# Chapter 6 – Search APIs

# Example Request - count\_etf\_list\_bulk\_indexed\_doc

POST http://localhost:9200/cf\_etf/\_count

HEADERS Content-Type application/json

curl --location --request POST "http://localhost:9200/cf\_etf/\_count" --header
"Content-Type: application/json"

# **Example Request - search\_within\_cf\_etf**

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

curl --location --request POST "http://localhost:9200/cf\_etf/\_search" --header
"Content-Type: application/json"

# Example Request - search\_within\_cf\_etf\_cf\_view

POST http://localhost:9200/cf\_etf,cf\_view/\_search

HEADERS Content-Type application/json

curl --location --request POST "http://localhost:9200/cf\_etf,cf\_view/\_search" --header
"Content-Type: application/json"

# **Example Request - search\_within\_all\_indices**

POST http://localhost:9200/\_search

HEADERS Content-Type application/json curl --location --request POST "http://localhost:9200/\_search" --header "Content-Type:
application/json"

# Example Request - search\_cf\_etf\_from\_size\_sort\_source\_false

POST http://localhost:9200/cf\_etf/\_search?from=2&size=2&sort=symbol:asc&\_source=false

#### **HEADERS**

Content-Type application/json

#### **PARAMS**

from

2

size

2 sort

symbol:asc

\_source

false

```
curl --location --request POST
```

"http://localhost:9200/cf\_etf/\_search?from=2&size=2&sort=symbol:asc&\_source=false" -- header "Content-Type: application/json"

#### Example Request - search cf etf sort score

POST http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares edge global&from=2&size=2&sort=\_score:asc

#### **HEADERS**

Content-Type application/json

#### PARAMS

q

fund\_name:ishares edge global

from

2

size

2 sort

\_score:asc

## curl --location --request POST

"http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares%20edge%20global&from=2&size= 2&sort=\_score:asc" --header "Content-Type: application/json"

#### Example Request - search\_query\_default\_operator

# POST search\_query\_default\_operator

http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares edge global&default\_operator=AND

#### **HEADERS**

Content-Type application/json

#### **PARAMS**

q

fund\_name:ishares edge global default\_operator AND

curl --location --request POST

"http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares%20edge%20global&default\_operator=AND" --header "Content-Type: application/json"

# Example Request - search\_query\_default\_operator\_explain

POST http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares edge global&default\_operator=AND&explain=true

#### **HEADERS**

Content-Type application/json

#### **PARAMS**

a

fund\_name:ishares edge global default\_operator AND explain

true

curl --location --request POST

"http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares%20edge%20global&default\_operator=AND&explain=true" --header "Content-Type: application/json"

#### Example Request - search\_query\_keyword\_analyzer

POST http://localhost:9200/cf\_etf/\_search?q=fund\_name:ishares edge global&default\_operator=AND&analyzer=keyword

**HEADERS** 

Content-Type application/json

#### **PARAMS**

q

fund\_name:ishares edge global default\_operator

```
curl --location --request POST
"http://localhost:9200/cf_etf/_search?q=fund_name:ishares%20edge%20global&default_oper
ator=AND&analyzer=keyword" --header "Content-Type: application/json" --data ""
```

# Example Request - request\_body\_search\_fund\_name\_w\_3\_words

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\":
\"fund_name:ishares edge global\", \"default_operator\": \"AND\" } } }"
```

## Example Request. - request\_body\_search\_from\_size\_sort\_source\_false

```
POST request_body_search_from_size_sort_source_false http://localhost:9200/cf_etf/_search
```

```
HEADERS
```

```
Content-Type application/json
```

```
BODY
{
         "from":2,
         "size":2,
         "sort":{"symbol":"asc"},
         "_source":false
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"from\":2, \"size\":2,
\"sort\":{\"symbol\":\"asc\"}, \"_source\":false }"
```

# Example Request - request\_body\_search\_sort\_rating\_symbol

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\":
\"fund_name:ishares edge msci\", \"default_operator\": \"AND\" } },
\"sort\":{\"rating\":\"desc\", \"symbol\":\"asc\"} }"
```

