

Read Write APIs

# Table of Contents

1. Overview .....	1
1.1. Version information .....	1
1.2. Contact information .....	1
1.3. URI scheme .....	1
1.4. Tags .....	1
1.5. Produces .....	1
2. Paths .....	1
2.1. Setup a single immediate payment .....	2
2.1.1. Description .....	2
2.1.2. Body parameter .....	2
2.1.3. Responses .....	4
2.1.4. Consumes .....	6
2.1.5. Produces .....	6
2.1.6. Tags .....	6
2.1.7. Security .....	6
2.2. Submit a single immediate payment .....	7
2.2.1. Description .....	7
2.2.2. Parameters .....	7
2.2.3. Responses .....	7
2.2.4. Consumes .....	9
2.2.5. Produces .....	9
2.2.6. Tags .....	10
2.2.7. Security .....	10
2.3. Get the status of a payment .....	11
2.3.1. Description .....	11
2.3.2. Parameters .....	11
2.3.3. Responses .....	11
2.3.4. Produces .....	12
2.3.5. Tags .....	12
2.3.6. Security .....	12
3. Security .....	12
3.1. TPPOAuth2Security .....	13
3.2. PSUOAuth2Security .....	13

# 1. Overview

Draft Swagger specification for Read Write

## 1.1. Version information

*Version* : v0.1

## 1.2. Contact information

*Contact* : Claudio Viola

*Contact Email* : [claudio.viola@openbanking.org.uk](mailto:claudio.viola@openbanking.org.uk)

## 1.3. URI scheme

*BasePath* : /open-banking

*Schemes* : HTTPS

## 1.4. Tags

- Payments : Payments endpoints

## 1.5. Produces

- `application/prs.openbanking.rwdata.v0.1+json`

# 2. Paths

## 2.1. Setup a single immediate payment

POST /payments

### 2.1.1. Description

Setup a single immediate payment

### 2.1.2. Body parameter

Setup a single immediate payment

Name : body

Flags : required

Name	Description	Schema
<b>CreditorAccount</b> <i>required</i>	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	<a href="#">CreditorAccount</a>
<b>CreditorAgent</b> <i>required</i>	Financial institution servicing an account for the creditor.	<a href="#">CreditorAgent</a>
<b>DebtorAccount</b> <i>optional</i>	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	<a href="#">DebtorAccount</a>
<b>DebtorAgent</b> <i>optional</i>	Financial institution servicing an account for the debtor.	<a href="#">DebtorAgent</a>
<b>EndToEndIdentification</b> <i>required</i>	Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. <b>Length : 1 - 35</b>	string
<b>InstructedAmount</b> <i>required</i>	Amount of money to be moved between the debtor and creditor, before deduction of charges, expressed in the currency as ordered by the initiating party. Usage: This amount has to be transported unchanged through the transaction chain.	<a href="#">InstructedAmount</a>
<b>InstructionIdentification</b> <i>required</i>	Unique identification as assigned by an instructing party for an instructed party to unambiguously identify the instruction. Usage: the instruction identification is a point to point reference that can be used between the instructing party and the instructed party to refer to the individual instruction. It can be included in several messages related to the instruction. <b>Length : 1 - 35</b>	string

Name	Description	Schema
<b>RemittanceInformation</b> <i>optional</i>	Information supplied to enable the matching/reconciliation of an entry with the items that the payment is intended to settle, such as commercial invoices in an accounts' receivable system, in an unstructured form. <b>Length : 1 - 140</b>	string

#### CreditorAccount

Name	Description	Schema
<b>Identification</b> <i>required</i>	maxLength 34 text <b>Length : 1 - 34</b>	string
<b>Name</b> <i>optional</i>	maxLength 70 text <b>Length : 1 - 70</b>	string
<b>SchemeName</b> <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

#### CreditorAgent

Name	Description	Schema
<b>Identification</b> <i>required</i>	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS). <b>Pattern : "^SC[0-9]{6,6}\$"</b>	string
<b>SchemeName</b> <i>required</i>	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### DebtorAccount

Name	Description	Schema
<b>Identification</b> <i>required</i>	maxLength 34 text <b>Length : 1 - 34</b>	string
<b>Name</b> <i>optional</i>	maxLength 70 text <b>Length : 1 - 70</b>	string
<b>SchemeName</b> <i>required</i>	Name of the identification scheme, in a coded form as published in an external list.	enum (BBAN)

#### DebtorAgent

Name	Description	Schema
<b>Identification</b> <i>required</i>	United Kingdom (UK) Sort Code - identifies British financial institutions on the British national clearing systems. The sort code is assigned by the Association for Payments and Clearing Services (APACS). <b>Pattern : "^SC[0-9]{6,6}\$"</b>	string

Name	Description	Schema
<b>SchemeName</b> <i>required</i>	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

