Tens Supergroup API   1.1.0   OAS3
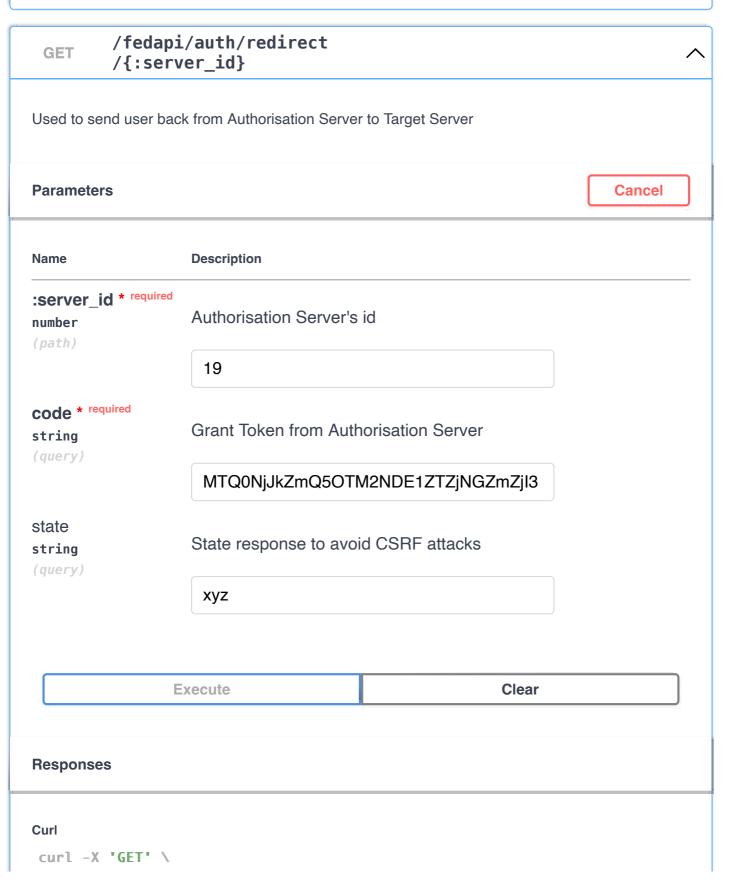
API specifications for cs3099 tens supergroup

default ⌃

GET /fedapi ⌃

Return information about the federation api

Parameters   [Try it out]

No parameters

Responses

Code	Description	Links
200	OK	*No links*

Media type

[**application/json**]

Controls `Accept` header.

Example Value   Schema

```
        {
          "group": 11,
          "greeting": "Welcome to our federated backend!"
        }
```

GET   /fedapi/auth/authorise   ⌃

Request authorisation to users's Authorisation Server

Parameters   [Try it out]

Name	Description
response_type * required **string** *(query)*	Response Type (fixed string) `code`
redirect_uri * required **string** *(query)*	Uri to redirect to after authentication `https://cs3099user11.host.cs.st-andrews.ac.u`
client_id * required **number** *(query)*	Target Server's Client Id `19`
state **string** *(query)*	State to avoid CSRF attacks `xyz`

Responses

Code	Description	Links
302	redirect to Target Server login page	*No links*

GET `/fedapi/auth/redirect/{:server_id}`   ⌃

Used to send user back from Authorisation Server to Target Server

Parameters   [Cancel]

Name	Description
:server_id * required **number** *(path)*	Authorisation Server's id `19`
code * required **string** *(query)*	Grant Token from Authorisation Server `MTQ0NjJkZmQ5OTM2NDE1ZTZjNGZmZjI3`
state **string** *(query)*	State response to avoid CSRF attacks `xyz`

Execute	Clear

Responses

Curl

```
curl -X 'GET' \
```

```
'https://cs3099user11.host.cs.st-andrews.ac.uk/fedapi/auth/redirect/19?cc
-H 'accept: */*'
```