#### Example Request - search\_query\_scroll\_1

POST http://localhost:9200/cf\_etf/\_search?scroll=10m

```
HEADERS
Content-Type application/json
PARAMS
scroll
10m
BODY
{
```

```
{
    "size": 313
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search?scroll=10m" --
header "Content-Type: application/json" --data "{ \"size\": 313 }"
```

#### Example Request - search\_query\_scroll\_2

POST http://localhost:9200/\_search/scroll

```
HEADERS
Content-Type
application/json

BODY
{
    "scroll":"10m",
    "scroll_id": "DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAAAANQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ=="
}
```

```
curl --location --request POST "http://localhost:9200/_search/scroll" --header
"Content-Type: application/json" --data "{ \"scroll\":\"10m\", \"scroll_id\":
\"DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAAAQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ==\" }"
```

# Example Request - search\_query\_scroll\_3

POST http://localhost:9200/\_search/scroll

```
HEADERS
Content-Type
application/json

BODY
{
    "scroll":"10m",
    "scroll id": "DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAANQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ=="
```

```
curl --location --request POST "http://localhost:9200/_search/scroll" --header
"Content-Type: application/json" l-data "{ \"scroll\":\"10m\", \"scroll_id\":
\"DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAAANQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ==\" }"
```

#### **Example Request - delete\_scroll context**

DEL http://localhost:9200/\_search/scroll

```
HEADERS
Content-Type
application/json

BODY
{
    "scroll_id":
["DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAAAAQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ=="]
}
```

```
curl --location --request DELETE "http://localhost:9200/_search/scroll" --header
"Content-Type: application/json" --data "{ \"scroll_id\":
[\"DXF1ZXJ5QW5kRmV0Y2gBAAAAAAAAANQWNWdUemoybmFSOUNvM3gwQkRZT0xBQQ==\"] }"
```

# Example Request request\_body\_search\_after POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"size\":2, \"sort\":
{ \"rating\":\"desc\", \"symbol\":\"asc\" }, \"search_after\": [5, \"EES\"] }"
```

# Example Request - request\_body\_search\_rescore\_original

POST request\_body\_search\_rescore\_original

http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"description:emerging non-diversified high-yield gobal dividend\",
\"analyzer\":\"description_analyzer\" } } }"
```

#### Example Request - request\_body\_search\_rescore

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
{
       "query": {
               "query string": {
                       "query": "description:emerging non-diversified high-yield gobal
dividend",
                      "analyzer": "description analyzer"
       },
"rescore": {
    "--index"

               "window size":500,
               "query": {
    "rescore_query": {
                              "query string": {
                              "query": "description: global",
                              "analyzer": "description_analyzer"
                      },
                      "query weight" : 0.1,
               "rescore query weight": 0.9
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"description:emerging non-diversified high-yield gobal dividend\",
\"analyzer\":\"description_analyzer\" } }, \"rescore\": { \"window_size\":500,
\"query\": { \"rescore_query\": { \"query_string\":
{ \"query\":\"description:global\", \"analyzer\":\"description_analyzer\" } },
\"query_weight\": 0.1, \"rescore_query_weight\": 0.9 } } }"
```

# Example Request - request\_body\_search\_rescore\_mode

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"description:emerging non-diversified high-yield gobal\",
\"analyzer\":\"description_analyzer\" } }, \"rescore\": { \"window_size\":100,
\"query\": { \"rescore_query\": { \"query_string\":
{ \"query\":\"description:global\", \"analyzer\":\"description_analyzer\" } },
\"score_mode\": \"avg\" } }"
```

## Example Request - request\_body\_search\_script\_evaluate\_doc

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"description:emerging non-diversified high-yield gobal\",
\"analyzer\":\"description_analyzer\" } }, \"script_fields\": { \"test\": { \"script\": \"doc['symbol']\" } }"
```

Example Request - request\_body\_search\_script\_evaluation\_source

