

ĐỀ TÀI: Server Management System (VCS-SMS)

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YÊU CẦU CHỨC NĂNG



Kiểm tra trạng thái của server



Quản lý server



Báo cáo

Send daily report to mail
(automatically & manually)

QUẢN LÝ SERVER





MODEL HỆ THỐNG

Server

ID

Name

Status

Uptime

IPv4

IdUserManager

CreatedTime

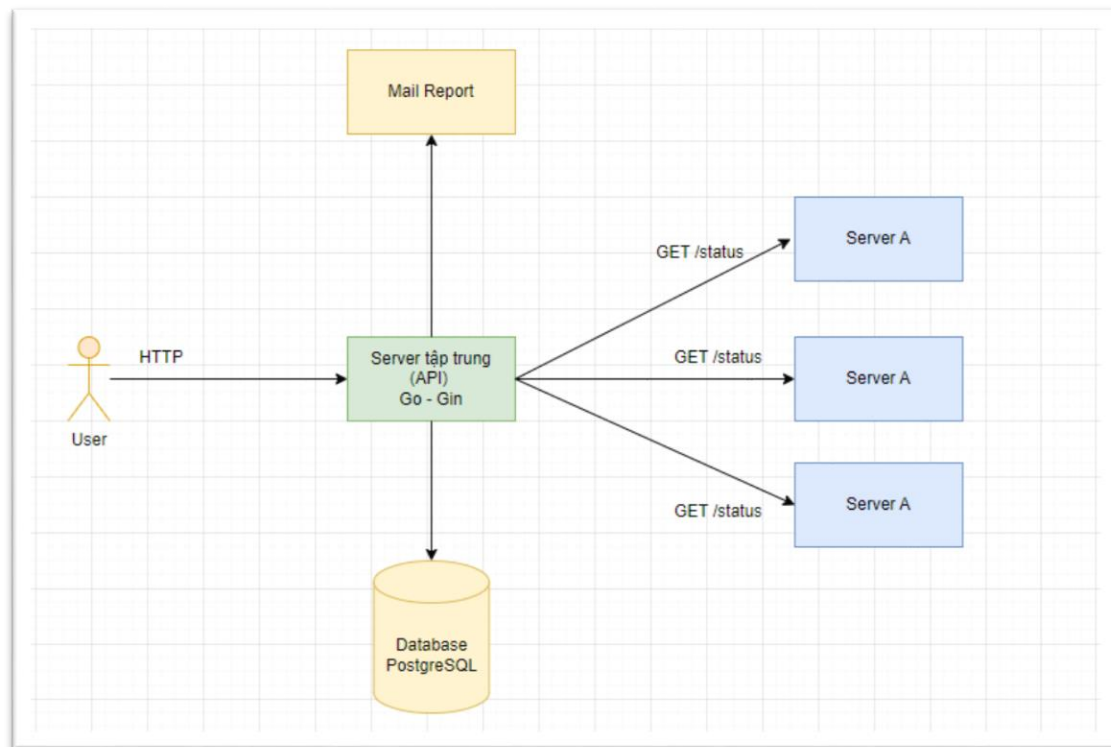
LastUpdated

Columns +

	Name	Data type	Length/Precision	Scale	Not NULL?	Primary key?	Default
	id	text			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	name	text			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	status	text			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	uptime	numeric			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	ipv4	text			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	id_user_manager	bigint			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	created_time	timestamp with time zone			<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	last_updated	timestamp with time zone			<input checked="" type="checkbox"/>	<input type="checkbox"/>	



KIẾN TRÚC ỨNG DỤNG



Token

1. Register

POST http://localhost:8000/api/auth/register

Params Authorization Headers (9) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL Text

```
1 1
2 2
3 3
4 4
5 5
6 6
```

Body Cookies Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 1
2 2
3 3
4 4
5 5
6 6
7 7
8 8
9 9
10 10
11 11
12 12
```

Raw

```
{
  "Name": "PA1",
  "Email": "panh1@gmail.com",
  "Password": "1anh123456",
  "PasswordConfirm": "1anh123456"
}
```

Pretty

```
1 1
2 2
3 3
4 4
5 5
6 6
7 7
8 8
9 9
10 10
11 11
12 12
```

```
{
  "data": {
    "user": {
      "id": 1,
      "name": "PA1",
      "email": "panh1@gmail.com",
      "created_at": "2022-10-28T12:47:33.778213+07:00",
      "updated_at": "2022-10-28T12:47:33.778213+07:00"
    }
  },
  "status": "success"
}
```

POST http://localhost:8000/api/auth/register

Params Authorization Headers (10) Body Pre-request Script

none form-data x-www-form-urlencoded raw binary

