Chapter 3 – Document APIs

Example Request - index_cf_etf_doc_acwf

PUT http://localhost:9200/cf_etf/_doc/1

HEADERS
Content-Type
application/json

BODY
```json
{
    "symbol": "ACWF",
    "fund_name": "iShares Edge MSCI Multifactor Global ETF",
    "rating": 3,
    "morningstar_category": "World Large Stock",
    "category": "Equity",
    "family": "iShares",
    "market_cap": "large",
    "description": "The investment seeks to track the investment results of the
MSCI ACWI Diversified Multiple-Factor Index.\\n The fund generally will invest at
least 90% of its assets in the component securities of the underlying index and in
investments that have economic characteristics that are substantially identical to the
component securities of the underlying index. The underlying index is designed to
contain equity securities from the MSCI ACWI Index (the \\\"parent index\\\") that
have high exposure to four investment style factors: value, quality, momentum and low
size, while maintaining a level of risk similar to that of the parent index.",
    "exchange": "NYSE Arca"
}
```

```
curl --location --request PUT "http://localhost:9200/cf_etf/_doc/1" --header "Content-
Type: application/json"  --data "{ \"symbol\": \"ACWF\", \"fund_name\": \"iShares Edge
MSCI Multifactor Global ETF\", \"rating\": 3, \"morningstar_category\": \"World Large
Stock\", \"category\": \"Equity\", \"family\": \"iShares\", \"market_cap\": \"large\",
\"description\": \"The investment seeks to track the investment results of the MSCI
ACWI Diversified Multiple-Factor Index.\\\ The fund generally will invest at least 90%
of its assets in the component securities of the underlying index and in investments
that have economic characteristics that are substantially identical to the component
securities of the underlying index. The underlying index is designed to contain equity
securities from the MSCI ACWI Index (the \\\\\\\"parent index\\\\\\\") that have high
exposure to four investment style factors: value, quality, momentum and low size,
while maintaining a level of risk similar to that of the parent index.\",
\"exchange\": \"NYSE Arca\" }"
```

Example Request - index_cf_etf_doc_acwi

POST http://localhost:9200/cf_etf/_doc

HEADERS
Content-Type

application/json

BODY

```
{
        "symbol": "ACWI",
        "fund_name": "iShares MSCI ACWI ETF",
        "rating": 3,
        "morningstar_category": "World Large Stock",
        "category": "International",
        "family": "iShares",
        "market_cap": "large",
        "description": "The investment seeks to track the investment results of the
MSCI ACWI composed of large- and mid-capitalization developed and emerging market
equities.\\n The fund generally will invest at least 90% of its assets in the
component securities of the underlying index and in investments that have economic
characteristics that are substantially identical to the component securities of the
underlying index. The index is a free float-adjusted market capitalization index
designed to measure the combined equity market performance of developed and emerging
markets countries.",
        "exchange": "NASDAQ Global Market"
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_doc" --header "Content-
Type: application/json" --data "{ \"symbol\": \"ACWI\", \"fund_name\": \"iShares MSCI
ACWI ETF\", \"rating\": 3, \"morningstar_category\": \"World Large Stock\",
\"category\": \"International\", \"family\": \"iShares\", \"market_cap\": \"large\",
\"description\": \"The investment seeks to track the investment results of the MSCI
ACWI composed of large- and mid-capitalization developed and emerging market
equities.\\\ The fund generally will invest at least 90% of its assets in the
component securities of the underlying index and in investments that have economic
characteristics that are substantially identical to the component securities of the
underlying index. The index is a free float-adjusted market capitalization index
designed to measure the combined equity market performance of developed and emerging
markets countries.\", \"exchange\": \"NASDAQ Global Market\" }"
```

Example Request - get_cf_etf_doc_acwi

GET http://localhost:9200/cf_etf/_doc/1

HEADERS
Content-Type
application/json

```
curl --location --request GET "http://localhost:9200/cf_etf/_doc/1" --header "Content-
Type: application/json"
```

Example Request - get_cf_etf_parital_doc_acwf

GET http://localhost:9200/cf_etf/_doc/1?_source=symbol,rating,category

HEADERS
Content-Type

application/json

PARAMS
_source
symbol,rating,category

```
curl --location --request GET
"http://localhost:9200/cf_etf/_doc/1?_source=symbol,rating,category" --header
"Content-Type: application/json"
```

Example Request - update_cf_etf_doc_acwf

POST http://localhost:9200/cf_etf/_doc/1/_update

HEADERS
Content-Type
application/json

BODY
```
{
        "doc": {
                "market_cap": "mid"
        }
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_doc/1/_update" --header
"Content-Type: application/json" --data "{ \"doc\": { \"market_cap\": \"mid\" } }"
```