```
POST http://localhost:9200/cf_etf/_search
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"description:emerging non-diversified high-yield gobal\",
\"analyzer\":\"description_analyzer\" } }, \"script_fields\": { \"test\": { \"script\": \"doc['symbol']\" } }"
```

#### Example Request - request\_body\_search\_named\_queries

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

```
BODY
```

```
{
       "query": {
              "bool": {
                     "should":[
                            {"query string": {
                                   _name":"Asia",
                                   "query": "description:asia",
                                   "analyzer": "description analyzer"
                            }},
                            {"query_string": {
                                   _name":"usa",
                                   "query": "description:usa",
                                   "analyzer": "description analyzer"
                            }},
                            {"query_string": {
                                   " name": "europe",
                                   "query": "description:europe",
                                   "analyzer": "description analyzer"
                            }}
```

```
}
}
```

# Example Request - request\_body\_search\_field\_collapse

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"range\":
{\"rating\":{\"gte\":4}} }, \"collapse\" : { \"field\":\"rating\" } }"
```

#### Example Request - multi\_search\_api

```
HEADERS
Content-Type
application/json

BODY
{"index":"cf_etf"}
{"query": {"bool":{"must_not":{"exists":{"field":"rating"}}}}}
{"index":"cf_view"}
{"query": {"bool":{"must_not":{"exists":{"field":"rating"}}}}}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_msearch" --header "Content-Type: application/json" --data $'{\"index\":\"cf_etf\"}\n{\"query\":
```

```
{\"bool\":{\"must_not\":{\"exists\":{\"field\":\"rating\"}}}}\n{\"index\":\"cf_view\"
}\n{\"query\": {\"bool\":{\"must_not\":{\"exists\":{\"field\":\"rating\"}}}}\n'
```

## **Example Request - highlighting**

```
POST http://localhost:9200/cf_etf/_search
```

```
HEADERS
Content-Type
application/json
BODY
       "query": {
              "bool": {
    "should":[
                             {"query_string": {
                                     "query": "description:asia",
                                     "analyzer": "description_analyzer"
                             {"query string": {
                                     "query": "description:usa",
                                     "analyzer": "description analyzer"
                             }},
                             {"query string": {
                                     "query": "description:europe",
                                     "analyzer": "description analyzer"
                             }}
                      ]
       },
"highlight": {
               "fields":{
                      "description":{}
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\":
    {\"should\":[ {\"query_string\": { \"query\": \"description:asia\",
    \"analyzer\":\"description_analyzer\" }}, {\"query_string\":
    \"description:usa\", \"analyzer\":\"description_analyzer\" }}, {\"query_string\":
    {\"query\": \"description:europe\", \"analyzer\":\"description_analyzer\" }} ] } },
    \"highlight\": { \"fields\":{ \"description\":{} } } }"
```

#### Example Request - highlighting\_number\_of\_fragments\_0

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\":
{ \"must\":[ {\"match\":{\"description\":\"index\"}} ] } }, \"highlight\":
{ \"fields\":{ \"description\":{\"number_of_fragments\":0} } } }"
```

#### Example Request - highlighting\_fragment\_size\_20

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

#### **BODY**

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\":
{ \"must\":[ {\"match\":{\"description\":\"index\"}} ] } }, \"highlight\":
{ \"fields\":{ \"description\":{\"fragment_size\": 20} } }"
```

```
POST http://localhost:9200/cf_etf/_search
```

```
HEADERS
Content-Type
application/json
BODY
{
        "query": {
               "bool": {
                       "should":[
                               {"match":{"description":"asia"}},
                               {"match":{"fund_name":"global"}}
                       ]
       },
"highlight": {
    "an mate"
                "no match size":20,
               "fields":{
                       "description":{}
       }
```

