
chapter7

GET retrieve ACWI 5 yrs dividends

```
https://api.iextrading.com/1.0/stock/AGND/dividends/5y
```

Example Request

```
retrieve ACWI 5 yrs dividends
```

GET iex stats

```
https://api.iextrading.com/1.0/stock/acwf/chart
```

Example Request

```
iex stats
```

GET cf_etf_dividend_denormalize_mappings

```
http://localhost:9200/cf_etf_dividend_denormalize/_mappings
```

HEADERS

Content-Type

application/json

Example Request

```
cf_etf_dividend_denormalize_mappings
```

POST cf_etf_dividend_denormalize_search

```
http://localhost:9200/cf_etf_dividend_denormalize/_search
```

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "bool": {
      "must": [
        {"range": {"exDate": {"lte": "2016-02-01"}}},
        {"range": {"amount": {"gte": 0.1}}}
      ]
    }
  }
}
```

Example Request

```
cf_etf_dividend_denormalize_search
```

```
curl --location --request POST "http://localhost:9200/cf_etf_dividend_denormalize/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"bool\": {
      \"must\": [
        {\"range\": {\"exDate\": {\"lte\": \"2016-02-01\"}}},
        {\"range\": {\"amount\": {\"gte\": 0.1}}}
      ]
    }
  }
}
```

GET cf_etf_dividend_array_object_mappings

http://localhost:9200/cf_etf_dividend_io/_mappings

HEADERS

Content-Type

application/json

Example Request

cf_etf_dividend_array_object_mappings

POST cf_etf_dividend_array_object_search

http://localhost:9200/cf_etf_dividend_io/_search

HEADERS

Content-Type

application/json

BODY

```

{
  "query": {
    "bool": {
      "must": [
        {"range": {"announcement.exDate": {"lte": "2016-02-01"}}},
        {"range": {"announcement.amount": {"gte": 0.1}}},
        {"match": {"symbol": "ACWF"}}
      ]
    }
  }
}

```

Example Request

cf_etf_dividend_array_object_search

```

curl --location --request POST "http://localhost:9200/cf_etf_dividend_io/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"bool\": {
      \"must\": [
        {\"range\": {\"announcement.exDate\": {\"lte\": \"2016-02-01\"}}},
        {\"range\": {\"announcement.amount\": {\"gte\": 0.1}}},
        {\"match\": {\"symbol\": \"ACWF\"}}
      ]
    }
  }
}"

```

POST cf_etf_dividend_array_object_search_none

http://localhost:9200/cf_etf_dividend_io/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "bool": {
      "must": [
        {"range": {"announcement.exDate": {"lte": "2015-12-01"}}},
        {"range": {"announcement.amount": {"gte": 0.2}}},
        {"match": {"symbol": "ACWF"}}
      ]
    }
  }
}
```

Example Request

cf_etf_dividend_array_object_search_none

```
curl --location --request POST "http://localhost:9200/cf_etf_dividend_io/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"bool\": {
      \"must\": [
        {\"range\": {\"announcement.exDate\": {\"lte\": \"2015-12-01\"}}},
        {\"range\": {\"announcement.amount\": {\"gte\": 0.2}}},
        {\"match\": {\"symbol\": \"ACWF\"}}
      ]
    }
  }
}
```

GET cf_etf_dividend_nested__mappings

http://localhost:9200/cf_etf_dividend_nested/_mappings

HEADERS

Content-Type

application/json

Example Request

cf_etf_dividend_nested__mappings

POST cf_etf_dividend_nested_object_search_none

http://localhost:9200/cf_etf_dividend_nested/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "bool": {
      "must": [
        {"match": {"symbol": "ACWF"}},
        {"nested": {
          "path": "announcement",
          "query": {
            "bool": {
              "must": [
```

Example Request

cf_etf_dividend_nested_object_search_none

