

Payments REST API - Design

This document provides a basic design for the Payments REST API.

Create a payment

Create a payment.

URL : /v1/payments/

Method : POST

Headers : Content-Type: application/json

Auth required : NO

Permissions required : None

Data example All fields must be sent.

```
{
  "type": "Payment",
  "version": 0,
  "organisation_id": "743d5b63-8e6f-432e-a8fa-c5d8d2ee5fcb",
  "attributes": {
    "amount": "100.21",
    "beneficiary_party": {
      "account_name": "W Owens",
      "account_number": "31926819",
      "account_number_code": "BBAN",
      "account_type": 0,
      "address": "1 The Beneficiary Localtown SE2",
      "bank_id": "403000",
      "bank_id_code": "GBDSC",
      "name": "Wilfred Jeremiah Owens"
    },
    "charges_information": {
      "bearer_code": "SHAR",
      "sender_charges": [
        {
          "amount": "5.00",
          "currency": "GBP"
        },
        {
          "amount": "10.00",
          "currency": "USD"
        }
      ]
    }
  }
}
```

```

        "receiver_charges_amount": "1.00",
        "receiver_charges_currency": "USD"
    },
    "currency": "GBP",
    "debtor_party": {
        "account_name": "EJ Brown Black",
        "account_number": "GB29XABC10161234567801",
        "account_number_code": "IBAN",
        "address": "10 Debtor Crescent Sourcetown NE1",
        "bank_id": "203301",
        "bank_id_code": "GBDSC",
        "name": "Emelia Jane Brown"
    },
    "end_to_end_reference": "Wil piano Jan",
    "fx": {
        "contract_reference": "FX123",
        "exchange_rate": "2.00000",
        "original_amount": "200.42",
        "original_currency": "USD"
    },
    "numeric_reference": "1002001",
    "payment_id": "123456789012345678",
    "payment_purpose": "Paying for goods/services",
    "payment_scheme": "FPS",
    "payment_type": "Credit",
    "processing_date": "2017-01-18",
    "reference": "Payment for Em's piano lessons",
    "scheme_payment_sub_type": "InternetBanking",
    "scheme_payment_type": "ImmediatePayment",
    "sponsor_party": {
        "account_number": "56781234",
        "bank_id": "123123",
        "bank_id_code": "GBDSC"
    }
}

```

Success Response

Condition : If everything is OK and a payment didn't exist.

Code : 201 CREATED

Content example

```

{
  "data": {
    "id": "5b14fc8d530a6940e3ffc7b2",
    "type": "Payment",
    "version": 0,
    "organisation_id": "743d5b63-8e6f-432e-a8fa-c5d8d2ee5fcb",
  }
}

```

```
"attributes": {
  "amount": "100.21",
  "beneficiary_party": {
    "account_name": "W Owens",
    "account_number": "31926819",
    "account_number_code": "BBAN",
    "account_type": 0,
    "address": "1 The Beneficiary Localtown SE2",
    "bank_id": "403000",
    "bank_id_code": "GBDSC",
    "name": "Wilfred Jeremiah Owens"
  },
  "charges_information": {
    "bearer_code": "SHAR",
    "sender_charges": [
      {
        "amount": "5.00",
        "currency": "GBP"
      },
      {
        "amount": "10.00",
        "currency": "USD"
      }
    ],
    "receiver_charges_amount": "1.00",
    "receiver_charges_currency": "USD"
  },
  "currency": "GBP",
  "debtor_party": {
    "account_name": "EJ Brown Black",
    "account_number": "GB29XABC10161234567801",
    "account_number_code": "IBAN",
    "account_type": 0,
    "address": "10 Debtor Crescent Sourcetown NE1",
    "bank_id": "203301",
    "bank_id_code": "GBDSC",
    "name": "Emelia Jane Brown"
  },
  "end_to_end_reference": "Wil piano Jan",
  "fx": {
    "contract_reference": "FX123",
    "exchange_rate": "2.00000",
    "original_amount": "200.42",
    "original_currency": "USD"
  },
  "numeric_reference": "1002001",
  "payment_id": "123456789012345678",
  "payment_purpose": "Paying for goods/services",
  "payment_scheme": "FPS",
  "payment_type": "Credit",
  "processing_date": "2017-01-18",
  "reference": "Payment for Em's piano lessons",
  "scheme_payment_sub_type": "InternetBanking",
  "scheme_payment_type": "ImmediatePayment",
```

```
"sponsor_party": {  
  "account_name": "",  
  "account_number": "56781234",  
  "account_number_code": "",  
  "account_type": 0,  
  "address": "",  
  "bank_id": "123123",  
  "bank_id_code": "GBDSC",  
  "name": ""  
}  
}  
}  
}
```

Error Responses

Condition : If an invalid payment's payload was sent.

