Read Write APIs

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1. Overview

Draft Swagger specification for Read Write

1.1. Version information

Version: v0.1

1.2. Contact information

Contact : Claudio Viola

 ${\it Contact\ Email: claudio.viola@openbanking.org.uk}$

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
CreditorAccou nt required	Unambiguous identification of the account of the creditor to which a credit entry will be posted as a result of the payment transaction.	CreditorAccount
CreditorAgent required	Financial institution servicing an account for the creditor.	CreditorAgent
DebtorAccoun t optional	Unambiguous identification of the account of the debtor to which a debit entry will be made as a result of the transaction.	DebtorAccount
DebtorAgent optional	Financial institution servicing an account for the debtor.	DebtorAgent
EndToEndIde ntification required	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. Length: 1 - 35	string
InstructedAm ount required	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.	InstructedAmount
InstructionIde ntification required	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. Length: 1 - 35	string

Name	Description	Schema
RemittanceInf ormation optional	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. Length: 1 - 140	string

CreditorAccount

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

CreditorAgent

Name	Description	Schema
Identification required	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). Pattern: "^SC[0-9]{6,6}\$"	string
SchemeName required	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

DebtorAccount

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

DebtorAgent

Name	Description	Schema
Identification required	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). Pattern: "^SC[0-9]{6,6}\$"	string

Name	Description	Schema
SchemeName	Specifies the external financial institution identification	anarra (III/CantCada)
required	scheme name code in the format of character string.	enum (UKSortCode)

Instructed Amount

Name	Description	Schema
Amount required	Pattern : "^-?\\d{1,13}\\.\\d{1,5}\$"	string
Currency required	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' Pattern: "^[A-Z]{3}\$"	string

2.1.3. Responses

HTTP Code	Description	Schema
200	Payment setup successfully	Payment setup POST 200 Response
400	Bad Request	HTTP 400 Error
401	Unauthorized	HTTP 401 Error
403	Forbidden	HTTP 403 Error
409	Conflict	HTTP 409 Error
500	Internal Server Error	HTTP 500 Error

Payment setup POST 200 Response

Name	Description	Schema
PaymentAuth orisationID required	ASPSP authorisation identifier for the payment Length : 1 - 35	string

HTTP 400 Error

Name	Schema
description required	enum (The request could not be understood by the server due to malformed syntax. The client SHOULD NOT repeat the request without modifications.)
status required	enum (400)
title required	enum (BadRequest)

HTTP 401 Error

Name	Schema
description required	enum (The request requires user authentication.)
status required	enum (401)
title required	enum (Unauthorised)

HTTP 403 Error

Name	Schema
description required	enum (The server understood the request, but is refusing to fulfill it. Authorization will not help and the request SHOULD NOT be repeated.)
status required	enum (403)
title required	enum (Forbidden)

HTTP 409 Error

Name	Schema	
description required	enum (The request could not be completed due to a conflict with the current state of the resource.)	
status required	enum (409)	
title required	enum (Conflict)	

HTTP 500 Error

Name	Schema
description required	enum (The server encountered an unexpected condition which prevented it from fulfilling the request.)
status required	enum (500)
title required	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

Туре	Name	Scopes
oauth2	TPPOAuth2Securi ty	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	PaymentAuth orisationID required	ASPSP authorisation identifier for the payment	string

2.2.3. Responses

HTTP Code	Description	Schema
200	OK	Payment submit PATCH 200 response
202	Accepted	Payment submit PATCH 202 response
400	Bad Request	HTTP 400 Error
401	Unauthorized	HTTP 401 Error
403	Forbidden	Payment submit PATCH 403 response
409	Conflict	Payment submit PATCH 409 response
500	Internal Server Error	HTTP 500 Error

Payment submit PATCH 200 response

Name	Description	Schema
PaymentRefer enceID optional	Payment Reference ID Length: 1 - 35	string

Name	Description	Schema
PaymentStatu s required		enum (AwaitingExecution, InProgress, Debited, AwaitingFurtherAut horisation, CreditSent, CreditDelivered, CreditApplied, CreditRejected)
PaymentStatu sDescription required		enum (Queued for processing by debtor bank – outcome unknown, Payment being processed by debtor bank – outcome unknown, Debit applied to debtor account, awaiting send to scheme, The payment failed, credit will never be applied at the beneficiary, Multiparty authorisation is required for the payment, Payment sent to scheme, Payment arrived at beneficiary bank, The credit has been applied at the beneficiary bank, The credit was rejected at the beneficiary bank)

Payment submit PATCH 202 response

Name	Description	Schema
PaymentRefer enceID optional	Payment Reference ID Length: 1 - 35	string
PaymentStatu s required		enum (InstructionReceived)

Name	Description	Schema
PaymentStatu sDescription required		enum (Payment execution instruction accepted.)

HTTP 400 Error

Name	Schema	
description required	enum (The request could not be understood by t server due to malformed syntax. The client SHO NOT repeat the request without modifications.)	
status required	enum (400)	
title required	enum (BadRequest)	

HTTP 401 Error

Name	Schema
description required	enum (The request requires user authentication.)
status required	enum (401)
title required	enum (Unauthorised)

Payment submit PATCH 403 response

Name	Schema
description required	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.)
status required	enum (403)

Name	Schema
title required	enum (InvalidPayerSortCode, InvalidPayerAccount, InvalidPayeeSortCode, InvalidPayeeAccount, InvalidAmount, InvalidExecutionDate, SchemeReject, SendingInstitutionReject, ReceivingInstitutionReject)

Payment submit PATCH 409 response

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

HTTP 500 Error

Name	Schema
description required	enum (The server encountered an unexpected condition which prevented it from fulfilling the request.)
status required	enum (500)
title required	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

Туре	Name	Scopes
oauth2	PSUOAuth2Secur ity	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	PaymentAuth orisationID required	ASPSP authorisation identifier for the payment	string

2.3.3. Responses

HTTP Code	Description	Schema
200	Payment Status Resnonse	Payment status GET 200 response

Payment status GET 200 response

Name	Description	Schema
PaymentRefer enceID optional	Payment Reference ID Length: 1 - 35	string
PaymentStatu s required		enum (AwaitingExecution, InProgress, Debited, AwaitingFurtherAut horisation, CreditSent, CreditDelivered, CreditApplied, CreditRejected)

Name	Description	Schema
PaymentStatu sDescription required		enum (Queued for processing by debtor bank – outcome unknown, Payment being processed by debtor bank – outcome unknown, Debit applied to debtor account, awaiting send to scheme, The payment failed, credit will never be applied at the beneficiary, Multiparty authorisation is required for the payment, Payment sent to scheme, Payment arrived at beneficiary bank, The credit has been applied at the beneficiary bank, The credit was rejected at the beneficiary bank)

2.3.4. Produces

• application/prs.openbanking.rwdata.v0.1+json

2.3.5. Tags

• Payments

2.3.6. Security

Туре	Name	Scopes
oauth2	PSUOAuth2Secur ity	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_cre dential	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