# Example Request - highlighting\_highlight\_fields\_unordered

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"multi_match\": { \"query\": \"asia\", \"fields\": [\"fund_name\", \"description\"] } }, \"highlight\": { \"fields\":{ \"fund_name\":{}, \"description\":{} } } }"
```

## Example Request - highlighting\_highlight\_field\_order\_score

"description":{}

```
POST http://localhost:9200/cf_etf/_search
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\":
{\"description\":\"index\"} }, \"highlight\": { \"number_of_fragments\" : 3,
\"fragment_size\":20, \"order\":\"score\", \"fields\":{ \"description\":{} } } }"
```

#### **Example Request - highlighting\_multi\_match**

POST http://localhost:9200/cf\_etf/\_search

}

```
}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"multi_match\": { \"query\": \"asia\", \"fields\": [\"fund_name\", \"description\"] } }, \"highlight\":
{ \"fields\":[ {\"fund_name\":{}}, {\"description\":{}} ] } }"
Example Request - highlighting_fragmenter_plain_span
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
        "query": {
                "match_phrase":{
                         "description": "NASDAQ US Benchmark"
        "highlight": {
                 "type": "plain",
                "fragmenter": "span",
                "fields":{
                         "description":{}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\":
{ \"match_phrase\":{ \"description\": \"NASDAQ US Benchmark\" } }, \"highlight\":
{ \"type\":\"plain\", \"fragmenter\": \"span\", \"fields\":{ \"description\":{} } } }"
```

#### **Example Request - highlighting\_require\_field\_match\_false**

```
POST http://localhost:9200/cf_etf/_search
```

```
HEADERS
Content-Type
application/json
```

}

```
BODY
```

```
}

}

highlight": {
    "require_field_match":false,
    "fields":{
        "description":{}
}

}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\":
{ \"should\":[ {\"match\":{\"description\":\"asia\"}},
    {\"match\":{\"fund_name\":\"global\"}} ] } }, \"highlight\":
{ \"require_field_match\":false, \"fields\":{ \"description\":{} } } }"
```

# Example Request - highlighting\_tags\_schema

```
HEADERS
Content-Type
application/json
```

```
BODY
{
       "query": {
              "bool": {
                     "should":[
                             {"query_string": {
                                    "query": "description:asia",
                                    "analyzer": "description_analyzer"
                             }},
                             {"query string": {
                                    "query": "description:usa",
                                    "analyzer": "description_analyzer"
                             }},
                             {"query string": {
                                    "query": "description:europe",
                                    "analyzer": "description_analyzer"
                             }}
                     ]
       },
"highlight": {
"ings so
               "tags_schema": "styled",
              "fields":{
                     "symbol":{},
                     "description":{}
              }
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\":
    { \"should\":[ {\"query_string\": { \"query\": \"description:asia\",
    \"analyzer\":\"description_analyzer\" }}, {\"query_string\":
    \"description:usa\", \"analyzer\":\"description_analyzer\" }}, {\"query_string\":
    { \"query\": \"description:europe\", \"analyzer\":\"description_analyzer\" }} ] } },
    \"highlight\": { \"tags_schema\":\"styled\", \"fields\":{ \"symbol\":{},
    \"description\":{} } } }"
```

#### Example Request - highlighting\_boundary\_scanner

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"multi_match\": { \"query\": \"pacific\", \"fields\": [\"description\", \"fund_name\"] } }, \"highlight\": { \"boundary_scanner_locale\": \"en-US\", \"fields\":{ \"description\":{\"boundary_scanner\" : \"sentence\"}, \"fund_name\": {\"boundary_scanner\" : \"word\"} } }"
```

#### Example Request - match\_query\_or

```
HEADERS
Content-Type
application/json

BODY
{
    "query": {
    "match": {
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\": { \"fund_name\":
{ \"query\": \"ishares global\" } } }"
```

# Example Request - match\_query\_and

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\": { \"fund_name\":
{ \"query\": \"ishares global\", \"operator\": \"and\" } } } }"
```

# Example Request - match\_query\_fuzziness\_2

