**6. API command Testing for the Core Banking Application MifoX:**

We have tested the following API request using the postman API tool -  
6.1. GET requests:  
6.1.1. To fetch all the Office details which are configured in the CBS application.  
url: <http://122.165.73.156:8080/fineract-provider/api/v1/offices>  
Basic authentication:   
username-mifos, password- password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

We will get the response code as 200 ok and the response body as a json object as follows, which will contain the details of the offices we have configured from the User Interface.  
JSON response body:  
[

{

"id": 1,

"name": "Head Office",

"nameDecorated": "Head Office",

"externalId": "1",

"openingDate": [

2009,

1,

1

],

"hierarchy": "."

},

{

"id": 2,

"name": "APT Main Branch",

"nameDecorated": "....APT Main Branch",

"externalId": "APT-B",

"openingDate": [

2025,

1,

1

],

"hierarchy": ".2.",

"parentId": 1,

"parentName": "Head Office"

},

{

"id": 3,

"name": "APT Branch A",

"nameDecorated": "........APT Branch A",

"externalId": "APT-B1",

"openingDate": [

2025,

1,

2

],

"hierarchy": ".2.3.",

"parentId": 2,

"parentName": "APT Main Branch"

}

]  
  
6.1.2. To fetch all the Client details which are configured in the CBS application.  
url: <http://122.165.73.156:8080/fineract-provider/api/v1/clients>  
Basic authentication:   
username-mifos, password- password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

We will get the response code as 200 ok and the response body as a json object as follows, which will contain the details of the clients we have configured from the UI. Here we have highlighted the details of a particular client John with id = 2.   
Note that the account ID we get in this request is the client account ID. Likewise we have individual account ID’s for the various accounts created inside the client account, eg:- Savings account,Loan account, etc. That will be covered in the next request section.

JSON response body:  
{

"totalFilteredRecords": 5,

"pageItems": [

{

"id": 2,

"accountNo": "000000002",

"externalId": "789",

"status": {

"id": 300,

"code": "clientStatusType.active",

"value": "Active"

},

"subStatus": {

"active": false,

"mandatory": false

},

"active": true,

"activationDate": [

2025,

1,

6

],

"firstname": "John",

"middlename": "S",

"lastname": "H",

"displayName": "John S H",

"mobileNo": "9964783938",

"emailAddress": "johnsh@gmail.com",

"dateOfBirth": [

2008,

2,

4

],

"gender": {

"id": 21,

"name": "MALE",

"active": false,

"mandatory": false

},

"clientType": {

"id": 15,

"name": "Savings",

"active": false,

"mandatory": false

},

"clientClassification": {

"id": 28,

"name": "Regular",

"active": false,

"mandatory": false

},

"isStaff": false,

"officeId": 2,

"officeName": "APT Main Branch",

"staffId": 1,

"staffName": "Employee\_1, Officer001",

"timeline": {

"submittedOnDate": [

2025,

1,

6

],

"submittedByUsername": "mifos",

"submittedByFirstname": "App",

"submittedByLastname": "Administrator",

"activatedOnDate": [

2025,

1,

6

],

"activatedByUsername": "mifos",

"activatedByFirstname": "App",

"activatedByLastname": "Administrator"

},

"legalForm": {

"id": 1,

"code": "legalFormType.person",

"value": "Person"

},

"clientNonPersonDetails": {

"constitution": {

"active": false,

"mandatory": false

},

"mainBusinessLine": {

"active": false,

"mandatory": false

}

}

},

{

"id": 3,

"accountNo": "000000003",

"externalId": "456",

"status": {

"id": 300,

"code": "clientStatusType.active",

"value": "Active"

