

Culqi API Python - Documentación

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1 Introducción

La API de Culqi está construido bajo los estándares de REST. Es decir, nuestra API posee URLs orientada a recursos, y hace uso de los códigos de respuesta HTTP para indicar los posibles errores en el API. Es importante indicar que se encuentra implementada una autenticación HTTP (Bearer Token), solicitada en cada petición. Además, soportamos las solicitudes HTTP de origen cruzado (CORS), permitiendo que tu sitio y Culqi puedan interactuar de manera segura mediante nuestra API desde una aplicación cliente (aunque NUNCA deberías exponer tu Llave Secreta en el código de la aplicación web cliente). Por otro lado, un objeto JSON es retornado en cada una las peticiones hacia el API, incluyendo los errores. Adicionalmente nuestras bibliotecas convierten las respuestas en objetos específicos para cada lenguaje soportado.

Finalmente, para que puedas comenzar a experimentar con nuestra API, todas las cuentas registradas en Culqi poseen llaves para el entorno de pruebas (Regístrate y obtén tus llaves) y el entorno de producción. Usando las llaves de prueba las transacciones nunca pasan por las redes bancarias y no tienen ningún costo. (¡Recuerda usar tarjetas de prueba, no tarjetas reales al probar!).

2 Inicialización

Para inicializar el cliente necesitamos la llave pública y la llave privada que nos dan en Culqi al crear nuestro comercio. Suponiendo que hemos colocado nuestras llaves en un archivo `.env`, procedemos a cargarlas de la siguiente manera.

```
[1]: import os
import json
from uuid import uuid4
from copy import deepcopy
from dotenv import load_dotenv

load_dotenv();
```

Asumiendo que nuestras llaves fueron almacenadas en las variables de entorno `API_PUBLIC_KEY` y `API_PRIVATE_KEY`, inicializamos el cliente así

```
[2]: from culqi import Culqi

public_key = os.environ.get("API_PUBLIC_KEY")
private_key = os.environ.get("API_PRIVATE_KEY")

culqi = Culqi(public_key=public_key, private_key=private_key)
```

3 Recursos

Para mostrar la forma de acceder a los distintos recursos de Culqi emplearemos datos de pruebas. Estos datos serán los mismos que utilizamos en los tests.

```
[3]: class Data:
    CARD = {
        "successful": {
            "visa": {
                "card_number": "4111111111111111",
                "expiration_month": "09",
                "expiration_year": "2025",
                "cvv": "123",
                "email": "richard@piedpiper.com",
            },
            "master_card": {
                "card_number": "5111111111111118",
                "expiration_month": "06",
                "expiration_year": "2025",
                "cvv": "039",
                "email": "richard@piedpiper.com",
            },
            "american_express": {
                "card_number": "371212121212122",
                "expiration_month": "11",
                "expiration_year": "2025",
                "cvv": "2841",
                "email": "richard@piedpiper.com",
            },
            "diners_club": {
                "card_number": "36001212121210",
                "expiration_month": "04",
                "expiration_year": "2025",
                "cvv": "964",
                "email": "richard@piedpiper.com",
            },
        },
        "stolen_card": {
            "visa": {
                "card_number": "4000020000000000",
```

```

        "expiration_month": "10",
        "expiration_year": "2025",
        "cvv": "354",
        "email": "richard@piedpiper.com",
    },
},
"lost_card": {
    "visa": {
        "card_number": "4000030000000009",
        "expiration_month": "08",
        "expiration_year": "2025",
        "cvv": "836",
        "email": "richard@piedpiper.com",
    }
},
"insufficient_funds": {
    "visa": {
        "card_number": "4000040000000008",
        "expiration_month": "03",
        "expiration_year": "2025",
        "cvv": "295",
        "email": "richard@piedpiper.com",
    }
},
"contact_issuer": {
    "master_card": {
        "card_number": "5400000000000005",
        "expiration_month": "01",
        "expiration_year": "2025",
        "cvv": "492",
        "email": "richard@piedpiper.com",
    }
},
"incorrect_cvv": {
    "master_card": {
        "card_number": "5400020000000003",
        "expiration_month": "07",
        "expiration_year": "2025",
        "cvv": "203",
        "email": "richard@piedpiper.com",
    }
},
"issuer_not_available": {
    "american_express": {
        "card_number": "3700010000000000",
        "expiration_month": "04",
        "expiration_year": "2025",
    }
}

```

```

        "cvv": "2511",
        "email": "richard@piedpiper.com",
    }
},
"issuer_decline_operation": {
    "american_express": {
        "card_number": "3700020000000008",
        "expiration_month": "05",
        "expiration_year": "2025",
        "cvv": "1810",
        "email": "richard@piedpiper.com",
    }
},
"invalid_card": {
    "diners_club": {
        "card_number": "3600000000000008",
        "expiration_month": "09",
        "expiration_year": "2025",
        "cvv": "683",
        "email": "richard@piedpiper.com",
    }
},
"processing_error": {
    "diners_club": {
        "card_number": "3600010000000007",
        "expiration_month": "12",
        "expiration_year": "2025",
        "cvv": "820",
        "email": "richard@piedpiper.com",
    }
},
"fraudulent": {
    "diners_club": {
        "card_number": "3600020000000006",
        "expiration_month": "01",
        "expiration_year": "2025",
        "cvv": "230",
        "email": "richard@piedpiper.com",
    }
},
}

CHARGE = {
    "amount": 1000,
    "capture": False,
    "currency_code": "PEN",
    "description": "Venta de prueba",

```

```

    "email": "richard@piedpiper.com",
    "installments": 0,
    "source_id": None,
}

REFUND = {
    "amount": 100,
    "reason": "solicitud_comprador",
    "charge_id": None,
}

CUSTOMER = {
    "address": "Avenida Lima 123213",
    "address_city": "LIMA",
    "country_code": "PE",
    "email": None,
    "first_name": "Richard",
    "last_name": "Piedpiper",
    "phone_number": "+51998989789",
}

PLAN = {
    "amount": 1000,
    "currency_code": "PEN",
    "interval": "dias",
    "interval_count": 2,
    "limit": 10,
    "name": None,
    "trial_days": 30,
}

ORDER = {
    "amount": 1000,
    "currency_code": "PEN",
    "description": "Venta de prueba",
    "order_number": None,
    "client_details": {
        "first_name": "Richard",
        "last_name": "Piedpiper",
        "email": "richard@piedpiper.com",
        "phone_number": "+51998989789",
    },
    "expiration_date": 1893474000,
    "confirm": False,
}

```

Una función que vamos a emplear es `display` para mostrar de manera legible las respuestas entre-

gadas por Culqi en cada una de nuestras operaciones,

```
[4]: def display(data):  
      print(json.dumps(data, indent=4, ensure_ascii=False))
```

3.1 Tokens

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/tokens>

```
[5]: def get_token_data(code, provider):  
      return deepcopy(Data.CARD[code][provider])
```

