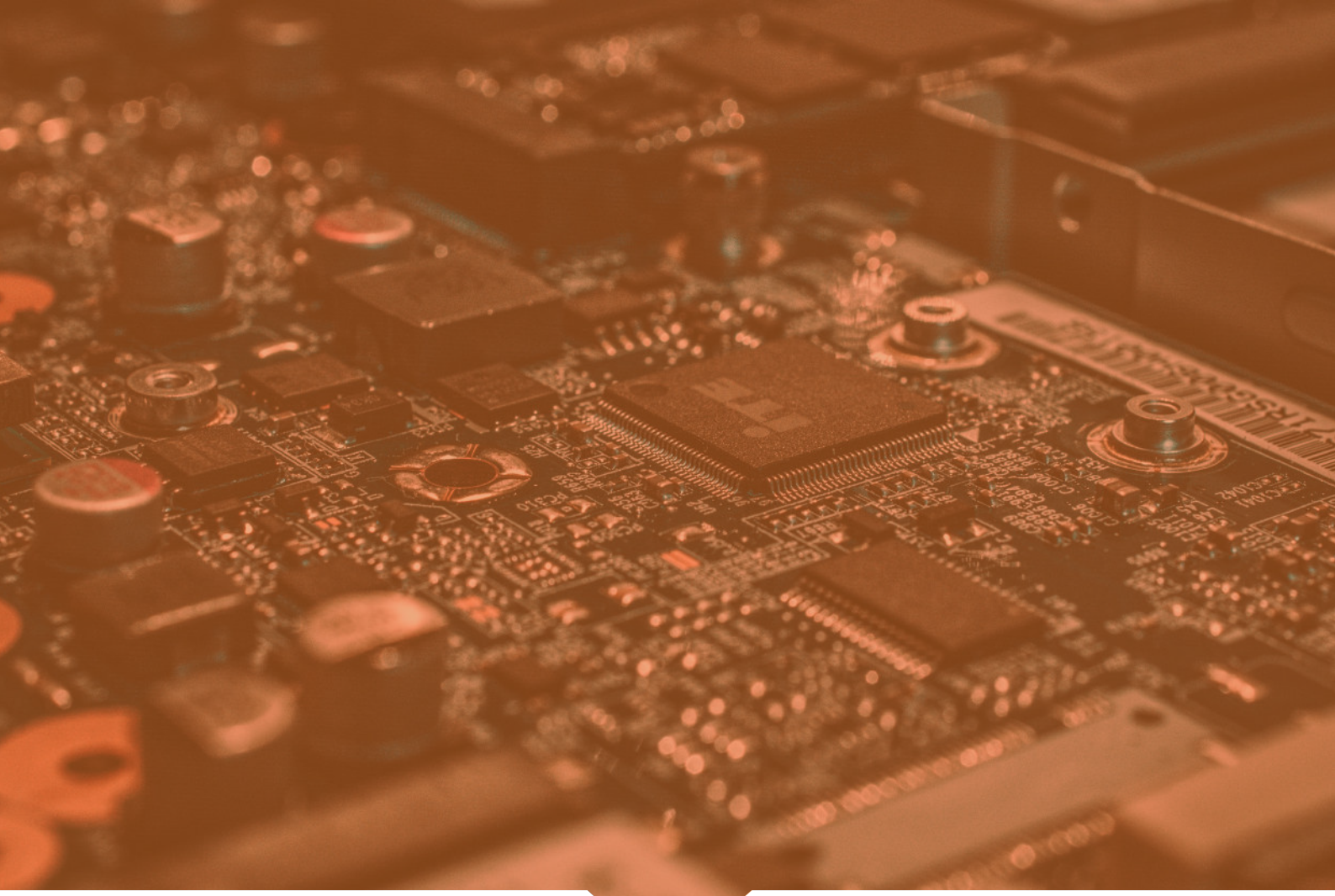


# Intelligent Checkout

## API Documentation

pci pal

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# Launching a Flow

## Overview

In order to launch an integrated Intelligent Checkout flow PCI Pal provides an API which comprises the following steps:

1. Authentication
2. Session Generation
3. Displaying the Session

These steps must occur in the order defined above, each step is expanded upon in the following sections.