Request URL

```
https://cs3099user11.host.cs.st-andrews.ac.uk/fedapi/auth/redirect/19?
code=MTQ0NjJkZmQ5OTM2NDE1ZTZjNGZmZjI3&state=xyz
```

Server response

Code	Details

403
Undocumented   Error: response status is 403

Response body

```html
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<title>Error</title>
</head>
<body>
<pre>Forbidden</pre>
</body>
</html>
```

Download

Response headers

```
access-control-allow-methods: GET,POST
content-length: 136
content-security-policy: default-src 'none'
content-type: text/html; charset=utf-8
date: Thu,10 Nov 2022 23:59:46 GMT
server: nginx/1.20.1
strict-transport-security: max-age=86400; preload
vary: Origin
x-content-type-options: nosniff
x-powered-by: Express
```

Responses

Code	Description	Links
302	redirect to Tarquet Server resource (preferably home page?)	*No links*

POST	**/fedapi/auth/token**	∧
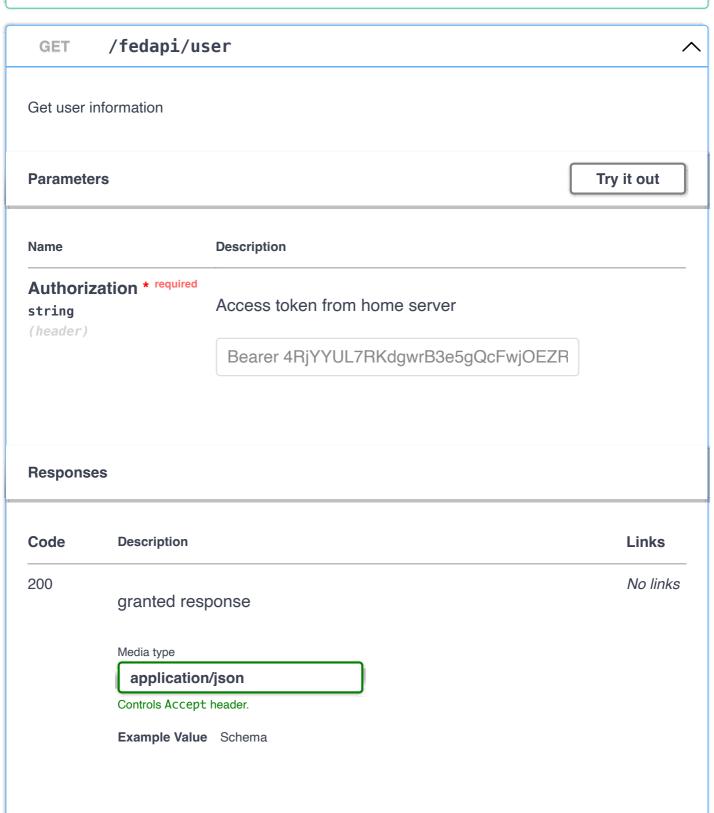
Used by Target Server to get access token from Authorisation Server

Parameters

<div style="text-align: right">**Try it out**</div>

Name	Description
client_id * required number *(query)*	Authorisation Server's id `19`
client_secret * required string *(query)*	Authorisation Server's secret (defined in discord) `4RjYYUL7RKdgwrB3e5gQcFwjOEZRh6Lu`
grant_type * required string *(query)*	Grant Type (fixed string) `authorization_code`
code * required string *(query)*	code from Authorisation Server during authentication `MTQ0NjJkZmQ5OTM2NDE1ZTZjNGZmZjl3`

Responses

Code	Description	Links
200	granted response Media type **application/x-www-form-urlencoded** Controls `Accept` header. **Example Value** Schema	*No links*

```
{
    "access_token": "4RjYYUL7RKdgwrB3e5gQcFwjOEZRh6Lu"
}
```

| 401 | | No links |
| Unauthorized | | |

GET   /fedapi/user   ⌃

Get user information

| Parameters | Try it out |

Name	Description
Authorization * required `string` *(header)*	Access token from home server Bearer 4RjYYUL7RKdgwrB3e5gQcFwjOEZR

Responses

Code	Description	Links
200	granted response	No links

Media type

application/json

Controls `Accept` header.