3.1.1 Listar

```
[6]: token_list = culqi.token.list(  
      data={  
          "limit": 1,  
      },  
      headers={  
          "Accept-Encoding": "identity",  
      }  
)  
  
display(token_list)  
  
{  
  "status": 200,  
  "data": {  
    "paging": {  
      "previous":  
"https://api.culqi.com/v2/tokens?limit=1&before=tkn_test_CcP3ZegM0zlVNuQv",  
      "next":  
"https://api.culqi.com/v2/tokens?limit=1&after=tkn_test_CcP3ZegM0zlVNuQv",  
      "cursors": {  
        "before": "tkn_test_CcP3ZegM0zlVNuQv",  
        "after": "tkn_test_CcP3ZegM0zlVNuQv"  
      },  
      "remaining_items": 0  
    },  
    "items": [  
      {  
        "object": "token",  
        "id": "tkn_test_CcP3ZegM0zlVNuQv",  
        "type": "card",  
        "creation_date": 1615131583000,  
        "email": "richard0b7f@piedpiper.com",  
        "card_number": "360001****0007",  
        "last_four": "0007",
```

```

        "active": true,
        "iin": {
            "object": "iin",
            "bin": "360001",
            "card_brand": "Diners",
            "card_type": "credito",
            "card_category": null,
            "issuer": {
                "name": "",
                "country": "PERU",
                "country_code": "PE",
                "website": null,
                "phone_number": null
            },
            "installments_allowed": []
        },
        "client": {
            "ip": "191.98.182.73",
            "ip_country": "Peru",
            "ip_country_code": "PE",
            "browser": "UNKNOWN",
            "device_fingerprint": null,
            "device_type": "Escritorio"
        },
        "metadata": {}
    }
}
]
}
}

```

3.1.1.2 Crear

```
[7]: token_data = get_token_data("successful", "visa")
token = culqi.token.create(data=token_data)
```

```
display(token)
```

```

{
    "status": 201,
    "data": {
        "object": "token",
        "id": "tkn_test_qW2ETydmZ8CmKZQE",
        "type": "card",
        "creation_date": 1615131587000,
        "email": "richard@piedpiper.com",
        "card_number": "411111*****1111",
        "last_four": "1111",
        "active": true,

```

```

    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",
      "card_type": "credito",
      "card_category": "Clásica",
      "issuer": {
        "name": "BBVA",
        "country": "PERU",
        "country_code": "PE",
        "website": null,
        "phone_number": null
      },
      "installments_allowed": [
        2,
        4,
        6,
        8,
        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
      ]
    },
    "client": {
      "ip": "191.98.182.73",
      "ip_country": "Peru",
      "ip_country_code": "PE",
      "browser": "UNKNOWN",
      "device_fingerprint": null,
      "device_type": "Escritorio"
    },
    "metadata": {}
  }
}

```

3.1.3 Leer

```

[8]: token_id = token["data"]["id"]
    token = culqi.token.read(id_=token_id)

    display(token)

```

```

{

```



```

"status": 200,
"data": {
  "object": "token",
  "id": "tkn_test_qW2ETydmZ8CmKZQE",
  "type": "card",
  "creation_date": 1615131587000,
  "email": "richard@piedpiper.com",
  "card_number": "411111*****1111",
  "last_four": "1111",
  "active": true,
  "iin": {
    "object": "iin",
    "bin": "411111",
    "card_brand": "Visa",
    "card_type": "credito",
    "card_category": "Clásica",
    "issuer": {
      "name": "BBVA",
      "country": "PERU",
      "country_code": "PE",
      "website": null,
      "phone_number": null
    },
    "installments_allowed": [
      2,
      4,
      6,
      8,
      10,
      12,
      3,
      5,
      7,
      9,
      24,
      48
    ]
  },
  "client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
  },
  "metadata": {}
}

```

```
}
```

3.1.4 Actualizar

```
[9]: token_id = token["data"]["id"]
token_metadata = {
    "metadata": {
        "orderId": "1234567890"
    }
}
token = culqi.token.update(id=token_id, data=token_metadata)

display(token)
```

```
{
  "status": 200,
  "data": {
    "object": "token",
    "id": "tkn_test_qW2ETydmZ8CmKZQE",
    "type": "card",
    "creation_date": 1615131587000,
    "email": "richard@piedpiper.com",
    "card_number": "411111*****1111",
    "last_four": "1111",
    "active": true,
    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",
      "card_type": "credito",
      "card_category": "Clásica",
      "issuer": {
        "name": "BBVA",
        "country": "PERU",
        "country_code": "PE",
        "website": null,
        "phone_number": null
      },
    },
    "installments_allowed": [
      2,
      4,
      6,
      8,
      10,
      12,
      3,
      5,
      7,
```

```

        9,
        24,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {
    "orderId": "1234567890"
}
}
}

```

3.2 Cargos

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/cargos>

```

[10]: def get_charge_data(code, provider):
    token_data = deepcopy(Data.CARD[code][provider])
    token = culqi.token.create(data=token_data)

    charge_data = deepcopy(Data.CHARGE)
    charge_data["source_id"] = token["data"]["id"]

    return charge_data

```

3.2.1 Listar

```

[11]: charge_list = culqi.charge.list(
    data={
        "limit": 1,
    },
    headers={
        "Accept-Encoding": "identity",
    },
)

display(charge_list)

{
    "status": 200,
    "data": {

```

```

    "paging": {
      "previous":
"https://api.culqi.com/v2/charges?limit=1&before=chr_test_XC0vjjYHs9PKwqKj",
      "next":
"https://api.culqi.com/v2/charges?limit=1&after=chr_test_XC0vjjYHs9PKwqKj",
      "cursors": {
        "before": "chr_test_XC0vjjYHs9PKwqKj",
        "after": "chr_test_XC0vjjYHs9PKwqKj"
      },
      "remaining_items": 338
    },
    "items": [
      {
        "duplicated": null,
        "object": "charge",
        "id": "chr_test_XC0vjjYHs9PKwqKj",
        "creation_date": 1615131590000,
        "amount": 100,
        "amount_refunded": 0,
        "current_amount": 100,
        "installments": 0,
        "installments_amount": null,
        "currency_code": "PEN",
        "email": null,
        "description": "Validacion de tarjeta",
        "source": {
          "object": "token",
          "id": "tkn_test_8SSSqy9swCHbfZ1F",
          "type": "card",
          "creation_date": 1615131588000,
          "email": "richardbfc3@piedpiper.com",
          "card_number": "400002*****0000",
          "last_four": "0000",
          "active": true,
          "iin": {
            "object": "iin",
            "bin": "400002",
            "card_brand": "Visa",
            "card_type": "credito",
            "card_category": null,
            "issuer": {
              "name": "RIVER VALLEY C.U.",
              "country": "PERU",
              "country_code": null,
              "website": null,
              "phone_number": null
            },
            "installments_allowed": null
          }
        }
      }
    ]
  }

```

```

    },
    "client": {
        "ip": "191.98.182.73",
        "ip_country": null,
        "ip_country_code": "PE",
        "browser": null,
        "device_fingerprint": null,
        "device_type": null
    },
    "metadata": {}
},
"outcome": {
    "type": "card_error",
    "code": "card_declined",
    "decline_code": "stolen_card",
    "merchant_message": "Tarjeta robada. La tarjeta fue
bloqueada y reportada al banco emisor como una tarjeta robada.",
    "user_message": "Su tarjeta está vencida. Verifica la fecha
de vencimiento de tu tarjeta e ingrésalos correctamente. Si es denegada
nuevamente, contáctate con el banco emisor de tu tarjeta."
},
"fraud_score": null,
"antifraud_details": {
    "first_name": "Richard",
    "last_name": "Piedpiper",
    "address": "Avenida Lima 123213",
    "address_city": "LIMA",
    "country_code": "PE",
    "phone": "51998989789",
    "object": "client"
},
"dispute": false,
"capture": null,
"reference_code": "LxqYIoLTFG",
"authorization_code": "zdXUZU",
"metadata": {},
"total_fee": null,
"fee_details": {
    "fixed_fee": null,
    "variable_fee": null
},
"total_fee_taxes": null,
"transfer_amount": null,
"paid": false,
"statement_descriptor": null,
"transfer_id": null,
"operations": [],
"capture_date": null

```

```

    }
  ]
}
}

```

3.2.2 Crear

```

[12]: charge_data = get_charge_data("successful", "visa")
      charge = culqi.charge.create(data=charge_data)

      display(charge)