},

"subStatus": {

"active": false,

"mandatory": false

},

"active": true,

"activationDate": [

2025,

1,

8

],

"firstname": "Peter",

"middlename": "A",

"lastname": "B",

"displayName": "Peter A B",

"mobileNo": "8511555698",

"emailAddress": "peter@gmail.com",

"dateOfBirth": [

1980,

3,

12

],

"gender": {

"id": 21,

"name": "MALE",

"active": false,

"mandatory": false

},

"clientType": {

"id": 15,

"name": "Savings",

"active": false,

"mandatory": false

},

"clientClassification": {

"id": 28,

"name": "Regular",

"active": false,

"mandatory": false

},

"isStaff": false,

"officeId": 2,

"officeName": "APT Main Branch",

"timeline": {

"submittedOnDate": [

2025,

1,

8

],

"submittedByUsername": "mifos",

"submittedByFirstname": "App",

"submittedByLastname": "Administrator",

"activatedOnDate": [

2025,

1,

8

],

"activatedByUsername": "mifos",

"activatedByFirstname": "App",

"activatedByLastname": "Administrator"

},

"legalForm": {

"id": 1,

"code": "legalFormType.person",

"value": "Person"

},

"clientNonPersonDetails": {

"constitution": {

"active": false,

"mandatory": false

},

"mainBusinessLine": {

"active": false,

"mandatory": false

}

}

},

{

"id": 1,

"accountNo": "000000001",

"externalId": "333",

"status": {

"id": 300,

"code": "clientStatusType.active",

"value": "Active"

},

"subStatus": {

"active": false,

"mandatory": false

},

"active": true,

"activationDate": [

2025,

1,

2

],

"firstname": "Sujith",

"middlename": "C",

"lastname": "S",

"displayName": "Sujith C S",

"mobileNo": "9400666053",

"emailAddress": "sujithsivaraman@appliedpaymentstech.com",

"dateOfBirth": [

1988,

2,

24

],

"gender": {

"id": 21,

"name": "MALE",

"active": false,

"mandatory": false

},

"clientType": {

"id": 15,

"name": "Savings",

"active": false,

"mandatory": false

},

"clientClassification": {

"id": 28,

"name": "Regular",

"active": false,

"mandatory": false

},

"isStaff": false,

"officeId": 2,

"officeName": "APT Main Branch",

"staffId": 1,

"staffName": "Employee\_1, Officer001",

"timeline": {

"submittedOnDate": [

2025,

1,

2

],

"submittedByUsername": "mifos",

"submittedByFirstname": "App",

"submittedByLastname": "Administrator",

"activatedOnDate": [

2025,

1,

2

],

"activatedByUsername": "mifos",

"activatedByFirstname": "App",

"activatedByLastname": "Administrator"

},

"legalForm": {

"id": 1,

"code": "legalFormType.person",

"value": "Person"

},

"clientNonPersonDetails": {

"constitution": {

"active": false,

"mandatory": false

},

"mainBusinessLine": {

"active": false,

"mandatory": false

}

}

},

{

"id": 6,

"accountNo": "000000006",

"externalId": "APT-B1-111",

"status": {

"id": 300,

"code": "clientStatusType.active",

"value": "Active"

},

"subStatus": {

"active": false,

"mandatory": false

},

"active": true,

"activationDate": [

2025,

1,

9

],

"firstname": "Anil",

"middlename": "K",

"lastname": "S",

"displayName": "Anil K S",

"gender": {

"active": false,

"mandatory": false

},

"clientType": {

"active": false,

"mandatory": false

},

"clientClassification": {

"active": false,

"mandatory": false

},

"isStaff": false,

"officeId": 3,

"officeName": "APT Branch A",

"timeline": {

"submittedOnDate": [

2025,

1,

9

],

"submittedByUsername": "mifos",

"submittedByFirstname": "App",

"submittedByLastname": "Administrator",

"activatedOnDate": [

2025,

1,

9

],

"activatedByUsername": "mifos",

"activatedByFirstname": "App",

"activatedByLastname": "Administrator"

},

"legalForm": {

"id": 1,

"code": "legalFormType.person",

"value": "Person"

},

"clientNonPersonDetails": {

"constitution": {

"active": false,

"mandatory": false

},

"mainBusinessLine": {

"active": false,

"mandatory": false

}

}

},

{

"id": 8,

"accountNo": "000000008",

"externalId": "Cl-1",

"status": {

"id": 300,

"code": "clientStatusType.active",

"value": "Active"