```
}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\": { \"fund_name\": { \"query\": \"ishares global\", \"operator\": \"and\", \"fuzziness\":2 } } } }"
Example Request - match_query_ zero_terms_query_all
GET http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
        "query": {
               "match": {
                       "fund_name": {
                               "query": "to be",
                               "zero terms query": "all"
                       }
               }
       }
curl --location --request GET "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\": { \"fund_name\":
{ \"query\": \"to be\", \"zero_terms_query\": \"all\" } } }"
Example Request - match_query_ cutoff_frequency_10
POST match_query_ cutoff_frequency_10
http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
        "query": {
               "match": {
                       "fund_name": {
                               "query": "usa global emerging",
                               "cutoff_frequency": 10
                       }
```

}

}

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match\": { \"fund_name\":
{ \"query\": \"usa global emerging\", \"cutoff_frequency\": 10 } } }"
```

## **Example Request - match phrase query**

```
POST match_phrase_query
```

http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
{
       "query": {
              "match_phrase": {
                     "fund_name": {
                            "query": "ishares msci"
              }
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match_phrase\":
{ \"fund_name\": { \"query\": \"ishares msci\" } } } }"
```

# **Example Request - match\_phrase\_query\_prefix**

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
"query": {
       "match_phrase_prefix": {
              "description": {
                     "query": "The investment seeks to track"
              }
       }
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"match_phrase_prefix\":
{ \"description\": { \"query\": \"The investment seeks to track\" } } } }"
```

#### **Example Request - query\_string\_colon\_character**

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"fund_name:ishares\" } } }"
```

#### Example Request - query\_string\_grouping

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

}

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"fund_name:(usa || asia)\" } }"
```

# **Example Request - query\_string\_boolean\_characters**

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"fund_name:((usa || asia) && emerging && ! global)\" } }"
```

# Example Request - query\_string\_boolean\_op

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"rating:>=4\" } } }"
```

#### Example Request - query\_string\_wildcard

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
'Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\":
```

#### **Example Request - query\_string\_exact\_phrase**

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

**BODY** 

```
"query": {
      "query_string": {
             "query": "fund name:\"iShares MSCI ACWI ETF\""
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\":
\"fund_name:\\\"iShares MSCI ACWI ETF\\\"\" } } }"
```

# **Example Request - query string fuzziness**

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
{
```

```
"query": {
       "query_string": {
             "query": "fund name:(ishares~ && global~)"
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\":
\"fund_name:(ishares~ && global~)\" } } }"
```

## **Example Request - query\_string\_regex**

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"query_string\": { \"query\": \"symbol://ACW?//\" } } }"
```

## Example Request - query\_string\_boosting

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data
$'{\"query\":{\"query_string\":{\"query\":\"fund_name:(ishares global^2)\"}}}'
```

## **Example Request - query\_string\_range\_query**

```
}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\": { \"query\": \ "rating:[1 TO 3}\" } }"
Example Request - query_string_multiple_fields
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
       "sort":{"rating":"desc"},
       "query": {
               "query_string": {
                      "fields": ["fund_name", "description"],
"query": "emerging"
               }
       }
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"query_string\": { \"fields\": [\"fund_name\", \"description\"], \"query\":
Example Request - simple_query_string_boolean_AND
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
       "sort":{"rating":"desc"},
       "query": {
```

"simple\_query\_string": {

}

}

"fields": ["fund\_name"],
"query": "ishares + global"

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\": \"ishares +
global\" } } }"
```

## Example Request - simple\_query\_string\_boolean\_OR

```
POST http://localhost:9200/cf_etf/_search
```

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\": \"ishares |
global\" } } }"
```

#### **Example Request - simple\_query\_string\_must\_not\_match**

```
HEADERS
Content-Type
application/json
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\": \"-ishares + -
global\" } } }"
```

# **Example Request - simple\_query\_string\_match\_prhase**

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\": \"\\\"iShares
MSCI ACWI ETF\\\"\" } }"
```

#### Example Request - simple\_query\_string\_fuzziness

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\":
\"global~\" } }"
```