```

```

{
  "status": 201,
  "data": {
    "duplicated": false,
    "object": "charge",
    "id": "chr_test_M4efNkiZX9jszJQA",
    "creation_date": 1615131596000,
    "amount": 1000,
    "amount_refunded": 0,
    "current_amount": 1000,
    "installments": 1,
    "installments_amount": 1000,
    "currency_code": "PEN",
    "email": "richard@piedpiper.com",
    "description": "Venta de prueba",
    "source": {
      "object": "token",
      "id": "tkn_test_by2icDaZJGAAYY00",
      "type": "card",
      "creation_date": 1615131594000,
      "email": "richard@piedpiper.com",
      "card_number": "411111*****1111",
      "last_four": "1111",
      "active": true,
      "iin": {
        "object": "iin",
        "bin": "411111",
        "card_brand": "Visa",
        "card_type": "credito",
        "card_category": "Clásica",
        "issuer": {
          "name": "BBVA",
          "country": "PERU",
          "country_code": "PE",
          "website": null,
          "phone_number": null
        }
      }
    }
  }
}

```

```

    },
    "installments_allowed": [
        2,
        4,
        6,
        8,
        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {}
},
"outcome": {
    "type": "venta_exitosa",
    "code": "AUT0000",
    "merchant_message": "La operación de venta ha sido autorizada exitosamente",
    "user_message": "Su compra ha sido exitosa."
},
"fraud_score": 56.0,
"dispute": false,
"capture": false,
"reference_code": "bYYXVQ7bfh",
"authorization_code": "qnXJW5",
"metadata": {},
"total_fee": 47,
"fee_details": {
    "fixed_fee": {},
    "variable_fee": {
        "currency_code": "PEN",
        "commision": 0.0399,
        "total": 40
    }
}
},

```

```

        "total_fee_taxes": 7,
        "transfer_amount": 953,
        "paid": false,
        "statement_descriptor": "CULQI*",
        "transfer_id": null,
        "capture_date": null
    }
}

```

3.2.3 Capturar

```

[13]: charge_id = charge["data"]["id"]
      captured_charge = culqi.charge.capture(id_=charge_id)

      display(captured_charge)

```

```

{
  "status": 201,
  "data": {
    "duplicated": false,
    "object": "charge",
    "id": "chr_test_M4efNkiZX9jszJQA",
    "creation_date": 1615131596000,
    "amount": 1000,
    "amount_refunded": 0,
    "current_amount": 1000,
    "installments": 1,
    "installments_amount": 1000,
    "currency_code": "PEN",
    "email": "richard@piedpiper.com",
    "description": "Venta de prueba",
    "source": {
      "object": "token",
      "id": "tkn_test_by2icDaZJGAAYY00",
      "type": "card",
      "creation_date": 1615131594000,
      "email": "richard@piedpiper.com",
      "card_number": "411111*****1111",
      "last_four": "1111",
      "active": true,
      "iin": {
        "object": "iin",
        "bin": "411111",
        "card_brand": "Visa",
        "card_type": "credito",
        "card_category": null,
        "issuer": {
          "name": "BBVA",

```



```

        "country": "PERU",
        "country_code": null,
        "website": null,
        "phone_number": null
    },
    "installments_allowed": null
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": null,
    "ip_country_code": null,
    "browser": null,
    "device_fingerprint": null,
    "device_type": null
},
"metadata": {}
},
"outcome": {
    "type": "venta_exitosa",
    "code": "AUT0000",
    "merchant_message": "La operación de venta ha sido autorizada
 exitosadamente",
    "user_message": "Su compra ha sido exitosa."
},
"fraud_score": 56.0,
"dispute": false,
"capture": true,
"reference_code": "bYYXVQ7bfh",
"authorization_code": "qnXJW5",
"metadata": {},
"total_fee": 47,
"fee_details": {
    "fixed_fee": {},
    "variable_fee": {
        "currency_code": "PEN",
        "commision": 0.0399,
        "total": 40
    }
},
"total_fee_taxes": 7,
"transfer_amount": 953,
"paid": false,
"statement_descriptor": "CULQI*",
"transfer_id": null,
"operations": [],
"capture_date": null
}
}

```

3.2.4 Leer

```
[14]: charge_id = captured_charge["data"]["id"]
      charge = culqi.charge.read(id_=charge_id)

      display(charge)

{
  "status": 200,
  "data": {
    "duplicated": false,
    "object": "charge",
    "id": "chr_test_M4efNkiZX9jszJQA",
    "creation_date": 1615131596000,
    "amount": 1000,
    "amount_refunded": 0,
    "current_amount": 1000,
    "installments": 1,
    "installments_amount": 1000,
    "currency_code": "PEN",
    "email": "richard@piedpiper.com",
    "description": "Venta de prueba",
    "source": {
      "object": "token",
      "id": "tkn_test_by2icDaZJGAAYY00",
      "type": "card",
      "creation_date": 1615131594000,
      "email": "richard@piedpiper.com",
      "card_number": "411111*****1111",
      "last_four": "1111",
      "active": true,
      "iin": {
        "object": "iin",
        "bin": "411111",
        "card_brand": "Visa",
        "card_type": "credito",
        "card_category": null,
        "issuer": {
          "name": "BBVA",
          "country": "PERU",
          "country_code": null,
          "website": null,
          "phone_number": null
        },
        "installments_allowed": null
      },
      "client": {
        "ip": "191.98.182.73",
```

```

        "ip_country": null,
        "ip_country_code": null,
        "browser": null,
        "device_fingerprint": null,
        "device_type": null
    },
    "metadata": {}
},
"outcome": {
    "type": "venta_exitosa",
    "code": "AUT0000",
    "merchant_message": "La operación de venta ha sido autorizada
 exitosamente",
    "user_message": "Su compra ha sido exitosa."
},
"fraud_score": 56.0,
"dispute": false,
"capture": true,
"reference_code": "bYYXVQ7bfh",
"authorization_code": "qnXJW5",
"metadata": {},
"total_fee": 47,
"fee_details": {
    "fixed_fee": {},
    "variable_fee": {
        "currency_code": "PEN",
        "commision": 0.0399,
        "total": 40
    }
},
"total_fee_taxes": 7,
"transfer_amount": 953,
"paid": false,
"statement_descriptor": "CULQI*",
"transfer_id": null,
"operations": [],
"capture_date": 1615131600000
}
}

```

3.2.5 Actualizar

```

[15]: charge_id = charge["data"]["id"]
charge_metadata = {
    "metadata": {
        "orderId": 1234567890
    }
}

```

```

}
charge = culqi.charge.update(id_=charge_id, data=charge_metadata)

display(charge)

```

```

{
  "status": 200,
  "data": {
    "duplicated": false,
    "object": "charge",
    "id": "chr_test_M4efNkiZX9jszJQA",
    "creation_date": 1615131596000,
    "amount": 1000,
    "amount_refunded": 0,
    "current_amount": 1000,
    "installments": 1,
    "installments_amount": 1000,
    "currency_code": "PEN",
    "email": "richard@piedpiper.com",
    "description": "Venta de prueba",
    "source": {
      "object": "token",
      "id": "tkn_test_by2icDaZJGAAYY00",
      "type": "card",
      "creation_date": 1615131594000,
      "email": "richard@piedpiper.com",
      "card_number": "411111*****1111",
      "last_four": "1111",
      "active": true,
      "iin": {
        "object": "iin",
        "bin": "411111",
        "card_brand": "Visa",
        "card_type": "credito",
        "card_category": "Clásica",
        "issuer": {
          "name": "BBVA",
          "country": "PERU",
          "country_code": "PE",
          "website": null,
          "phone_number": null
        }
      },
      "installments_allowed": [
        2,
        4,
        6,
        8,

