

**1) Create bank:**  
**/obp/v4.0.0/banks**

```
{ "id": "slv.09.sv.pisto", "short_name": "Pisto.NET", "full_name": "Pisto.NET El Salvador",  
  "logo": "logo", "website": "www.pisto.net", "bank_routings": [{ "scheme": "Bank_ID",  
    "address": "gh.29.es" }], "attributes": [{ "name": "ACCOUNT_MANAGEMENT_FEE",  
    "value": "5987953" }]}
```

Answer:

```
{  
  "id": "slv.09.sv.pisto",  
  "short_name": "Pisto.NET",  
  "full_name": "Pisto.NET El Salvador",  
  "logo": "logo",  
  "website": "www.pisto.net",  
  "bank_routings": [{  
    "scheme": "OBP",  
    "address": "slv.09.sv.pisto"  
  }],  
  "attributes": [  
    {  
      "scheme": "Bank_ID",  
      "address": "gh.29.es"  
    }  
  ],  
  "attributes": []  
}
```

Create USER:

```
{ "email": "felixsmith@example.com", "username": "felixsmith", "password": "String",  
  "first_name": "Simon", "last_name": "Redfern"}
```

**1) Add entitlement for user -**

**a) CanCreateUserCustomerLink**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto", "role_name": "CanCreateUserCustomerLink"}
```

```
{  
  "entitlement_id": "a02a5ca6-b670-47e5-b49b-07f658983215",  
  "role_name": "CanCreateUserCustomerLink",  
  "bank_id": "slv.09.sv.pisto"  
}
```

**a) CanCreateCustomer**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

{ "bank\_id":"slv.09.sv.pisto", "role\_name":"**CanCreateCustomer**"}

```
{
  "entitlement_id": "86c0daf5-7f13-4e98-8a9e-d27314762672",
  "role_name": "CanCreateCustomer",
  "bank_id": "slv.09.sv.pisto"
}
```

**a)CanGetAnyUser (FAILED)**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

{ "bank\_id":"slv.09.sv.pisto", "role\_name":"**CanGetAnyUser**"}

**b) CanCreateAccount**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

{ "bank\_id":"slv.09.sv.pisto", "role\_name":"CanCreateAccount"}

**b) CanCreateEntitlementAtOneBank**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

{ "bank\_id":"slv.09.sv.pisto", "role\_name":"CanCreateEntitlementAtOneBank"}

**b.1) Add access to a merchant to create cards , login as superuser**

POST:

/obp/v4.0.0/users/14ae6f0c-b380-4edc-9cfe-9d01371b919c/entitlements

HEADER:

{ "bank\_id":"slv.09.sv.pisto", "role\_name":"CanCreateAccount"}

```
{
  "entitlement_id" : "6eaa4435-6735-4c37-880d-2fcb7a3d07f7",
  "role_name" : "CanCreateAccount",
  "bank_id" : "slv.09.sv.pisto"
}
```

#### c) CanGetDynamicEndpoint\_ConnectedWallets238

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto", "role_name": "CanGetDoubleEntryTransactionAtOneBank" }
```

#### d) CanUpdateCustomerCreditLimit

POST:

/obp/v4.0.0/users/14ae6f0c-b380-4edc-9cfe-9d01371b919c/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto", "role_name": "CanUpdateCustomerCreditLimit" }
```

#### d.1) Add access to a merchant to set credit limit , login as superuser

POST:

/obp/v4.0.0/users/14ae6f0c-b380-4edc-9cfe-9d01371b919c/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto", "role_name": "CanCreateAccount" }
```

```
{
  "entitlement_id" : "cda5a272-be1d-4bef-b9d3-3bb80e8137a4",
  "role_name" : "CanUpdateCustomerCreditLimit",
  "bank_id" : "slv.09.sv.pisto"
}
```

#### e) CanGetDynamicEndpoint\_ConnectedWallets238 (FAILED!)

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto",
  "role_name": "CanGetDynamicEndpoint_ConnectedWallets238" }
```

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto",  
"role_name": "CanGetDynamicEndpoint_CoreClientsInfo398"}
```

#### **f) Wallets (FAILED!)**

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto",  
"role_name": "CanGetDynamicEndpoint_ConnectedWallets238"}
```

g) email invitations

POST:

/obp/v4.0.0/users/13ca85fa-c0c2-4d51-9a1e-935b17948c09/entitlements

HEADER:

