

# chapter9

## PUT create\_pipeline\_range\_ratio

http://localhost:9200/\_ingest/pipeline/range\_ratio

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "description": "calculate the range of high and low and divide by the close price",
  "processors": [
    {
      "script": {
        "source": "ctx.range_ratio = (ctx.high-ctx.low)/ctx.close"
      }
    }
  ]
}
```

### Example Request

create\_pipeline\_range\_ratio

```
curl --location --request PUT "http://localhost:9200/_ingest/pipeline/range_ratio" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"description\": \"calculate the range of high and low and divide by the close price\",
  \"processors\": [
    {
      \"script\": {
        \"source\": \"ctx.range_ratio = (ctx.high-ctx.low)/ctx.close\"
      }
    }
  ]
}
```

## DEL delete\_pipeline\_range\_ratio

http://localhost:9200/\_ingest/pipeline/range\_ratio

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "description": "calculate the range of high and low and divide by the close price",
  "processors": [
    {
      "set": {
        "field": "range_ratio",
        "value": "({{high}}-{{low}})/{{close}}"
      }
    }
  ]
}
```

### Example Request

delete\_pipeline\_range\_ratio

```
curl --location --request DELETE "http://localhost:9200/_ingest/pipeline/range_ratio" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"description\": \"calculate the range of high and low and divide by the close price\",
  \"processors\": [
    {
      \"set\": {
        \"field\": \"range_ratio\",
        \"value\": \"({{high}}-{{low}})/{{close}}\"
      }
    }
  ]
}
```

## DEL delete\_pipeline\_wildcard\_expression

http://localhost:9200/\_ingest/pipeline/range\_ratio\*

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "description": "calculate the range of high and low and divide by the close price",
  "processors": [
    {
      "set": {
        "field": "range_ratio",
        "value": "({{high}}-{{low}})/{{close}}"
      }
    }
  ]
}
```

### Example Request

delete\_pipeline\_wildcard\_expression

```
curl --location --request DELETE "http://localhost:9200/_ingest/pipeline/range_ratio*" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"description\": \"calculate the range of high and low and divide by the close price\",
  \"processors\": [
    {
      \"set\": {
        \"field\": \"range_ratio\",
        \"value\": \"({{high}}-{{low}})/{{close}}\"
      }
    }
  ]
}
```

## POST simulate\_pipeline\_range\_ratio

http://localhost:9200/\_ingest/pipeline/range\_ratio/\_simulate

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "docs" : [
    { "_source": { "date": "2018-12-26", "open": 24.8706, "high": 25.6553, "low": 24.7117, "cl
```

### Example Request

simulate\_pipeline\_range\_ratio

```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/range_ratio/_simulate" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"docs\": [
    {\"_source\": {\"date\": \"2018-12-26\", \"open\": 24.8706, \"high\": 25.6553, \"low\":
  ]
}"
```

## POST simulate\_pipeline\_ad\_hoc\_range\_ratio

http://localhost:9200/\_ingest/pipeline/\_simulate

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "pipeline": {
    "description": "calculate the range of high and low and divide by the close price",
    "processors": [{
      "script": {
        "source": "ctx.range_ratio = (ctx.high-ctx.low)/ctx.close"
      }
    }]
  },
  "..."
}
```

### Example Request

simulate\_pipeline\_ad\_hoc\_range\_ratio

```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \  
--header "Content-Type: application/json" \  
--header "accept: application/json" \  
--data "{  
  \"pipeline\": {  
    \"description\": \"calculate the range of high and low and divide by the close price\",  
    \"processors\": [{  
      \"script\": {  
        \"source\": \"ctx.range_ratio = (ctx.high-ctx.low)/ctx.close\"
```

## POST index\_with\_pipeline\_range\_ratio

http://localhost:9200/cf\_etf\_pipeline/\_doc/1?pipeline=range\_ratio

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### PARAMS

#### pipeline

range\_ratio

### BODY

```
{  
  "date": "2018-12-26",  
  "open": 24.8706,  
  "high": 25.6553,  
  "low": 24.7117,  
  "close": 25.6553,  
  "volume": 422158,  
  "unadjustedVolume": 422158,  
  "change": 0.84425,  
  "changePercent": 3.403,
```

## Example Request

index\_with\_pipeline\_range\_ratio