Example Value   Schema
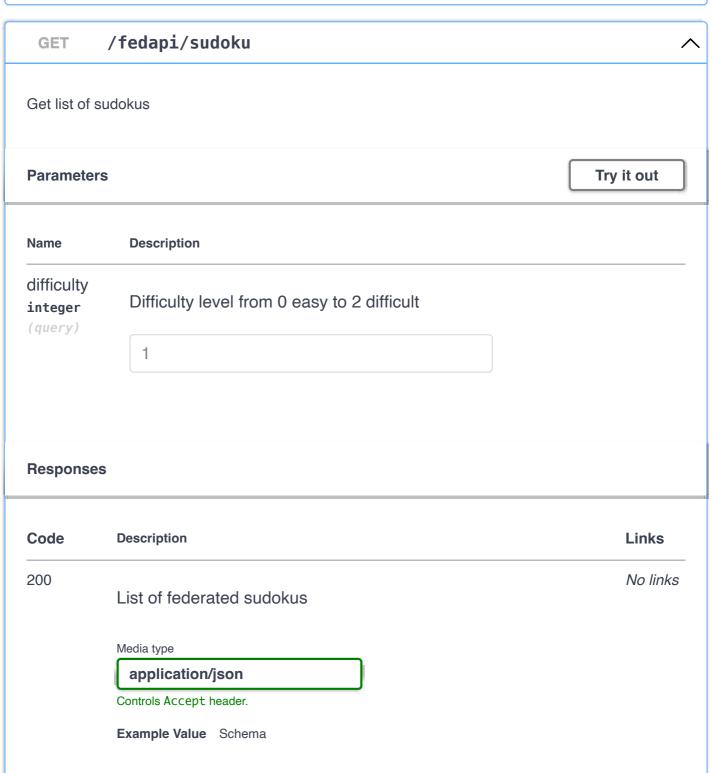
```json
{
  "username": "Ironcanon",
  "id": "78HUYH9",
  "email": "ahp9@st-andrews.ac.uk",
  "group": 10
}
```

| 401 | | *No links* |
| Unauthorized | | |

GET /fedapi/sudoku ︿

Get list of sudokus

| **Parameters** | | Try it out |

Name	**Description**
difficulty **integer** *(query)*	Difficulty level from 0 easy to 2 difficult
	[1]

Responses

Code	**Description**	**Links**
200	List of federated sudokus	*No links*

Media type

[**application/json**]

Controls `Accept` header.

Example Value   Schema

```json
[
  {
    "sudoku_id": "784678GHJ",
    "author_id": "78HUYH9",
    "group": 11,
    "difficulty": 1,
    "puzzle": [
      [
        "1",
        "2",
        "3",
        "4",
        "5",
        "6",
        "7",
        "8",
        "9"
      ],
      [
        "1",
        "2",
        "3",
        "4",
        "5",
        "6"
```

Schemas ∧

sudoku   {
    sudoku_id   string
                                  example: 784678GHJ
                                  Sudoku id (to be decided at the group level)

    author_id   string
                                    example: 78HUYH9
                                  Author id (to be decided at the group level)

    group   integer
                                    example: 11
                                    Group number of origin

    difficulty   integer
                                    example: 1

    puzzle
                                  [

example: List [List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"]]

                [[...]]]
    solution
                                  [

example: List [List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"], List ["1", "2", "3", "4", "5", "6", "7", "8", "9"]]

                [...]]
}

user   {
    username   string
                    example: Ironcanon
                    User's display name

    id   string
                    example: 78HUYH9
                    Author id (format to be decided at the group level)

    email   string
                    example: ahp9@st-andrews.ac.uk
                    Email of user

    group   integer
                    example: 10
                    Group number of origin

}