```

```

        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {}
},
"outcome": {
    "type": "venta_exitosa",
    "code": "AUT0000",
    "merchant_message": "La operación de venta ha sido autorizada exitosamente",
    "user_message": "Su compra ha sido exitosa."
},
"fraud_score": 56.0,
"dispute": false,
"capture": true,
"reference_code": "bYYXVQ7bfh",
"authorization_code": "qnXJW5",
"metadata": {
    "orderId": "1234567890"
},
"total_fee": 47,
"fee_details": {
    "fixed_fee": {},
    "variable_fee": {
        "currency_code": "PEN",
        "commision": 0.0399,
        "total": 40
    }
},
"total_fee_taxes": 7,
"transfer_amount": 953,
"paid": false,
"statement_descriptor": "CULQI*",

```

```

        "transfer_id": null,
        "capture_date": 1615131600000
    }
}

```

3.3 Devoluciones

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/devoluciones>

```

[16]: def get_refund_data(kind, provider):
    token_data = deepcopy(Data.CARD[kind][provider])
    token = culqi.token.create(data=token_data)

    charge_data = deepcopy(Data.CHARGE)
    charge_data["source_id"] = token["data"]["id"]
    charge = culqi.charge.create(data=charge_data)

    refund_data = deepcopy(Data.REFUND)
    refund_data["charge_id"] = charge["data"]["id"]

    return refund_data

```

3.3.1 Listar

```

[17]: refund_list = culqi.refund.list(
    data={
        "limit": 1,
    },
    headers={
        "Accept-Encoding": "identity",
    },
)

display(refund_list)

```

```

{
    "status": 200,
    "data": {
        "paging": {
            "previous":
"https://api.culqi.com/v2/refunds?limit=1&before=ref_test_NIKAx4LD0hRx8tv3",
            "next":
"https://api.culqi.com/v2/refunds?limit=1&after=ref_test_NIKAx4LD0hRx8tv3",
            "cursors": {
                "before": "ref_test_NIKAx4LD0hRx8tv3",
                "after": "ref_test_NIKAx4LD0hRx8tv3"
            },
            "remaining_items": null
        }
    }
}

```

```

    },
    "items": [
      {
        "object": "refund",
        "id": "ref_test_NIKAx4LD0hRx8tv3",
        "charge_id": "chr_test_pmmqoIHBNpxTPLQk",
        "creation_date": 1615131607000,
        "amount": 100,
        "reason": "Devolución solicitada por el comercio",
        "metadata": {}
      }
    ]
  }
}

```

3.3.2 Crear

```

[18]: refund_data = get_refund_data("successful", "visa")
refund = culqi.refund.create(data=refund_data)

display(refund)

```

```

{
  "status": 201,
  "data": {
    "object": "refund",
    "id": "ref_test_Bot8onvJGFK2D0zX",
    "charge_id": "chr_test_sT8485Ik7QBskbv1",
    "creation_date": 1615131614000,
    "amount": 100,
    "reason": "Devolución solicitada por el comercio",
    "metadata": {}
  }
}

```

3.3.3 Leer

```

[19]: refund_id = refund["data"]["id"]
refund = culqi.refund.read(id_=refund_id)

display(refund)

```

```

{
  "status": 200,
  "data": {
    "object": "refund",
    "id": "ref_test_Bot8onvJGFK2D0zX",
    "charge_id": "chr_test_sT8485Ik7QBskbv1",

```

```

        "creation_date": 1615131614000,
        "amount": 100,
        "reason": "Devolución solicitada por el comercio",
        "metadata": {}
    }
}

```

3.3.4 Actualizar

```

[20]: refund_id = refund["data"]["id"]
refund_metadata = {
    "metadata": {
        "orderId": 1234567890
    }
}
refund = culqi.refund.update(id=refund_id, data=refund_metadata)

display(refund)

```

```

{
    "status": 200,
    "data": {
        "object": "refund",
        "id": "ref_test_Bot8onvJGFK2D0zX",
        "charge_id": "chr_test_sT8485Ik7QBskbvl",
        "creation_date": 1615131614000,
        "amount": 100,
        "reason": "Devolución solicitada por el comercio",
        "metadata": {
            "orderId": "1234567890"
        }
    }
}

```

3.4 Clientes

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/clientes>

```

[21]: def get_customer_data():
    customer_data = deepcopy(Data.CUSTOMER)
    customer_data["email"] = "richard{0}@piedpiper.com".format(uuid4().hex[:4])

    return customer_data

```


3.4.1 Listar

```
[22]: customer_list = culqi.customer.list(
    data={
        "limit": 1,
    },
    headers={
        "Accept-Encoding": "identity",
    },
)

display(customer_list)

{
  "status": 200,
  "data": {
    "paging": {
      "previous":
"https://api.culqi.com/v2/customers?limit=1&before=cus_test_f4l7UKPuYrORPvyP",
      "next":
"https://api.culqi.com/v2/customers?limit=1&after=cus_test_f4l7UKPuYrORPvyP",
      "cursors": {
        "before": "cus_test_f4l7UKPuYrORPvyP",
        "after": "cus_test_f4l7UKPuYrORPvyP"
      },
      "remaining_items": null
    },
    "items": [
      {
        "object": "customer",
        "id": "cus_test_f4l7UKPuYrORPvyP",
        "creation_date": 1615131609000,
        "email": "richard50be@piedpiper.com",
        "antifraud_details": {
          "first_name": "Richard",
          "last_name": "Piedpiper",
          "address": "Avenida Lima 123213",
          "address_city": "LIMA",
          "country_code": "PE",
          "phone": "+51998989789",
          "object": "client"
        },
        "cards": [
          {
            "object": "card",
            "id": "crd_test_yAPm5rwlF3aTGVHa",
            "active": true,
            "creation_date": 1615131614000,
```

```

"customer_id": "cus_test_f4l7UKPuYrORPvyP",
"source": {
  "object": "token",
  "id": "tkn_test_mw7AQicjl0II6Y5u",
  "type": "card",
  "creation_date": 1615131608000,
  "email": "richard50be@piedpiper.com",
  "card_number": "511111*****1118",
  "last_four": "1118",
  "active": true,
  "iin": {
    "object": "iin",
    "bin": "511111",
    "card_brand": "MasterCard",
    "card_type": "debito",
    "card_category": "Clásica",
    "issuer": {
      "name": "INTERBANK",
      "country": "PERU",
      "country_code": "PE",
      "website": null,
      "phone_number": null
    },
    "installments_allowed": [
      24,
      2,
      3,
      4,
      5,
      6,
      7,
      8,
      9,
      12,
      48
    ]
  },
  "client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
  },
  "metadata": {}
},
"metadata": {}

```

```

        }
    ],
    "metadata": {}
}
]
}
}

```

3.4.2 Crear

```

[23]: customer_data = get_customer_data()
customer = culqi.customer.create(data=customer_data)

display(customer)

```

```

{
  "status": 201,
  "data": {
    "object": "customer",
    "id": "cus_test_xHxfvWLS9lInzdqE",
    "creation_date": 1615131616908,
    "email": "richard8f52@piedpiper.com",
    "antifraud_details": {
      "first_name": "Richard",
      "last_name": "Piedpiper",
      "address": "Avenida Lima 123213",
      "address_city": "LIMA",
      "country_code": "PE",
      "phone": "+51998989789",
      "object": "client"
    },
    "metadata": {}
  }
}

```

3.4.3 Leer

```

[24]: customer_id = customer["data"]["id"]
customer = culqi.customer.read(id_=customer_id)

display(customer)

```

```

{
  "status": 200,
  "data": {
    "object": "customer",
    "id": "cus_test_xHxfvWLS9lInzdqE",
    "creation_date": 1615131616000,