## Authentication

The first step required for integrated customers is to generate an oAuth2 Bearer token using using the OAuth2 client_credentials grant type.

Integrated customers will be provided with the relevant credentials via a secure transfer during the project setup phase.

Upon successful authentication a bearer token and, optionally, a refresh token will be provided. The bearer token must be added to the Authorization header for all subsequent requests in the format “bearer <token>”.

By default bearer tokens are valid for 5 minutes, if a refresh token is provided this can be used to retrieve a new bearer token when the previous one expires. If successful an updated bearer token and refresh token will be provided.

## Session Generation

Once authenticated, a PCI Pal session needs to be generated. This step allows integrated customers to provide any transaction related data that should be pre-loaded into the session. This can include the type of flow i.e. MOTO or Digital, as well as client details (such as name, billing address and email address) and transaction details (such as order reference and amount).

For each session that is generated a unique Id in the form of a GUID will be provided, as well as the telephony LinkID.

## Displaying the Session

Once the Session ID has been generated, the next step is displaying the session in a browser/embedded iFrame. PCI Pal supports the latest 3 major versions of the following browsers:

- Google Chrome
- Microsoft Edge
- Mozilla Firefox

When displayed the session will show the agent payment details page. This page will be pre-loaded with any data that was provided during the Session Generation step, all information will be editable, allowing the agent to make any necessary changes to the initial data provided.

Changes to this data will only be saved when the button at the bottom of the page is clicked. Should the page be refreshed before this time any changes made by the agent will be discarded and the data will revert back to the initial values provided.

# Getting Information Back

## Overview

Once a session has been generated, the current session state can be requested at any time via the API.

This information can be used to track the payment progress through the Intelligent Checkout flow.

It should be noted that the current session state will never expose information that is considered to be secure, for example, credit card numbers.

In addition to getting the session state via the API, it is also possible to subscribe to an optional webhook which is triggered once a payment has been completed.

## Current Session State API

Polling the PCI Pal API will provide the current session state details at the point in time that the API call was made.

It is recommended when polling the API to wait a minimum of 5 seconds between requests.

## Webhooks

Once a payment has been completed, a webhook can be sent to the integrated merchant to notify them of the outcome for a specific payment.

This webhook is optional and will only be sent when a valid end-point has been provided. All webhook messages are signed and the integrated merchant should validate the signature for each webhook request received to ensure it has come from PCI Pal.

# API Schemas

## Authentication

## Overview

| | |
|---|---|
| **Endpoint** | /api/v1/token |
| **Method** | POST |
| **Requires Authentication** | No |
| **Content Type** | application/x-www-form-urlencoded |

## Inputs

| Input | Required | Type | Description |
|---|---|---|---|
| grant_type | Yes | string | The oAuth2 grant type to use during authentication for integrations this will always be **client_credentials.** |
| username | Yes | string | The username to authenticate with. For integrations this will be provided during setup |
| client_id | Yes | string | The client id for the application that is authenticating. For integrations this will be provided during setup. |
| client_secret | Yes | string | The client secret for the application that is authenticating. For integrations this will be provided during setup. |
| tenantname | Yes | string | The name of the tenant that the authenticating application belongs to. For integrations this will be provided during set. |

## Outputs

| Output | Type | Description |
|---|---|---|
| access_token | string | The access token that was provided. This will be encoded as a JSON Web Token (JWT). |
| token_type | string | The type of token provided. This will always be **bearer**. |
| expires_in | integer | The period of time in seconds until the access_token expires. By default this will be **300**. |
| client_id | string | The client Id that made the original request. |
| tenantname | string | The name of the tenant that made the original request. |
| refresh_token | string | The refresh token that was generated in order to generate a new access token. This will be in the form of a GUID with no hyphens i.e. 38201dde13df4213b1359fa2078ce1d0. |
| .issued | string | The date and time that the token as issued in UTC. |
| .expires | string | The date and time that the token expires in UTC. |