},

"subStatus": {

"active": false,

"mandatory": false

},

"active": true,

"activationDate": [

2025,

1,

15

],

"firstname": "Sunil",

"middlename": "H",

"lastname": "S",

"displayName": "Sunil H S",

"dateOfBirth": [

1963,

2,

5

],

"gender": {

"id": 21,

"name": "MALE",

"active": false,

"mandatory": false

},

"clientType": {

"active": false,

"mandatory": false

},

"clientClassification": {

"active": false,

"mandatory": false

},

"isStaff": false,

"officeId": 3,

"officeName": "APT Branch A",

"timeline": {

"submittedOnDate": [

2025,

1,

15

],

"submittedByUsername": "mifos",

"submittedByFirstname": "App",

"submittedByLastname": "Administrator",

"activatedOnDate": [

2025,

1,

15

],

"activatedByUsername": "mifos",

"activatedByFirstname": "App",

"activatedByLastname": "Administrator"

},

"legalForm": {

"id": 1,

"code": "legalFormType.person",

"value": "Person"

},

"clientNonPersonDetails": {

"constitution": {

"active": false,

"mandatory": false

},

"mainBusinessLine": {

"active": false,

"mandatory": false

}

}

}

]

}

6.1.3. To fetch all the account details which are configured under the CBS application.  
url: <http://122.165.73.156:8080/fineract-provider/api/v1/clients/external-id/789/accounts>  
Basic authentication:   
username-mifos, password- password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

We will get the response code as 200 ok and the response body as a json object as follows, which will contain the details of the accounts created under the client John with external ID: 789. Here we have highlighted the some of the key details such as account ID, account No, account external ID, account balance etc.

JSON response body:  
         {

    "groupLoanIndividualMonitoringAccounts": [],

    "savingsAccounts": [

        {

            "id": 2,

            "accountNo": "000000002",

            "externalId": "888",

            "productId": 2,

            "productName": "Regular savings product",

            "shortProductName": "RSP",

            "status": {

                "id": 300,

                "code": "savingsAccountStatusType.active",

                "value": "Active",

                "submittedAndPendingApproval": **false**,

                "approved": **false**,

                "rejected": **false**,

                "withdrawnByApplicant": **false**,

                "active": **true**,

                "closed": **false**,

                "prematureClosed": **false**,

                "transferInProgress": **false**,

                "transferOnHold": **false**,

                "matured": **false**

            },

            "currency": {

                "code": "INR",

                "name": "Indian Rupee",

                "decimalPlaces": 2,

                "inMultiplesOf": 100,

                "displaySymbol": "₹",

                "nameCode": "currency.INR",

                "displayLabel": "Indian Rupee (₹)"

            },

            "accountBalance": 22742.000000,

            "accountType": {

                "id": 1,

                "code": "accountType.individual",

                "value": "Individual"

            },

            "timeline": {

                "submittedOnDate": [

                    2025,

                    1,

                    6

                ],

                "submittedByUsername": "mifos",

                "submittedByFirstname": "App",

                "submittedByLastname": "Administrator",

                "approvedOnDate": [

                    2025,

                    1,

                    6

                ],

                "approvedByUsername": "mifos",

                "approvedByFirstname": "App",

                "approvedByLastname": "Administrator",

                "activatedOnDate": [

                    2025,

                    1,

                    6

                ]

            },

            "subStatus": {

                "id": 0,

                "code": "SavingsAccountSubStatusEnum.none",

                "value": "None",

                "none": **true**,

                "inactive": **false**,

                "dormant": **false**,

                "escheat": **false**,

                "block": **false**,

                "blockCredit": **false**,

                "blockDebit": **false**

            },

            "lastActiveTransactionDate": [

                2025,

                1,

                16

            ],

            "depositType": {

                "id": 100,

                "code": "depositAccountType.savingsDeposit",

                "value": "Savings"

