

# REST Query API

## Overview

The standard QueryRequest and QueryResponse model have been simplified to make this API easier to work with in a JavaScript-only environment as opposed to porting over the full Java-based object model. Query requests can be created either by using the existing CGI-query string syntax (but pointing to a different servlet than our existing REST API) or by creating a JSON query request object, below, and posting it to server.

### Required Modules

These features require that the `rest` module be included when you run `createproject` to create your Attivio project.

### REST API Parameters

The master list of QueryRequest REST parameters is located on the [HTTP REST APIs](#) page.

[View incoming links](#). >>

[Attivio Platform](#) , [Date Facets](#) , [Discrete Facets](#) , [Filter-Based Facets](#) , [Highlighting Results](#) , [Range Facets](#) , [REST API Tutorial](#) , [REST Auto Complete API](#) , [Schema Facet](#)

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## Endpoint URIs

URL	METHOD	Input	Output
<a href="http://yourAieHost:17000/rest/searchApi/search">http://yourAieHost:17000/rest/searchApi/search</a>	POST	Simplified JSON Query Request	Simplified JSON Query Response
<a href="http://yourAieHost:17000/rest/searchApi/simpleCgi">http://yourAieHost:17000/rest/searchApi/simpleCgi</a>	GET	<a href="#">HTTP REST API CGI parameters</a>	Simplified JSON Query Response
<a href="http://yourAieHost:17000/rest/searchApi/legacyCgi">http://yourAieHost:17000/rest/searchApi/legacyCgi</a>	GET	<a href="#">HTTP REST API CGI parameters</a>	Standard/Legacy XML Query Response
<a href="http://yourAieHost:17000/rest/searchApi/viewSampleRequest">http://yourAieHost:17000/rest/searchApi/viewSampleRequest</a>	GET		Simplified JSON Query Request

## Admin UI

With the REST module added to your project, the "Debug Search" page in the Admin UI will have a new option labeled Output Format as shown below:

### Rest Search API

Output Format:

Workflows:

Query:

# Simplified JSON Query Request


This is an example of a Simplified JSON Query Request.

```
{
  "workflow": "search",
  "query": "*:*",
  "queryLanguage": "advanced",
  "locale": "en",
  "rows": 10,
  "filters": [
    "author:me",
    "OR(title:c*, title:d*)"
  ],
  "facets": [
    "cat",
    "date"
  ],
  "facetFilters": [
    {
      "name": "Language",
      "label": "English",
      "filter": "language:FACET(English)"
    }
  ],
  "sort": [
    "date:DESC"
  ],
  "fields": [
    ".id",
    "title",
    "text",
    "date",
    "SCOPETEASER(text) as scopeTeaser"
  ],
  "username": "me",
  "realm": "myrealm",
  "restParams": {
    "zones": [
      "default"
    ],
    "offset": [
      10
    ],
    "highlight": [
      "true"
    ],
    "abcEnabled": [
      "true"
    ],
    "searchProfile": [
      "attivio"
    ],
    "includeMetadataInResponse": [
      "true"
    ]
  },
  "relevancyModel": {
    "name": "default",
    "defaultSearchField": {
      "defaultBoost": 100,
      "proximityMode": "DEFAULT",
      "fieldNorms": true,
      "termBoosts": [
        {
          "field": "title",
          "boost": 200,
          "norms": true,
          "mode": "TFIDF"
        }
      ]
    }
  }
}
```

```

    {
      "field": "anchortext",
      "boost": 200,
      "norms": true,
      "mode": "TFIDF"
    }
  ],
  "phraseBoosts": [
    {
      "field": "title",
      "boost": 300,
      "norms": true,
      "mode": "TFIDF"
    },
    {
      "field": "anchortext",
      "boost": 300,
      "norms": true,
      "mode": "TFIDF"
    }
  ],
  "completenessBoosts": [
    {
      "field": "title",
      "boost": 1000,
      "norms": true,
      "mode": "TFIDF"
    },
    {
      "field": "anchortext",
      "boost": 1000,
      "norms": true,
      "mode": "TFIDF"
    }
  ],
  "proximityBoosts": [],
  "scoreMode": "TFIDF"
},
"staticBoosts": [
  {
    "field": "linkfactor",
    "normalization": 1
  }
],
"fields": [],
"freshness": {
  "field": "date",
  "decay": 0.085,
  "resolution": "HOURS",
  "normalization": 1
}
}
}

```

Parameter	Required	Default	Description
workflow		search	The <a href="#">query workflow</a> with which to process the query
query			The query to execute
queryLanguage		advanced	The query language to use for the query ( <a href="#">simple</a> or <a href="#">advanced</a> ).
locale			The <a href="#">locale</a> to use for all linguistic processing of the query
rows		10	The number of search results (documents) to return for this query
filters			A list of queries in <a href="#">Advanced Query Language</a> syntax; only results passing these filters will be returned
facets			A list of <a href="#">facet</a> requests. For examples of complex facet requests see <a href="#">Discrete Facets</a> .
facetFilters			A list of <a href="#">facet filters</a> . Each facet filter represents a facet bucket that is being used to refine the result set.

