

Windows 8.0 IPv4 Network Test

This presentation shows a batch file to gather and test IPv4 on the local machine. The batch gathers the MAC address, IPv4 DNS servers, IPv4 address, IPv4 subnet mask, IPv4, router/gateway, arp cache, current date, and current time. The batch file will ping the IPv4 loopback, a host by IP address, and a host by FQDN.

Preuss

3/11/2014



Tim Preuss



Computer



Recycle Bin



Oracle VM
VirtualBox



Recuva

The presentation is logon using a non-administration logon.

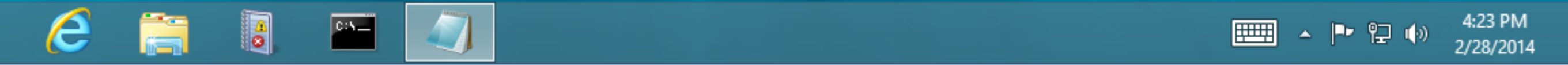




Untitled - Notepad

File Edit Format View Help

The presentation opens notepad.





Tim Preuss



Computer



Recycle Bin

Oracle VM
VirtualBox

Recuva

Untitled - Notepad

File Edit Format View Help

```
REM This will test IPv4 connection settings.
REM The answers will be put in a file named ipv4_test.txt
REM The netsh /? is a good reference.
REM Preuss 2/28/2014

echo 'This is the MAC (layer 2) address for this computer.' >> ipv4_test.txt
getmac >> ipv4_test.txt

echo 'This will report the DNS servers used by the computer.' >> ipv4_test.txt
netsh interface ipv4 show dns >> ipv4_test.txt

echo 'This will report the computer's IPv4 address, subnet mask, router/gateway, and metric information.' >> ipv4_test.txt
netsh interface ipv4 show addresses >> ipv4_test.txt

echo 'This will ping the computer's loopback address.' >> ipv4_test.txt
ping 127.0.0.1 >> ipv4_test.txt

echo 'This will ping brazil.minnesota.edu by IPv4 address.' >> ipv4_test.txt
ping 134.29.228.101 >> ipv4_test.txt

echo 'This will ping brazil.minnesota.edu by FQDN.' >> ipv4_test.txt
ping brazil.minnesota.edu >> ipv4_test.txt

echo 'This is a report of the computer's IPv4 ARP cache.' >> ipv4_test.txt
arp -a >> ipv4_test.txt

echo 'This is the date and time of operation.' >> ipv4_test.txt
date /T >> ipv4_test.txt
time /T >> ipv4_test.txt

echo 'This is a copy of the source code.' >> ipv4_test.txt
type test_ipv4.bat >> ipv4_test.txt

notepad ipv4_test.txt
```

The presentation creates the batch file shown. Note all the information is being put into the file `ipv4_test.txt`

4:38 PM
2/28/2014

Tim Preuss
Computer
Recycle Bin
Oracle VM VirtualBox
Recuva

Untitled - Notepad

File Edit Format View Help

Save As

File name: test_ipv4.bat
Save as type: All Files (*.*)
Encoding: ANSI

Name	Date modified	Type
list.txt	2/11/2014 12:33 PM	Text Document
part_rpt.txt	2/11/2014 12:36 PM	Text Document
part_rpt02.txt	2/11/2014 12:38 PM	Text Document

```
echo 'This is a copy of the source code.' >> ipv4_test.txt
type test_ipv4.bat >> ipv4_test.txt

notepad ipv4_test.txt
```

The presentation selects save as to save the batch file. The presentation names the batch file test_ipv4.bat. The presentation changes the Save as Type: to All Files.

Tim Preuss
Computer
Recycle Bin
Oracle VM VirtualBox
Recuva

Untitled - Notepad

File Edit Format View Help

Save As

File path: << My Docume... >> batch_files

Search: Search batch_files

Organize | New folder

Name	Date modified	Type
list.txt	2/11/2014 12:33 PM	Text Document
logon_test.bat	9/27/2013 10:48 AM	Windows Batch P
logon-list.bat	12/10/2013 2:34 PM	Windows Batch P
part_rpt.txt	2/11/2014 12:36 PM	Text Document
part_rpt02.txt	2/11/2014 12:38 PM	Text Document
prod2.bat	9/26/2013 3:17 PM	Windows Batch P

File name: test_ipv4.bat
Save as type: All Files (*.*)
Encoding: ANSI

Buttons: Save, Cancel

```
echo 'This is a copy of the source code.' >> ipv4_test.txt  
type test_ipv4.bat >> ipv4_test.txt  
  
notepad ipv4_test.txt
```

The presentation is ready to select save.



Tim Preuss



Computer



Recycle Bin



Oracle VM VirtualBox



Recuva

C:\Users\tim_p_000\Documents\batch_files

File Home Share View

Libraries Documents batch_files

Search batch_files

Name	Date modified	Type	Size
list.txt	2/11/2014 12:33 PM	Text Document	1 KB
logon_test.bat	9/27/2013 10:48 AM	Windows Batch File	40 KB
logon-list.bat	12/10/2013 2:34 PM	Windows Batch File	1 KB
part_rpt.txt	2/11/2014 12:36 PM	Text Document	0 KB
part_rpt02.txt	2/11/2014 12:38 PM	Text Document	2 KB
prod2.bat	9/26/2013 3:17 PM	Windows Batch File	1 KB
test_ipv4.bat	2/28/2014 4:38 PM	Windows Batch File	2 KB

7 items

The presentation successfully save the batch file. The presentation double clicks or runs the batch file.



Tim Preuss

Computer

Recycle Bin

Oracle VM VirtualBox

Recuva

```

File Edit Format View Help
|This is the MAC (layer 2) address for this computer.'

Physical Address Transport Name
=====
00-0C-29-92-F5-06 \Device\Tcpip_{9DD146E5-2096-40E5-9175-29F11AA42947}
08-00-27-00-F4-7E \Device\Tcpip_{52828242-621B-4866-94BF-D557B8E94D31}
'This will report the DNS servers used by the computer.'

Configuration for interface "VirtualBox Host-Only Network"
DNS servers configured through DHCP: None
Register with which suffix: Primary only

Configuration for interface "Ethernet"
DNS servers configured through DHCP: 192.168.5.2
Register with which suffix: Primary only

Configuration for interface "Loopback Pseudo-Interface 1"
Statically Configured DNS Servers: None
Register with which suffix: Primary only

'This will report the computer's IPv4 address, subnet mask, router/gateway, and metric information.'

Configuration for interface "VirtualBox Host-Only Network"
DHCP enabled: Yes
IP Address: 169.254.162.20
Subnet Prefix: 169.254.0.0/16 (mask 255.255.0.0)
InterfaceMetric: 20

Configuration for interface "Ethernet"
DHCP enabled: Yes
IP Address: 192.168.5.134
Subnet Prefix: 192.168.5.0/24 (mask 255.255.255.0)
Default Gateway: 192.168.5.2
Gateway Metric: 0
InterfaceMetric: 10

Configuration for interface "Loopback Pseudo-Interface 1"
DHCP enabled: No
IP Address: 127.0.0.1

```

This is an example of the some of the data from the batch file. Your results will not be the same.