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
Contact Email : claudio.viola@openbanking.org.uk

1.3. License information

License : open-licence
License URL : https://www.openbanking.org.uk/open-licence
Terms of service : https://www.openbanking.org.uk/terms

1.4. URI scheme

BasePath : /open-banking
Schemes : HTTPS

1.5. Tags

- Payments : Payments endpoints

1.6. Produces

- `application/json`

2. Paths

2.1. Create a payment submission

```
POST /payment-submissions
```

2.1.1. Description

Submit a previously setup payment

2.1.2. Parameters

Type	Name	Description	Schema
Path	**PaymentId** *required*	ASPSP identifier for the payment setup resource	string

2.1.3. Body parameter

Setup a single immediate payment

Name : body
Flags : required

Name	Description	Schema
CreditorAccount *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
DebtorAccount *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
EndToEndIdentification *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
InstructedAmount *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

Name	Description	Schema
InstructionIdentification *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
MerchantCategoryCode *optional*	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction. **Length** : 3 - 4	string
PaymentId *required*	ASPSP identifier for the payment setup resource **Length** : 1 - 35	string
RemittanceInformation *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.	RemittanceInformation

CreditorAccount

Name	Description	Schema
Identification *required*	maxLength 34 text **Length** : 1 - 34	string
Name *required*	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	Description	Schema
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
SchemeName *required*	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

InstructedAmount

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

RemittanceInformation

Name	Description	Schema
CreditorReferenceInformation *optional*	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money. If the business context requires the use of a creditor reference or a payment remit identification, and only one identifier can be passed through the end-to-end chain, the creditor's reference or payment remittance identification should be quoted in the end-to-end transaction identification. **Length** : `1 - 35`	string
Unstructured *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

2.1.4. Responses

HTTP Code	Description	Schema
201	Payment submit resource successfully created	Response 201
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
409	Conflict	No Content
500	Internal Server Error	No Content

Response 201

Name	Description	Schema
CreatedAt *required*	UTC time when the resource was created	string (date-time)
Links *required*		< Links > array
PaymentId *required*	ASPSP identifier for the payment setup resource **Length** : 1 - 35	string
PaymentSubmissionId *required*	ASPSP identifier for the payment submission resource **Length** : 1 - 35	string
Status *required*	Status of the payment setup resource	enum (AcceptedSettlementInProcess, AcceptedSettlementCompleted, Received, Failed)

Links

Name	Schema
href *optional*	string (uri)
method *optional*	enum (GET)
rel *optional*	enum (self)

2.1.5. Consumes

- `application/json`

2.1.6. Produces

- `application/json`

2.1.7. Tags

- Payments

2.1.8. Security

Type	Name	Scopes
oauth2	**PSUOAuth2Security**	payment

2.2. Get a payment submission

```
GET /payment-submissions/{PaymentSubmissionId}
```

2.2.1. Description

Get payment submission

2.2.2. Parameters

Type	Name	Description	Schema
Path	**PaymentSubmissionId** *required*	ASPSP identifier for the payment submission resource	string

2.2.3. Responses

HTTP Code	Description	Schema
200	Payment resource successfully retrieved	Response 200
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content
500	Internal Server Error	No Content

Response 200

Name	Description	Schema
CreatedAt *required*	UTC time when the resource was created	string (date-time)
PaymentId *required*	ASPSP identifier for the payment setup resource **Length** : 1 - 35	string
PaymentSubmissionId *required*	ASPSP identifier for the payment submission resource **Length** : 1 - 35	string
Status *required*	Status of the payment setup resource	enum (AcceptedSettlementInProcess, AcceptedSettlementCompleted, Received, Failed)

2.2.4. Produces

- `application/json`

2.2.5. Tags

- Payments

2.2.6. Security

Type	Name	Scopes
oauth2	**TPPOAuth2Security**	tpp_client_credential

2.3. Create a single immediate payment

```
POST /payments
```

2.3.1. Description

Create a single immediate payment

2.3.2. Parameters

Type	Name	Description	Schema
Header	**Idempotency-Key** *required*	Every request will be processed only once per idempotency-key	string