```
1 1
2 2
3 3
4 4
5 5
6 6
```

Body Cookies (1) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 1
2 2
3 3
4 4
```

Raw

```
{
  "Name": "PA1",
  "Email": "panh1@gmail.com",
  "Password": "1anh123456",
  "PasswordConfirm": "1anh123456"
}
```

Pretty

```
1 1
2 2
3 3
4 4
```

```
{
  "message": "User with that email already exists",
  "status": "fail"
}
```

2. Login

POST http://localhost:8000/api/auth/login

Params Authorization Headers (10) **Body** Pre-reqs

none form-data x-www-form-urlencoded raw

```
1 {
2   "Email": "panh1@gmail.com",
3   "Password": "1anh123456"
4 }
```

Body Cookies (3) Headers (6) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "accessToken": "eyJ3bGc10iJSUzI1NiIsIn
3   "status": "success"
4 }
```

POST http://localhost:8000/api/auth/login

Params Authorization Headers (10) **Body** Pre-reqs

none form-data x-www-form-urlencoded raw

```
1 {
2   "Email": "panh1@gmail.com",
3   "Password": "1anh123456a"
4 }
```

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "Wrong Password",
3   "status": "fail"
4 }
```

server_management_system / auth / login

POST http://localhost:8000/api/auth/login

Params Authorization Headers (10) **Body** Pre-reqs

none form-data x-www-form-urlencoded raw

```
1 {
2   "Email": "1panh1@gmail.com",
3   "Password": "1anh123456"
4 }
```

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "Invalid email",
3   "status": "fail"
4 }
```

YÊU CẦU CHỨC NĂNG – I. QUẢN LÝ SERVER

1. Create Server

server_management_system / server / create

POST http://localhost:8000/api/servers/

Params Authorization Headers (10) **Body** Pre-request Script Tests Settings

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL

```
1 {
2   "server_name": "server10",
3   "Status": "online",
4   "uptime": 134.575,
5   "Ipv4": "192.168.2.0"
6 }
```

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "data": {
3     "server_id": "cddoihnlld5mb28oah0",
4     "server_name": "server10",
5     "status": "online",
6     "uptime": 134.575,
7     "ipv4": "192.168.2.0",
8     "idUserManager": 1,
9     "created_time": "2022-10-28T14:48:22.7166563+07:00",
10    "last_updated": "2022-10-28T14:48:22.7166563+07:00"
11  },
12  "status": "success"
13 }
```

POST http://localhost:8000/api/servers/

Params Authorization Headers (10) **Body** Pre-request Script Tests

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ Gra

```
1 {
2   "server_name": "server10",
3   "Status": "online",
4   "uptime": 134.575,
5   "Ipv4": "192.168.2.0"
6 }
```

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 {
2   "message": "Server with that Name already exists",
3   "status": "fail"
4 }
```


2. View Servers

server_management_system / server / view

GET http://localhost:8000/api/servers/view

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
<input type="checkbox"/> offset	0
<input type="checkbox"/> limit	10
<input type="checkbox"/> sortRequired	status
Key	Value

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
68 {
69   "server_id": "cd968a4mr9dl265231j0",
70   "server_name": "server8",
71   "status": "online",
72   "uptime": 1234.678,
73   "ipv4": "192.168.2.6",
74   "created_time": "2022-10-28T12:54:41.300918+07:00",
75   "last_updated": "2022-10-28T12:54:41.300918+07:00"
76 },
77 {
78   "server_id": "cd9qh5cmx9dgea58osrg",
79   "server_name": "server9",
80   "status": "online",
81   "uptime": 1234.678,
82   "ipv4": "192.168.2.6",
83   "created_time": "2022-10-28T12:54:41.300918+07:00",
84   "last_updated": "2022-10-28T12:54:41.300918+07:00"
85 },
86 "filter": "No filter",
87 "results": 9,
88 "sort": "name",
89 "status": "success"
90 }
```

server_management_system / server / view

GET http://localhost:8000/api/servers/view?filterRequired=status&valueRequired=online

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
<input type="checkbox"/> offset	0
<input type="checkbox"/> limit	10
<input type="checkbox"/> sortRequired	status
<input checked="" type="checkbox"/> filterRequired	status
<input checked="" type="checkbox"/> valueRequired	online
Key	Value

