

# DatxApiManager

## Datx APIManager

Token - Get token to call apis  
 Token - Revoke generated token  
 User\_Account - Get current orders  
 User\_Account - Get current trades  
 User\_Account - Get portfolio information  
 User\_Account - Get monetary assets  
 User\_Account - Get turnover  
 User\_Account - Create a new order  
 User\_Account - Modify order  
 User\_Account - Cancel an order

Date	Version	Description
2018-12-25	1.0	Initial service documentation

### توجه

با توجه به اینکه داده های مربوط به سرویس های سفارشات جاری، معاملات جاری، گردش حساب، پورتنوی کاربر، گردش حساب و دارایی ریالی از طریق سامانه مجزای **push** (ر.ک. **DATX\_PUSH\_API**) قابل محاسبه است، داده های این سرویس ها صرفا جنبه مغایرت گیری داشته و با نرخ ۱۵ دقیقه یکبار بروزرسانی شده و هر ۵ ثانیه نیز قابل فراخوانی می باشد.

# Token

## Token - Get token to call apis

You can get api token to call services

POST

/api/oauth/token

### Header-Example:

```
{
  "Content-Type" : "application/x-www-form-urlencoded",
  "Authorization" : "Basic Authentication of Client Id and Client Secret"
}
```

### Parameter

Field	Type	Description
username	String	Dtts Username
password	String	Dtts Password
client_id	String	Api Manager Username
client_secret	String	Api Manager Password
grant_type	String	ApiManagergranttype. The standard which used for generating token is OAUTH2. OAUTH has 4 grant types in order to give access_token. one of those is "password". password grant_type is used when we have separated credentials in resource server (dtts). So type the exact "password" word for this field. Allowed values: [password]

### Body-Example:

```
{
  "client_id" : "apiManager_username",
  "client_secret" : "apiManager_password",
  "username" : "dtts_username",
  "password" : "dtts_password",
  "grant type" : "password"
}
```

Field	Type	Description
access_token	String	Token
token_type	String	Type of token
refresh_token	String	To revival taken token
expires_in	String	Expiry time of token
scope	String	Scope of token

#### Success

```
HTTP/1.1 200 OK
{
  "access_token": "35751a52-8116-4c1e-8617-eb5dd8495054",
  "token_type": "bearer",
  "refresh_token": "87413a4a-e696-4668-9505-e203fdf6021f",
  "expires_in": 1797,
  "scope": "datx1 read write"
}
```

#### Error 4xx

Name	Description
403	dtts credentials is wrong or jsessionId is expired.
401	api manager username or password is incorrect.
422	cannot get token without client credentials.

#### Response (example):

```
HTTP/1.1 401 client_id or client_secret is incorrect
{
  "error": "InvalidClientCredentialsError"
}
HTTP/1.1 403 dtts credentials is wrong or jsessionId is expired
{
  "error": "UsernamePasswordError"
}
```

## Token - Revoke generated token

You can revoke the access tokens issued for the application by following the instructions below

POST

```
/api/oauth/token/revoke
```

Header-Example:

```
{
  "Authorization" : "Bearer valid token"
}
```

### Success 200

Field	Type	Description
access_token	String	Token
status	String	Status of token

Success

```
HTTP/1.1 200 OK
{
  "access_token": "35751a52-8116-4c1e-8617-eb5dd8495054",
  "status": "revoked"
}
```

### Response Code Description

Name	Description
419	Authorization header not present
431	Token is not valid

Response (example):

```
HTTP/1.1 400 Bad Request
{
  "errorMsg": "token is not valid",
  "errorCode": "431"
}
```

# User Account

## User\_Account - Get current orders

You can get all current orders for user.

POST

/api/dtts/rest/v1/getCurrentOrders

Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
pgNum	Number	page number

Body-Example:

```
{
  "pgNum": 1
}
```

### Success 200

Field	Type	Description
OID	Number	Order Id.
Q	Number	Order quantity.
P	Number	Order price.
i	String	ISIN.
OT	String	Order type. Allowed values: <b>[LIMIT]</b>
VT	String	Validity type. Allowed values: <b>[DAY , GTD , GTC , FAK]</b>
VD	Date	Validity date.
TRQ	Number	Traded quantity.

