

HİZMETE ÖZEL



**BORSA
İSTANBUL**

BISTECH PTRM API CERTIFICATION PROGRAM

September 2022, Version 1.0

BISTECH PTRM API CERTIFICATION PROGRAM

..... ' BISTECH PTRM API FUNCTIONALITY and
CONNECTIVITY TEST

To The Attention of Our Members:

The purpose of this test is to enable our members to test their systems as they are in BISTECH PTRM API environment.

The certification test consists of the below steps;

1. System Connectivity Test
2. PTRM API Functionalities Test
 - a. Currency Control Functionality Test
 - b. User Limit Controller Functionality Test
 - c. User Transaction Controller Functionality Test

Please perform the below transactions in order and make sure to check the messages incoming at every step when you carry out these transactions.

First, determine the impact expected to occur when the request is sent to the system

Whether the expected impact occurred or not after any request is sent to the system will be controlled by dimensional and contextual integrity and accuracy of the response which reached you concerning the activity at the first degree. By controlling whether the activities are accurately processed or not at your main system which is the source of the activities carried out from every channel at the back in the second degree, proper blanks below each option will be ticked.

Inform the officers immediately if an unexpected situation occurs.

Please send the document to Borsa Istanbul officers after filling the part spared for you at the end of the test.

Legal Liability fully pertains to the member in disputes which may arise between the customers and members who do not use some of the properties and functions in their PTRM API programs which are taking part in existing property rules to be used with BISTECH PTRM API.

For this reason, we recommend our members to inform their customers on this subject and form the proper legal basis with their customers.

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Our members are fully responsible for the faultless perform of the member system.

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SECTION 1: CONNECTIVITY TEST

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Pre Trade Limit Groups that will be used during the test are listed below with username information:

Pre Trade Limit Group	Users
BIABC_BIABC_ABC	TG_RW_ABC
BIABC_BIABC_ABC	TG_RW_ABC1

1. Incorrect Login Attempt

- Send Login Request with password 123456 and verify that request is denied with the “Invalid login credentials provided” error message.

POST /api/v1/auth/login

```
{
  "dto": {
    "password": "username",
    "userName": "password"
  }
}
```

() Expected responses are received

() Problem with responses

2. Submitting a Login Request

Send the Login Request with the correct username and password. Verify that the access token is received.

POST /api/v1/auth/login

```
{
  "dto": {
    "password": "username",
    "userName": "password"
  }
}
```

() Expected responses are received

() Problem with responses

SECTION 2: PTRM API FUNCTIONALITY TEST

CURRENCY CONTROLLER FUNCTIONALITY TEST

a. Currency Information Request Submission

Send the request below and verify the Exchange Rate information for all currencies received.

```
GET /api/v1/currency/all-currencies
```

Expected responses are received

Problem with responses

USER LIMIT FUNCTIONALITY TEST

a. Sending User Limit Groups View Request

Send the below request and verify that all limit groups of the user are received.

```
GET /api/v1/read/userlimit/active-group-names
```

Expected responses are received

Problem with responses

b. Sending User Limit Groups Detail Information Display Request

Send the request below and verify that the detail information of the user limit groups are received.

```
GET /api/v1/read/userlimit/active-group-names
```

Expected responses are received

Problem with responses

c. Sending Risk Limit Update Request Effective Next Business Day to User Limit Group

Send the request below for the BIABC_BIABC_ABC user limit group, to update the limit of the BUY_MAX_SIZE risk type as 10,000,000 effective the next day for MSPOTEQTEREGL security.