# Example Request - simple\_query\_string\_prefix

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\":
\"ishares~\" } } }"
```

# Example Request - simple\_query\_string\_precedence

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"sort\":{\"rating\":\"desc\"}, \"query\":
{ \"simple_query_string\": { \"fields\": [\"fund_name\"], \"query\": \"(usa | asia) +
emerging\" } } }"
```

# Example Request - intervals\_query\_order\_and\_max\_gap

POST http://localhost:9200/cf\_etf/\_search

**HEADERS** 

```
Content-Type
application/json
BODY
{
       "size":50,
       "query": {
              "intervals": {
                     "fund_name": {
                             "all_of": {
                                    "ordered":true,
                                    "intervals":[
                                           {"match": {"query": "MSCI Markets",
"max_gaps" : 1}},
                                            {"match": {"query": "ETF"}}
                                    ]
                             }
                     }
              }
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"size\":50, \"query\": { \"intervals\":
{ \"fund_name\": { \"all_of\": { \"ordered\":true, \"intervals\":[ {\"match\":
{\"query\":\"MSCI Markets\", \"max_gaps\" : 1}}, {\"match\": {\"query\":
\"ETF\"}} ] } } } } }"
```

# Example Request - intervals\_query\_max\_gap\_not\_match

```
HEADERS
Content-Type
application/json
BODY
{
       "size":50,
       "query": {
              "intervals": {
                      "fund_name": {
                             "all_of": {
                                    "ordered":true,
                                    "intervals":[
                                           {"match": {"query": "MSCI Markets",
"max_gaps" : 0}},
                                           {"match": {"query": "ETF"}}
                                    ]
                             }
                     }
              }
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
'Content-Type: application/json" --data "{ \"size\":50, \"query\": { \"intervals\":
{ \"fund_name\": { \"all_of\": { \"ordered\":true, \"intervals\":[ {\"match\":
{\"query\":\"MSCI Markets\", \"max_gaps\" : 0}}, {\"match\": {\"query\":
\"ETF\"}} ] } } } }
```

# Example Request - intervals\_query\_order\_not\_match

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
{
       "size":50,
       "query": {
              "intervals": {
                     "fund name": {
                            "all of": {
                                   "ordered":true,
                                   "intervals":[
                                          {"match": {"query": "ETF"}},
                                          {"match": {"query": "MSCI Markets",
"max gaps" : 1}}
                            }
                     }
             }
      }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"size\":50, \"query\": { \"intervals\": { \"fund_name\": { \"all_of\": { \"ordered\":true, \"intervals\":[ {\"match\":
{\"query\": \"ETF\"}}, {\"match\": {\"query\":\"MSCI Markets\", \"max_gaps\" :
1}} ] } } ]"
```

#### Example Request - term\_query\_term

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
"query": {
      "term": {
             "symbol": "ACWI"
```

```
}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"term\": { \"symbol\":
  \mathbb{N}^{\mathsf{MCWI}} = \frac{1}{2} \cdot \frac{1}{2}
Example Request - term_query_terms
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
                                              "query": {
                                                                                          "terms": {
                                                                                                                                     "symbol": ["ACWI", "ACWF"]
                                            }
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
 "Content-Type: application/json" --data "{ \"query\": { \"terms\": { \"symbol\":
[\"ACWI\", \"ACWF\"] } }"
Example Request - term_query_range
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
                                              "query": {
                                                                                          "range": {
                                                                                                                                     "rating": {
                                                                                                                                                                                  "gte": 3,
                                                                                                                                                                                  "lt":5
                                                                                                                                     }
                                                                                        }
                                            }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"range\": { \"rating\":
{ \"gte\": 3, \"lt\":5 } } } }"
```

# **Example Request - term\_query\_exists**

POST http://localhost:9200/cf\_etf/\_search

# **Example Request - term\_query\_prefix**

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
BODY
```

```
"query": {
         "prefix": { "symbol":"ACW"}
         }
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data
"{\"query\":{\"prefix\":{\"symbol\":\"ACW\"}}}"
```

#### Example Request - term\_query\_wildcard

POST http://localhost:9200/cf\_etf/\_search

**HEADERS** 