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
33 {
34   "server_name": "server8",
35   "status": "online",
36   "uptime": 1234.678,
37   "ipv4": "192.168.2.6",
38   "created_time": "2022-10-28T12:54:41.300918+07:00",
39   "last_updated": "2022-10-28T12:54:41.300918+07:00"
40 },
41 {
42   "server_id": "cd9qh5cmx9dgea58osrg",
43   "server_name": "server9",
44   "status": "online",
45   "uptime": 1234.678,
46   "ipv4": "192.168.2.6",
47   "created_time": "2022-10-28T12:54:41.300918+07:00",
48   "last_updated": "2022-10-28T12:54:41.300918+07:00"
49 },
50 "filter": "status",
51 "required filter": "online",
52 "results": 5,
53 "sort": "name",
54 "status": "success"
55 }
```

3. Update Server

server_management_system / server / update

PUT ⌵ http://localhost:8000/api/servers/cd9qh5cmr0dgea58osrg

Params Authorization Headers (10) **Body** ● Pre-request Script Tests Settings

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● GraphQL **Text** ⌵

```
1 1
2 2 ..... "Status": "online"
3 3
```

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON ⌵ ≡

```
1 1
2 2 "data": {
3 3   "server_id": "cd9qh5cmr0dgea58osrg",
4 4   "server_name": "server9",
5 5   "status": "online",
6 6   "uptime": 1234.678,
7 7   "ipv4": "192.168.2.6",
8 8   "idUserManager": 1,
9 9   "created_time": "2022-10-28T12:54:41.300918+07:00",
10 10  "last_updated": "2022-10-28T14:53:11.2176338+07:00"
11 11 },
12 12 "status": "success"
13 13
```

server_management_system / server / update

PUT ⌵ http://localhost:8000/api/servers/cd94b77llgd5mr16khhbg

Params Authorization Headers (10) **Body** ● Pre-request Script Te

● none ● form-data ● x-www-form-urlencoded ● raw ● binary ● G

```
1 1
2 2 ..... "Status": "online"
3 3
```


Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON ⌵ ≡

```
1 1
2 2 "message": "No Server with that Id exists",
3 3 "status": "fail"
4 4
```

4. Delete Server with ID, Delete All Server

server_management_system / server / delete_idserver


DELETE  http://localhost:8000/api/servers/cd95umvllgd3jv3jll1g

Params Authorization Headers (8) Body Pre-request Script Test Results

Query Params


KEY
Key

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON 

```
1 [
2   "status": "deletedsuccess"
3 ]
```

deleteAll


DELETE  http://localhost:8000/api/servers/

Params Authorization Headers (8) Body Pre-request Script Test Results

Query Params

KEY
Key

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON 

```
1 [
2   "results": "All data have been deleted successfully"
3 ]
```

5. Import Servers

server_management_system / server / excel/import

POST http://localhost:8000/api/servers/excel/import

Params Authorization Headers (10) Body Pre-request Script Tests Settings

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE
<input checked="" type="checkbox"/> file	ImportServer
Key	Value

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
16      "server_name": "server3"
17    },
18    {
19      "server_id": "cd9qgh4mr0dgea58ospg",
20      "server_name": "server6"
21    },
22    {
23      "server_id": "cd9s8a4mr0dl265231j0",
24      "server_name": "server8"
25    },
26    {
27      "server_id": "cd9qgtkmr0dgea58osq0",
28      "server_name": "server4"
29    },
30    {
31      "server_id": "cd9qgvkmr0dgea58osqg",
32      "server_name": "server5"
33    },
34    {
35      "server_id": "cd9qh5cmr0dgea58osrg",
36      "server_name": "server9"
37    }
38  ],
39  "ImportFail": {
40    "CountFail": 0,
41    "data": []
42  }
43 }
44 }
45 }
```

server_management_system / server / excel/import

POST http://localhost:8000/api/servers/excel/import

Params Authorization Headers (10) Body Pre-request Script Tests

none form-data x-www-form-urlencoded raw binary GraphQL

KEY	VALUE
<input checked="" type="checkbox"/> file	Key

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
17    },
18    {
19      "server_id": "cd9qgh4mr0dgea58ospg",
20      "server_name": "server6"
21    },
22    {
23      "server_id": "cd9qgtkmr0dgea58osq0",
24      "server_name": "server4"
25    },
26    {
27      "server_id": "cd9qgvkmr0dgea58osqg",
28      "server_name": "server5"
29    },
30    {
31      "server_id": "cd9qh5cmr0dgea58osrg",
32      "server_name": "server9"
33    }
34  ],
35  "ImportFail": {
36    "CountFail": 1,
37    "data": [
38      {
39        "server_id": "cd9s8a4mr0dl265231j0",
40        "server_name": "server8"
41      }
42    ]
43  }
44 }
45 }
```

6. Export Servers

server_management_system / server / excel/export

GET http://localhost:8000/api/servers/excel/export?sortRequired=ipv4

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
<input checked="" type="checkbox"/> sortRequired	ipv4
Key	Value

Body Cookies (3) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1  
2  
3  
{"status": "success"}
```