Example Request - update_cf_etf_doc_acwf_remove_market_cap_field

POST http://localhost:9200/cf_etf/_doc/1/_update

HEADERS
Content-Type
application/json

BODY
```
{
        "script": "ctx._source.remove('market_cap')"
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_doc/1/_update" --header
"Content-Type: application/json" --data "{ \"script\":
\"ctx._source.remove('market_cap')\" }"
```

Example Request - delete_cf_etf_doc_acwf_by_id

DEL http://localhost:9200/cf_etf/_doc/1

HEADERS
Content-Type
application/json

BODY

```json
{
        "symbol": "ACWF",
        "fund_name": "iShares Edge MSCI Multifactor Global ETF",
        "rating": 3,
        "morningstar_category": "World Large Stock",
        "category": "Equity",
        "family": "iShares",
        "market_cap": "large",
        "description": "The investment seeks to track the investment results of the
MSCI ACWI Diversified Multiple-Factor Index.\\n The fund generally will invest at
least 90% of its assets in the component securities of the underlying index and in
investments that have economic characteristics that are substantially identical to the
component securities of the underlying index. The underlying index is designed to
contain equity securities from the MSCI ACWI Index (the \\\"parent index\\\") that
have high exposure to four investment style factors: value, quality, momentum and low
size, while maintaining a level of risk similar to that of the parent index.",
        "exchange": "NYSE Arca"
}
```

```
curl --location --request DELETE "http://localhost:9200/cf_etf/_doc/1" --header
"Content-Type: application/json" --data "{ \"symbol\": \"ACWF\", \"fund_name\":
\"iShares Edge MSCI Multifactor Global ETF\", \"rating\": 3, \"morningstar_category\":
\"World Large Stock\", \"category\": \"Equity\", \"family\": \"iShares\",
\"market_cap\": \"large\", \"description\": \"The investment seeks to track the
investment results of the MSCI ACWI Diversified Multiple-Factor Index.\\\ The fund
generally will invest at least 90% of its assets in the component securities of the
underlying index and in investments that have economic characteristics that are
substantially identical to the component securities of the underlying index. The
underlying index is designed to contain equity securities from the MSCI ACWI Index
(the \\\\\\\"parent index\\\\\\\") that have high exposure to four investment style
factors: value, quality, momentum and low size, while maintaining a level of risk
similar to that of the parent index.\", \"exchange\": \"NYSE Arca\" }"
```

Example Request - reindex_cf_etf_doc_acwf

PUT http://localhost:9200/cf_etf/_doc/1

HEADERS
Content-Type
application/json

BODY

```json
{
        "symbol": "ACWF",
        "fund_name": "iShares Edge MSCI Multifactor Global ETF",
        "rating": 3,
        "morningstar_category": "World Large Stock",
        "category": "Equity",
        "family": "iShares",
```

```
        "market_cap": "large",
        "description": "The investment seeks to track the investment results of the
MSCI ACWI Diversified Multiple-Factor Index.\\n The fund generally will invest at
least 90% of its assets in the component securities of the underlying index and in
investments that have economic characteristics that are substantially identical to the
component securities of the underlying index. The underlying index is designed to
contain equity securities from the MSCI ACWI Index (the \\\"parent index\\\") that
have high exposure to four investment style factors: value, quality, momentum and low
size, while maintaining a level of risk similar to that of the parent index.",
        "exchange": "NYSE Arca"
}
```

```
curl --location --request PUT "http://localhost:9200/cf_etf/_doc/1" --header "Content-
Type: application/json" --data "{ \"symbol\": \"ACWF\", \"fund_name\": \"iShares Edge
MSCI Multifactor Global ETF\", \"rating\": 3, \"morningstar_category\": \"World Large
Stock\", \"category\": \"Equity\", \"family\": \"iShares\", \"market_cap\": \"large\",
\"description\": \"The investment seeks to track the investment results of the MSCI
ACWI Diversified Multiple-Factor Index.\\\ The fund generally will invest at least 90%
of its assets in the component securities of the underlying index and in investments
that have economic characteristics that are substantially identical to the component
securities of the underlying index. The underlying index is designed to contain equity
securities from the MSCI ACWI Index (the \\\\\\\"parent index\\\\\\\") that have high
exposure to four investment style factors: value, quality, momentum and low size,
while maintaining a level of risk similar to that of the parent index.\",
\"exchange\": \"NYSE Arca\" }"
```

Example Request - get_cf_etf_multiple_documents
POST http://localhost:9200/_mget

HEADERS
Content-Type
application/json

BODY
```
{
        "docs": [
                {"_index": "cf_view", "_id":"1", "_source":["symbol", "category"]},
                {"_index": "cf_etf", "_id": "1", "_source":["symbol", "category"]}
        ]
}
```

```
curl --location --request POST "http://localhost:9200/_mget" --header "Content-Type:
application/json" --data "{ \"docs\": [ {\"_index\": \"cf_view\", \"_id\":\"1\",
\"_source\":[\"symbol\", \"category\"]}, {\"_index\": \"cf_etf\", \"_id\": \"1\",
\"_source\":[\"symbol\", \"category\"]} ] }"
```