ACQ	Number	Active quantity.
CLQ	Number	Canceled quantity.
OS	String	Order status.  Allowed values: <b>[PC(Pending_Confirmation) , PSE(PENDING_SEND_EXCHANGE) , EXP(EXPIRED) , F(FILLED) , CNL(CANCELLED) , CFM(CONFIRMED) , SR(SYSTEM_REJECTED) , AR(ACCOUNTING_REJECTED) , RJ(REJECTED) , PM(PENDING_MODIFICATION) , PCNL(PENDING_CANCELLATION) , PAOPV(PENDING_ACCOUNTING_OR_PORTFOLIO_VALIDATION)]</b>
OES	String	Order execution status.  Allowed values: <b>[NE(Not_Executed) , TE(Totally_Executed) , PE(Partial_Executed)]</b>
SD	String	Order side.  Allowed values: <b>[B(BUY) , S(SELL)]</b>
MDT	Date	Last modification time.
CT	Date	Creation time.
ICQ	Number	IceBerg quantity.
MNQ	Number	Minimum quantity.
IBO	String	account type.  Allowed values: <b>[CNB(CREDIT_NEAR_BROKER) , BPI(Pasargad , Bank) , SB(Saman , Bank) , BM(Mellat , Bank)]</b>
BID	Number	Bank Id.  Allowed values: <b>[0(Credit_Near_Broker) , 16(Pasargad) , 20(Mellat) , 18(Saman)]</b>
OGT	String	Order gateway.  Allowed values: <b>[MOB(Mobile) , WEB , API]</b>
FLG	Number	A flag showing whether actions are enabled or disabled.  Allowed values: <b>[0(Disabled_All_Actions) , 1(Copy) , 2(edit , copy , cancel)]</b>

Success

```
HTTP/1.1 200 OK
[
  {
    "ACQ" : 0,
    "BID" : 0,
    "CLQ" : 0,
    "CT" : 1396/03/16 15:08:17,
    "OID" : 399975,
    "FLG" : "1",
    "OGT" : "WEB",
    "i" : "IRO1SSOF0001",
    "IBO" : "CNB",
    "ICQ" : 0,
    "MNQ" : 0,
    "MDT" : 1396/03/16 15:08:18,
    "OES" : "NE",
    "OS" : "PC",
    "OT" : "LIMIT",
    "P" : 1319,
    "Q" : 5,
    "SD" : "B",
    "TRQ" : 0,
    "VT" : "DAY"
  },
  {
    "ACQ" : 10,
    "BID" : 0,
    "CLQ" : 0,
    "CT" : 1396/03/27 14:25:27,
    "FLG" : 2,
    "IBO" : "CNB",
    "ICQ" : 0,
    "MDT" : 1396/03/27 14:25:30,
    "MNQ" : 0,
    "OES" : "NE",
    "OGT" : "WEB",
    "OID" : 400527,
    "OS" : "CFM",
    "OT" : "LIMIT",
    "P" : 1049,
    "Q" : 10,
    "SD" : "B",
    "TRQ" : 0,
    "VT" : "DAY",
    "i" : "IRO1SIPA0001"
  }
]
```

## Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 Dtts credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.

RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
PageNumberIsInvalid	424 Page number is not number.
PageNumberIsLessThanZero	425 Page number is less than zero.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 1 request per 5 second
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Get current trades

You can get current trades for user

**POST**

/api/dtts/rest/v1/getCurrentTrades

### Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
pgNum	Number	page number

### Body-Example:

```
{
  "pgNum": 1
}
```



## Success 200

Field	Type	Description
CNL	String	Is canceled?.
CT	Date	Creation time.
MDT	Date	Last modification time.
OID	Number	Order ID.
SD	String	Order side. Allowed values: [S(SELL) , B(BUY)]
TCM	Number	Trade commission.
TRD	Date	Trade date.
TRP	Number	Trade price.
TRQ	Number	Trade quantity.
i	String	Instrument ISIN.
TRID	Number	Trade ID.

Success

HTTP/1.1 200 OK

```
[
{
  "CNL" : "true",
  "CT" : 1396/03/27 10:28:32,
  "MDT" : 1396/03/27 10:28:32,
  "OID" : 400526,
  "SD" : "B",
  "TCM" : 5,
  "TRD" : 1396/03/27 11:27:09,
  "TRP" : 1457,
  "TRQ" : 1,
  "TRID" : 56438,
  "i" : "IRO1SSOF0001"
}
]
```

## Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 Dtts credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.

RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
PageNumberIsInvalid	424 Page number is not number.
PageNumberIsLessThanZero	425 Page number is less than zero.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 1 request per 5 seconds
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Get portfolio information

You can get user's portfolio

POST

```
/api/dtts/rest/v1/getPortfoyInfo
```

Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

## Success 200

Field	Type	Description
i	String	ISIN (International Securities Identification Number ).
QAS	Number	Accumulated Quantity.
QBL	Number	Blocked Quantity.
CS	Number	Cost.

Success

```
HTTP/1.1 200 OK

[
  {
    "CS" : 191423,
    "QAS" : 100,
    "QBL" : 0,
    "i" : "IRO1MSKN0001"
  },
  {
    "CS" : 13797115,
    "QAS" : 4387,
    "QBL" : 0,
    "i" : "IRO1ROOI0001"
  }
]
```

#### Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 DttS credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.
RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
PageNumberIsNotNeededForThisApi	426 Page number is not needed.

#### Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 1 request per 5 seconds.
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Get monetary assets

You can get user's assets in rial

POST

```
/api/dtts/rest/v1/getMonetaryAssets
```

Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

Success 200

Field	Type	Description
OW	Number	Available Cash.
BL	Number	Blocked Cash.

Success

```
HTTP/1.1 200 OK

[
  {
    "BL" : 166223,
    "OW" : 13797115
  }
]
```

Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 Dtts credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.
RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 1 request per 5 seconds.
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Get turnover

You can get user's turnover

POST

/api/dtts/rest/v1/getTurnover

Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
pgNum	Number	page number

Body-Example:

```
{
  "pgNum": 1
}
```

### Success 200

Field	Type	Description
DT	Date	Date.
CRT	Number	Credit.
DBT	Number	Debit.

Success

HTTP/1.1 200 OK

```
[
  {
    "CRT" = 19942235,
    "DBT" = 0
  },
  {
    "CRT" = 0,
    "DBT" = 1462,
    "DT" = 1396/03/27 11:27:09
  }
]
```

## Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 DttS credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.
RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
PageNumberIsInvalid	424 Page number is not number.
PageNumberIsLessThanZero	425 Page number is less than zero.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 1 request per 5 second
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Create a new order

You can create a new order

POST

/api/dtts/rest/v1/createOrderRequest

### Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
BID	Number	Bank ID Allowed values: <b>[0(Credit_Near_Broker) , 16(Pasargad) , 20(Mellat) , 18(Saman)]</b>
ICQ	Number	Iceberg quantity.
i	String	Instrument ISIN.
MNQ	Number	Minimum quantity.
P	Number	Order price.
Q	Number	Order quantity.
SD	String	Order side. Allowed values: <b>[S(SELL) , B(BUY)]</b>
VT	String	Time validity type. Allowed values: <b>[DAY , GTD , GTC , FAK]</b>
VD	Date	Validity date. Allowed values: <b>[NULL , DATE(GTD)]</b>
OT	String	Order type. Allowed values: <b>[LIMIT]</b>
C	String	Cautionary instrument. Allowed values: <b>[A(ACCEPT) , R(REJECT) , NULL]</b>

### Body-Example:

```
{
  "BID": 0,
  "i": "IRO1SSOF0001",
  "OT": "LIMIT",
  "P": 1319,
  "Q": 100,
  "ICQ": "0",
  "MNQ": "0",
  "SD": "B",
  "VD": "NULL",
  "VT": "DAY",
  "OT": "LIMIT"
  "C": "A"
}
```

### Response Params

Field	Description
ID	orderId if order registered.
rid	requestExchangeId if order registered.
res_code	response code if order not registered.



## Response Code Description

Field	Description
200	Order registered.
601	<p><b><u>OMS limitation failed</u></b></p> <p>Order not authorized in holiday User is not authorized in this market Instrument not exist Order Type invalid Order validity date invalid Minimum quantity must be equal/lower than original quantity Iceberg quantity must be equal/lower than original quantity</p> <p><b><u>Primary limitation failed</u></b></p> <p>Market is closed Quantity limitation is violated Price limitation is violated Instrument status invalid Instrument group status invalid ticker size invalid</p> <p><b><u>Admin limitation failed</u></b></p>
602	Not member in market.
603	Instrument ipo.
604	Error in data transfer.
605	Request not authorized.
606	Instrument is under caution.