## Example Request

```
1 grant_type=client_credentials&tenantname=PCI%20Pal&username=AutomatedTes-
  tUser1&client_id=PCI%20Pal%20Web&client_secret=******
```

## Example Response


```
{
  “access_token”: “eyX0eXAiOiJKV1QiLCJhbGciOiJodHRwOi8vd3d3LnczLm9y-
  Zy8yMDAxLzA0L3htbGRzaWctbW9yZSNobWFjLXNoYTUxMiJ9.eyJ1bmlxdWVfb-
  mFtZSI6IjMiLCJyb2xlIjoiYXBwbGljYXRpb24iLCJ0ZW5hbnRJZCI6IjEiLCJkaXNwbG-
  F5TmFtZSI6IkF1dG9tYXRlZCBUZXN0IFVzZXIgMSIsInVzZXJOYW1lIjoiQXV0b21hdG-
  VkVGVzdFVzZXIxIiwiZW1haWxDb25maXJtZWQiOnRydWUsImZvcmNlUGFzc3dvc-
  mRSZXNldCI6ZmFsc2UsInNlY3VyaXR5UXVlc3Rpb25zQ29tcGxldGVkIjp0cnVlLCJsY-
  W5ndWFnZSI6ImVuLUdCIiwiYXV0aGVudGljYXRpb25JZCI6IjgwM2RjMzA2ODgyY-
  jQ0MWE4Y2E0MTM5NjUxZTQ0ZjhlIiwicmVzZWxsZXIiOnRydWUsInNlY3VyaX-
  R5UXVlc3Rpb25zRW5hYmxlZCI6dHJ1ZSwidGVuYW50UGVybWlzc2lvbnMiOiJ7X-
  CJJc0FkbWluXCI6dHJ1ZSxcIklzRmxvd0FkbWluXCI6ZmFsc2UsXCJJc1VzZXJBZG1p-
  blwiOmZhbHNlLFwiSXNTdXBwb3J0XCI6ZmFsc2UsXCJJc1JlcG9ydGluZ1wiOmZh-
  bHNlLFwiSGFzQW55RWxldmF0ZWRQZXJtaXNzaW9uc1wiOnRydWV9IiwiZ3JvdX-
  BNZW1iZXJzaGlwIjoiWzFdIiwiaXNzIjoicGNpcGFsLnRlc3QiLCJhdWQiOiJwY2l-
  wYWwudGVzdCIsImV4cCI6MTY3ODI4NzYzNSwibmJmIjoxNjc4Mjg3MzM1fQ.
  BW1ubklAoneFwOuExrDA6aYrJji6raDGsqtdbkS-pnRfxvm4DK5abckRA_wDbaCr2Dx-
  g3RmaLygiPl4CAoKCng”,
  “token_type”: “bearer”,
  “expires_in”: 300,
  “refresh_token”: “38201dde13df4213b1359fa2078ce1d0”,
  “client_id”: “PCI Pal Web”,
  “tenantName”: “PCI Pal”,
  “.issued”: “2023-03-08T14:55:35Z”,
  “.expires”: “2023-03-08T15:00:35Z”
}
```

# Launch Session

## Overview

| | |
|---|---|
| **Endpoint** | /api/v1/checkout/integrated/{tenantId}/launch-checkout |
| **Method** | POST |
| **Requires Authentication** | Yes |
| **Content Type** | application/json |
| **Note** | This end-point will provide a homogenised approach to launching the session for all locales. |