            }

        },

        {

            "id": 5,

            "accountNo": "000000005",

            "externalId": "JNSV01",

            "productId": 4,

            "productName": "Sav\_Prod\_1",

            "shortProductName": "SP1",

            "status": {

                "id": 300,

                "code": "savingsAccountStatusType.active",

                "value": "Active",

                "submittedAndPendingApproval": **false**,

                "approved": **false**,

                "rejected": **false**,

                "withdrawnByApplicant": **false**,

                "active": **true**,

                "closed": **false**,

                "prematureClosed": **false**,

                "transferInProgress": **false**,

                "transferOnHold": **false**,

                "matured": **false**

            },

            "currency": {

                "code": "INR",

                "name": "Indian Rupee",

                "decimalPlaces": 2,

                "inMultiplesOf": 10,

                "displaySymbol": "₹",

                "nameCode": "currency.INR",

                "displayLabel": "Indian Rupee (₹)"

            },

            "accountBalance": 27504.000000,

            "accountType": {

                "id": 1,

                "code": "accountType.individual",

                "value": "Individual"

            },

            "timeline": {

                "submittedOnDate": [

                    2025,

                    1,

                    15

                ],

                "submittedByUsername": "mifos",

                "submittedByFirstname": "App",

                "submittedByLastname": "Administrator",

                "approvedOnDate": [

                    2025,

                    1,

                    15

                ],

                "approvedByUsername": "mifos",

                "approvedByFirstname": "App",

                "approvedByLastname": "Administrator",

                "activatedOnDate": [

                    2025,

                    1,

                    15

                ]

            },

            "subStatus": {

                "id": 0,

                "code": "SavingsAccountSubStatusEnum.none",

                "value": "None",

                "none": **true**,

                "inactive": **false**,

                "dormant": **false**,

                "escheat": **false**,

                "block": **false**,

                "blockCredit": **false**,

                "blockDebit": **false**

            },

            "lastActiveTransactionDate": [

                2025,

                1,

                16

            ],

            "depositType": {

                "id": 100,

                "code": "depositAccountType.savingsDeposit",

                "value": "Savings"

            }

        }

    ],

    "guarantorAccounts": []

}

6.2. POST requests:

6.2.1. To perform Amount withdrawal from a savings account:  
url: <http://122.165.73.156:8080/fineract-provider/api/v1/savingsaccounts/2/transactions?command=withdrawal>

This particular api request is to update the savings account with account ID.2 which we have mentioned in the url. Savings account ID 2 is corresponds to the client John which we get from the client’s account details described in the above section.

Basic authentication:   
username: mifos, password: password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

JSON Request Body:  
{

    "transactionDate": "07 January 2025",

    "transactionAmount": 3330,

    "paymentTypeId": 2,

    "note": "withdrawal of 105 rs",

    "dateFormat": "dd MMMM yyyy",

    "locale": "en"

}

Here paymentTypeId: 2 stands for the withdrawal. We will get the response code as 200 ok and the response body as a json object as follows, which contains the details of the account which gets debited.

JSON response body:

{

    "officeId": 2,

    "clientId": 2,

    "savingsId": 2,

    "resourceId": 95,

    "changes": {

        "paymentTypeId": 2

    }

}

6.2.2. To perform Amount deposit to a savings account:  
url: [http://122.165.73.156:8080/fineract-provider/api/v1/savingsaccounts/2/transactions?command=deposit](http://122.165.73.156:8080/fineract-provider/api/v1/savingsaccounts/2/transactions?command=withdrawal)

This particular api request is to update the savings account with account ID.2 which we have mentioned in the url. Savings account ID 2 is corresponds to the client John which we get from the client’s account details described in the above section.

Basic authentication:   
username: mifos, password: password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

JSON Request Body:  
{

    "transactionDate": "07 January 2025",

    "transactionAmount": 2050,

    "paymentTypeId": 1,

    "note": "deposit 25k",

    "dateFormat": "dd MMMM yyyy",

    "locale": "en"

}  
Here paymentTypeId: 1 stands for the deposit. We will get the response code as 200 ok and the response body as a json object as follows, which contains the details of the account which gets credited.