### Success

```

HTTP/1.1 200 OK
Order registered
[
  {
    "id": 6434734,
    "rid": "3001icjb17f6c360"
  }
]

Order not registered
[
  {
    "res_code": 601
  }
]
```

## Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 DttS credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.
RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
InvalidClientCredentials	422 Cannot get token without client credentials.
PageNumberIsNotNeededForThisApi	426 Page number is not needed.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 4 request per seconds
ResourceServerBusinessError	5201 Resource server returns with error.

## User\_Account - Modify order

You can modify an order

POST

/api/dtts/rest/v1/modifyOrderRequest

### Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
OID	Number	Order Id.
P	Number	Order price.
Q	Number	Order quantity.
ICQ	Number	Iceberg quantity.
VT	String	Time validity type. Allowed values: [DAY , GTD , GTC , FAK]
VD	Date	Validity date. Allowed values: [NULL , DATE(GTD)]

### Body-Example:

```
{
  "OID": 400717,
  "P": 1319,
  "Q": 110,
  "ICQ": "0",
  "SD": "B",
  "VT": "DAY",
  "VD": "NULL",
}
```

### Response Params

Field	Description
rid	requestExchangeId if order registered.
res_code	response code.

## Response Code Description

Field	Description
200	Order registered.
601	<p><b><u>OMS limitation failed</u></b></p> <p>Order not authorized in holiday User is not authorized in this market Instrument not exist Order Type invalid Order validity date invalid Minimum quantity must be equal/lower than original quantity Iceberg quantity must be equal/lower than original quantity</p> <p><b><u>Primary limitation failed</u></b></p> <p>Market is closed Quantity limitation is violated Price limitation is violated Instrument status invalid Instrument group status invalid ticker size invalid</p> <p><b><u>Admin limitation failed</u></b></p>
604	Error in data transfer.
605	Request not authorized.
607	Order not found.

### Success

```

HTTP/1.1 200 OK
Order registered
[
  {
    "rid": "3001icjb17f6c360"
  }
]

Order not registered
[
  {
    "res_code": 601
  }
]
```

### Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 DttS credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.

RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
InvalidClientCredentials	422 Cannot get token without client credentials.
PageNumberIsNotNeededForThisApi	426 Page number is not needed.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ResourceServerBusinessError	5201 Resource server returns with error.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 4 request per seconds

## User\_Account - Cancel an order

You can cancel an order

POST

/api/dtts/rest/v1/cancelOrder

### Header-Example:

```
{
  "Content-Type" : "application/json",
  "Authorization" : "Bearer cebcbb91-2980-4632-adcf-aac4bc07f644"
}
```

### Parameter

Field	Type	Description
OID	Number	Order Id.

### Body-Example:

```
{
  "OID": 400717
}
```

## Response Params

Field	Description
rid	requestExchangeId if order registered.
res_code	response code.

## Response Code Description

Field	Description
200	Order registered.
601	<p><b><u>OMS limitation failed</u></b></p> <p>Order not authorized in holiday User is not authorized in this market Instrument not exist Order Type invalid Order validity date invalid Minimum quantity must be equal/lower than original quantity Iceberg quantity must be equal/lower than original quantity</p> <p><b><u>Primary limitation failed</u></b></p> <p>Market is closed Quantity limitation is violated Price limitation is violated Instrument status invalid Instrument group status invalid ticker size invalid</p> <p><b><u>Admin limitation failed</u></b></p>
604	Error in data transfer.
605	Request not authorized.
607	Order not found.

Success

```

HTTP/1.1 200 OK
Order registered
[
  {
    "rid": "3001icjb17f6c360"
  }
]

Order not registered
[
  {
    "res_code": 601
  }
]
```

## Error 4xx

Name	Description
BadRequest	400 Parameter value is incorrect.
Forbidden	403 DttS credentials is wrong or jsessionId is expired.
MethodNotAllowed	405 Method not allowed.
RequestTimeout	408 Connection timeout.
ParameterNotAllowed	418 Parameter not allowed.
InvalidAuthorizationHeader	419 Header not filled correctly.
WrongParameters	420 Wrong parameter names.
InvalidClientCredentials	422 Cannot get token without client credentials.
PageNumberIsNotNeededForThisApi	426 Page number is not needed.

## Error 5xx

Name	Description
ServiceUnavailable	503 Service is unavailable.
ResourceServerBusinessError	5201 Resource server returns with error.
ApiCallExceedLimitationException	520 Exceeded maximum call rate. You get this error in case of calling more than 4 request per seconds