```
{ "bank_id": "slv.09.sv.pisto", "role_name": "CanCreateUserInvitation"}
```

### **2) Set credit limit for merchant**

/obp/v4.0.0/banks/slv.09.sv.pisto/customers/CUSTOMER\_ID/credit-limit

```
{ "credit_limit": { "currency": "USD", "amount": "1000" }}
```

### **3) Create Merchants Account:**

#### **USD\_ACCT**

POST:

/obp/v4.0.0/banks/slv.09.sv.pisto/accounts

HEADER:

```
{ "user_id": "13ca85fa-c0c2-4d51-9a1e-935b17948c09", "label": "Merchant_Account",  
"product_code": "0001", "balance": { "currency": "USD", "amount": "0" },  
"branch_id": "MAIN", "account_routings": [{ "scheme": "AccountNumber",  
"address": "M000001" } ]}
```

#### **BTC\_ACCT public address:**

**zpub6mt4QZkuqb1ch5Vu1detB2t3Rc3x3J8Ao8gGJsJ1BTMpZAeEBQk88Fb4aBNV  
ScXYxj1GcbJrBtLKvHZYxtoQxtod9tN4ozQt49LJm2VPZsU**

**Lightning public address:**

03d6e0297ab8949f4a8f283ec4d95aec4223d4f8a2fa30c3b73f6050ef602b893f

=====

#### **USD\_ACCT**

POST:

/obp/v4.0.0/banks/slv.09.sv.pisto/accounts

HEADER:

```
{ "user_id":"14ae6f0c-b380-4edc-9cfe-9d01371b919c", "label":"Merchant_Account",  
  "product_code":"0001", "balance":{"currency":"USD", "amount":"0" },  
  "branch_id":"MAIN", "account_routings":[{"scheme":"AccountNumber",  
  "address":"M000002" }]}
```

**BTC\_ACCT public address:**

**zpub6mt4QZkuqb1ch5Vu1detB2t3Rc3x3J8Ao8gGJsJ1BTMpZAeEBQk88Fb4aBNV  
ScXYxj1GcbJrBtLKvHZYxtoQxtod9tN4ozQt49LJm2VPZsU**

**Lightning public address:**

**03d6e0297ab8949f4a8f283ec4d95aec4223d4f8a2fa30c3b73f6050ef602b893f**

=====

## **2) BTC account**

## **3) Bitcoin account**

**a) Bitcoin Public Address**

**b) Move money from Bitcons to USD account**

## **4) Create Gift Cards (Accounts (\$))**

POST:

/obp/v4.0.0/banks/slv.09.sv.pisto/accounts

HEADER:

```
{ "user_id":"13ca85fa-c0c2-4d51-9a1e-935b17948c09", "label":"GiftCard",  
  "product_code":"0002", "balance":{"currency":"USD", "amount":"0" },  
  "branch_id":"MAIN", "account_routings":[{"scheme":"AccountNumber",  
  "address":"1234567890123456" }]}
```

**5) Balance Gift Cards (\$)**

**6) Load funds gift card (\$)**

Merchant moves money from merchant account to gift card account debiting merchant and transfer to gift card. Credit limit should be increased to allow that.

Use:

**/obp/v4.0.0/banks/slv.09.sv.pisto/accounts/dbccf261-6227-4d2f-947c-5427acefdfab/  
owner/transaction-request-types/ACCOUNT/transaction-requests**

```
{ "to":{ "bank_id":"slv.09.sv.pisto",  
"account_id":"a76924d5-ef3a-4236-8b70-1b729b36e27c" }, "value":{  
"currency":"USD", "amount":"50" }, "description":"Gift Card Load"}
```

**7) Redeem gift cards (\$)**

**- Get account by card number (routing)**

**/obp/v4.0.0/management/accounts/account-routing-query**

```
{ "bank_id":"slv.09.sv.pisto", "account_routing":{ "scheme":"AccountNumber",  
"address":"M000001" }}
```

**- Get account by card number (routing)**

**/obp/v4.0.0/management/accounts/account-routing-query**

```
{ "bank_id":"gh.29.uk", "account_routing":{ "scheme":"AccountNumber",  
"address":"4930396" }}
```

**8) Create Customers (linked to Gift Cards)**

**More Gift CARDS CREATED**

**/obp/v4.0.0/banks/slv.09.sv.pisto/accounts**

HEADER:

```
{ "user_id":"13ca85fa-c0c2-4d51-9a1e-935b17948c09", "label":"GiftCard",  
"product_code":"0002", "balance":{ "currency":"USD", "amount":"0" },  
"branch_id":"MAIN", "account_routings":[{ "scheme":"AccountNumber",  
"address":"1234567890123457" }]}
```

**9) Get transactions:**

obp/v4.0.0/banks/slv.09.sv.pisto/accounts/0ade5270-2a22-4acf-9f3e-25b7e1cff8df/VIEW\_ID/transactions

10) Invite customer:

/obp/v4.0.0/banks/slv.09.sv.pisto/user-invitation

```
{ "first_name":"Jose", "last_name":"Peres", "email":"chelevera2@gmail.com",  
  "company":"Corner Store", "country":"El Salvador", "purpose":"Merchant"}
```

---

Accounts USD

```
{  
  "user_name":"Thiago.Busd.01",  
  "password":"X!601fc5d2",  
},  
{  
  "user_name":"Camila.Busd.01",  
  "password":"X!02006fd1",  
},  
{  
  "user_name":"Timo.Busd.01",  
  "password":"X!c9a49d53",  
},  
{  
  "user_name":"Isabella.Busd.01",  
  "password":"X!42b230fd",  
},  
  
{  
  "user_name":"Santiago.Busd.01",  
  "password":"X!cb802a67",  
},
```

11) Get all customers for PISTO.NET

/obp/v4.0.0/users/current/customers

```
{  
  "customers": [{  
    "bank_id":"slv.09.sv.pisto",  
    "customer_id":"245dc6a7-3610-4589-8776-6fbd12e2734a",  
    "customer_number":"1774970911",
```

```

    "legal_name": "Alex Vera",
    "mobile_phone_number": "+6045629392",
    "email": "alex@ipayzone.net",
    "face_image": {
      "url": "www.openbankproject",
      "date": "2017-09-19T00:00:00Z"
    },
    "date_of_birth": "2017-09-19",
    "relationship_status": "single",
    "dependants": 1,
    "dob_of_dependants": ["2017-09-19"],
    "credit_rating": {
      "rating": "OBP",
      "source": "OBP"
    },
    "credit_limit": {
      "currency": "USD",
      "amount": "0"
    },
    "highest_education_attained": "Engineer",
    "employment_status": "worker",
    "kyc_status": true,
    "last_ok_date": "2017-09-19T00:00:00Z",
    "title": "Dr.",
    "branch_id": "DERBY6",
    "name_suffix": "Sr",
    "customer_attributes": []
  }
]
}

```

## 12) Create customer

/obp/v4.0.0/banks/slv.09.sv.pisto/customers

POST:

```

{ "legal_name": "Eveline Tripman", "mobile_phone_number": "+44 07972 444 876",
  "email": "felixsmith@example.com", "face_image": {
    "url": "www.openbankproject", "date": "2017-09-19T00:00:00Z" },
  "date_of_birth": "2017-09-19T00:00:00Z", "relationship_status": "single",
  "dependants": 1, "dob_of_dependants": ["2017-09-19T00:00:00Z"],
  "credit_rating": { "rating": "OBP", "source": "OBP" }, "credit_limit": {
    "currency": "USD", "amount": "0" }, "highest_education_attained": "Master",
  "employment_status": "worker", "kyc_status": true,

```



```
"last_ok_date":"2017-09-19T00:00:00Z", "title":"Dr.", "branch_id":"DERBY6",  
"name_suffix":"Sr"}
```

=====

/obp/v4.0.0/banks/slv.09.sv.pisto/customers

POST:

```
{ "legal_name":"Alex Vera", "mobile_phone_number":"+6045629392",  
"email":"alex@ipayzone.net",
```

```
"face_image":{ "url":"www.openbankproject", "date":"2017-09-19T00:00:00Z"  
}, "date_of_birth":"2017-09-19T00:00:00Z", "relationship_status":"single",  
"dependants":1, "dob_of_dependants":["2017-09-19T00:00:00Z"],  
"credit_rating":{ "rating":"OBP", "source":"OBP" }, "credit_limit":{  
"currency":"USD", "amount":"0" }, "highest_education_attained":"Engineer",  
"employment_status":"worker", "kyc_status":true,  
"last_ok_date":"2017-09-19T00:00:00Z", "title":"Dr.", "branch_id":"DERBY6",  
"name_suffix":"Sr"}
```