POST /api/v1/txn/userlimit/save-pending-group

```
{
  "dto": {
    "parameters": {
      "name": "BIABC_BIABC_ABC",
      "participant": "BIABC"
    },
    "riskCheck": [
      {
        "groupName": "BIABC_BIABC_ABC",
        "tradable": "MSPOTEQTEREGL",
        "riskType": "BUY_MAX_SIZE",
        "calculationMethod": "QUANTITY",
        "limit": 10000000,
        "level": "MEMBER",
        "deleted": false
      }
    ]
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the check that the risk limit of this security is updated for the next day of User Limit Group as expected will be checked and verified by the Exchange Personnel.

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d. Submission of Risk Limit Update Request on Instrument belonging to Active User Limit Group

Send the request below to update the BUY_MAX_SIZE limit of the MSPOTEQTEREGL value of the User Limit Group to 5,000,000.

POST /api/v1/txn/userlimit/save-active-group

```
{
  "dto": {
    "parameters": {
      "name": "BIABC_BIABC_ABC",
      "participant": "BIABC"
    },
    "riskCheck": [
      {
        "groupName": "BIABC_BIABC_ABC",
        "tradable": "MSPOTEQTEREGL",
        "riskType": "BUY_MAX_SIZE",
        "calculationMethod": "QUANTITY",
        "limit": 10000000,
        "level": "MEMBER",
        "deleted": false
      }
    ]
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the check that the risk limit of this security is updated for the active User Limit Group as expected will be checked and verified by the Exchange Personnel.

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e. Sending Request to Update Notification Field in Active User Limit Group

Send the below request with the body to update the Notification field to BIABC_BIABC_ABC User Limit Group to 60.

POST /api/v1/txn/userlimit/save-active-group

```
{
  "dto": {
    "parameters": {
      "name": "BIABC_BIABC_ABC",
      "participant": "BIPIT",
      "notification" : 60
    }
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the check that the Notification value of the User Limit Group can be updated as expected will be verified by the Exchange Personnel by checking the PTRM GUI.

USER TRANSACTION FUNCTIONALITY TEST

- ❖ At this stage, users of ABCDE1 and ABCDE2 belonging to the User Limit Group will be used to connect to the system and orders entered by Exchange Personnel.

f. Sending Mass Cancel Request to User of User Limit Group

Send the request below to mass order cancellation request for ABCDE1 user belonging to the BIABC_BIABC_ABC User Limit Group.

```
POST /api/v1/txn/userlimit/mass-cancel-for-user
```

```
{
  "dto": {
    "ptlgUsers": [
      "ABCDE1"
    ]
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the cancellation of all orders of the user in the request will be checked and verified by the Exchange Personnel.

g. Sending Mass Cancel Requests to all Users of User Limit Group

Send the request below with the body to mass order cancellation request for BIABC_BIABC_ABC User Limit Group.

```
POST /api/v1/txn/userlimit/mass-cancel
```

```
{
  "dto": {
    "groupNames": ["BIABC_BIABC_ABC"]
  }
}
```

Expected responses are received

Problem with responses

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- ❖ At this stage, the cancellation of all orders for the users belonging to User Limit Group will be checked and verified by the Exchange Personnel.

h. Submitting a Request to Block User Limit Group

Send the request below to block the BIABC_BIABC_ABC User Limit Group.

```
POST /api/v1/txn/userlimit/block-group
```

```
{
  "dto": {
    "groupNames": ["BIABC_BIABC_ABC"]
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the termination of the connections for the users belonging to User Limit Group will be confirmed by the Exchange Personnel via the PTRM GUI.

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i. Submitting a Request to Un-block User Limit Group

Send the request below to un-block BIABC_BIABC_ABC User Limit Group.

```
POST /api/v1/txn/userlimit/unblock-group
```

```
{
  "dto": {
    "groupNames": ["BIABC_BIABC_ABC"]
  }
}
```

Expected responses are received

Problem with responses

- ❖ At this stage, the success of reconnections for the users belonging to User Limit Group will be checked and verified by the Exchange Personnel.

Test Evaluation

Title of the Brokerage House/ISV	
Technical Staff Participated in the Test (Client)	
Exchange Official Participated in the Test	
General Evaluation (to be filled by BIST officials)	

Please contact with bistechsupport_autoticket@borsaistanbul.com for your questions.