```

```

    "email": "richard8f52@piedpiper.com",
    "antifraud_details": {
      "first_name": "Richard",
      "last_name": "Piedpiper",
      "address": "Avenida Lima 123213",
      "address_city": "LIMA",
      "country_code": "PE",
      "phone": "+51998989789",
      "object": "client"
    },
    "cards": [],
    "metadata": {}
  }
}

```

3.4.4 Actualizar

```

[25]: customer_id = customer["data"]["id"]
customer_metadata = {
    "metadata": {
        "orderId": 1234567890
    }
}
customer = culqi.customer.update(
    id=customer_id, data=customer_metadata
)

display(customer)

```

```

{
  "status": 200,
  "data": {
    "object": "customer",
    "id": "cus_test_xHxfvWLS9lInzdzqE",
    "creation_date": 1615131616000,
    "email": "richard8f52@piedpiper.com",
    "antifraud_details": {
      "first_name": "Richard",
      "last_name": "Piedpiper",
      "address": "Avenida Lima 123213",
      "address_city": "LIMA",
      "country_code": "PE",
      "phone": "+51998989789",
      "object": "client"
    },
    "metadata": {
      "orderId": "1234567890"
    }
  }
}

```

```

    }
}

```

3.4.5 Eliminar

```

[26]: customer_id = customer["data"]["id"]
      deleted_customer = culqi.customer.delete(id=customer_id)

      display(deleted_customer)

```

```

{
  "status": 200,
  "data": {
    "id": "cus_test_xHxfvWLS9lInzdqE",
    "deleted": true,
    "merchant_message": "Se eliminó el cliente con ID
cus_test_xHxfvWLS9lInzdqE exitosamente."
  }
}

```

3.5 Tarjetas

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/tarjetas>

```

[27]: def get_card_data(code, provider):
      email = "richard{0}@piedpiper.com".format(uuid4().hex[:4])

      token_data = deepcopy(Data.CARD[code][provider])
      token_data["email"] = email
      token = culqi.token.create(data=token_data)

      customer_data = deepcopy(Data.CUSTOMER)
      customer_data["email"] = email
      customer = culqi.customer.create(data=customer_data)

      return {
        "token_id": token["data"]["id"],
        "customer_id": customer["data"]["id"],
      }

```

3.5.1 Listar

```

[28]: card_list = culqi.card.list(
      data={
        "limit": 1,
      },
      headers={
        "Accept-Encoding": "identity",
      }
)

```

```

    },
)

display(card_list)

```

```

{
  "status": 200,
  "data": {
    "paging": {
      "previous":
"https://api.culqi.com/v2/cards?limit=1&before=crd_test_yAPm5rwlF3aTGVHa",
      "next":
"https://api.culqi.com/v2/cards?limit=1&after=crd_test_yAPm5rwlF3aTGVHa",
      "cursors": {
        "before": "crd_test_yAPm5rwlF3aTGVHa",
        "after": "crd_test_yAPm5rwlF3aTGVHa"
      },
      "remaining_items": 83
    },
    "items": [
      {
        "object": "card",
        "id": "crd_test_yAPm5rwlF3aTGVHa",
        "active": true,
        "creation_date": 1615131614000,
        "customer_id": "cus_test_f417UKPuYrORPvyP",
        "source": {
          "object": "token",
          "id": "tkn_test_mw7AQicjl0II6Y5u",
          "type": "card",
          "creation_date": 1615131608000,
          "email": "richard50be@piedpiper.com",
          "card_number": "511111*****1118",
          "last_four": "1118",
          "active": true,
          "iin": {
            "object": "iin",
            "bin": "511111",
            "card_brand": "MasterCard",
            "card_type": "debito",
            "card_category": "Clásica",
            "issuer": {
              "name": "INTERBANK",
              "country": "PERU",
              "country_code": "PE",
              "website": null,
              "phone_number": null
            }
          }
        }
      }
    ]
  }
}

```

```

    },
    "installments_allowed": [
        24,
        2,
        3,
        4,
        5,
        6,
        7,
        8,
        9,
        12,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {}
},
"metadata": {}
}
]
}
}

```

3.5.2 Crear

```

[29]: card_data = get_card_data("successful", "visa")
card = culqi.card.create(data=card_data)

display(card)

```

```

{
    "status": 201,
    "data": {
        "object": "card",
        "id": "crd_test_3HS06nwaWNH7GJv9",
        "active": true,
        "creation_date": 1615131630282,
        "customer_id": "cus_test_357GTykK2sAJymJB",
        "source": {
            "object": "token",

```

```

    "id": "tkn_test_46FxFV1t3eF7anVP",
    "type": "card",
    "creation_date": 1615131624000,
    "email": "richard0640@piedpiper.com",
    "card_number": "411111*****1111",
    "last_four": "1111",
    "active": true,
    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",
      "card_type": "credito",
      "card_category": "Clásica",
      "issuer": {
        "name": "BBVA",
        "country": "PERU",
        "country_code": "PE",
        "website": null,
        "phone_number": null
      },
      "installments_allowed": [
        2,
        4,
        6,
        8,
        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
      ]
    },
    "client": {
      "ip": "191.98.182.73",
      "ip_country": "Peru",
      "ip_country_code": "PE",
      "browser": "UNKNOWN",
      "device_fingerprint": null,
      "device_type": "Escritorio"
    },
    "metadata": {}
  },
  "metadata": {
    "ZDA": true
  }
}

```



```
}  
}
```

3.5.3 Leer

```
[30]: card_id = card["data"]["id"]  
card = culqi.card.read(id_=card_id)  
  
display(card)
```

```
{  
  "status": 200,  
  "data": {  
    "object": "card",  
    "id": "crd_test_3HS06nwaWNH7GJv9",  
    "active": true,  
    "creation_date": 1615131630000,  
    "customer_id": "cus_test_357GTykK2sAJymJB",  
    "source": {  
      "object": "token",  
      "id": "tkn_test_46FxFV1t3eF7anVP",  
      "type": "card",  
      "creation_date": 1615131624000,  
      "email": "richard0640@piedpiper.com",  
      "card_number": "411111*****1111",  
      "last_four": "1111",  
      "active": true,  
      "iin": {  
        "object": "iin",  
        "bin": "411111",  
        "card_brand": "Visa",  
        "card_type": "credito",  
        "card_category": "Clásica",  
        "issuer": {  
          "name": "BBVA",  
          "country": "PERU",  
          "country_code": "PE",  
          "website": null,  
          "phone_number": null  
        },  
        "installments_allowed": [  
          2,  
          4,  
          6,  
          8,  
          10,  
          12,  
          3,  
        ]  
      }  
    }  
  }  
}
```

```

        5,
        7,
        9,
        24,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {}
},
"metadata": {}
}
}

```

3.5.4 Actualizar

```

[31]: card_id = card["data"]["id"]
card_metadata = {
    "metadata": {
        "orderId": 1234567890
    }
}
card = culqi.card.update(
    id=card_id, data=card_metadata
)

display(card)

```

```

{
    "status": 200,
    "data": {
        "object": "card",
        "id": "crd_test_3HS06nwaWNH7GJv9",
        "active": true,
        "creation_date": 1615131630000,
        "customer_id": "cus_test_357GTykK2sAJymJB",
        "source": {
            "object": "token",
            "id": "tkn_test_46FxFV1t3eF7anVP",
            "type": "card",
            "creation_date": 1615131624000,

```

```

    "email": "richard0640@piedpiper.com",
    "card_number": "411111*****1111",
    "last_four": "1111",
    "active": true,
    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",
      "card_type": "credito",
      "card_category": "Clásica",
      "issuer": {
        "name": "BBVA",
        "country": "PERU",
        "country_code": "PE",
        "website": null,
        "phone_number": null
      },
      "installments_allowed": [
        2,
        4,
        6,
        8,
        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
      ]
    },
    "client": {
      "ip": "191.98.182.73",
      "ip_country": "Peru",
      "ip_country_code": "PE",
      "browser": "UNKNOWN",
      "device_fingerprint": null,
      "device_type": "Escritorio"
    },
    "metadata": {}
  },
  "metadata": {
    "orderId": "1234567890"
  }
}