## Inputs

| Input | Required | Type | Description |
|---|---|---|---|
| flow_id | Yes | integer | The flow Id for the relevant intelligent checkout flow. For integrations this will be provided during setup. |
| transaction_details | No | object | The details of the transaction being processed. |
| reference | No | string | The transaction reference to use i.e. ABC123. [A-Za-z0-9] |
| amount | No | integer | The transaction amount in minor units i.e. 1250 in USD would be $12.50. There is a minimum value of 50 and a maximum value of 99999999. |

| Input | Required | Type | Description |
|---|---|---|---|
| consumer_details | No | object | The details of the customer that the transaction relates to. |
| first_name | No | string | The customer's first name i.e. Bob. |
| last_name | No | string | The customer's last name i.e. Smith. |
| email_address | No | string | The customer's email address i.e. bob.smith@pcipal.com. |
| phone_number | No | object | The customer's phone number for receiving SMS messages. |
| country_code | No | string | The country code for the phone number i.e. +1 |
| number | No | string | The telephone number without any formatting i.e. 5550123456 |
| address | No | object | The customer's address details. |
| address_line1 | No | string | The first line of the address. |
| address_line2 | No | string | The second line of the address. |
| state_or_county | No | string | The state or county for the address i.e. California. |
| postcode | No | string | The postal/zip code where the address can be found i.e. 12345 |

# Outputs

| Output | Type | Description |
|---|---|---|
| session_id | string | The unique Id of the session that was created. In the form of a GUID. |

## Example Request

```
{
  “flow_Id”: 123,
   “transaction_details”:
  {
  “reference”: “ABC123”,
  “amount”: 1250
  },
  “consumer_details”:
  {
    “first_name”: “Bob”,
    “last_name”: “Smith”,
    “email_address”: “bob.smith@pcipal.com”,
    “phone_number”:
    {
      “country_code”: “+1”,
      “number”: “5550123456”
    },
    “address”:
    {
      “address_line1”: “1 A Street”,
      “address_line2”: “Apt 12”,
      “state_or_county”: “California”,
      “postcode”: “12345”,
    }
  }
 }
```

## Example Response

```
{
  “session_id”: “97687bc3-798e-40a9-a83a-f5555011c002”
}
```

# Launch Refund Session

## Overview

| | |
|---|---|
| **Endpoint** | /api/v1/checkout/integrated/{tenantId}/launch-refund |
| **Method** | POST |
| **Requires Authentication** | Yes |
| **Content Type** | application/json |
| **Note** | This end-point will provide a homogenised approach to launching the refund session for all locales. |

## Inputs

| Input | Required | Type | Description |
|---|---|---|---|
| flow_id | Yes | integer | The flow Id for the relevant intelligent checkout flow. For integrations this will be provided during setup. |
| refund_details | No | object | The details of the refund transaction being processed. |
| reference | No | string | The transaction reference to use i.e. ABC123. [A-Za-z0-9] |
| amount | No | integer | The transaction amount in minor units i.e. 1250 in USD would be $12.50. |
| transaction_id | No | string | The transaction id given by the provider for this transaction. |

## Outputs

| Output | Type | Description |
|---|---|---|
| session_id | string | The unique Id of the session that was created. In the form of a GUID. |

## Example Request

```
{
  “flow_Id”: 123,
  “refund_details”:
  {
    “reference”: “ABC123”,
    “amount”: 1250,
    “transaction_id”: “bd4d56ef-3712-4fc4-b98e-be28d3dcd6c4”
  }
}
```

## Example Response

```
{
  “session_id”: “97687bc3-798e-40a9-a83a-f5555011c002”
}
```

# Get Current Session State

## Overview

| | |
|---|---|
| **Endpoint** | /api/v1/checkout/integrated/{tenantId}/{sessionid}/current-state |
| **Method** | GET |
| **Requires Authentication** | Yes |
| **Content Type** | application/json |
| **Note** | This end-point will provide a homogenised approach to retrieve the current session state for all locales. |