relevancyModel			The <a href="#">relevancy model</a> to use for the query.
sort			A list of <a href="#">sort expressions</a> used for ordering the query's results
fields		*	A list of <a href="#">schema fields</a> or <a href="#">field expressions</a> to be returned for each matching document in the result set
username			The username/ID of the <a href="#">Content Security principal</a> to set for the query request
realm			The realm of the <a href="#">Content Security principal</a> to set for the query request
restParams			A map of Key to List of values for <a href="#">legacy REST API query parameters</a> , which are parsed according to the standard CGI argument parsing. <b>Note that you must specify whether a parameter is single-valued or multiple-valued for every parameter. As every value specified for the key is extracted and set, if multiple values are specified for a single-valued parameter, the last value specified takes effect.</b>

## Attivio Business Center-Specific Query Request Parameters

Parameter	Required	Default	Description
abc.enabled	Yes, if searchProfile parameter is set.	false	A flag that tells AIE that this query request must be enabled for search using Business Center rules.
searchProfile	No		The name of the search profile to use for triggering Business Center rules under that searchProfile.



You must set `abc.enabled = true` if you are setting a value for `searchProfile`.

## Simplified JSON Query Response

### Document

```
{
  "totalTime": 21,
  "totalHits": 2,
  "documents": [
    {
      "fields": {
        "title": [
          "Document 1 title"
        ],
        "date": [
          20000
        ],
        ".id": [
          "doc1"
        ]
      },
      "children": null
    },
    {
      "fields": {
        "title": [
          "Document 2 title"
        ],
        "date": [
          20000
        ],
        ".id": [
          "doc2"
        ]
      },
      "children": null
    }
  ],
  "facets": [
    {
```

```

"label": "Category",
"field": "cat",
"buckets": [
  {
    "value": "cat1",
    "count": 1,
    "filter": "cat:FACET(cat1)"
  },
  {
    "value": "cat2",
    "count": 1,
    "filter": "cat:FACET(cat2)"
  }
]
},
{
"label": "size",
"field": "size",
"buckets": [
  {
    "value": 150,
    "count": 1,
    "filter": "size:FACET(150)"
  },
  {
    "value": 120,
    "count": 1,
    "filter": "size:FACET(120)"
  }
],
"statistics": {
  "count": 2,
  "sum": 270,
  "min": 120,
  "max": 150,
  "mean": 135,
  "midpoint": 135,
  "stdev": 21.213203435596427,
  "var": 450
}
},
],
"feedback": [
  {
    "messageName": "myMessage",
    "stageName": "Stage1",
    "message": "This is a feedback message",
    "properties": {
      "prop1": "vall"
    }
  }
],
"placements": [
  {
    "label": "my placement label",
    "linkUrl": "link url",
    "linkText": "my link text",
    "imageUrl": "imgeUrl1",
    "markup": "some markup <a href=\"here\">here</a>"
  }
]
}

```



By default, printed output is not formatted as above, To format output as shown, install a JSON pretty-print plugin for your browser.

Parameter	Description
documents	Any array of document objects
documents.children	A list of child documents created as a result of a JOIN query
documents.fields	Name to List of values for the field. Strings, Dates, and number types are supported.
facets	A list of facet responses
facets.buckets	A list of buckets for the facet
facets.buckets.count	The number of documents for this query that are a part of this bucket
facets.buckets.filter	An advanced query string that can be used to filter the current result set with the facet bucket
facets.buckets.label	An optional display label to represent the bucket in the UI. Typically only available for filter based facet requests and range facets.
facets.buckets.max	The max value for the bucket's range (only available for range facets)
facets.buckets.min	The min value for the bucket's range (only available for range facets)
facets.buckets.value	The value for the bucket.
facets.label	The label to use in the UI representing a single facet. This is often time the field name of the field being faceted on
facets.statistics	Statistics for a facet (if available, for numeric fields only)
facets.statistics.count	Sum of count for all buckets
facets.statistics.max	Maximum value for all values in facet field.
facets.statistics.mean	Average value for field
facets.statistics.midpoint	Midpoint between minimum and maximum value.
facets.statistics.min	Minimum value for all values in facet field.
facets.statistics.stdev	Standard deviation for all values in facet field.
facets.statistics.sum	Sum of all values in facet field.
facets.statistics.var	Statistical variance for all values in facet field.
feedback	List of feedback messages from the server
feedback.message	The user visible text of the message to display
feedback.message.properties	A String to String map of properties for the message
feedback.messageName	The name of the message
feedback.stageName	The stage that generated the message
placements	Placements added by the Attivio Business Center
placements.imageUrl	The image for the placement
placements.label	The label for the placement
placements.linkText	The text for the placement's link
placements.linkUrl	The link for the placement
placements.markup	Any HTML markup associated with the placement
totalHits	The total number of hits found for this query
totalTime	The total amount of time in ms it took to process the query