```
Content-Type
application/json
BODY
{
       "query": {
              "wildcard": {"symbol":"A*I"}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"wildcard\":
{\"symbol\":\"A*I\"} } }"
Example Request - term_query_regexp
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
{
       "query": {
              "regexp": {"symbol":"ACW[IF]"}
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"regexp\":
{\"symbol\":\"ACW[IF]\"} } }"
Example Request - term_query_fuzzy
POST http://localhost:9200/cf_etf/_search
HEADERS
Content-Type
application/json
BODY
       "query": {
              "fuzzy": {"symbol":"ACW~"}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"fuzzy\":
{\"symbol\":\"ACW~\"} } }"
```

## **Example Request - term\_query\_ids**

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" \ --header
"Content-Type: application/json" \ --data "{ \"query\": { \"ids\":
{\"values\":[\"oU2jLGkB_W0hQaVaoEie\", \"GgOJ7msB3gfI-VGlT4dA\"]} } }"
```

# **Example Request - script\_query**

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

BODY

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data $'{ \"query\": { \"bool\": { \"must\":
{\"match_phrase_prefix\": {\"fund_name\": \"ishares edge\" }}, \"filter\":
{ \"script\": { \"lang\": \"painless\", \"source\":\"if
(!doc[\'rating\'].empty && doc[\'rating\'].value >= 4) return true; else
false;\" } } } }'
```

## **Example Request - bool query**

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
BODY
{
       "query": {
              "bool": {
                     "must": {"match phrase prefix": {"fund_name": "ishares edge" }},
                     "must not": {"match": {"fund name":"global"}}
              }
       }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"bool\": { \"must\": {\"match_phrase_prefix\": {\"fund_name\": \"ishares edge\" }}, \"must_not\":
{\"match\": {\"fund_name\":\"global\"}} } }"
```

## Example Request - boosting\_query

POST boosting query

```
HEADERS
Content-Type
application/json
```

```
BODY
{
```

```
"query": {
             "boosting": {
                    "positive": {"match phrase prefix": {"fund name": "ishares
edge" }},
                    "negative": {"term":{"category":"Equity"}},
                    "negative_boost":0.1
             }
      }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"boosting\": { \"positive\":
{\"match_phrase_prefix\": {\"fund_name\": \"ishares edge\" }}, \"negative\":
{\"term\":{\"category\":\"Equity\"}}, \"negative_boost\":0.1 } }"
```

## Example Request - dismax\_query\_query\_1

POST http://localhost:9200/cf\_etf/\_search

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"dis_max\": { \"queries\":
[ {\"match_phrase\": {\"fund_name\": \"ishares edge\" }} ] } } }"
```

## Example Request - dismax\_query\_query\_2

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

BODY

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"query\": { \"dis_max\": { \"queries\":
[ {\"match\": {\"morningstar_category\": \"World Large Stock\"}} ] } } }"
```

#### Example Request - dismax\_query\_query\_1&2

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

## **Example Request - function\_score\_query**

```
HEADERS
Content-Type
application/json
BODY
{
       "query": {
              "function_score": {
                     "query": {"match phrase": {"fund name": "ishares edge" }},
                     "functions":[
                            {"filter":{"wildcard": {"morningstar category": "*Stock"}},
"weight":2},
                            {"filter":{"wildcard": {"morningstar category":
"*Growth"}}, "weight":1.5},
                            {"filter":{"wildcard": {"morningstar_category": "*Blend"}},
"weight":0.5}
                     ]
       }
```

```
POST http://localhost:9200/cf_etf/_explain/GgOJ7msB3gfI-VGlT4dA
```

```
HEADERS
Content-Type
application/json

BODY
{
         "query": {
                "match": {"fund_name": "ishares edge global"}
          }
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_explain/GgOJ7msB3gfI-
VGlT4dA" --header "Content-Type: application/json" --data "{ \"query\": { \"match\":
{\"fund_name\": \"ishares edge global\"} } }"
```

