

## INTRODUCTION

[Authentication](#)  
[Responses](#)  
[Error responses](#)  
[Error responses related to payments](#)  
[Expanding objects](#)  
[API changes](#)  
[Testing resources](#)  
[Changelog](#)

## RESOURCES

## Transactions

[Create a transaction](#)  
[Create a pre-authorization](#)  
[Create a transaction with a card](#)  
[Create a transaction with a card using CryptKey](#)  
[Create a transaction with a card and a customer](#)  
[Create a transaction with backup routing](#)  
[Create a transaction for a bank account](#)  
[Get a transaction](#)  
[Get a list of transactions](#)  
[Get a list of customer transactions](#)  
[Get transactions for a given card](#)  
[Get transactions for a given bank account](#)  
[Get transactions for a given subscription](#)

## 3D-Secure Authentications

[Initialize 3D-Secure process with a CryptKey](#)  
[Get a 3D-Secure authorization](#)  
[Finalize a 3D-Secure transaction](#)

## Captures

[Create a full capture](#)  
[Create a partial capture](#)

## Refunds

[Create a full refund](#)  
[Create a partial refund](#)

## Cards

[Create a card](#)

## Sample response:

```

{
  "id": "r33crz06i0gf5",
  "attempts": [],
  "created_at": 1539177769,
  "amount": 1000,
  "currency": "usd",
  "authorized": true,
  "captured": false,
  "captures": [],
  "refunded": false,
  "refunds": [],
  "voided": true,
  "voids": [
    {
      "id": "54cr3kendngfd",
      "created_at": 1539177769,
      "status": "succeeded",
      "extra_data": {}
    }
  ],
  "chargeback": null,
  "reference": "b138bc50148440ee",
  "order_reference": null,
  "card": {
    "id": "mzivhq15yi9rf",
    "customer": {
      "id": "mhtaadb4edvrf"
    }
  },
  "decline_reason": null,
  "extra_data": {}
}

```

## Straal.js

### Overview

Straal.js is a helper library to make it easier to make API requests directly from merchant's website. It utilizes client-side encryption and sends data over HTTPS to make secure transactions.

### Download

You can [download Straal.js from Straal GitHub](#) or add it to your project using NPM:

```
npm i --save https://github.com/straal/StraalJS.git#1.0.0
```

### Usage

In order to perform a transaction request directly from your website you have to do the following:

1. [Create a CryptKey](#) on your application backend.
2. Pass the generated [CryptKey](#) to frontend part of your site (via request or templating).
3. Pass [CryptKey](#) into Straal.js client code.

## Notifications

### Overview

Straal can notify your backend about certain events. For example, when we charge customer subscription, or after a transaction performed by your user from a mobile device. The notification is a regular HTTP request with JSON-formatted data.

### Request finished

Event name: `request_finished`

If you are using Straal Checkout Page, we strongly recommend you handle the [Checkout attempt finished](#) notification instead.

When configured, this notification is sent each time when a transaction-related request is made. It contains the entire response body along with some extra information. Configuring this notification is highly recommended for clients sending encrypted requests directly from their website or a

## INTRODUCTION

Authentication

Responses

Error responses

Error responses related to

payments

Expanding objects

API changes

Testing resources

Changelog

## RESOURCES

## Transactions

Create a transaction

Create a pre-authorization

Create a transaction with a card

Create a transaction with a card using CryptKey

Create a transaction with a card and a customer

Create a transaction with backup routing

Create a transaction for a bank account

Get a transaction

Get a list of transactions

Get a list of customer transactions

Get transactions for a given card

Get transactions for a given bank account

Get transactions for a given subscription

## 3D-Secure Authentications

Initialize 3D-Secure process with a CryptKey

Get a 3D-Secure authorization

Finalize a 3D-Secure transaction

## Captures

Create a full capture

Create a partial capture

## Refunds

Create a full refund

Create a partial refund

## Cards

Create a card

```

{
  "event": "request_finished",
  "data": {
    "path": "/v1/cards/mzihvhl5yi9rf/transactions",
    "permission": "v1.transactions.create",
    "auth_method": "cryptkey",
    "cryptkey": {
      "id": "70xfzmyznzghk"
    },
    "request_id": "0e04ead77926441c9369f1932ddd13c8",
    "response": {
      "id": "f9g63mazh1wi1",
      "attempts": [],
      "created_at": 1470238921,
      "amount": 999,
      "currency": "usd",
      "authorized": true,
      "captured": true,
      "captures": [
        {
          "id": "qkymdfy2jbui1",
          "created_at": 1470239156,
          "amount": 999
        }
      ],
      "refunded": false,
      "refunds": [],
      "voided": false,
      "voids": [],
      "chargeback": null,
      "reference": "b138bc50148440ee",
      "order_reference": null,
      "card": {
        "id": "mzihvhl5yi9rf",
        "customer": {
          "id": "mhtaadb4edvrf"
        }
      },
      "decline_reason": null,
      "extra_data": {}
    }
  }
}

```

## Checkout Page

These notifications are sent only for transactions made via Straal Checkout Page.

## Checkout attempt finished

Event name: `checkout_attempt_finished`

This notification is sent when a single payment attempt via Straal Checkout Page is finished.

Sample notification:

```

{
  "event": "checkout_attempt_finished",
  "data": {
    "checkout": {
      "id": "iqxjxcr01hcko",
      "af_profiling_reference": null,
      "af_user_reference": null,
      "amount": 1000,
      "checkout_url": "https://checkout.straal.com/f4k3",
      "created_at": 1554385200,
      "currency": "pln",
      "customer": {
        "id": "c0cxh9x04xikh"
      },
      "extra_data": {},
      "failure_url": "https://yourproduct.com/payment_succeeded",
      "merchant_image": null,
      "order_description": null,
      "order_reference": "some_order_reference",
      "return_url": "https://yourproduct.com/payment_failed",
      "ttl": 600,
      "use_3ds": true
    },
    "checkout_attempt": {
      "id": "hj9cxs20d0cki",
      "af_attempt_reference": null,
      "authentication_3ds": {
        "id": "dfa234gatkg5",

```