

Find Stems

Wiki Home	Grouper Release Announcements	Grouper Guides	Grouper Deployment Guide	Community Contributions	Internal Developer Resources
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[Grouper Web Services](#)

Description

Find stems search for stems based on name, attribute, parent stem, etc. Can build queries with group math (AND / OR / MINUS)

Features

- Use [query type](#) to build one query object
- For AND|OR|MINUS you can link up multiple queries into one
- Returns stems
- Can actAs another user
- v2.1 and later, you can sort and/or page the results of individual filter types: parent stem, and approximate group name. Can sort on name, displayName, extension, or displayExtension.

Find stems Lite service

- Accepts one query to search (cannot use group math)
- Documentation: [SOAP](#) (click on findStemsLite), [REST](#) (click on findStemsLite)
- For REST, the request can put data in query string (in URL or request body)
- REST request (colon is escaped to %3A): GET /grouper-ws/servicesRest/v1_3_000/stems
 - Note: if passing data in request body e.g. actAs, use a POST
- (see documentation above for details): [Request object](#), [response object](#)
- [Response codes](#)
- [Samples](#) (all files with "Lite" in them, click on "download" to see file)

Find stems service

- Accepts multiple query objects in a graph (can use group math)
- Documentation: [SOAP](#) (click on findStems), [REST](#) (click on findStems)
- REST request (colon is escaped to %3A): POST /grouper-ws/servicesRest/v1_3_000/stems
- (see documentation above for details): [Request object](#), [response object](#)
- [Response codes overall](#), [response codes for each assignment](#)
- Returns an overall status, and a status for each assignment
- [Samples](#) (all files without "Lite" in them, click on "download" to see files)

Example: find stems directly under another stem

```
[mchyzer@flash pennGroupsClient-2.6.0]$ java -jar grouperClient-2.6.19.jar --operation=findStemsWs --
stemQueryFilterType=FIND_BY_PARENT_STEM_NAME --parentStemName=test --parentStemNameScope=ONE_LEVEL --debug=true
Reading resource: grouper.client.properties, from: /home/mchyzer/grouper/pennGroupsClient-2.6.0/grouper.client.
properties

##### REQUEST START (indented) #####

POST /grouperWs/servicesRest/2.6.19/stems HTTP/1.1
Connection: close
Authorization: Basic xxxxxxxxxxxxxxxxx
User-Agent: Jakarta Commons-HttpClient/3.1
Host: grouperWs.apps.upenn.edu:-1
Content-Length: 157
Content-Type: application/json; charset=UTF-8

{
  "WsRestFindStemsRequest": {
    "wsStemQueryFilter": {
      "stemQueryFilterType": "FIND_BY_PARENT_STEM_NAME",
      "parentStemName": "test",
      "parentStemNameScope": "ONE_LEVEL"
    }
  }
}
```

REQUEST END

RESPONSE START (indented)

HTTP/1.1 200 OK
Date: Tue, 16 May 2023 19:48:30 GMT
Content-Type: application/json; charset=UTF-8
Content-Length: 973
Connection: close
Server: Apache/2.4.6 (CentOS) OpenSSL/1.0.2k-fips
Strict-Transport-Security: max-age=15768000
X-Grouper-resultCode: SUCCESS
X-Grouper-success: T
X-Grouper-resultCode2: NONE

```
{
  "WsFindStemsResults": {
    "resultMetadata": {
      "success": "T",
      "resultCode": "SUCCESS",
      "resultMessage": "Success for: clientVersion: 2.6.19, wsStemQueryFilter: WsStemQueryFilter
[stemQueryFilterType=FIND_BY_PARENT_STEM_NAME,parentStemName=test,parentStemNameScope=ONE_LEVEL], actAsSubject:
null\n, params: null\n, wsStemLookups: null"
    },
    "stemResults": [
      {
        "displayExtension": "isc",
        "extension": "isc",
        "displayName": "test:isc",
        "name": "test:isc",
        "description": "isc testing",
        "idIndex": "18374",
        "uuid": "62aa6040-a78f-48d5-bd21-dccb339ca4bc"
      },
      {
        "displayExtension": "ldapTesting",
        "extension": "ldapTesting",
        "displayName": "test:ldapTesting",
        "name": "test:ldapTesting",
        "description": "ldapTesting",
        "idIndex": "29086",
        "uuid": "df41ed1e-f94d-4f36-b0aa-046163f694ed"
      },
      {
        "displayExtension": "seas",
        "extension": "seas",
        "displayName": "test:seas",
        "name": "test:seas",
        "description": "seas",
        "idIndex": "22781",
        "uuid": "957319ac-e0ee-48dc-a0d2-90673ee0d0e6"
      }
    ]
  },
  "responseMetadata": {
    "serverVersion": "2.6.19",
    "millis": "4549"
  }
}
```

RESPONSE END

Output template: Index \${index}: name: \${wsStem.name}, displayName: \${wsStem.displayName}, available variables:
wsFindStemsResults, resultMetadata, grouperClientUtils, index, wsStem
Index 0: name: test:isc, displayName: test:isc
Index 1: name: test:ldapTesting, displayName: test:ldapTesting
Index 2: name: test:seas, displayName: test:seas

Elapsed time: 5709ms

[mchyzer@flash pennGroupsClient-2.6.0]\$