```
curl --location --request POST "http://localhost:9200/cf_etf_pipeline/_doc/1?pipeline=range_ratio" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"date\": \"2018-12-26\",
  \"open\": 24.8706,
  \"high\": 25.6553,
  \"low\": 24.7117,
  \"close\": 25.6553,
```

**DEL index\_with\_pipeline\_range\_ratio\_doc**

http://localhost:9200/cf\_etf\_pipeline/\_doc/1

## HEADERS

**Content-Type**

application/json

**accept**

application/json

## BODY

```
{
  "date": "2018-12-26",
  "open": 24.8706,
  "high": 25.6553,
  "low": 24.7117,
  "close": 25.6553,
  "volume": 422158,
  "unadjustedVolume": 422158,
  "change": 0.84425,
  "changePercent": 3.403,
```

## Example Request

index\_with\_pipeline\_range\_ratio\_doc

```
curl --location --request DELETE "http://localhost:9200/cf_etf_pipeline/_doc/1" \  
  --header "Content-Type: application/json" \  
  --header "accept: application/json" \  
  --data "{  
    \"date\": \"2018-12-26\",  
    \"open\": 24.8706,  
    \"high\": 25.6553,  
    \"low\": 24.7117,  
    \"close\": 25.6553,  
    \"volume\": 422158,  
  }"
```

**GET** get\_document\_from\_index\_with\_pipeline\_range\_ratio

http://localhost:9200/cf\_etf\_pipeline/\_doc/1

**HEADERS**

**Content-Type**

application/json

**accept**

application/json

**BODY**

```
{  
  
}
```

Example Request

get\_document\_from\_index\_with\_pipeline\_range\_ratio

```
curl --location --request GET "http://localhost:9200/cf_etf_pipeline/_doc/1" \  
  --header "Content-Type: application/json" \  
  --header "accept: application/json" \  
  --data "{  
  
  }"
```



## POST simulate\_pipeline\_ad\_hoc\_kv\_processor

http://localhost:9200/\_ingest/pipeline/\_simulate

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  "pipeline": {
    "description": "kv processor demo",
    "processors": [{
      "kv": {
        "field": "test_field",
        "field_split": ",",
        "value_split": ":",
        "target_field": "e",
        "trim_key": " "
      }
    ]
  }
}
```

### Example Request

simulate\_pipeline\_ad\_hoc\_kv\_processor

```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"pipeline\": {
    \"description\": \"kv processor demo\",
    \"processors\": [{
      \"kv\": {
        \"field\": \"test_field\",
        \"field_split\": \",\",
        \"value_split\": \":\",
        \"target_field\": \"e\",
        \"trim_key\": \" \"
      }
    ]
  }
}
```

## POST simulate\_pipeline\_simple\_conditional\_execution

http://localhost:9200/\_ingest/pipeline/\_simulate

## HEADERS

### Content-Type

application/json

### accept

application/json

## BODY

```
{
  "pipeline": {
    "description": "remove the rating field is the rating is equal to a single space string",
    "processors": [{
      "remove": {
        "field": "rating",
        "if": "ctx.rating == ' '"
      }
    }]
  }
}
```

## Example Request

simulate\_pipeline\_simple\_conditional\_execution

```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"pipeline\": {
    \"description\": \"remove the rating field is the rating is equal to a single space string\"
    \"processors\": [{
      \"remove\": {
        \"field\": \"rating\",
```

## POST get\_document\_empty\_rating\_from\_cf\_etf

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

## HEADERS

**Content-Type**

application/json

**accept**

application/json

## BODY

```
{
  "query": {
    "match": {
      "symbol": "AGT"
    }
  }
}
```

## Example Request

get\_document\_empty\_rating\_from\_cf\_etf

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

**POST** simulate\_pipeline\_conditional\_execution\_null\_safe\_operator

http://localhost:9200/\_ingest/pipeline/\_simulate

## HEADERS

**Content-Type**

application/json

**accept**

application/json

## BODY

```

{
  "pipeline": {
    "description": "calculate the range of high and low and divide by the close price",
    "processors": [
      { "set": {
        "field": "new_id",
        "value": "{{id}}",
        "if": "ctx.parent?.child != null"
      } }
    ]
  }
}

```

## Example Request

simulate\_pipeline\_conditional\_execution\_null\_safe\_operator

```

curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"pipeline\": {
    \"description\": \"calculate the range of high and low and divide by the close price\",
    \"processors\": [
      { \"set\": {
        \"field\": \"new_id\",