```

3.5.5 Eliminar

```
[32]: card_id = card["data"]["id"]
      deleted_card = culqi.card.delete(id=card_id)

      display(deleted_card)

{
  "status": 200,
  "data": {
    "id": "crd_test_3HS06nwaWNH7GJv9",
    "deleted": true,
    "merchant_message": "Se eliminó la tarjeta con ID
crd_test_3HS06nwaWNH7GJv9 exitosamente."
  }
}
```

3.6 Planes

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/planes>

```
[33]: def get_plan_data():
      plan_data = deepcopy(Data.PLAN)
      plan_data["name"] = "plan-{0}".format(uuid4().hex[:4])

      return plan_data
```

3.6.1 Listar

```
[34]: plan_list = culqi.plan.list(
      data={
        "limit": 1,
      },
      headers={
        "Accept-Encoding": "identity",
      },
    )

      display(plan_list)

{
  "status": 200,
  "data": {
    "paging": {
      "previous":
"https://api.culqi.com/v2/plans?limit=1&before=pln_test_QIFyiFRhv4wuhMxZ",
      "next":
"https://api.culqi.com/v2/plans?limit=1&after=pln_test_QIFyiFRhv4wuhMxZ",
    }
  }
}
```

```

        "cursors": {
            "before": "pln_test_QIFyiFRhv4wuhMxZ",
            "after": "pln_test_QIFyiFRhv4wuhMxZ"
        },
        "remaining_items": 51
    },
    "items": [
        {
            "object": "plan",
            "id": "pln_test_QIFyiFRhv4wuhMxZ",
            "creation_date": 1615129728000,
            "name": "plan-7274",
            "amount": 1000,
            "currency_code": "PEN",
            "interval_count": 2,
            "interval": "Días",
            "limit": 10,
            "trial_days": 30,
            "total_subscriptions": 1,
            "metadata": {}
        }
    ]
}

```

3.6.2 Crear

```

[35]: plan_data = get_plan_data()
      plan = culqi.plan.create(data=plan_data)

      display(plan)

```

```

{
    "status": 201,
    "data": {
        "object": "plan",
        "id": "pln_test_uXQck7r2kIOuPZL8",
        "creation_date": 1615131633000,
        "name": "plan-6b3f",
        "amount": 1000,
        "currency_code": "PEN",
        "interval_count": 2,
        "interval": "Días",
        "limit": 10,
        "trial_days": 30,
        "total_subscriptions": 0,
        "metadata": {}
    }
}

```

```
}
```

3.6.3 Leer

```
[36]: plan_id = plan["data"]["id"]
plan = culqi.plan.read(id_=plan_id)

display(plan)
```

```
{
  "status": 200,
  "data": {
    "object": "plan",
    "id": "pln_test_uXQck7r2kI0uPZL8",
    "creation_date": 1615131633000,
    "name": "plan-6b3f",
    "amount": 1000,
    "currency_code": "PEN",
    "interval_count": 2,
    "interval": "Días",
    "limit": 10,
    "trial_days": 30,
    "total_subscriptions": 0,
    "metadata": {}
  }
}
```

3.6.4 Actualizar

```
[37]: plan_id = plan["data"]["id"]
plan_metadata = {
  "metadata": {
    "orderId": 1234567890
  }
}
plan = culqi.plan.update(
  id_=plan_id, data=plan_metadata
)

display(plan)
```

```
{
  "status": 200,
  "data": {
    "object": "plan",
    "id": "pln_test_uXQck7r2kI0uPZL8",
    "creation_date": 1615131633000,
    "name": "plan-6b3f",
```

```

        "amount": 1000,
        "currency_code": "PEN",
        "interval_count": 2,
        "interval": "Días",
        "limit": 10,
        "trial_days": 30,
        "total_subscriptions": 0,
        "metadata": {
            "orderId": "1234567890"
        }
    }
}

```

3.6.5 Eliminar

```

[38]: plan_id = plan["data"]["id"]
      deleted_plan = culqi.plan.delete(id=plan_id)

      display(deleted_plan)

```

```

{
    "status": 200,
    "data": {
        "id": "pln_test_uXQck7r2kIOuPZL8",
        "deleted": true,
        "merchant_message": "Se eliminó el plan con ID pln_test_uXQck7r2kIOuPZL8 exitosamente."
    }
}

```

3.7 Suscripciones

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/suscripciones>

```

[39]: def get_subscription_data(code, provider):
      email = "richard{0}@piedpiper.com".format(uuid4().hex[:4])

      token_data = deepcopy(Data.CARD[code][provider])
      token_data["email"] = email
      token = culqi.token.create(data=token_data)

      customer_data = deepcopy(Data.CUSTOMER)
      customer_data["email"] = email
      customer = culqi.customer.create(data=customer_data)

      card_data = {
          "token_id": token["data"]["id"],
          "customer_id": customer["data"]["id"],

```

```

}
card = culqi.card.create(data=card_data)

plan_data = deepcopy(Data.PLAN)
plan_data["name"] = "plan-{0}".format(uuid4().hex[:4])
plan = culqi.plan.create(data=plan_data)

return {
    "card_id": card["data"]["id"],
    "plan_id": plan["data"]["id"],
}

```

3.7.1 Listar

```

[40]: subscription_list = culqi.subscription.list(
    data={
        "limit": 1,
    },
    headers={
        "Accept-Encoding": "identity",
    },
)

display(subscription_list)

```

```

{
    "status": 200,
    "data": {
        "paging": {
            "previous": "https://api.culqi.com/v2/subscriptions?limit=1&before=sub_test_utqKrxgouUh0IL76",
            "next": "https://api.culqi.com/v2/subscriptions?limit=1&after=sub_test_utqKrxgouUh0IL76",
            "cursors": {
                "before": "sub_test_utqKrxgouUh0IL76",
                "after": "sub_test_utqKrxgouUh0IL76"
            },
            "remaining_items": 30
        },
        "items": [
            {
                "object": "subscription",
                "id": "sub_test_utqKrxgouUh0IL76",
                "creation_date": 1615129729000,
                "status": "Activa",
                "current_period": 0,
                "total_period": 10,
            }
        ]
    }
}

```



```

"current_period_start": 1617685200000,
"current_period_end": 1617858000000,
"cancel_at_period_end": false,
"cancel_at": null,
"ended_at": 1619413200000,
"next_billing_date": 1617685200000,
"trial_start": 1615129729000,
"trial_end": 1617721729000,
"charges": [],
"plan": {
  "object": "plan",
  "id": "pln_test_QIFyiFRhv4wuhMxZ",
  "creation_date": 1615129728000,
  "name": "plan-7274",
  "amount": 1000,
  "currency_code": "PEN",
  "interval_count": 2,
  "interval": "Días",
  "limit": 10,
  "trial_days": 30,
  "total_subscriptions": 1,
  "metadata": {}
},
"card": {
  "object": "card",
  "id": "crd_test_tiP6jsig6txtNlK9",
  "active": true,
  "creation_date": 1615129727000,
  "customer_id": "cus_test_atem3d4M6YsKrrW7",
  "source": {
    "object": "token",
    "id": "tkn_test_FCVsMz64M0YXU5R4",
    "type": "card",
    "creation_date": 1615129722000,
    "email": "richard8b67@piedpiper.com",
    "card_number": "411111*****1111",
    "last_four": "1111",
    "active": true,
    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",
      "card_type": "credito",
      "card_category": "Clásica",
      "issuer": {
        "name": "BBVA",
        "country": "PERU",
        "country_code": "PE",

