# Searching for Data via the CLU

If your user account has the Read permission level on a data file in DME, you can search for that data. You can generate a list of such data files that match a search query. You can also specify a search path to narrow the search. The list provides the full path to each file in DME.

New collections and data files appear in search results 30-60 minutes after they were created.

To search for data:

1. In your local system, create a JSON file that specifies a search query. For more information, refer to Building a Query to Search for Data via the CLU.
2. Run the following command:

```
dm_query_dataobject [-D REST-response] [-o output-file] <criteria.json> [search-path]
```

The following table describes each parameter:

| Parameter | Description |
|---|---|
| `[-D <REST-response>]` | An optional parameter, specifying a path and filename in your local system. The system always creates a response file:<br>• If you specify this parameter, the system saves the response from the server to the specified file in the specified location.<br>• If you omit this parameter, the system saves the file as query-dataobject-response-header.tmp in your home directory. |
| `[-o <output-file>]` | An optional parameter, specifying a path and filename in your local system. The system always creates a query output file:<br>• If you specify this parameter, the system saves the query output to the specified file in the specified location.<br>• If you omit this parameter, the system prints the query output to standard output and saves the file as query-dataobject-response-message.json.tmp in your home directory. |
| `<criteria.json>` | A path and filename for a JSON file in your local system, containing the compound query for the search. |
| `[search-path]` | An optional parameter, specifying the path to the collection in DME in which you want to search. |

For example, consider the following criteria.json file. When you perform a query, the system requires it in the context of a compoundQuery element with a join operator, even if it contains only one simple query.

```
{
   "compoundQuery": {
      "operator": "AND",
      "queries": [
         {
            "attribute": "source_file_size",
            "value": "10",
            "operator": "NUM_LESS_OR_EQUAL"
         }
      ]
      },
   "detailedResponse": false,
   "page": 1,
   "totalCount": true
}
```

With the above criteria.json file, the following command generates a list of data files in DME, in Project_1 and subcollections, that are size 10 or smaller. The output provides a total count of results and lists only the first page (the first 100 paths).

```
dm_query_dataobject criteria.json /Example_Archive/PI_Lab1/Project_1
```

To generate the second page (the second 100 paths), set the page indicator to 2. To generate a list with metadata, set detailedResponse to true.