#### InstructedAmount

Name	Description	Schema
<b>Amount</b> <i>required</i>	<b>Pattern</b> : "^-?\d{1,13}\.\d{1,5}\$"	string
<b>Currency</b> <i>required</i>	A code allocated to a currency by a Maintenance Agency under an international identification scheme, as described in the latest edition of the international standard ISO 4217 'Codes for the representation of currencies and funds' <b>Pattern</b> : "^[A-Z]{3}\$"	string

### 2.1.3. Responses

HTTP Code	Description	Schema
<b>200</b>	Payment setup successfully	<a href="#">Payment setup POST 200 Response</a>
<b>400</b>	Bad Request	<a href="#">HTTP 500 Error</a>
<b>401</b>	Unauthorized	<a href="#">HTTP 401 Error</a>
<b>403</b>	Forbidden	<a href="#">Payment setup POST 403 response</a>
<b>409</b>	Conflict	<a href="#">Payment setup POST 409 Response</a>
<b>500</b>	Internal Server Error	<a href="#">HTTP 500 Error</a>

#### Payment setup POST 200 Response

Name	Description	Schema
<b>EndToEndIdentification</b> <i>required</i>	Unique identification assigned by the initiating party to unambiguously identify the transaction. This identification is passed on, unchanged, throughout the entire end-to-end chain. Usage: The end-to-end identification can be used for reconciliation or to link tasks relating to the transaction. It can be included in several messages related to the transaction. <b>Length</b> : 1 - 35	string
<b>PaymentAuthorisationID</b> <i>required</i>	ASPSP authorisation identifier for the payment <b>Length</b> : 1 - 35	string

#### HTTP 500 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The payment infrastructure is busy or unavailable.)
<b>status</b> <i>required</i>	enum (500)
<b>title</b> <i>required</i>	enum (InternalServerError)

#### HTTP 401 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The request is unauthorised. Do not resubmit the request.)
<b>status</b> <i>required</i>	enum (401)
<b>title</b> <i>required</i>	enum (Unauthorised)

#### Payment setup POST 403 response

Name	Schema
<b>description</b> <i>required</i>	enum (The payer sort code is not valid - is closed, does not exist, or is not valid for the scheme., The payer account is not valid - is closed, does not exist, or is not valid for the scheme., The payee sort code is not valid - is closed, does not exist, or is not valid for the scheme., The payee account is not valid - is closed, does not exist, or is not valid for the scheme., The amount is not valid - exceeds scheme limit., The date is too far in the future., The scheme has rejected payment for an unspecified reason., The sending institution has rejected payment for an unspecified reason., The receiving institution has rejected payment for an unspecified reason.)
<b>status</b> <i>required</i>	enum (403)
<b>title</b> <i>required</i>	enum (InvalidPayerSortCode, InvalidPayerAccount, InvalidPayeeSortCode, InvalidPayeeAccount, InvalidAmount, InvalidExecutionDate, SchemeReject, SendingInstitutionReject, ReceivingInstitutionReject)

#### Payment setup POST 409 Response

Name	Schema
<b>description</b> <i>required</i>	enum (The sending institution has rejected payment for an unspecified reason.)
<b>status</b> <i>required</i>	enum (409)

Name	Schema
<b>title</b> <i>required</i>	enum (SendingInstitutionReject)

## HTTP 500 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The payment infrastructure is busy or unavailable.)
<b>status</b> <i>required</i>	enum (500)
<b>title</b> <i>required</i>	enum (InternalServerError)

### 2.1.4. Consumes

- `application/prs.openbanking.rwdata.v0.1+json`

### 2.1.5. Produces

- `application/prs.openbanking.rwdata.v0.1+json`

### 2.1.6. Tags

- Payments

### 2.1.7. Security

Type	Name	Scopes
<b>oauth2</b>	<a href="#">TPPOAuth2Security</a>	tpp_client_credential



## 2.2. Submit a single immediate payment

PATCH /payments/{PaymentAuthorisationID}

### 2.2.1. Description

Submit a previously setup single immediate payment

### 2.2.2. Parameters

Type	Name	Description	Schema
Path	<b>PaymentAuth orisationID</b> <i>required</i>	ASPSP authorisation identifier for the payment	string

### 2.2.3. Responses

HTTP Code	Description	Schema
200	Payment executed or ready for scheme to execute.	<a href="#">Payment submit PATCH 200 response</a>
202	Payment execution instruction accepted.	<a href="#">Payment submit PATCH 202 response</a>
400	Bad Request	<a href="#">HTTP 500 Error</a>
401	Unauthorized	<a href="#">HTTP 401 Error</a>
403	Forbidden	<a href="#">Payment submit PATCH 403 response</a>
409	Conflict	<a href="#">Payment submit PATCH 409 response</a>
500	Internal Server Error	<a href="#">HTTP 500 Error</a>

#### Payment submit PATCH 200 response

Name	Description	Schema
<b>PaymentRefer enceID</b> <i>optional</i>	Payment Reference ID <b>Length : 1 - 35</b>	string
<b>PaymentStatu s</b> <i>required</i>		enum (ReadyforExecution)

Name	Description	Schema
<b>PaymentStatusDescription</b> <i>required</i>		enum (Payment execution instruction accepted.)

