Web Services API Reference

Subresources

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Subresources

This is part of the API Basics section of the Web Services API.

Contents

Overview

Web Services includes a feature called `subresources`, which allows reading the subresources of an object.

Example - Show all subresources

For example, if we have a user object which has one or more skills and one or more devices associated twith it, and we want to read all of those in one request we need to do the following:

Request

```
GET .../api/v2/users/<user_id>?subresources=*
```

Response

```
{
        "id":<user_id>,
        "firstName":<first_name>,
        ...
        "skills":[{
                "id":<skill_1_id>,
                ...
        },
        ...
        {
                "id":<skill_N_id>,
                ...
        }],
        "devices":[{
                "id":<device_1_id>,
                ...
        },
        ...
        {
                "id":<device_M_id>,
                ...
        }]
}
```

If the `subresources` parameter is not included in the request, you receive everything except the "skills" collection and "devices" collection.

> **Important**
>
> It is also possible to apply subresources feature to object settings and request both an object and its settings in one request.

Selecting Subresources

In the example above, we specify `subresources=*` to get all available subresources.

If the object we are interested in has several types of subresources, we can choose which subresources to be returned. This could be achieved by specifying a comma-separated list of subresources.

Example

Request

```
GET .../api/v2/users/<user_id>?subresources=skills,devices
```

Response

```
{
        "id":<user_id>,
        "firstName":<first_name>,
        ...
        "skills":[{
                "id":<skill_1_id>,
                ...
        },
        ...
        {
                "id":<skill_N_id>,
                ...
        }],
        "devices":[{
                "id":<device_1_id>,
                ...
        },
        ...
        {
                "id":<device_M_id>,
                ...
        }]
}
```

Example 2

Request

```
GET .../api/v2/users/<user_id>?subresources=skills
```

Response

```
{
        "id":<user_id>,
        "firstName":<first_name>,
        ...
        "skills":[{
                "id":<skill_1_id>,
                ...
```

```
        },
        ...
        {
                "id":<skill_N_id>,
                ...
        }]
}
```

Filtering and Sorting by Subresource Properties

If an object has subresources, it is possible to filter and sort by their properties. For example: show all users with skill "Sales". This could be achieved by using subresource name (for example "skills") followed by a dot and its property (for example ".name").

Example - Sorting by Skill Name

Request

```
GET .../api/v2/users?subresources=skills&fields=id,userName&skills.name=Sales
```

Response

```
{
        "statusCode": 0,
        "users": [{
                "id": "3454353254324",
                "userName": "cmburns@springfieldnclear.com",
                "skills":[{
                        "id": "0890689",
                        "name": "Sales",
                        "level": 2
                }
        },
        {
                "id": "3567365736736",
                "userName": "hsimpson@springfieldnclear.com,
                "skills":[{
                        "id": "0890689",
                        "name": "Sales",
                        "level": 4
                }
        }]
}
```

Example 2

Request

```
GET .../api/v2/users?subresources=skills&fields=id,userName&sortBy=skills.levelo=Descending
```

Response


```
{
        "statusCode": 0,
        "users": [{
                "id": "3567365736736",
                "userName": "hsimpson@springfieldnclear.com,
                "skills":[{
                        "id": "0890689",
                        "name": "Sales",
                        "level": 4
                }
        },
        {
                "id": "3454353254324",
                "userName": "cmburns@springfieldnclear.com",
                "skills":[{
                        "id": "0890689",
                        "name": "Sales",
                        "level": 2
                }
        }]
}
```