

# OPUS - API Specification

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**Route:** </search/jobs/>

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**Description:** Returns an array of jobs according to the search criteria specified by the user.

**Route Parameter(s):** None

**Query Parameter(s):** industry (string)\*, sector (string)\*, symbol (string)\*, companyName (string)\*, jobType (string)\*, ratingLow (int)\* (default: 0), ratingHigh (int)\* (default: 5), numEmployeesLow (int)\* (default: 0), numEmployeesHigh (int)\* (default: 8000000000), jobTitle (string)\*, page (int)\*, pageSize (int)\* (default: 10)

**Route Handler:** jobs(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), jobType (string), jobCountry (string), jobTitle (string), jobLink (string), jobCompany (string), jobLocation (string), shortDescription (string), postingDate (string), salary (string)})}

### **Expected (Output) Behaviour:**

- Return an array with all jobs that match the constraints. If no match satisfies the constraints, return all jobs.

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**Route:** </search/companies/>

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**Description:** Returns an array of companies according to the search criteria specified by the user.

**Route Parameter(s):** None

**Query Parameter(s):** symbol (string)\*, companyName (string)\*, numEmployeesLow (int)\* (default: 0), numEmployeesHigh (int)\* (default: 8000000000), mktCapLow (int)\* (default: 0),

mktCapHigh (int)\* (default: 10000000000), sentiLow (int)\* (default: 0), sentiHigh (int)\* (default: 1), jobNum (int)\*, page (int)\*, pagesize (int)\* (default: 10)

**Route Handler:** company\_all(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), companyName (string), numEmployees (int), mktCap (int), sentiment (float), jobNum (int) })}

**Expected (Output) Behaviour:**

- Return an array with all companies that match the constraints. If no match satisfies the constraints, return all jobs.

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**Route:** /company/{symbol}

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**Description:** Returns an array of various attributes of a given company.

**Route Parameter(s):** symbol

**Query Parameter(s):** None

**Route Handler:** company\_info(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), price (float), volAvg (float), mktCap (float), companyName (String), currency (string), exchange (string), exchangeShortName (string), industry (string), website (string), description (string), ceo (string), sector (string), country (string), fullTimeEmployees (int), phone (string), address (text), city (string), state (string), zip (string), image(text) })}

**Expected (Output) Behaviour:**

Return the company information for the specified company.

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**Route:** /company/news/{symbol}

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**Description:** Returns an array of news article relating to the company with the matching symbol as well as relating to its peers sorted by the published date in descending order.

**Route Parameter(s):** symbol

**Query Parameter(s):** page (int)\*, pagesize (int)\* (default: 10)

**Route Handler:** company\_news(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), publishedDate (string), title (string), image (string), site (string), text (string), url (string) })}

### **Expected (Output) Behaviour:**

- Case 1: If the page parameter (page) is defined
  - Return appropriate entries for the given page and pagesize (example: page = 5, pagesize = 3, return the 13th through 15th most recently published articles relating to the company and its peers)
- Case 2: If the page parameter (page) is not defined
  - Return the 10 most recently published articles relating to the company and its peers

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**Route:** /company/sentiment/{symbol}

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**Description:** Returns an aggregated sentiment rating for the company with the matching symbol as well as its peers and an average of all of its peers sentiment values

**Route Parameter(s):** symbol

**Query Parameter(s):** None

**Route Handler:** company\_sentiment(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {name (string), symbol (string), sentiment (string)})}

### **Expected (Output) Behaviour:**

Return sentiment values for given company, average of all peer companies, and all individual peer companies.

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**Route:** /company/jobs/{symbol}

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**Description:** Returns an array of job listings from the company with the matching symbol as well as from its peers.

**Route Parameter(s):** symbol

**Query Parameter(s):** page (int)\*, pagesize (int)\* (default: 10)

**Route Handler:** company\_jobs(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), publishedDate (string), title (string), image (string), site (string), text (string), url (string)})}

### **Expected (Output) Behaviour:**

- Case 1: If the page parameter (page) is defined
  - Return appropriate entries for the given page and pagesize (example: page = 5, pagesize = 3, return the 13th through 15th most recently published articles relating to the company and its peers)

- Case 2: If the page parameter (page) is not defined
  - Return the 10 most recently published articles relating to the company and its peers

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**Route:** /company/peers/{symbol}

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**Description:** Returns an array of all of the peers of the specified company.

**Route Parameter(s):** symbol

**Query Parameter(s):** None

**Route Handler:** company\_peer\_info(req, res)

**Return Type:** JSON

**Return Parameters:** {results (JSON array of {symbol (string), peerID (string)})}

**Expected (Output) Behaviour:**

Return the peers of a given company