## Inputs

N/A

## Outputs

| | | Type | Description |
|---|---|---|---|
| transaction_details | | object | The details of the transaction for the flow. |
| | digital_link | string | The digital link Url to use to launch the consumer side of the transaction. |
| | transaction_id | string | The transaction id given by the provider for this transaction. |
| | reference | string | The reference number for the transaction. |
| | amount | integer | The value of the transaction in minor units i.e. 1250 in USD would be $12.50. |
| | currency_code | string | The currency code for the transaction (not currently in place). |
| | journey | Enum | The journey type: Digital \| Moto. |

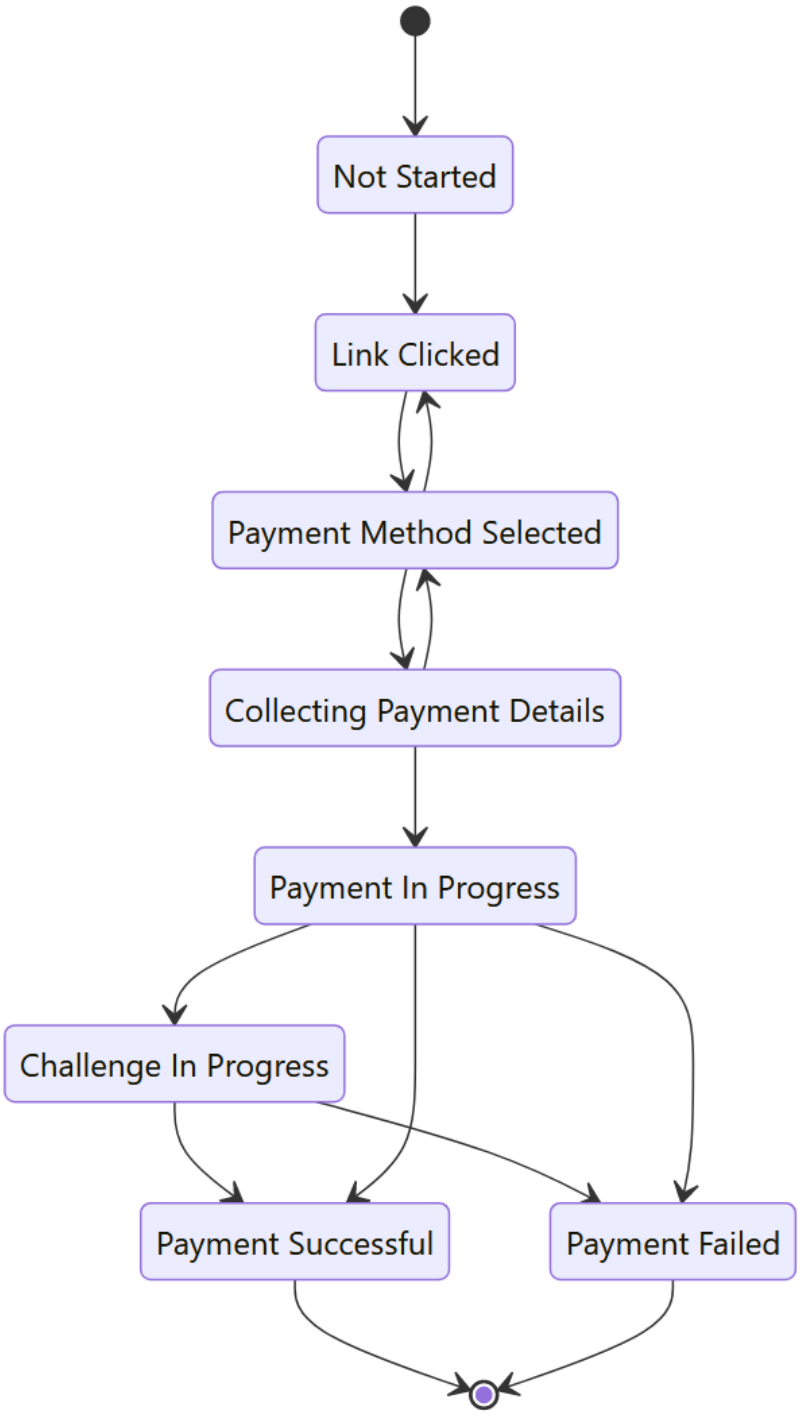
| | Type | Description |
|---|---|---|
| payment_method | Enum | The payment method being used for the transaction. Valid options are:<br>• PayByCard<br>• PayByBank<br>• DigitalWallet |
| payment_provider | string | The display text for the payment method:<br>• PayByCard - The card type being used i.e. Visa Credit, Mastercard<br>• PayByBank - The provider specified by TrueLayer<br>• DigitalWallet - Google Pay or Apple Pay |
| last_updated_utc | DateTime | The date and time that the payment state was last updated by the consumer in UTC. |
| payment_outcome | Enum | The current payment outcome valid options are: NotStarted, Success, Fail, Pending, Cancelled |
| session_id | string | The session id for the payment. |
| consumer_details | object | The details of the consumer that the transaction relates to. |
| first_name | string | The first name of the consumer. |
| last_name | string | The last name of the consumer. |
| email_address | string | The email address of the consumer. |
| phone_number | object | The phone number of the consumer. |
| country_code | string | The country code for the phone number i.e. +1 |
| number | string | The telephone number without any formatting i.e. 5550123456 |
| address | object | The address of the consumer. |
| address_line1 | string | The first line of the address. |
| address_line2 | string | The second line of the address. |