2.3.3. Body parameter

Setup a single immediate payment

Name : body
Flags : required

Name	Description	Schema
CreditorAccount *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
DebtorAccount *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
EndToEndIdentification *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
InstructedAmount *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

Name	Description	Schema
InstructionIdentification *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
MerchantCategoryCode *optional*	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction. **Length** : 3 - 4	string
RemittanceInformation *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.	RemittanceInformation

CreditorAccount

Name	Description	Schema
Identification *required*	maxLength 34 text **Length** : 1 - 34	string
Name *required*	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

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

InstructedAmount

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

RemittanceInformation

Name	Description	Schema
CreditorReferenceInformation *optional*	Unique reference, as assigned by the creditor, to unambiguously refer to the payment transaction. Usage: If available, the initiating party should provide this reference in the structured remittance information, to enable reconciliation by the creditor upon receipt of the amount of money. If the business context requires the use of a creditor reference or a payment remit identification, and only one identifier can be passed through the end-to-end chain, the creditor's reference or payment remittance identification should be quoted in the end-to-end transaction identification. **Length** : 1 - 35	string
Unstructured *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

2.3.4. Responses

HTTP Code	Description	Schema
201	Payment setup resource successfully created	Payment setup POST response
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
409	Conflict	No Content
500	Internal Server Error	No Content

Payment setup POST response

Name	Description	Schema
CreatedAt *required*	UTC time when the resource was created	string (date-time)
CreditorAccount *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
DebtorAccount *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
EndToEndIdentification *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
InstructedAmount *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

Name	Description	Schema
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
Links *required*		< Links > array
MerchantCate goryCode *optional*	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction. **Length** : 3 - 4	string
PaymentId *required*	ASPSP identifier for the payment setup resource **Length** : 1 - 35	string
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
Status *required*	Status of the payment setup resource	enum (Pending, AcceptedTechnicalV alidation, AcceptedCustomerPr ofile)

CreditorAccount

Name	Description	Schema
Identification *required*	maxLength 34 text **Length** : 1 - 34	string
Name *required*	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

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

InstructedAmount

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

Links

Name	Schema
href *optional*	string (uri)
method *optional*	enum (GET)
rel *optional*	enum (self)

2.3.5. Consumes

- `application/json`

2.3.6. Produces

- `application/json`

2.3.7. Tags

- Payments

2.3.8. Security

Type	Name	Scopes
oauth2	**TPPOAuth2Security**	tpp_client_credential

2.4. Get a single immediate payment

```
GET /payments/{PaymentId}
```

2.4.1. Description

Get a single immediate payment

2.4.2. Parameters

Type	Name	Description	Schema
Path	**PaymentId** *required*	ASPSP identifier for the payment setup resource	string

2.4.3. Responses

HTTP Code	Description	Schema
200	Payment resource successfully retrieved	Payment setup GET response
400	Bad Request	No Content
401	Unauthorized	No Content
403	Forbidden	No Content
404	Not Found	No Content
500	Internal Server Error	No Content

Payment setup GET response

Name	Description	Schema
CreatedAt *required*	UTC time when the resource was created	string (date-time)
CreditorAccount *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
DebtorAccount *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

Name	Description	Schema
EndToEndIdentification *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
InstructedAmount *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
InstructionIdentification *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
MerchantCategoryCode *optional*	Category code conform to ISO 18245, related to the type of services or goods the merchant provides for the transaction. **Length** : 3 - 4	string
PaymentId *required*	ASPSP identifier for the payment setup resource **Length** : 1 - 35	string
RemittanceInformation *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
Status *required*	Status of the payment setup resource	enum (Pending, AcceptedTechnicalValidation, AcceptedCustomerProfile)

CreditorAccount

Name	Description	Schema
Identification *required*	maxLength 34 text **Length** : 1 - 34	string
Name *required*	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
SchemeName *required*	Specifies the external financial institution identification scheme name code in the format of character string.	enum (UKSortCode)

InstructedAmount

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

2.4.4. Produces

- `application/json`

2.4.5. Tags

- Payments

2.4.6. Security

Type	Name	Scopes
oauth2	**TPPOAuth2Security**	tpp_client_credential

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