.apple_pay` – **Required** Object carrying the parameters required for making an Apple Pay payment
  - `dynamic_descriptor` – Short text to be displayed on the bank statement of the cardholder. Support varies per Payment Contract.
  - `capture_now` – Used for separate authorization and capture
  - `account_validation` – Boolean flag to mark a transaction as account validation (\$0 auth)
  - `card` – **Required**
    - `payment_contract_id` – This id can be found in the portal or given to you by a Verifone employee. It is used to retrieve MID and other merchant configurations necessary for payment.
    - `sca_compliance_level` – Strong Customer Authentication (SCA) compliance level. Determines the rules of 3DS usage.
    - `threed_secure` – Used for [3-D Secure payments](#)
    - `authorization_type` – Flags transaction as pre/final auth

### Example request

```
{
  "amount": 9988,
  "currency_code": "EUR",
  "entity_id": "{{entity_id}}",
  "configurations": {
    "apple_pay": {
      "dynamic_descriptor": "Sneakers deluxe",
      "card": {
        "sca_compliance_level": "NONE",
        "payment_contract_id": "{{payment_contract_id}}"
      }
    }
  },
  "merchant_reference": "ORDER-4432",
  "return_url": "https://examplemerchant.com/order/1234/return"
}
```

### Authorization and capture

Checkout can be used to do a sale (`captureNow = true`) or to authorize without capturing immediately (`captureNow = false`). An authorized payment reserves the money in the cardholder's account and allows you to capture the funds at a later stage. Authorizing the payment can be done using Checkout, capturing the payment is done through a separate API call or through the portal.

You cannot capture more or less than has been authorized by the cardholder per transaction.

Example: If a payment has been authorized for 20.00 EUR; it is only possible to perform a full capture for 20.00 EUR.

### Requirement

Set the `configurations.apple_pay.capture_now` value to `false`. Setting it to `true` will immediately capture the payment.

Captures can only be done on transactions with the status AUTHORIZED.

After you have used Checkout to authorize a payment, you will receive the id of the transaction in the `transaction_id` query string parameter appended to the `return_url`. This id needs to be referenced for [capturing the payment](#).

## MOTO

Apple Pay transactions are **not compatible** with Mail or Telephone shopper interactions.

## Account verification

Sometimes a merchant wants to ensure that the customer's card details are valid and can be used to make a payment, without making the actual payment at the time. This can be done via a transaction referred to as an Account Verification. Account Verification transactions do not have an amount, so there is no money being blocked or moved from the customer's card. However, processing such transactions can provide the merchant with the knowledge on whether the card is valid, but also indicate CVV validity and AVS information, depending on if it is supported by your acquirer supports this feature. Account verification is also known as zero-value.

### Set-up

Checkout pages can be set up for processing transactions. This is done by providing the `amount` of Checkout as `0`. If `configurations.apple_pay.capture_now` is set to true, it will be overridden with `false` because it is not possible to capture an account verification payment.

### 3-D Secure

Account verification can be used in combination with 3-D Secure. Follow the steps in the [Accepting 3-D Secure payments](#) document to configure Checkout for 3-D Secure, then set the `amount` to `0` (zero). No money will be reserved on the cardholder's account and authentication will be done.

## Handling responses

Whenever an Apple Pay payment is processed via the Checkout, the responses events would contain additional fields in the **details** object.

Example of successful Apple Pay payment via the Checkout:

```
[
  {
    "type": "TRANSACTION_SUCCESS",
    "id": "f2041250-4fc2-4b3a-bc94-651ba099541a",
    "timestamp": "2020-07-08T12:42:37.974Z",
    "details": {
      "id": "927bdeb4-afb9-44ff-9bf2-6348e2080c82",
      "payment_provider_contract": "8d3c506b-5585-4c1c-8530-2319237f6385",
      "amount": 12322,
    }
  }
]
```

```
"blocked": false,
"customer": null,
"merchant_reference": "ORDER-9633",
"payment_product": "CARD",
"status": "AUTHORIZED",
"authorization_code": "5669 ",
"created_by": "ffalac64-d04c-4af1-9e71-c7aad3c854d5",
"cvv_result": "0",
"details": {
  "auto_capture": true
},
"reason_code": "0000",
"rrn": "ORDER-9633",
"shopper_interaction": "ECOMMERCE",
"stan": "041796",
"reversal_status": "NONE",
"geo_location": [
  51.9336,
  4.4888
],
"city": "Rotterdam",
"country_code": "NLD",
"additional_data": {
  "acquirer_response_code": "00",
  "initiator_trace_id": "041796"
}
}
```