```

```

        "website": null,
        "phone_number": null
    },
    "installments_allowed": [
        2,
        4,
        6,
        8,
        10,
        12,
        3,
        5,
        7,
        9,
        24,
        48
    ]
},
"client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
},
"metadata": {}
},
"metadata": {}
},
"metadata": {
    "order_id": "0001"
}
}
]
}
}

```

3.7.2 Crear

```

[41]: subscription_data = get_subscription_data("successful", "visa")
subscription = culqi.subscription.create(data=subscription_data)

display(subscription)

```

```

{
    "status": 201,
    "data": {

```

```

"object": "subscription",
"id": "sub_test_fcGyWEQTh83qcZyS",
"creation_date": 1615131643000,
"status": "Activa",
"current_period": 0,
"total_period": 10,
"current_period_start": 1617685200000,
"current_period_end": 1617858000000,
"cancel_at_period_end": false,
"cancel_at": null,
"ended_at": 1619413200000,
"next_billing_date": 1617685200000,
"trial_start": 1615131643000,
"trial_end": 1617723643000,
"charges": [],
"plan": {
  "object": "plan",
  "id": "pln_test_wPdNqlSBErDW9vbS",
  "creation_date": 1615131642000,
  "name": "plan-035c",
  "amount": 1000,
  "currency_code": "PEN",
  "interval_count": 2,
  "interval": "Días",
  "limit": 10,
  "trial_days": 30,
  "total_subscriptions": 1,
  "metadata": {}
},
"card": {
  "object": "card",
  "id": "crd_test_yjsrR87YeJ1lLwk5",
  "active": true,
  "creation_date": 1615131642000,
  "customer_id": "cus_test_dPj41BFoNfZ1Uzjd",
  "source": {
    "object": "token",
    "id": "tkn_test_JEGrRwOE6DwWwjwV",
    "type": "card",
    "creation_date": 1615131637000,
    "email": "richard5f26@piedpiper.com",
    "card_number": "411111*****1111",
    "last_four": "1111",
    "active": true,
    "iin": {
      "object": "iin",
      "bin": "411111",
      "card_brand": "Visa",

```

```

        "card_type": "credito",
        "card_category": "Clásica",
        "issuer": {
            "name": "BBVA",
            "country": "PERU",
            "country_code": "PE",
            "website": null,
            "phone_number": null
        },
        "installments_allowed": [
            2,
            4,
            6,
            8,
            10,
            12,
            3,
            5,
            7,
            9,
            24,
            48
        ]
    },
    "client": {
        "ip": "191.98.182.73",
        "ip_country": "Peru",
        "ip_country_code": "PE",
        "browser": "UNKNOWN",
        "device_fingerprint": null,
        "device_type": "Escritorio"
    },
    "metadata": {}
},
"metadata": {}
}
}

```

3.7.3 Leer

```

[42]: subscription_id = subscription["data"]["id"]
      subscription = culqi.subscription.read(id_=subscription_id)

      display(subscription)

```

```
{
```

```

"status": 200,
"data": {
  "object": "subscription",
  "id": "sub_test_fcGyWEQTh83qcZyS",
  "creation_date": 1615131643000,
  "status": "Activa",
  "current_period": 0,
  "total_period": 10,
  "current_period_start": 1617685200000,
  "current_period_end": 1617858000000,
  "cancel_at_period_end": false,
  "cancel_at": null,
  "ended_at": 1619413200000,
  "next_billing_date": 1617685200000,
  "trial_start": 1615131643000,
  "trial_end": 1617723643000,
  "charges": [],
  "plan": {
    "object": "plan",
    "id": "pln_test_wPdNqlSBErDW9vbS",
    "creation_date": 1615131642000,
    "name": "plan-035c",
    "amount": 1000,
    "currency_code": "PEN",
    "interval_count": 2,
    "interval": "Días",
    "limit": 10,
    "trial_days": 30,
    "total_subscriptions": 1,
    "metadata": {}
  },
  "card": {
    "object": "card",
    "id": "crd_test_yjsrR87YeJ1lLwk5",
    "active": true,
    "creation_date": 1615131642000,
    "customer_id": "cus_test_dPj41BFoNfZ1Uzjd",
    "source": {
      "object": "token",
      "id": "tkn_test_JEGrRwOE6DwWwjwV",
      "type": "card",
      "creation_date": 1615131637000,
      "email": "richard5f26@piedpiper.com",
      "card_number": "411111*****1111",
      "last_four": "1111",
      "active": true,
      "iin": {
        "object": "iin",

```

```

        "bin": "411111",
        "card_brand": "Visa",
        "card_type": "credito",
        "card_category": "Clásica",
        "issuer": {
            "name": "BBVA",
            "country": "PERU",
            "country_code": "PE",
            "website": null,
            "phone_number": null
        },
        "installments_allowed": [
            2,
            4,
            6,
            8,
            10,
            12,
            3,
            5,
            7,
            9,
            24,
            48
        ]
    },
    "client": {
        "ip": "191.98.182.73",
        "ip_country": "Peru",
        "ip_country_code": "PE",
        "browser": "UNKNOWN",
        "device_fingerprint": null,
        "device_type": "Escritorio"
    },
    "metadata": {}
},
"metadata": {}
},
"metadata": {}
}
}

```

3.7.4 Actualizar

```

[43]: subscription_id = subscription["data"]["id"]
subscription_metadata = {
    "metadata": {

```

```

        "orderId": 1234567890
    }
}
subscription = culqi.subscription.update(
    id=subscription_id, data=subscription_metadata
)

display(subscription)

```

```

{
  "status": 200,
  "data": {
    "object": "subscription",
    "id": "sub_test_fcGyWEQTh83qcZyS",
    "creation_date": 1615131643000,
    "status": "Activa",
    "current_period": 0,
    "total_period": 10,
    "current_period_start": 1617685200000,
    "current_period_end": 1617858000000,
    "cancel_at_period_end": false,
    "cancel_at": null,
    "ended_at": 1619413200000,
    "next_billing_date": 1617685200000,
    "trial_start": 1615131643000,
    "trial_end": 1617723643000,
    "charges": [],
    "plan": {
      "object": "plan",
      "id": "pln_test_wPdNqlSBErDW9vbS",
      "creation_date": 1615131642000,
      "name": "plan-035c",
      "amount": 1000,
      "currency_code": "PEN",
      "interval_count": 2,
      "interval": "Días",
      "limit": 10,
      "trial_days": 30,
      "total_subscriptions": 1,
      "metadata": {}
    },
    "card": {
      "object": "card",
      "id": "crd_test_yjsrR87YeJ1lLwk5",
      "active": true,
      "creation_date": 1615131642000,
      "customer_id": "cus_test_dPj41BFoNfZ1Uzjd",

```

```

"source": {
  "object": "token",
  "id": "tkn_test_JEGrRwOE6DwWwjwV",
  "type": "card",
  "creation_date": 1615131637000,
  "email": "richard5f26@piedpiper.com",
  "card_number": "411111*****1111",
  "last_four": "1111",
  "active": true,
  "iin": {
    "object": "iin",
    "bin": "411111",
    "card_brand": "Visa",
    "card_type": "credito",
    "card_category": "Clásica",
    "issuer": {
      "name": "BBVA",
      "country": "PERU",
      "country_code": "PE",
      "website": null,
      "phone_number": null
    },
    "installments_allowed": [
      2,
      4,
      6,
      8,
      10,
      12,
      3,
      5,
      7,
      9,
      24,
      48
    ]
  },
  "client": {
    "ip": "191.98.182.73",
    "ip_country": "Peru",
    "ip_country_code": "PE",
    "browser": "UNKNOWN",
    "device_fingerprint": null,
    "device_type": "Escritorio"
  },
  "metadata": {}
},
"metadata": {}