# Example Request - validate\_api

POST http://localhost:9200/cf\_etf/\_validate/query?explain=true

```
HEADERS
Content-Type
application/json

PARAMS
explain
true

BODY

{
        "query": {
             "match": {"rating":"five"}
        }
```

```
curl --location --request POST
"http://localhost:9200/cf_etf/_validate/query?explain=true" --header "Content-Type:
application/json" --data "{ \"query\": { \"match\": {\"rating\":\"five\"} } }"
```

#### Example Request - search\_count\_api\_fund\_name\_w\_asia

```
POST http://localhost:9200/cf_etf/_count
```

```
HEADERS
Content-Type
application/json

BODY
{
        "query": {
            "term": {"fund_name":"asia"}
```

```
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_count" --header
"Content-Type: application/json" --data "{ \"query\": { \"term\":
{\"fund_name\":\"asia\"} } }"
```

# **Example Request - field\_capabilities**

GET http://localhost:9200/\_field\_caps?fields=fund\_name,description

HEADERS Content-Type application/json

PARAMS fields fund\_name,description

```
curl --location --request GET
"http://localhost:9200/_field_caps?fields=fund_name,description" --header "Content-
Type: application/json"
```

## Example Request - ranking\_evaluation

POST http://localhost:9200/cf\_etf/\_rank\_eval

HEADERS Content-Type application/json

BODY

```
{
       "requests": [
              {
                     "id": "Asia",
                     "request":{"query": {"match":{"description":"asia"}}},
                     "ratings": []
              },
                     "id": "Global",
                     "request":{"query": {"match":{"description":"global"}}},
                     "ratings": []
              }
      ],
    "metric": {
        "precision": {
            "k" : 3,
            "relevant rating threshold" : 1
        }
    }
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_rank_eval" --header
"Content-Type: application/json" --data "{ \"requests\": [ { \"id\": \"Asia\",
\"request\":{\"query\": {\"match\":{\"description\":\"asia\"}}}, \"ratings\": [] },
{ \"id\": \"Global\", \"request\":{\"query\":
{\"match\":{\"description\":\"global\"}}}, \"ratings\": [] } ], \"metric\":
{ \"precision\": { \"k\" : 3, \"relevant_rating_threshold\" : 1 } } }"
```

## Example Request - search\_request\_profiling

POST http://localhost:9200/cf etf/ search

HEADERS Content-Type application/json

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"profile\":true, \"query\":
{ \"query_string\": { \"query\": \"fund_name:ishares description:global\",
\"default_operator\": \"AND\" } }"
```

#### Example Request - term\_suggester

POST http://localhost:9200/cf\_etf/\_search

HEADERS Content-Type application/json

```
BODY
```

```
}
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"suggest\": { \"text\": \"asian stock\",
\"suggester_1\": { \"term\": { \"field\": \"fund_name\" } }, \"suggester_2\":
{ \"term\": { \"field\": \"description\" } } }"
```

# Example Request - phrase\_suggester

POST http://localhost:9200/cf\_etf/\_search

```
HEADERS
Content-Type
application/json
```

```
BODY
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_search" --header
"Content-Type: application/json" --data "{ \"suggest\": { \"text\": \"divide weigh
index\", \"suggester\": { \"phrase\": { \"field\": \"description\" } } } }"
```

#### Example Request - cf\_etf\_suggester\_mappings

GET http://localhost:9200/cf\_etf\_suggester/\_mappings

HEADERS Content-Type application/json

curl --location --request GET "http://localhost:9200/cf\_etf\_suggester/\_mappings" -header "Content-Type: application/json"

#### **Example Request - cf\_etf\_suggester**

POST http://localhost:9200/cf\_etf\_suggester/\_search

HEADERS Content-Type application/json

CHAPTER6