Example of failed Apple Pay payment via the Checkout:

```
[
  {
    "type": "TRANSACTION_FAILED",
    "id": "f2041250-4fc2-4b3a-bc94-651ba099541a",
    "timestamp": "2020-07-08T12:42:37.974Z",
    "details": {
      "id": "927bdeb4-afb9-44ff-9bf2-6348e2080c82",
      "payment_provider_contract": "8d3c506b-5585-4c1c-8530-2319237f6385",
      "amount": 12322,
      "blocked": false,
      "customer": null,
      "merchant_reference": "ORDER-9633",
      "payment_product": "CARD",
      "status": "FAILED",
      "created_by": "ffalac64-d04c-4af1-9e71-c7aad3c854d5",
      "cvv_result": "0",
      "details": {
        "auto_capture": true
      }
    },
    "shopper_interaction": "ECOMMERCE",
    "stan": "041796",
    "reversal_status": "NONE",
    "geo_location": [
      51.9336,
      4.4888
    ],
    "city": "Rotterdam",
    "country_code": "NLD",
    "additional_data": {
      "acquirer_response_code": "00",
      "initiator_trace_id": "041796"
    }
  }
]
```

```
{
}
```

When a transaction has been declined the `events` would look like this:

```
[
  {
    "type": "TRANSACTION_DECLINED",
    "id": "f2041250-4fc2-4b3a-bc94-651ba099541a",
    "timestamp": "2020-07-08T12:42:37.974Z",
    "details": {
      "id": "927bdeb4-afb9-44ff-9bf2-6348e2080c82",
      "payment_provider_contract": "8d3c506b-5585-4c1c-8530-2319237f6385",
      "amount": 12322,
      "blocked": false,
      "customer": null,
      "merchant_reference": "ORDER-9633",
      "payment_product": "CARD",
      "status": "DECLINED",
      "created_by": "ffalac64-d04c-4af1-9e71-c7aad3c854d5",
      "cvv_result": "0",
      "details": {
        "auto_capture": true
      }
    },
    "shopper_interaction": "ECOMMERCE",
    "stan": "041796",
    "reversal_status": "NONE",
    "geo_location": [
      51.9336,
      4.4888
    ],
    "city": "Rotterdam",
    "country_code": "NLD",
    "additional_data": {
      "acquirer_response_code": "05",
      "initiator_trace_id": "041796"
    }
  }
]
```

To ensure that the redirection request was not tampered with, always check that the `transactionId` received as a query parameter in the redirection matches the `transactionId` property of the retrieved Checkout. If those are not matching, this is an indication of either an incorrect integration, that the redirection to your `returnUrl` did not originate from Verifone or it was tampered with.

You can now store the `transactionId` value together with the order `1234` in your system to link the two together.

## Scenarios

The table below describes the different outcomes of a Checkout. Examples for reproducing the scenarios can be found in the section below it. A full list of [error codes](#) are available.

Description	3-D Secure Configured	Result	Merchant action
Failed transaction*	N	Redirect: checkout_id={checkoutId} & transaction_id={transactionId} & errorCode=123	Unsuccessful payment (technical reason), do not display order confirmation.
Failed 3-D Secure	Y	Redirect: checkout_id={checkoutId} & authentication_id={authenticationId} & errorCode=140	3DS failed due to technical reasons, do not display order confirmation.
Declined transaction	N	Redirect: checkout_id={checkoutId} & transaction_id={transactionId} & error_code=121	Payment reached the acquirer, but was declined (e.g. Insufficient Funds), do not display order confirmation.
Successful transaction <b>Test card:</b> 4000000000001091, expiry: 01/any, cvv: any	N	Redirect: checkout_id={checkoutId} & transaction_id={transactionId}	Display order confirmation.
Successful 3-D Secure and transaction. <b>Test card:</b> 4000000000001091, expiry: 01/any, cvv: any	Y	Redirect: checkout_id={checkoutId} & transaction_id={transactionId} & authentication_id={authenticationId}	Display order confirmation.
Customer visits the URL of an already completed Checkout	-	Redirect: checkoutId={checkoutId} & error_code=168	Display corresponding message to the customer. Checkout is completed whenever there was a single successful payment processed through it.
Customer visits the URL of an expired Checkout	-	Redirect: checkout_id={checkoutId} & error_code=169	Display corresponding message to the customer. Checkout is expired whenever the expiryTime is reached
Customer visits the URL of a Checkout which has reached the maximum of failed payment attempts	-	Redirect: checkout_id={checkoutId} & error_code=165	Display corresponding message to the customer. Payments through a single Checkout can be attempted up to 3 times unsuccessfully.

Description	3-D Secure Configured	Result	Merchant action
Form validation errors / Apple Pay service failures on the Checkout page	-	Displays error alert to Customer on the page	Customer is prompted to correct their form input and retry the payment or try using an alternate card or payment method

\*\*\* Failed transaction - Depending on which step in the payment process failed, the `transaction_id` might not always be present as the query parameter