Code : 400 BAD REQUEST

Content :

```
{  
  "errors": [  
    {  
      "detail": "Invalid request payload",  
      "status": 400  
    }  
  ]  
}
```

Show all payments

Show all available payments.

URL : `/v1/payments/`

Method : `GET`

Headers : Content-Type: application/json

Auth required : NO

Permissions required : None

Data constraints : `{}`

Success Responses

Condition : There are no payments available.

Code : `200 OK`

Content : `{"data": []}`

OR

Condition : There is one or more payments available.

Code : `200 OK`

Content : In this example, there are two payments:

```
{
  "data": [
    {
      "type": "Payment",
      "id": "4ee3a8d8-ca7b-4290-a52c-dd5b6165ec43",
      "version": 0,
      "organisation_id": "743d5b63-8e6f-432e-a8fa-c5d8d2ee5fcb",
      "attributes": {
        "amount": "100.21",
        "beneficiary_party": {
          "account_name": "W Owens",
          "account_number": "31926819",
          "account_number_code": "BBAN",
          "account_type": 0,
          "address": "1 The Beneficiary Localtown SE2",
          "bank_id": "403000",
          "bank_id_code": "GBDSC",
          "name": "Wilfred Jeremiah Owens"
        }
      }
    },
  ],
}
```

```

    "charges_information": {
      "bearer_code": "SHAR",
      "sender_charges": [
        {
          "amount": "5.00",
          "currency": "GBP"
        },
        {
          "amount": "10.00",
          "currency": "USD"
        }
      ],
      "receiver_charges_amount": "1.00",
      "receiver_charges_currency": "USD"
    },
    "currency": "GBP",
    "debtor_party": {
      "account_name": "EJ Brown Black",
      "account_number": "GB29XABC10161234567801",
      "account_number_code": "IBAN",
      "address": "10 Debtor Crescent Saurcetown NE1",
      "bank_id": "203301",
      "bank_id_code": "GBDSC",
      "name": "Emelia Jane Brown"
    },
    "end_to_end_reference": "Wil piano Jan",
    "fx": {
      "contract_reference": "FX123",
      "exchange_rate": "2.00000",
      "original_amount": "200.42",
      "original_currency": "USD"
    },
    "numeric_reference": "1002001",
    "payment_id": "123456789012345678",
    "payment_purpose": "Paying for goods/services",
    "payment_scheme": "FPS",
    "payment_type": "Credit",
    "processing_date": "2017-01-18",
    "reference": "Payment for Em's piano lessons",
    "scheme_payment_sub_type": "InternetBanking",
    "scheme_payment_type": "ImmediatePayment",
    "sponsor_party": {
      "account_number": "56781234",
      "bank_id": "123123",
      "bank_id_code": "GBDSC"
    }
  },
  {
    "type": "Payment",
    "id": "216d4da9-e59a-4cc6-8df3-3da6e7580b77",
    "version": 0,
    "organisation_id": "743d5b63-8e6f-432e-a8fa-c5d8d2ee5fcb",
    "attributes": {

```

```
"amount": "100.21",
"beneficiary_party": {
  "account_name": "W Owens",
  "account_number": "31926819",
  "account_number_code": "BBAN",
  "account_type": 0,
  "address": "1 The Beneficiary Localtown SE2",
  "bank_id": "403000",
  "bank_id_code": "GBDSC",
  "name": "Wilfred Jeremiah Owens"
},
"charges_information": {
  "bearer_code": "SHAR",
  "sender_charges": [
    {
      "amount": "5.00",
      "currency": "GBP"
    },
    {
      "amount": "10.00",
      "currency": "USD"
    }
  ],
  "receiver_charges_amount": "1.00",
  "receiver_charges_currency": "USD"
},
"currency": "GBP",
"debtor_party": {
  "account_name": "EJ Brown Black",
  "account_number": "GB29XABC10161234567801",
  "account_number_code": "IBAN",
  "address": "10 Debtor Crescent Sourcetown NE1",
  "bank_id": "203301",
  "bank_id_code": "GBDSC",
  "name": "Emelia Jane Brown"
},
"end_to_end_reference": "Wil piano Jan",
"fx": {
  "contract_reference": "FX123",
  "exchange_rate": "2.00000",
  "original_amount": "200.42",
  "original_currency": "USD"
},
"numeric_reference": "1002001",
"payment_id": "123456789012345678",
"payment_purpose": "Paying for goods/services",
"payment_scheme": "FPS",
"payment_type": "Credit",
"processing_date": "2017-01-18",
"reference": "Payment for Em's piano lessons",
"scheme_payment_sub_type": "InternetBanking",
"scheme_payment_type": "ImmediatePayment",
"sponsor_party": {
  "account_number": "56781234",
```

```
    "bank_id": "123123",  
    "bank_id_code": "GBDSC"  
  }  
}  
]  
}
```

Show a single payment

Find and show a single payment by ID.