```



```

    },
    "metadata": {
        "orderId": "1234567890"
    }
}
}

```

3.7.5 Eliminar

```

[44]: subscription_id = subscription["data"]["id"]
      deleted_subscription = culqi.subscription.delete(id=subscription_id)

      display(deleted_subscription)

```

```

{
    "status": 200,
    "data": {
        "id": "sub_test_fcGyWEQTh83qcZyS",
        "deleted": true,
        "merchant_message": "Se eliminó la suscripcion con ID
sub_test_fcGyWEQTh83qcZyS exitosamente."
    }
}

```

3.8 Órdenes

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/orders>

```

[45]: def get_order_data():
      order_data = deepcopy(Data.ORDER)
      order_data["order_number"] = "order-{0}".format(uuid4().hex[:4])

      return order_data

```

3.8.1 Listar

```

[46]: order_list = culqi.order.list(
      data={
          "limit": 1,
      },
      headers={
          "Accept-Encoding": "identity",
      },
  )

display(order_list)

```

```

{
  "status": 200,
  "data": {
    "paging": {
      "previous":
"https://api.culqi.com/v2/orders?limit=1&before=ord_test_mpgi4pJYVcpPljv6",
      "next":
"https://api.culqi.com/v2/orders?limit=1&after=ord_test_mpgi4pJYVcpPljv6",
      "cursors": {
        "before": "ord_test_mpgi4pJYVcpPljv6",
        "after": "ord_test_mpgi4pJYVcpPljv6"
      },
      "remaining_items": 35
    },
    "items": [
      {
        "object": "order",
        "id": "ord_test_mpgi4pJYVcpPljv6",
        "amount": 1000,
        "payment_code": null,
        "currency_code": "PEN",
        "description": "Venta de prueba",
        "order_number": "order-a39b",
        "state": "deleted",
        "total_fee": null,
        "net_amount": null,
        "fee_details": null,
        "creation_date": 1615131475,
        "expiration_date": 1893474000,
        "updated_at": 1615131475,
        "paid_at": null,
        "available_on": null,
        "metadata": {}
      }
    ]
  }
}

```

3.8.2 Crear

```

[47]: order_data = get_order_data()
      order = culqi.order.create(data=order_data)

      display(order)

```

```

{
  "status": 201,
  "data": {

```

```

    "object": "order",
    "id": "ord_test_RR6XRh6IXDmFhK1C",
    "amount": 1000,
    "payment_code": null,
    "currency_code": "PEN",
    "description": "Venta de prueba",
    "order_number": "order-c825",
    "state": "created",
    "total_fee": null,
    "net_amount": null,
    "fee_details": null,
    "creation_date": 1615131647,
    "expiration_date": 1893474000,
    "updated_at": 1615131647,
    "paid_at": null,
    "available_on": null,
    "metadata": {}
  }
}

```

3.8.3 Confirmar

```

[48]: order_id = order["data"]["id"]
      order = culqi.order.confirm(id_=order_id)

      display(order)

```

```

{
  "status": 201,
  "data": {
    "object": "order",
    "id": "ord_test_RR6XRh6IXDmFhK1C",
    "amount": 1000,
    "payment_code": "013117141",
    "currency_code": "PEN",
    "description": "Venta de prueba",
    "order_number": "order-c825",
    "state": "pending",
    "total_fee": null,
    "net_amount": null,
    "fee_details": null,
    "creation_date": 1615131647,
    "expiration_date": 1893474000,
    "updated_at": 1615131647,
    "paid_at": null,
    "available_on": null,
    "metadata": {}
  }
}

```

```
}
```

3.8.4 Leer

```
[49]: order_id = order["data"]["id"]
order = culqi.order.read(id_=order_id)

display(order)
```

```
{
  "status": 200,
  "data": {
    "object": "order",
    "id": "ord_test_RR6XRh6IXDmFhK1C",
    "amount": 1000,
    "payment_code": "013117141",
    "currency_code": "PEN",
    "description": "Venta de prueba",
    "order_number": "order-c825",
    "state": "pending",
    "total_fee": null,
    "net_amount": null,
    "fee_details": null,
    "creation_date": 1615131647,
    "expiration_date": 1893474000,
    "updated_at": 1615131648,
    "paid_at": null,
    "available_on": null,
    "metadata": {}
  }
}
```

3.8.5 Actualizar

```
[50]: order_id = order["data"]["id"]
order_metadata = {
  "metadata": {
    "orderId": 1234567890
  }
}
order = culqi.order.update(
  id_=order_id, data=order_metadata
)

display(order)
```

```
{
  "status": 200,
```

```

    "data": {
      "object": "order",
      "id": "ord_test_RR6XRh6IXDmFhK1C",
      "amount": 1000,
      "payment_code": "013117141",
      "currency_code": "PEN",
      "description": "Venta de prueba",
      "order_number": "order-c825",
      "state": "pending",
      "total_fee": null,
      "net_amount": null,
      "fee_details": null,
      "creation_date": 1615131647,
      "expiration_date": 1893474000,
      "updated_at": 1615131648,
      "paid_at": null,
      "available_on": null,
      "metadata": {
        "orderId": "1234567890"
      }
    }
  }
}

```

3.8.6 Eliminar

```

[51]: order_id = order["data"]["id"]
      deleted_order = culqi.order.delete(id=order_id)

      display(deleted_order)

```

```

{
  "status": 204,
  "data": {}
}

```

3.9 Eventos

Consulta la documentación de Culqi en <https://apidocs.culqi.com/#/eventos>

3.9.1 Listar

```

[52]: event_list = culqi.event.list(
      data={
        "limit": 1,
      },
      headers={
        "Accept-Encoding": "identity",
      },

```

```
)

display(event_list)
```

```
{
  "status": 200,
  "data": {
    "paging": {
      "previous": null,
      "next": null,
      "cursors": {
        "before": null,
        "after": null
      },
      "remaining_items": 0
    },
    "items": []
  }
}
```

3.9.2 Leer

```
[53]: event_id = "sample_event_id"
event = culqi.event.read(id=event_id)

display(event)
```

```
{
  "status": 400,
  "data": {
    "object": "error",
    "type": "parameter_error",
    "merchant_message": "No existe el evento que intentas consultar:
'sample_event_id' o tiene un formato inválido."
  }
}
```

3.10 IINs

Actualmente no hay documentación sobre los IINs en la web oficial de Culqi

3.10.1 Listar

```
[54]: iin_list = culqi.iin.list(
  data={
    "limit": 1,
  },
  headers={
```

```

        "Accept-Encoding": "identity",
    },
)

display(iin_list)

```

```

{
  "status": 200,
  "data": {
    "paging": {
      "previous": "https://api.culqi.com/v2/iins?limit=1&before=533958",
      "next": "https://api.culqi.com/v2/iins?limit=1&after=533958",
      "cursors": {
        "before": "533958",
        "after": "533958"
      },
      "remaining_items": null
    },
    "items": [
      {
        "object": "iin",
        "bin": "533958",
        "card_brand": "MasterCard",
        "card_type": "credito",
        "card_category": null,
        "issuer": {
          "name": "FINANCIERA OH, S.A.",
          "country": "PERU",
          "country_code": "PE",
          "website": null,
          "phone_number": null
        },
        "installments_allowed": []
      }
    ]
  }
}

```

3.10.2 Leer

```

[55]: iin_id = "sample_event_id"
      iin = culqi.iin.read(id_=iin_id)

      display(iin)

```

```

{
  "status": 401,
  "data": {

```

```
    "object": "error",
    "type": "authentication_error",
    "merchant_message": "Has utilizado la llave equivocada para realizar la
operación. Dirígete al Panel de Integracion para usar las llaves correctas."
  }
}
```