JSON response body:  
{

    "officeId": 2,

    "clientId": 2,

    "savingsId": 2,

    "resourceId": 96,

    "changes": {

        "paymentTypeId": 1

    }

}

6.2.3. To perform Amount transfer between two savings accounts of two clients under different banks:  
url: [http://122.165.73.156:8080/fineract-provider/api/v1/accounttransfers](http://122.165.73.156:8080/fineract-provider/api/v1/savingsaccounts/2/transactions?command=withdrawal)

Basic authentication:   
username: mifos, password: password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

JSON Request Body:  
{

    "toOfficeId": 3,

    "toClientId": 6,

    "toAccountType": 2,

    "toAccountId": 4,

    "transferAmount": 514,

    "transferDate": "17 January 2025",

    "transferDescription": "fund transfer from John sav. acc000005 to Anil sav. acc000004",

    "dateFormat": "dd MMMM yyyy",

    "locale": "en",

    "fromAccountId": "5",

    "fromAccountType": "2",

    "fromClientId": 2,

    "fromOfficeId": 2

}

This api request is to transfer amount from one savings account under one bank to another savings account under another bank. Here the following account details are used in the json request body.  
fromOfficeId: 2 -> corresponding to the office APT Main Branch  
fromClientId: 2 -> corresponding to the client John  
from AccountType: 2 -> corresponding to the savings account  
fromAccountId: 2 -> corresponding to the id of the savings account 000000002

toOfficeId: 3 -> corresponding to the office APT Branch A  
toClientId: 6 -> corresponding to the client Anil  
to AccountType: 2 -> corresponding to the savings account  
toAccountId: 4 -> corresponding to the id of the savings account 000000004

Hence the savings account 000000002 of the client John under the bank APT Main Branch get debited an amount of rs.514 and at the same time the savings account 000000004 of the client Anil under the bank APT Branch A get credited an amount of rs.514

JSON response body:  
{

    "savingsId": 5,

    "resourceId": 18

}

6.2.4. To perform Amount transfer from a savings account under one bank to another loans account under another bank with two different clients:  
url: [http://122.165.73.156:8080/fineract-provider/api/v1/accounttransfers](http://122.165.73.156:8080/fineract-provider/api/v1/savingsaccounts/2/transactions?command=withdrawal)

Basic authentication:   
username: mifos, password: password  
Request header:   
Name: X-Mifos-Platform-TenantID , Value: default  
Name: Content-Type, Value: application/json

JSON Request Body:  
{

    "toOfficeId": 3,

    "toClientId": 8,

    "toAccountType": 1,

    "toAccountId": 5,

    "transferAmount": 614,

    "transferDate": "17 January 2025",

    "transferDescription": "fund transfer from John sav. acc000005 to Sunil loan. acc000005",

    "dateFormat": "dd MMMM yyyy",

    "locale": "en",

    "fromAccountId": "5",

    "fromAccountType": "2",

    "fromClientId": 2,

    "fromOfficeId": 2

}

This api request is to transfer amount from one savings account under one bank to another loans account under another bank. Here the following account details are used in the json request body.  
fromOfficeId: 2 -> corresponding to the office APT Main Branch  
fromClientId: 2 -> corresponding to the client John  
from AccountType: 2 -> corresponding to the savings account  
fromAccountId: 5 -> corresponding to the id of the savings account 000000005

toOfficeId: 3 -> corresponding to the office APT Branch A  
toClientId: 8 -> corresponding to the client Sunil  
to AccountType: 1 -> corresponding to the loans account  
toAccountId: 5 -> corresponding to the id of the loans account 000000005

Hence the savings account 000000005 of the client John under the bank APT Main Branch get debited an amount of rs.614 and at the same time the loans account 000000005 of the client Sunil under the bank APT Branch A get credited an amount of rs.614

JSON response body:  
{

    "savingsId": 5,

    "resourceId": 20

}