| | Type | Description |
|---|---|---|
| state_or_county | string | The state or county for the address i.e. California |
| postcode | string | The postal/zip code where the address can be found i.e. 12345. |
| error_details | object | The details of any error that may have occurred during the intelligent checkout flow. This section will always be present but the state will be Valid if no error has occurred. |
| error_code | string | The error code for the error that occurred (not currently in place). |
| error_message | string | The error message that occurred. |
| occurred_at_utc | DateTime | The date and time that the error occurred in UTC. |

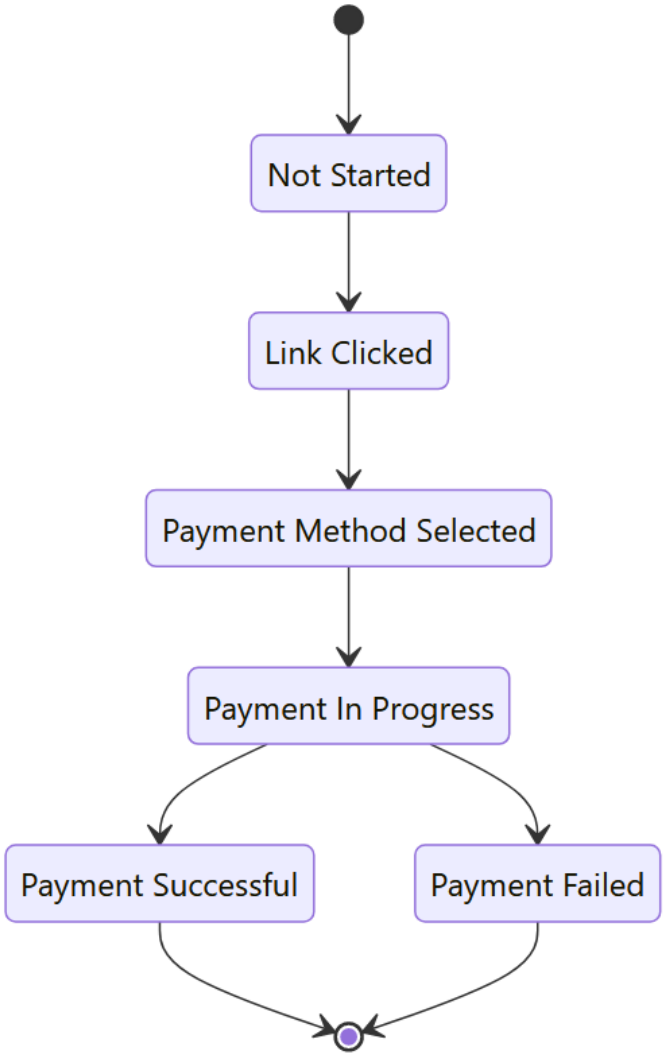
# Example Response


```
{
  “transaction_details”: {
  {
    “digital_link”: “http://”
    “transaction_id”: “bd4d56ef-3712-4fc4-b98e-be28d3dcd6c4”,
    “reference”: “ABC123”,
    “amount”: 1250,
    “currency_code”: “GBP”,
    “journey”: “Digital”,
    “payment_method”: “DigitalWallet”,
    “payment_provider”: “Google Pay”,
    “last_updated_utc”: “2018-12-10T13:45:00.000Z”,
    “payment_outcome”: “Success”,
    “session_id”: “97687bc3-798e-40a9-a83a-f5555011c002”
  },
  “consumer_details”:
  {
    “first_name”: “Bob”,
    “last_name”: “Smith”,
    “email_address”: “bob.smith@pcipal.com”,
    “phone_number”:
    {
      “country_code”: “+1”,
      “number”: “5550123456”
    }
    “address”:
    {
      “address_line1”: “Apt 12”,
      “address_line2”: “1 A Street”,
      “state_or_county”: “California”,
      “postcode”: “12345”,
    }
  }
}
```

