

API

Search queries

The query parameters have a heuristic (may change drastically over time) built around to determine what you intended when you typed in your search text and how that translates into "lucene-speak":

| Query string | Resultant query |
|----------------------|---|
| words | search for filenames with all of the words OR documents with all of the words (within a hard coded range) |
| (f or files):words | search for filenames with all of the words |
| (c or content):words | search for documents with all of the words in the indexed content |
| (l or literal):query | search using this exact query string (lucene query format) |

In addition, any paths are added as an AND for the set, i.e. the results only contain hits that satisfy the path arguments.

Any schema fields will also be added as an AND for the set. If no headrevision field is specified, p4-search will automatically add a "AND headrevision:true" to the query in order to only return one search hit per file. Setting "headrevision:.*" in the searchFields array below will return all indexable revisions.

Externally facing API calls

| API call | Description |
|-----------------|---|
| GET /api/search | <p>(no auth) Provides a simple search method (for demonstration only, the POST method is recommended). Query params to the search call are:</p> <pre>query={{query string}} path={{depot path to restrict search, not required}} user={{user ID for authentication}} ticket={{Perforce login ticket, p4 login -p -h searchindexerIP or p4 login -p -a, not required if "user" has no password set}} resultFormat:{{DETAILED SIMPLE}} startRow: {{DETAILED: result set row to return results from, starting at 0}} rowCount: {{number of rows to return}}</pre> <p>The search results are returned in the standard format depending on <i>resultFormat</i> (see below)</p> |

| | |
|-----------------------|---|
| POST /api/search | <p>(no auth) Similar to the GET method, but all of the parameters are in the POST data as a JSON object:</p> <pre>{ userId: user ID for authentication, ticket: Perforce login ticket, p4 login -p -h searchindexerIP or p4 login -p -a, empty if no password is required for "userId" queryRaw : query string, paths: [{ depot path 0 }, {depot path 1}, ...], searchFields: [{ field: Solr schema field name, value: value to search for }, ...] rowCount: maximum number of search results, optional resultFormat:{{DETAILED SIMPLE}} startRow: {{DETAILED: result set row to return results from, starting at 0}} rowCount: {{number of rows to return}} }</pre> <p>The search results are returned in the standard format depending on <i>resultFormat</i> (see below)</p> |
| POST /api/auth-search | <p>Similar to the POST /api/search method, only behind a Spring authentication wall (<i>/j_spring_security_check</i>). The JSON format is the same, but <i>userId</i> and <i>ticket</i> are not required (ignored).</p> <p>The search results are returned in the standard format (see below)</p> |
| HEAD /api/search | <p>Convenience method for Commons or other servers that just need to check "are you there" on startup. Returns a standard "OK" message (see below)</p> |

API calls for internal usage

| API call | Description |
|-------------------------|---|
| POST /api/queue/{token} | <p>Similar to the Swarm trigger API, this call is used by a trigger in the Perforce server to notify the indexer of a commit change. The "token" in this case is simply a configured value that is the same on both the Perforce server and the p4-search configuration file. The POST data is the following:</p> <pre>commit,{{change number}}</pre> <p>Receiving this API request will eventually trigger p4-search to index or re-index all of the files in the numbered changelist.</p> |
| GET /version | TBD: return version data in JSON format |
| GET /api/configuration | used internally by the p4-search UI, returns minimal configuration data (commonsURL and swarmURL for link generation) |
| GET /notauthorized | used internally by the p4-search login UI, returns an error page indicating unauthorized access |
| GET /api/userid | used internally by the p4-search login UI, returns the userid of the session's logged in user |
| GET /api/search-fields | used internally by the p4-search UI for providing a basic list of what is in the Solr schema (field name and type) |

API responses

All responses from p4-search are JSON data in the following format:

```
{ status: {
  code: 200 for OK, other error codes TBD,
  message: descriptive message of error },
  payload : [ empty for errors, JSON objects for search results ]
}
```

resultFormat: "SIMPLE"

Successful search results return a JSONified version of "p4 files" output in the "payload" array:

```
... payload : [
  { depotFile: {{depot path}}, rev: {{revision#}}, action: {{p4 action}}, fileType: {{performe
file type}}, change: {{changelist}} },
  { depotFile: ... }, ...
]
```

resultFormat: "DETAILED"

Successful search results return a payload as a JSON object with the following format:

```
...
payload: {
  detailedFilesModels: [
    { filesModel: {
      action: "add"
      change: "155024"
      depotFile: "//commons/spaces/138/files/QA_Agenda.docx"
      rev: "1"
      time: "1359765439"
      type: "ubinary"},
      score: 0.21028672 },
    { filesModel:{change:155022, type:ubinary, time:1359765346, action:add,...},...},
    {score:0.079532385, filesModel:{change:240293, type:text, time:1379367501, action:add,...},...},
    ...],
  fileModelCount: 5,
  lastRow: 5,
  maxScore: 0.21028672,
  numFound: 5,
}
```

detailedFilesModels contains an array of *filesModel* objects (the same format as SIMPLE results) paired with the *modifiedByUser* and *score* fields.

fileModelCount contains the number of elements in *detailedFilesModels*.

maxScore contains the highest score of any of the *filesModels*.

lastRow and *numFound* are used to page through the results by setting a future request's *startRow* value to *lastRow* + 1.

If the search returned no results, the payload array will be empty but the *status.code* will be 200 (OK).

History:

2014.2 - Added resultFormat details for better results and paging

2014.1 - Basic API information

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