

Brokerage Application Program Interface (API)

The URL generally has the form `/api/<resource>/<action>`, which could either retrieve a result or perform some action.

When retrieving a result, the API expects a HTTP GET method, and when performing an action it expects a HTTP POST.

The resource **`/api/brokerage`** offers access to the brokerages for which the API user is a contract person. It is not possible to address a specific brokerage.

Successful results are returned as HTTP 200 or 201 responses, with the body containing JSON data. Defined error responses will be in the HTTP 400 range, and undefined server errors in the HTTP 500 range.

Error responses contain the following JSON format:

```
{
  "errors" : [
    {
      "description" : "<error description>",
      "code" : "<error code>",
      "index" : <integer>
    }
  ]
}
```

where the error description is a detailed description of the error, and the error code is a short reference of the error.

Index is an optional error field and is present when the request data is an array of objects. It indicates the position of the offending object in the request array.



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1 Brokerage holdings

A breakdown of the investor accounts underlying instruments and their balances/market values.

GET: /api/brokerage/holdings?date={date}

Content-Type: application/json

Example request:

/api/brokerage/holdings?date=2005-07-04

Example JSON response:

HTTP: 200

```
{
  'data': [
    {
      "Brokerage code": "000000",
      "Brokerage name": "Adviser Default",
      "Brokerage unique id": 637388032,
      "Holdings": [
        {
          "Instrument code": "ZAR",
          "Units": {"type": "Money", "currency": "ZAR", "value": "0.00"},
          "Contract id": 816075264,
          "Date": "2005-07-04",
          "Instrument name": "Cash in ZAR",
          "Contract number": "POL3",
          "Client account id": 617959424,
          "Market Value in Fund Currency": {"type": "Money", "currency": "ZAR", "value": "0.00"},
          "Instrument id": 701434880,
          "Market Value in System Currency": {"type": "Money", "currency": "ZAR", "value": "0.00"},
          "Instrument account number": "",
          "Latest available price": {"type": "Price", "currency": "ZAR", "Instrument id": 701434880, "value": "1.0000"},
          "Price date": "2005-07-04"
        },
        {
          "Instrument code": "AGMF", "Units": {"type": "Money", "currency": "ZAR", "value": "99.78"},
          "Contract id": 816075264, "Date": "2005-07-04", "Instrument name": "Allan Gray Money Market Fund",
```

```
"Contract number": "POL3", "Client account id": 617959424, "Market Value in Fund Currency": {"type": "Money", "currency": "ZAR", "value": "99.78"}, "Instrument id": 574790656, "Market Value in System Currency": {"type": "Money", "currency": "ZAR", "value": "99.78"}, "Instrument account number": "", "Latest available price": {"type": "Price", "currency": "ZAR", "Instrument id": 574790656, "value": "1.0000"}, "Price date": "2005-07-04"},
```

```
    {"Instrument code": "COR01", "Units": {"type": "Unit", "Instrument id": 471667712, "value": "199.5600"}, "Contract id": 816075264, "Date": "2005-07-04", "Instrument name": "Coronation Balanced Fund", "Contract number": "POL3", "Client account id": 617959424, "Market Value in Fund Currency": {"type": "Money", "currency": "ZAR", "value": "199.56"}, "Instrument id": 471667712, "Market Value in System Currency": {"type": "Money", "currency": "ZAR", "value": "199.56"}, "Instrument account number": "", "Latest available price": {"type": "Price", "currency": "ZAR", "Instrument id": 471667712, "value": "1.0000"}, "Price date": "2005-05-22"}
```

```
    ]
```

```
  },
```

```
  {"Brokerage code": "000017", "Holdings": [], "Brokerage name": "Good Advice Brokers", "Brokerage unique id": 602849024}
```

```
]
```

```
}
```

Notes:

Units structure returned can be of the following types:

1. type Money, eg: "Units": {"type": "Money", "currency": "ZAR", "value": "99.78"}
2. type Unit, eg: "Units": {"type": "Unit", "Instrument id": 471667712, "value": "199.5600"}

Error codes:

HTTP response	Code	Description
400	MalformedRequest	Invalid date "2005-13-01". Expected ISO date "YYYY-MM-DD"

2 Brokerage transactions

Answers a list of transactions; will give the same balance per instrument as the Brokerage Holdings if summed together. Transaction types can be grouped together to give In/Out flows and fees/expense transaction totals.