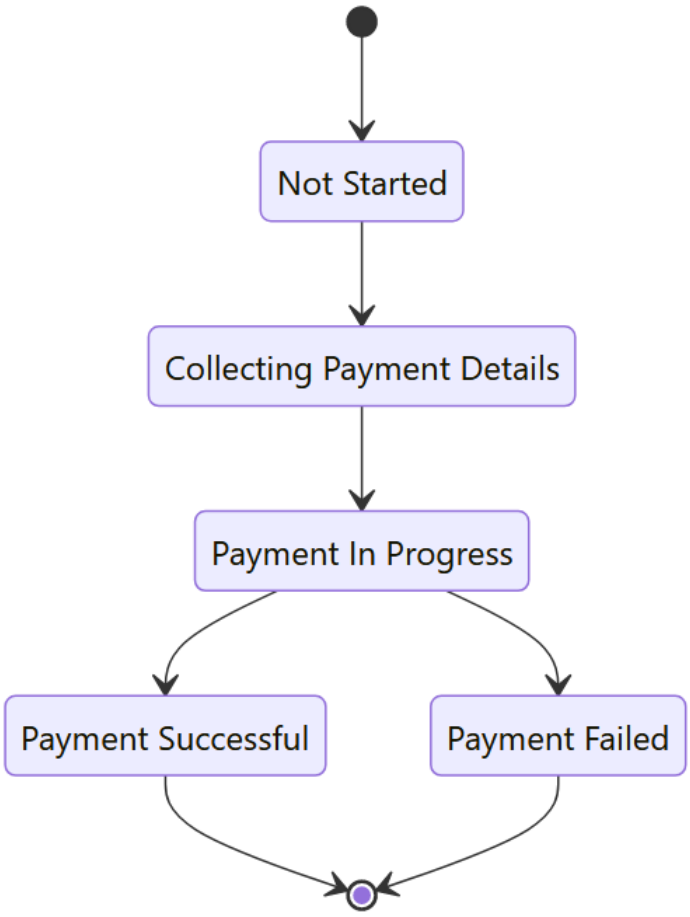
# Consumer Stages for Digital (Pay By Card)