```
bank_id    "slv.09.sv.pisto"  
customer_id "245dc6a7-3610-4589-8776-6fbd12e2734a"  
customer_number "1774970911"  
legal_name  "Alex Vera"  
mobile_phone_number "+6045629392"  
email       "alex@ipayzone.net"  
face_image  
  url      "www.openbankproject"  
  date     "2017-09-19T00:00:00Z"  
  
date_of_birth "2017-09-19T00:00:00Z"  
relationship_status "single"  
dependants 1  
dob_of_dependants "2017-09-19T00:00:00Z"  
credit_rating  
  rating "OBP"  
  source "OBP"  
  
credit_limit  
  currency "USD"  
  amount  "0"
```

```
highest_education_attained  "Engineer"
employment_status  "worker"
kyc_status  true
last_ok_date  "2017-09-19T00:00:00Z"
title  "Dr."
branch_id  "DERBY6"
name_suffix  "Sr"
```

=====

### 13) Customer link

/obp/v4.0.0/banks/slv.09.sv.pisto/user\_customer\_links

```
{ "user_id":"13ca85fa-c0c2-4d51-9a1e-935b17948c09",
  "customer_id":"245dc6a7-3610-4589-8776-6fbd12e2734a"}
```

```
{
  "user_customer_link_id": "3f26721c-5b9d-4b3e-a5ed-970702bb2c13",
  "customer_id": "245dc6a7-3610-4589-8776-6fbd12e2734a",
  "user_id": "13ca85fa-c0c2-4d51-9a1e-935b17948c09",
  "date_inserted": "2021-12-01T22:04:59Z",
  "is_active": true
}
```

Setting APP

The screenshot shows a web browser window with the URL `obp-apisandbox.bancohipotecario.com.sv/consumer-registration`. The form contains the following fields and values:

- Redirect URL (Optional)**: `pistoapp:/`
- Developer email**: `jvera@technoprepay.com`
- Description of the application**: `Customer app for storing and reloading payment cards (Gift cards) in the phone`
- Company**: `ipayzone.net`

A blue button labeled "Register consumer" is located at the bottom of the form.

### Register your consumer

Thanks for registering your consumer with Banco Hipotecario API Sandbox!  
Here is your developer information. Please save it in a secure place.

Please save it in a secure location.

**Consumer ID** 239678a8-7fd2-4b79-99b2-dbaadaedc55e

**Application Type** Public

**Application Name** Pisto App

**User redirect URL** `pistoapp:/`

**Developer Email** `jvera@technoprepay.com`

**App Description** Customer app for storing and reloading payment cards (Gift cards) in the phone

**Client certificate** None

**Consumer Key** `nc53sye1pzxxdubb0f3f4hrngyhnhnqtj5dx1pkwz`

**Consumer Secret** `rqqreljp0ax50kphq0ymc3rthh3nedj0q4v4hsx4`

**OAuth 1.0a**

**Endpoint** `https://obp-apisandbox.bancohipotecario.com.sv/oauth/initiate`

**OAuth 1.0a Documentation** [How to use OAuth for OpenBankProject](#)

**Direct Login**

**Endpoint** `https://obp-apisandbox.bancohipotecario.com.sv/my/logins/direct`

**Direct Login Documentation** [How to use Direct Login](#)

**Terms and Conditions** [Privacy Policy](#) [Twitter](#) [Github](#) [API Documentation](#)

Please save it in a secure location.

Consumer ID	239678a8-7fd2-4b79-99b2-dbaadaedc55e
Application Type	Public
Application Name	Pisto App
User redirect URL	pistoapp:/
Developer Email	jvera@technoprepay.com
App Description	Customer app for storing and reloading payment cards (Gift cards) in the phone
Client certificate	None
Consumer Key	nc53sye1pzxxdubb0f3f4hrngyhnnqtj5dx1pkwz

App Description	Customer app for storing and reloading payment cards (Gift cards) in the phone
Client certificate	None
Consumer Key	nc53sy1pzxxdubb0f3f4hrngyhnhqtj5dx1pkwz
Consumer Secret	rqqrcljp0ax50kphq0ymc3rthh3nedj0q4v4hsx4
OAuth 1.0a Endpoint	<a href="https://obp-apisandbox.bancohipotecario.com.sv/oauth/initiate">https://obp-apisandbox.bancohipotecario.com.sv/oauth/initiate</a>
OAuth 1.0a Documentation	<a href="#">How to use OAuth for OpenBankProject</a>
Direct Login Endpoint	<a href="https://obp-apisandbox.bancohipotecario.com.sv/my/logins/direct">https://obp-apisandbox.bancohipotecario.com.sv/my/logins/direct</a>
Direct Login Documentation	<a href="#">How to use Direct Login</a>