GET: `/api/brokerage/transactions?date={date}`

`/api/brokerage/transactionsInRange?fromDate={1}&toDate={2}'`

Content-Type: `application/json`

Note: Date must be ISO format string YYYY-MM-DD and will only include transactions that changed on this date

Example request:

`/api/brokerage/transactions?date=2005-05-13`

Example JSON response:

HTTP: 200

```
{
  'data': [
    {
      "Brokerage code": "000017",
      "Brokerage name": "Good Advice Brokers",
      "Brokerage unique id": 618780672,
      "Transactions": [
        {
          "Date": "2005-07-04",
          "Contract number": "POL3",
          "Contract id": 310246144,
          "Client account id": 463387648,
          "Instrument account number": "",
          "Transaction id": 861225728,
          "Instrument name": "Coronation Balanced Fund",
          "Instrument id": 572410112,
```

```

    "Instrument code": "COR01",
    "Processed date": "2005-07-04",
    "Description" : 'Sell (Annuity Payment)',
    'Amount' : {
        'currency' : 'ZAR',
        'value' : '-1431.00',
        'type' : 'Money'
    },
    'Price' : {
        'value' : '13.500000',
        'currency' : 'ZAR',
        'Instrument id' : 832593409,
        'type' : 'Price'
    },
    'Units' : {
        'value' : '-106',
        'Instrument id' : 832593409,
        'type' : 'Unit'
    },
    'Is Cashflow': 'No',
    'Type': 'ContributionTransaction',
    'Sub type': 'Sell'
  }
]
}

```

Error codes:

HTTP response	Code	Description
400	MalformedRequest	Invalid date "2005-13-01". Expected ISO date "YYYY-MM-DD"

3 Contracts

A list of contracts for the brokerages the API user is a contact person for.

GET: `/api/brokerage/contracts`

Content-Type: `application/json`

Example request:

`/api/brokerage/contracts`

Example JSON response:

HTTP: 200

```
{
  'data': [
    {
      "Brokerage code": "000000",
      "Contracts": [
        {
          "Advisor unique id": 425529344,
          "Owner unique id": 562061312,
          "Advisor code": "abcde",
          "Product name": "Discretionary",
          "Product code": "DIS",
          "Advisor name": "George Agnew",
          "Contract number": "POL3",
          "Owner": "liliana ivan",
          "Owner identification number": "6611235090089",
          "Preferred currency": "ZAR",
          "Contract unique id": 240485632,
          "Owner details": {
            "Work telephone": "",
            "Title": "",
            "Initials": "I",
            "First name": "liliana",
            "Home telephone": ""
          }
        }
      ]
    }
  ]
}
```

```
"Email address": "lili@finworks.biz",  
"Cellphone": "",  
"Surname": "ivan",  
"Type": "Person",  
"Middle names": "",  
"ID number": "6611235090089"}  
}  
],  
"Brokerage name": "Adviser Default",  
"Brokerage unique id": 822669056},  
{  
"Brokerage code": "000017",  
"Contracts": [],  
"Brokerage name": "Good Advice Brokers",  
"Brokerage unique id": 809288960}  
]  
}
```

Notes:

Owner details structure will have the following fields, depending on Type:

1. Type = 'Person'
 - a. Type (Person)
 - b. Email address
 - c. Cellphone
 - d. Home telephone
 - e. Work telephone
 - f. ID number
 - g. First name
 - h. Middle names
 - i. Title
 - j. Surname
 - k. Initials
2. Type = 'Company'
 - a. Type (Company)
 - b. Email address
 - c. Cellphone
 - d. Home telephone
 - e. Work telephone
 - f. Registration number



g. Company name

4 Advisors

A list of advisors for the brokerages the API user is a contact person for.

GET: `/api/brokerage/advisors`

Content-Type: `application/json`

Example request:

`/api/brokerage/contracts`

Example JSON response:

HTTP: 200

```
{
  'data': [
    {"Brokerage code": "000000",
    "Advisors":
      [
        {"Advisor code": "abcde",
        "Advisor unique id": 917447424,
        "Details": {"Title": "",
          "Initials": "G",
          "Work telephone": "",
          "Email address": "george@test.com",
          "First name": "George",
          "Cellphone": "",
          "Home telephone": "",
          "Type": "Person",
          "ID number": "5010011430080",
          "Surname": "Agnew",
          "Middle names": ""
        }
      ]
    },
    {"Brokerage name": "Adviser Default",
```



```
"Brokerage unique id": 568529408
```

```
},
```

```
{"Brokerage code": "000017",
```

```
"Advisors": [ ],
```

```
"Brokerage name": "Good Advice Brokers",
```

```
"Brokerage unique id": 847661568
```

```
}
```

```
]
```

```
}
```

Notes:

Details structure is the same as the Owner details from the contracts call