# Consumer Stages for Digital (Pay By Bank and Digital Wallet)



# Consumer Stages for Moto (Pay By Card)



# Webhook

## Overview

| | |
|---|---|
| **Endpoint** | Provided by the integrated merchant |
| **Method** | POST |
| **Requires Authentication** | No |
| **Content Type** | application/json |
| **Note** | • **x-signature** - this header will contain the signature for the webhook request<br>• **x-timestamp** - this header will contain the UTC timestamp for the webhook in milliseconds since 1970-01-01 and is required to validate the signature |

## Payload

| Output | Type | Description |
|---|---|---|
| event_type | Enum | The event type for the webhook.<br>Valid Options are:<br>• PaymentSuccess<br>• PaymentFailure |
| transaction_details | object | The details of the transaction for the flow. |
| digital_link | string | The digital link Url to use to launch the consumer side of the transaction. |
| transaction_id | string | The transaction id given by the provider for this transaction. |
| reference | string | The reference number for the transaction. |
| amount | integer | The value of the transaction in minor units i.e. 1250 in USD would be $12.50. |

| Output | Type | Description |
|---|---|---|
| currency_code | string | The currency code for the transaction (not currently in place). |
| journey | Enum | The journey type: Digital \| Moto. |
| payment_method | Enum | The payment method being used for the transaction. Valid options are:<br>• PayByCard<br>• PayByBank<br>• DigitalWallet |
| payment_provider | string | The display text for the payment method:<br>• PayByCard - The card type being used i.e. Visa Credit, Mastercard<br>• PayByBank - The provider specified by TrueLayer<br>• DigitalWallet - Google Pay or Apple Pay |
| last_updated_utc | DateTime | The date and time that the payment state was last updated by the consumer in UTC. |
| payment_outcome | Enum | The current payment outcome valid options are: NotStarted, Success, Fail, Pending, Cancelled |
| session_id | string | • The session id for the payment. |
| consumer_details | object | The details of the consumer that the transaction relates to. |
| first_name | string | The first name of the consumer. |
| last_name | string | The last name of the consumer. |
| email_address | string | The email address of the consumer. |
| phone_number | object | The phone number of the consumer. |
| country_code | string | The country code for the phone number i.e. +1 |
| number | string | The telephone number without any formatting i.e. 5550123456 |

| Output | Type | Description |
|---|---|---|
| address | object | The address of the consumer. |
| address_line1 | string | The first line of the address. |
| address_line2 | string | The second line of the address. |
| state_or_county | string | The state or county for the address i.e. California |
| postcode | string | The postal/zip code where the address can be found i.e. 12345. |
| error_details | object | The details of any error that may have occurred during the intelligent checkout flow. This section will always be present but the state will be Valid if no error has occurred. |
| error_code | string | The error code for the error that occurred (not currently in place). |
| error_message | string | The error message that occurred. |
| occurred_at_utc | DateTime | The date and time that the error occurred in UTC. |

# Example Payload

```
{
  “event_type”: “PaymentSuccess”,
  “transaction_details”:
  {
    “digital_link”: “http://”
    “transaction_id”: “bd4d56ef-3712-4fc4-b98e-be28d3dcd6c4”,
    “reference”: “ABC123”,
    “amount”: 1250,
    “currency_code”: “GBP”,
    “journey”: “Digital”,
    “payment_method”: “DigitalWallet”,
    “payment_provider”: “Google Pay”,
    “last_updated_utc”: “2018-12-10T13:45:00.000Z”,
    “payment_outcome”: “Success”,
    “session_id”: “97687bc3-798e-40a9-a83a-f5555011c002”
  },
  “consumer_details”:
  {
    “first_name”: “Bob”,
    “last_name”: “Smith”,
    “email_address”: “bob.smith@pcipal.com”,
    “phone_number”:
    {
      “country_code”: “+1”,
      “number”: “5550123456”
    }
    “address”:
    {
      “address_line1”: “Apt 12”,
      “address_line2”: “1 A Street”,
      “state_or_county”: “California”,
      “postcode”: “12345”,
    }
  }
}
```