```
curl --location --request POST "http://localhost:9200/cf_etf_dividend_nested/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"bool\": {
      \"must\": [
        {\"match\": {\"symbol\": \"ACWF\"}},
        {\"nested\": {
          \"path\": \"announcement\",
```

POST cf_etf_dividend_nested_object_search

http://localhost:9200/cf_etf_dividend_nested/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "bool": {
      "must": [
        {"match": {"symbol": "ACWF"}},
        {"nested": {
          "path": "announcement",
          "query": {
            "bool": {
              "must": [
```

Example Request

cf_etf_dividend_nested_object_search

```
curl --location --request POST "http://localhost:9200/cf_etf_dividend_nested/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"bool\": {
      \"must\": [
        {\"match\": {\"symbol\": \"ACWF\"}},
        {\"nested\": {
          \"path\": \"announcement\",
```

PUT cf_etf_dividend_join_index

http://localhost:9200/cf_etf_dividend_join/

HEADERS

Content-Type

application/json

BODY

```
{
  "mappings": {
    "dynamic": false,
    "properties": {
      "cf_etf_dividend": {
        "type": "join",
        "relations": {
          "cf_etf": "dividend"
        }
      }
    }
  }
}
```

Example Request

cf_etf_dividend_join_index

```
curl --location --request PUT "http://localhost:9200/cf_etf_dividend_join/" \
--header "Content-Type: application/json" \
--data "{
  \"mappings\": {
    \"dynamic\": false,
    \"properties\": {
      \"cf_etf_dividend\": {
        \"type\": \"join\",
        \"relations\": {

```

POST cf_etf_acwf_join_bulk_index

localhost:9200/cf_etf_dividend_join/_bulk

HEADERS

Content-Type

application/json

BODY

```
{ "index": { "_index": "cf_etf_dividend_join", "_id": "12345678" } }
{ "symbol": "ACWF", "fund_name": "iShares Edge MSCI Multifactor Global ETF", "rating": 3, "mornin
```


Example Request

n cf_etf_acwf_join_bulk_index

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_bulk" \  
  --header "Content-Type: application/json" \  
  --data "{\"index\":{\"_index\":\"cf_etf_dividend_join\", \"_id\":\"12345678\"}}\  
{\"symbol\": \"ACWF\", \"fund_name\": \"iShares Edge MSCI Multifactor Global ETF\", \"rating\":  
  The fund generally will invest at least 90% of its assets in the component securities of the ur  
\"
```

POST cf_etf_dividend_join_search_all

localhost:9200/cf_etf_dividend_join/_search

HEADERS

Content-Type

application/json

BODY

{ }

Example Request

cf_etf_dividend_join_search_all

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search" \  
  --header "Content-Type: application/json" \  
  --data "{ }  
\"
```

POST cf_etf_dividend_join_bulk_index

```
localhost:9200/cf_etf_dividend_join/_bulk
```

HEADERS

Content-Type

application/json

BODY

```
{ "index": { "_index": "cf_etf_dividend_join", "routing": "12345678" } }
{ "cf_etf_dividend": { "name": "dividend", "parent": "12345678", "exDate": "2017-12-19", "paymentDate": "2017-12-19" } }
{ "index": { "_index": "cf_etf_dividend_join", "routing": "12345678" } }
{ "cf_etf_dividend": { "name": "dividend", "parent": "12345678", "exDate": "2017-12-19", "paymentDate": "2017-12-19" } }
{ "index": { "_index": "cf_etf_dividend_join", "routing": "12345678" } }
{ "cf_etf_dividend": { "name": "dividend", "parent": "12345678", "exDate": "2017-06-20", "paymentDate": "2017-06-20" } }
{ "index": { "_index": "cf_etf_dividend_join", "routing": "12345678" } }
{ "cf_etf_dividend": { "name": "dividend", "parent": "12345678", "exDate": "2016-12-21", "paymentDate": "2016-12-21" } }
{ "index": { "_index": "cf_etf_dividend_join", "routing": "12345678" } }
```

