

Problem: Send a Wol to all workstations.

Wake-on-lan is based on the Mac-address. The mac adress is the hardware adress of the Network-card. In a local network a mac-address is determined with specific software or with the built-in commands:

(First ping the address)

Ping 192.168.2.1

(Second the arp command)

Arp -a

```
192.168.2.1      00-55-26-1c-e7-c1    dynamic
192.168.2.2      00-5d-15-70-05-01    dynamic
```

...

To get all of de mac-addresses you can ping all local ip's and check the arp-table if there is a mac-address. On a network where the netmask is 255.255.255.0 there a 255 ip's to ping. There is a faster way when there is a dhcp-server (Windows based) on the network. I have made a cmd-script to get the dynamic assigned ip-adresses and write them in a text-file.

```
FOR /F "tokens=2 delims=:" %%i IN ('ipconfig/all ^|find "Default Gateway") DO (FOR /F
"tokens=1-4 delims=. " %%j IN ('echo %%i') Do Set subnet=%%j.%%k.%%l.0)
netsh -c dhcp server scope %subnet% show clientsv5 1|find "-D-" >macs.txt
```

```
192.168.2.62 - 255.255.255.0 - c2-72-d7-35-f0-d2 -2-3-2012 4:32:52 -D- ws001.xxx.lokal
192.168.2.63 - 255.255.255.0 - c2-72-d7-2d-6b-bd -3-3-2012 7:44:50 -D- ws002.xxx.lokal
192.168.2.64 - 255.255.255.0 - 75-ac-c0-97-80-d5 -3-3-2012 8:46:31 -D- ws003.xxx.lokal
```

Ok, not quite yet the best input-file voor a wol command, but here is the line to wol the ip-adresses.

```
for /F "tokens=1-4,9-14 delims=- " %%i IN (macs.txt) DO wol.exe
%%m%%n%%o%%p%%q%%r&ping -a %%i.%%j.%%k.%%l >>job.log
```

To get a decent file with active mac-adresses use 2 cmd-scripts.

runjob1.cmd

```
for /F "tokens=1-4,9-14 delims=- " %%i IN (macs.txt) DO runjob2.cmd %%i.%%j.%%k.%%l
%%m%%n%%o%%p%%q%%rrunjob2.cmd
Set ip=%1
```

Set mac=%2

ping %ip%|find "bytes=" ||goto NOWOL

Echo %ip%- %mac% >>macs1.txt

:NOWOLAnd now run the wol-script (several hours later when the machine is down).**runjob3.cmd**

for /F "tokens=1-2 delims=-" %%i IN (macs1.txt) DO wol.exe %%j&ping -a %%i >>job3.log

I downloaded wol.exe from [here](#) .

I know there are better cmd s to do some actions bu I like it my way :-)