URL : `/v1/payments/:pk`

URL Parameters : `pk=[ObjectID]` where `pk` is the ID of the payment on the server.

Method : `GET`

Headers : Content-Type: application/json

Auth required : NO

Data: `{}`

Success Response

Condition : If payment exists.

Code : `200 OK`

Content

```
{
  "data": {
    "id": "5b14ed45530a693ba4246e96",
    "type": "Payment",
    "version": 0,
    "organisation_id": "88888-8e6f-432e-a8fa-c5d8d2ee5fcb",
    "attributes": {
      "amount": "100.21",
      "beneficiary_party": {
        "account_name": "W Owens",
        "account_number": "31926819",
        "account_number_code": "BBAN",
        "account_type": 0,
        "address": "1 The Beneficiary Localtown SE2",
        "bank_id": "403000",
        "bank_id_code": "GBDSC",
        "name": "Wilfred Jeremiah Owens"
      },
      "charges_information": {
        "bearer_code": "SHAR",
        "sender_charges": [
          {
            "amount": "5.00",
            "currency": "GBP"
          },
          {
            "amount": "10.00",
```

```

        "currency": "USD"
      }
    ],
    "receiver_charges_amount": "1.00",
    "receiver_charges_currency": "USD"
  },
  "currency": "GBP",
  "debtor_party": {
    "account_name": "EJ Brown Black",
    "account_number": "GB29XABC10161234567801",
    "account_number_code": "IBAN",
    "account_type": 0,
    "address": "10 Debtor Crescent Sourcetown NE1",
    "bank_id": "203301",
    "bank_id_code": "GBDSC",
    "name": "Emelia Jane Brown"
  },
  "end_to_end_reference": "Wil piano Jan",
  "fx": {
    "contract_reference": "FX123",
    "exchange_rate": "2.00000",
    "original_amount": "200.42",
    "original_currency": "USD"
  },
  "numeric_reference": "1002001",
  "payment_id": "123456789012345678",
  "payment_purpose": "Paying for goods/services",
  "payment_scheme": "FPS",
  "payment_type": "Credit",
  "processing_date": "2017-01-18",
  "reference": "Payment for Em's piano lessons",
  "scheme_payment_sub_type": "InternetBanking",
  "scheme_payment_type": "ImmediatePayment",
  "sponsor_party": {
    "account_name": "",
    "account_number": "56781234",
    "account_number_code": "",
    "account_type": 0,
    "address": "",
    "bank_id": "123123",
    "bank_id_code": "GBDSC",
    "name": ""
  }
}
}
}
}

```

Error Responses

Condition : If payment does not exist with **id** of provided **pk** parameter.

Code : 404 NOT FOUND

Content :

```
{
  "errors": [
    {
      "detail": "Payment ID does not exist",
      "status": 404
    }
  ]
}
```

Or

Condition : If payment ID is in invalid format.

Code : 400 BAD REQUEST

Content :

```
{
  "errors": [
    {
      "detail": "Invalid Payment ID",
      "status": 400
    }
  ]
}
```

Notes

-
-

Delete a payment

Delete a payment from database.

URL : `/v1/payments/:pk`

URL Parameters : `pk=[ObjectID]` where `pk` is the ID of the payment on the server.

Method : `DELETE`

Headers : Content-Type: application/json

Auth required : NO

Data: `{}`

Success Response

Condition : If the payment exists.

Code : `204 NO CONTENT`

Content:

```
{
  "data": {}
}
```

Error Responses

Condition : If payment does not exist with `id` of provided `pk` parameter.

Code : `404 NOT FOUND`

Content :

```
{
  "errors": [
    {
      "detail": "Payment ID does not exist",
      "status": 404
    }
  ]
}
```

Or

Condition : If payment ID is in invalid format.

Code : 400 BAD REQUEST

Content :

```
{
  "errors": [
    {
      "detail": "Invalid Payment ID",
      "status": 400
    }
  ]
}
```

Notes

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Update a payment

Fully update/override a payment on database. Use PATCH for partial update.

URL : `/v1/payments/:pk`

URL Parameters : `pk=[ObjectID]` where `pk` is the ID of the payment on the server.