	A ▼	B ▼	C ▼	D ▼	E ▼	F ▼	G ▼	H ▼
1	ID	Name	Status	Uptime	Ipv4	IdUserManager	CreatedTime	LastUpdated
2	cd9qg5vllgd5m	server8	online	134.58	192.168.2.0	1	10/28/22 2:56	10/28/22 2:56
3	cd9qg5tkmr0dgc	server4	offline	1,234.68	192.168.2.1	0	10/28/22 2:56	10/28/22 2:56
4	cd9qd2smr0dgc	server1	online	1,234.68	192.168.2.14	0	10/28/22 2:56	10/28/22 2:56
5	cd9qd5scmr0dgc	server3	offline	124.68	192.168.2.16	0	10/28/22 2:56	10/28/22 2:56
6	cd9qgvkmr0dgc	server5	offline	1,234.68	192.168.2.2	0	10/28/22 2:56	10/28/22 2:56
7	cd9qdocmr0dgc	server2	online	124.68	192.168.2.5	0	10/28/22 2:56	10/28/22 2:56
8	cd9qh5cmr0dgc	server9	online	1,234.68	192.168.2.6	0	10/28/22 2:56	10/28/22 2:56
9	cd9qgh4mr0dgc	server6	offline	1,234.68	192.168.2.7	0	10/28/22 2:56	10/28/22 2:56

YÊU CẦU CHỨC NĂNG – II. SEND DAILY REPORT TO MAIL

1. Report Manually

server_management_system / checking daily

GET

http://localhost:8000/api/report/manually

Params

Authorization

Headers (8)

Body

Pre-request Script

Query Params

KEY	
Key	

Body

Cookies (3)

Headers (3)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1

2

3

"status": "success"

Mail Report Manually

Hộp thư đến x

A

anhntpvcs@gmail.com

đến tôi ▼

Total number of server : 8

SERVERS ON : 4

SERVERS OFF : 4

Average Uptime of Servers: 819.665125s

↶

Trả lời

↷

Chuyển tiếp

2. Report Automatically

```
SEND_MAIL_TIME = '15:15:00'
```

```
func (sc ServerController) DailyReport() {  
    timeat := viper.GetString("SEND_MAIL_TIME")  
    gocron.Every(1).Day().At(timeat).Do(sc.SendEmail)  
    <-gocron.Start()  
}
```

Mail Daily Report Automatically Hộp thư đến x

A

anhntpvcs@gmail.com

đến tôi ▾

15:15 (2 phút trước) ☆

Total number of server : 8

SERVERS ON : 4

SERVERS OFF : 4

Average Uptime of Servers: 819.665125s

↩ Trả lời

➡ Chuyển tiếp



YÊU CẦU CHỨC NĂNG

III. KIỂM TRA TRẠNG THÁI CỦA SERVER

YÊU CẦU PHI CHỨC NĂNG

server_management_system / auth / **refresh**

GET http://localhost:8000/api/auth/refresh

Params Authorization Headers (8) Body Pre-request Script

Query Params

KEY
Key

Body Cookies (4) Headers (5) Test Results

Pretty Raw Preview Visualize JSON

```
1 [Key]
2 "accessToken": "eyJhbGciOiJSUzI1NiIsInR5cCI6IkpX
3 "status": "success"
```

server_management_system / auth / **me**

GET http://localhost:8000/api/users/me

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE
Key	Value

Body Cookies (4) Headers (3) Test Results

Pretty Raw Preview Visualize JSON

```
1 [Key]
2 "data": {
3   "user": {
4     "id": 1,
5     "name": "PA1",
6     "email": "panh1@gmail.com",
7     "created_at": "2022-10-28T12:47:33.778213+07:00",
8     "updated_at": "2022-10-28T12:47:33.778213+07:00"
9   }
10 },
11 "status": "success"
```

GET http://localhost:8000/api/auth/logout

Params Authorization Headers (8) Body Pre-request Script

Query Params

KEY
Key

Body Cookies (1) Headers (6) Test Results

Pretty Raw Preview Visualize JSON

```
1 [Key]
2 "status": "success"
```

THANKS FOR WATCHING



Link github: https://github.com/panhdjf/server_management_system

API agent: https://github.com/panhdjf/server_management_system