Example Request

```
cf_etf_dividend_join_bulk_index
```

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_bulk" \
  --header "Content-Type: application/json" \
  --data '{"index":{"_index":"cf_etf_dividend_join","routing":"12345678"}}
{"cf_etf_dividend":{"name":"dividend","parent":"12345678","exDate":"2017-12-19","paymentDate":"2017-12-19"}}
{"index":{"_index":"cf_etf_dividend_join","routing":"12345678"}}
{"cf_etf_dividend":{"name":"dividend","parent":"12345678","exDate":"2017-12-19","paymentDate":"2017-12-19"}}
{"index":{"_index":"cf_etf_dividend_join","routing":"12345678"}}
{"cf_etf_dividend":{"name":"dividend","parent":"12345678","exDate":"2017-06-20","paymentDate":"2017-06-20"}}
{"index":{"_index":"cf_etf_dividend_join","routing":"12345678"}}'
```

GET cf_etf_dividend_join_mappings

```
http://localhost:9200/cf_etf_dividend_join/_mappings
```

HEADERS

Content-Type

application/json

Example Request

cf_etf_dividend_join_mappings

POST cf_etf_dividend_join_parent_id_query

localhost:9200/cf_etf_dividend_join/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {"parent_id":{"type":"dividend", "id":"12345678"}}
}
```

Example Request

cf_etf_dividend_join_parent_id_query

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search" \
  --header "Content-Type: application/json" \
  --data "{
    \"query\": {\"parent_id\":{\"type\": \"dividend\", \"id\": \"12345678\"}}
  }"
```

POST cf_etf_dividend_join_has_child_search_match_all

localhost:9200/cf_etf_dividend_join/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "has_child": {"type": "dividend", "min_children": 6, "max_children": 7, "query": {"match_all": {}}}
  }
}
```

Example Request

cf_etf_dividend_join_has_child_search_match_all

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"has_child\": {\"type\": \"dividend\", \"min_children\": 6, \"max_children\": 7, \"query\": {\"match_all\": {}}}}
}"
```

POST cf_etf_dividend_join_has_child_search

localhost:9200/cf_etf_dividend_join/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "has_child": {"type": "dividend", "query": {"prefix": {"symbol": "ACWF"}}}
  }
}
```

Example Request

cf_etf_dividend_join_has_child_search

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search" \
--header "Content-Type: application/json" \
--data "{
  \"query\": {
    \"has_child\": {\"type\": \"dividend\", \"query\": {\"prefix\": {\"symbol\": \"ACWF\"}}}
  }
}"
```

POST cf_etf_dividend_join_has_parent_search_match_all

localhost:9200/cf_etf_dividend_join/_search

HEADERS

Content-Type

application/json

BODY

```
{
  "query": {
    "has_parent": {"parent_type": "cf_etf", "query": {"match_all": {}}}
  }
}
```

Example Request

cf_etf_dividend_join_has_parent_search_match_all

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search" \  
  --header "Content-Type: application/json" \  
  --data "{  
    \"query\": {  
      \"has_parent\": {\"parent_type\": \"cf_etf\", \"query\": {\"match_all\": {}}}  
    }  
  }"
```

POST cf_etf_dividend_join_has_parent_search

localhost:9200/cf_etf_dividend_join/_search?routing=12345678

HEADERS

Content-Type

application/json

PARAMS

routing

12345678

BODY

```
{  
  "query": {  
    "has_parent": {"parent_type": "cf_etf", "query": {"match": {"type": "Dividend income"}}}  
  }  
}
```

Example Request

cf_etf_dividend_join_has_parent_search

```
curl --location --request POST "localhost:9200/cf_etf_dividend_join/_search?routing=12345678" \  
  --header "Content-Type: application/json" \  
  --data "{  
    \"query\": {  
      \"has_parent\": {\"parent_type\": \"cf_etf\", \"query\": {\"match\": {\"type\": \"Dividend  
    }  
  }  
}"
```