#### Payment submit PATCH 202 response

Name	Description	Schema
<b>PaymentReferenceID</b> <i>optional</i>	Payment Reference ID <b>Length : 1 - 35</b>	string
<b>PaymentStatus</b> <i>required</i>		enum (InstructionReceived)
<b>PaymentStatusDescription</b> <i>required</i>		enum (Payment execution instruction accepted.)

#### HTTP 500 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The payment infrastructure is busy or unavailable.)
<b>status</b> <i>required</i>	enum (500)
<b>title</b> <i>required</i>	enum (InternalServerError)

#### HTTP 401 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The request is unauthorised. Do not resubmit the request.)
<b>status</b> <i>required</i>	enum (401)
<b>title</b> <i>required</i>	enum (Unauthorised)

#### Payment submit PATCH 403 response

Name	Schema
<b>description</b> <i>required</i>	enum (The payer sort code is not valid - is closed, does not exist, or is not valid for the scheme., The payer account is not valid - is closed, does not exist, or is not valid for the scheme., The payee sort code is not valid - is closed, does not exist, or is not valid for the scheme., The payee account is not valid - is closed, does not exist, or is not valid for the scheme., The amount is not valid - exceeds scheme limit., The date is too far in the future., The scheme has rejected payment for an unspecified reason., The sending institution has rejected payment for an unspecified reason., The receiving institution has rejected payment for an unspecified reason.)
<b>status</b> <i>required</i>	enum (403)
<b>title</b> <i>required</i>	enum (InvalidPayerSortCode, InvalidPayerAccount, InvalidPayeeSortCode, InvalidPayeeAccount, InvalidAmount, InvalidExecutionDate, SchemeReject, SendingInstitutionReject, ReceivingInstitutionReject)

#### Payment submit PATCH 409 response

Name	Schema
<b>description</b> <i>required</i>	enum (The sending institution has rejected payment for an unspecified reason.)
<b>status</b> <i>required</i>	enum (409)
<b>title</b> <i>required</i>	enum (SendingInstitutionReject)

#### HTTP 500 Error

Name	Schema
<b>description</b> <i>required</i>	enum (The payment infrastructure is busy or unavailable.)
<b>status</b> <i>required</i>	enum (500)
<b>title</b> <i>required</i>	enum (InternalServerError)

### 2.2.4. Consumes

- `application/prs.openbanking.rwdata.v0.1+json`

### 2.2.5. Produces

- `application/prs.openbanking.rwdata.v0.1+json`

## 2.2.6. Tags

- Payments

## 2.2.7. Security

Type	Name	Scopes
oauth2	<a href="#">PSUOAuth2Security</a>	payment

## 2.3. Get the status of a payment

GET /payments/{PaymentAuthorisationID}/status

### 2.3.1. Description

Get status of a previously submitted payment

### 2.3.2. Parameters

Type	Name	Description	Schema
Path	<b>PaymentAuth orisationID</b> <i>required</i>	ASPSP authorisation identifier for the payment	string

### 2.3.3. Responses

HTTP Code	Description	Schema
200	Payment Status Response	<a href="#">Payment status GET 200 response</a>

#### Payment status GET 200 response

Name	Description	Schema
<b>PaymentRefer enceID</b> <i>optional</i>	Payment Reference ID <b>Length : 1 - 35</b>	string
<b>PaymentStatu s</b> <i>required</i>		enum (AwaitingAuthorisati on, ReadyforSubmission , ReadyforExecution, SendingInstitutionEx ecution, SchemeExecution, ReceivingInstitution Execution, ExecutionComplete, ExecutionFailure, Cancelled)

Name	Description	Schema
<b>PaymentStatusDescription</b> <i>required</i>		enum (Payment request requires further authorisation to progress., Payment request is authorised and ready for submission., Payment executed or ready for scheme to execute., Payment is being executed by the sending institution., Payment has been passed from sending institution to scheme for processing., Payment has passed from scheme to receiving institution for processing., Payment has been applied to receiving account and is complete., Payment to receiving account has failed., Payment instruction cancelled.)

### 2.3.4. Produces

- `application/prs.openbanking.rwdata.v0.1+json`

### 2.3.5. Tags

- Payments

### 2.3.6. Security

Type	Name	Scopes
oauth2	<a href="#">PSUOAuth2Security</a>	payment

## 3. Security

## 3.1. TPPOAuth2Security

TPP client credential authorisation flow with the ASPSP

*Type* : oauth2

*Flow* : application

*Token URL* : /token

Name	Description
tpp_client_credential	TPP Client Credential Scope

## 3.2. PSUOAuth2Security

OAuth flow, it is required when the PSU needs to perform SCA with the ASPSP when a TPP wants to access an ASPSP resource owned by the PSU

*Type* : oauth2

*Flow* : accessCode

*Token URL* : /authorization

*Token URL* : /token

Name	Description
payment	Generic payment scope