```

**PUT** define\_for\_market\_cap\_\_null\_processor

http://localhost:9200/\_ingest/pipeline/for\_market\_cap\_null\_processor

## HEADERS

**Content-Type**

application/json

**accept**

application/json

## BODY

```

{
  "description": "for_market_cap_null_processor",
  "processors": [
    { "set": {
      "field": "market_cap_type",
      "value": "no_market_cap ETF"
    } }
  ]
}

```

## Example Request

```
define_for_market_cap_null_processor
```

```

curl --location --request PUT "http://localhost:9200/_ingest/pipeline/for_market_cap_null_processor" \
  --header "Content-Type: application/json" \
  --header "accept: application/json" \
  --data "{
    \"description\": \"for_market_cap_null_processor\",
    \"processors\": [
      { \"set\": {
        \"field\": \"market_cap_type\",
        \"value\": \"no_market_cap ETF\"
      } }
    ]
  }"

```

## o PUT define\_for\_market\_cap\_processor

```
http://localhost:9200/_ingest/pipeline/for_market_cap_processor
```

## HEADERS

**Content-Type**

application/json

**accept**

application/json

## BODY

```
{
  "description": "for_market_cap_processor",
  "processors": [
    { "set": {
      "field": "market_cap_type",
      "value": "market_cap ETF"
    } }
  ]
}
```

#### Example Request

define\_for\_market\_cap\_processor

```
curl --location --request PUT "http://localhost:9200/_ingest/pipeline/for_market_cap_processor"
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"description\": \"for_market_cap_processor\",
  \"processors\": [
    { \"set\": {
      \"field\": \"market_cap_type\",
      \"value\": \"market_cap ETF\"
    } }
  ]
}
```

#### GET symbol\_bil\_market\_cap\_null\_etf

http://localhost:9200/cf\_etf/\_search?q=symbol:BIL

#### HEADERS

##### Content-Type

application/json

##### accept

application/json

#### PARAMS

##### q

symbol:BIL

## Example Request

```
symbo_bil_market_cap_null_etf
```

```
curl --location --request GET "http://localhost:9200/cf_etf/_search?q=symbol:BIL" \  
--header "Content-Type: application/json" \  
--header "accept: application/json"
```

## POST simulate\_pipeline\_conditional\_execution\_switch\_case

```
http://localhost:9200/_ingest/pipeline/_simulate
```

## HEADERS

**Content-Type**

```
application/json
```

**accept**

```
application/json
```

## BODY

```
{  
  "pipeline": {  
    "description": "calculate the range of high and low and divide by the close price",  
    "processors": [  
      {  
        "pipeline": {  
          "name": "for_market_cap_null_processor",  
          "if": "ctx.market_cap == null"  
        },  
      },  
      {  
        "pipeline": {  
          "name": "for_market_cap_processor",  
          "if": "ctx.market_cap != null"  
        },  
      }  
    ]  
  }  
}
```

## Example Request

```
simulate_pipeline_conditional_execution_switch_case
```

```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \
--header "Content-Type: application/json" \
--header "accept: application/json" \
--data "{
  \"pipeline\": {
    \"description\": \"calculate the range of high and low and divide by the close price\",
    \"processors\": [
      {\"pipeline\": {
        \"name\": \"for_market_cap_null_processor\",
```

## POST simulate\_pipeline\_hit\_exception\_error

http://localhost:9200/\_ingest/pipeline/\_simulate

### HEADERS

#### Content-Type

application/json

#### accept

application/json

### BODY

```
{
  \"pipeline\": {
    \"description\": \"test parameter on_failure when error occurs\",
    \"processors\": [{
      \"remove\": {
        \"field\": \"rating\",
        \"on_failure\": [
          {\"set\": { \"field\": \"error\", \"value\": -1}},
          {\"set\": { \"field\": \"message\", \"value\": \"remove processor failure: {{ _ingest.\"
```

### Example Request

simulate\_pipeline\_hit\_exception\_error



```
curl --location --request POST "http://localhost:9200/_ingest/pipeline/_simulate" \  
--header "Content-Type: application/json" \  
--header "accept: application/json" \  
--data "{  
  \"pipeline\": {  
    \"description\": \"test parameter on_failure when error occurs\",  
    \"processors\": [{  
      \"remove\": {  
        \"field\": \"rating\",
```