Method : `PUT`

Headers : Content-Type: application/json

Auth required : NO

Data:

```
{
  "id": "5b14222b530a69fd4390de25",
  "type": "Payment",
  "version": 0,
  "organisation_id": "88888-8e6f-432e-a8fa-c5d8d2ee5fcb",
  "attributes": {
    "amount": "100.21",
    "beneficiary_party": {
      "account_name": "W Owens",
      "account_number": "31926819",
      "account_number_code": "BBAN",
      "account_type": 0,
      "address": "1 The Beneficiary Localtown SE2",
      "bank_id": "403000",
      "bank_id_code": "GBDSC",
      "name": "Wilfred Jeremiah Owens"
    },
    "charges_information": {
      "bearer_code": "SHAR",
      "sender_charges": [
        {
          "amount": "5.00",
          "currency": "GBP"
        },
        {
          "amount": "10.00",
          "currency": "USD"
        }
      ],
      "receiver_charges_amount": "1.00",
      "receiver_charges_currency": "USD"
    },
    "currency": "GBP",
    "debtor_party": {
      "account_name": "EJ Brown Black",
```

```

        "account_number": "GB29XABC10161234567801",
        "account_number_code": "IBAN",
        "address": "10 Debtor Crescent Sourcetown NE1",
        "bank_id": "203301",
        "bank_id_code": "GBDSC",
        "name": "Emelia Jane Brown"
    },
    "end_to_end_reference": "Wil piano Jan",
    "fx": {
        "contract_reference": "FX123",
        "exchange_rate": "2.00000",
        "original_amount": "200.42",
        "original_currency": "USD"
    },
    "numeric_reference": "1002001",
    "payment_id": "123456789012345678",
    "payment_purpose": "Paying for goods/services",
    "payment_scheme": "FPS",
    "payment_type": "Credit",
    "processing_date": "2017-01-18",
    "reference": "Payment for Em's piano lessons",
    "scheme_payment_sub_type": "InternetBanking",
    "scheme_payment_type": "ImmediatePayment",
    "sponsor_party": {
        "account_number": "56781234",
        "bank_id": "123123",
        "bank_id_code": "GBDSC"
    }
}

```

Success Response

Condition : If the payment exists.

Code : 200 OK

Content:

```

{
  "data": {
    "id": "5b14ed45530a693ba4246e96",
    "type": "Payment",
    "version": 0,
    "organisation_id": "88888-8e6f-432e-a8fa-c5d8d2ee5fcb",
    "attributes": {
      "amount": "100.21",
      "beneficiary_party": {
        "account_name": "W Owens",
        "account_number": "31926819",
        "account_number_code": "BBAN",

```

```
    "account_type": 0,
    "address": "1 The Beneficiary Localtown SE2",
    "bank_id": "403000",
    "bank_id_code": "GBDSC",
    "name": "Wilfred Jeremiah Owens"
  },
  "charges_information": {
    "bearer_code": "SHAR",
    "sender_charges": [
      {
        "amount": "5.00",
        "currency": "GBP"
      },
      {
        "amount": "10.00",
        "currency": "USD"
      }
    ],
    "receiver_charges_amount": "1.00",
    "receiver_charges_currency": "USD"
  },
  "currency": "GBP",
  "debtor_party": {
    "account_name": "EJ Brown Black",
    "account_number": "GB29XABC10161234567801",
    "account_number_code": "IBAN",
    "account_type": 0,
    "address": "10 Debtor Crescent Sourcetown NE1",
    "bank_id": "203301",
    "bank_id_code": "GBDSC",
    "name": "Emelia Jane Brown"
  },
  "end_to_end_reference": "Wil piano Jan",
  "fx": {
    "contract_reference": "FX123",
    "exchange_rate": "2.00000",
    "original_amount": "200.42",
    "original_currency": "USD"
  },
  "numeric_reference": "1002001",
  "payment_id": "123456789012345678",
  "payment_purpose": "Paying for goods/services",
  "payment_scheme": "FPS",
  "payment_type": "Credit",
  "processing_date": "2017-01-18",
  "reference": "Payment for Em's piano lessons",
  "scheme_payment_sub_type": "InternetBanking",
  "scheme_payment_type": "ImmediatePayment",
  "sponsor_party": {
    "account_name": "",
    "account_number": "56781234",
    "account_number_code": "",
    "account_type": 0,
    "address": ""
```



```
        "bank_id": "123123",
        "bank_id_code": "GBDSC",
        "name": ""
      }
    }
  }
}
```

Error Responses

Condition : If payment does not exist with **id** of provided **pk** parameter.

Code : 404 NOT FOUND

Content :

```
{
  "errors": [
    {
      "detail": "Payment ID does not exist",
      "status": 404
    }
  ]
}
```

Or

Condition : If payment ID is in invalid format.

Code : 400 BAD REQUEST

Content :

```
{
  "errors": [
    {
      "detail": "Invalid Payment ID",
      "status": 400
    }
  ]
}
```

Notes

- Additional notes
-