Example Request - get_cf_etf_multiple_documents_by_ids
POST http://localhost:9200/cf_etf/_mget

HEADERS
Content-Type
application/json

BODY

```
{
      "ids": ["1", "n01iLGkB_W0hQaVaF0iP"]
}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_mget" --header "Content-
Type: application/json" --data "{ \"ids\": [\"1\", \"n01iLGkB_W0hQaVaF0iP\"] }"
```

Example Request - bulk_api

POST http://localhost:9200/_bulk

HEADERS
Content-Type
application/json

BODY

```
{"delete": {"_index":"cf_etf", "_id":"1"}}
{"create": {"_index":"cf_etf", "_id":"1"}}
{"symbol": "ACWF", "fund_name": "iShares Edge MSCI Multifactor Global ETF", "rating":
3, "morningstar_category": "World Large Stock", "category": "Equity", "family":
"iShares", "market_cap": "large", "description": "The investment seeks to track the
investment results of the MSCI ACWI Diversified Multiple-Factor Index.\\n The fund
generally will invest at least 90% of its assets in the component securities of the
underlying index and in investments that have economic characteristics that are
substantially identical to the component securities of the underlying index. The
underlying index is designed to contain equity securities from the MSCI ACWI Index
(the \\\"parent index\\\") that have high exposure to four investment style factors:
value, quality, momentum and low size, while maintaining a level of risk similar to
that of the parent index.","exchange": "NYSE Arca"}
{"update": {"_index":"cf_etf", "_type":"_doc", "_id":"1"}}
{"script":"ctx._source.remove('market_cap')"}
```

```
curl --location --request POST "http://localhost:9200/_bulk" --header "Content-Type:
application/json" --data $'{\"delete\": {\"_index\":\"cf_etf\",
\"_id\":\"1\"}}\n{\"create\": {\"_index\":\"cf_etf\", \"_id\":\"1\"}}\n{\"symbol\":
\"ACWF\", \"fund_name\": \"iShares Edge MSCI Multifactor Global ETF\", \"rating\": 3,
\"morningstar_category\": \"World Large Stock\", \"category\": \"Equity\", \"family\":
\"iShares\", \"market_cap\": \"large\", \"description\": \"The investment seeks to
track the investment results of the MSCI ACWI Diversified Multiple-Factor Index.\\\
The fund generally will invest at least 90% of its assets in the component securities
of the underlying index and in investments that have economic characteristics that are
substantially identical to the component securities of the underlying index. The
underlying index is designed to contain equity securities from the MSCI ACWI Index
\(the \\\\\\\"parent index\\\\\\\"\) that have high exposure to four investment style
factors: value, quality, momentum and low size, while maintaining a level of risk
similar to that of the parent index.\",\"exchange\": \"NYSE Arca\"}\n{\"update\":
{\"_index\":\"cf_etf\", \"_type\":\"_doc\",
\"_id\":\"1\"}}\n{\"script\":\"ctx._source.remove(\'market_cap\')\"}\n'
```

Example Request - update_by_query
POST http://localhost:9200/cf_etf/_update_by_query

HEADERS
Content-Type
application/json

BODY
```
{"script":"if (ctx._source['rating']==3) {ctx._source['rating']=4}"}
```

```
curl --location --request POST "http://localhost:9200/cf_etf/_update_by_query" --
header "Content-Type: application/json" --data $'{\"script\":\"if
(ctx._source[\'rating\']==3) {ctx._source[\'rating\']=4}\"}'
```

Example Request - delete_by_query
POST http://localhost:9200/cf_etf/_delete_by_query?conflicts=proceed

HEADERS

Content-Type
application/json

PARAMS
conflicts
proceed

BODY
```
{"query":{"match":{"rating":4}}}
```

```
curl --location --request POST
"http://localhost:9200/cf_etf/_delete_by_query?conflicts=proceed" --header "Content-
Type: application/json" --data "{\"query\":{\"match\":{\"rating\":4}}}"
```

Example Request - reindex_api
POST http://localhost:9200/_reindex

HEADERS
Content-Type
application/json

BODY
```
{
      "source": {"index":"cf_view"},
      "dest": {"index": "cf_etf"}
}
```

```
curl --location --request POST "http://localhost:9200/_reindex" --header "Content-
Type: application/json" --data "{\"source\": {\"index\":\"cf_view\"},\"dest\":
{\"index\": \"cf_etf\"}}"
```

CHAPTER3