

# SCIM Query syntax

SCIM protocol provides a language to search and filter resources.

Please browse the standard specifications in this link:

<https://tools.ietf.org/html/rfc7644#section-3.4.2.2>

## Example

To search all users having "John" as name:

```
http://<domain>/webservice/scim2/v1/User/?filter=userName eq "John"
```

## Use

This feature can be used with the Search by filter operation.

After the URL resource, the filter parameter with the language expression to apply must be added:

**<URL>?filter=<expression>**

Remember that in this case the HTTP method is GET.

The result always is a SCIM response list.

## Syntax

### Attribute operators

Operator	Description
eq	equal

Operator	Description
eq_ci	case insensitive version of equal operator
ne	not equal
co	contains
sw	starts with
ew	ends with
pr	present (has value)
gt	greater than
ge	greater than or equal to
lt	less than
le	less than or equal to

# Logical operators

Operator	Description
and	Logical "and"
or	Logical "or"
not	"Not" function

# Grouping operators

Operator	Description
( )	Precedence grouping
[ ]	Complex attribute filter group

# Data values

Data type	Value
Numbers	Use the value without ", for example 1234
Text	Use the value within ", for example "John"
Date	Use the value within " with an ISO format, for example "2011-05-13T04:42:34Z"
Boolean	Use [ true   false ] (without ")

Data type	Value
Null	Use [ null ] (without ")

## Filter examples

```

filter=userName eq "admin"
filter=userName ne "admin"
filter=userName co "ad"
filter=userName sw "a"
filter=userName ew "n"
filter=userName pr
filter=id gt 1
filter=id ge 60
filter=id lt 1000
filter=id le 1188
filter=consoleProperties.id eq 229
filter=createdAt gt "2011-05-13T04:42:34Z"
filter=id eq 60 and id eq 1188
filter=id eq 60 or id eq 1188
filter=firstName eq "Admin" and id eq 60
filter=firstName eq "Admin" or id eq 61
filter=primaryGroup eq "world" and (firstName co "John" or lastName co "Smith")
filter=userName co "i" and (userName co "a" or userName co "s")
filter=id eq 60 and (userName co "a" and consoleProperties.id eq 229)

```

## Sorting

Short is optional .

Parameter	Description
sortBy	Specifies the attribute whose value will be used to order the returned responses.
sortOrder	Allowed values are "ascending" and "descending". If sortBy is provided, and sortOrder is not provided, sortOrder will be "ascending" by default.

Example:

http://<your-server>/webservice/scim2/v1/User?sortBy=lastName&sortOrder=descending

# Pagination

Parameter	Description
startIndex	Index of the first query result. Default 1
count	Maximun number of query results per page

Example:

http://<your-server>/webservice/scim2/v1/User?startIndex=1&count=10

```
{
  "totalResults":100,
  "itemsPerPage":10,
  "startIndex":1,
  "schemas":["urn:ietf:params:scim:api:messages:2.0:ListResponse"],
  "Resources":[{
    ...
  }]
}
```

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