Batch File Creation

This pdf will show how to create a Windows 7 batch file to report the current IP address, current IP subnet mask, ping the IPv4 loopback, ping argentina.mait.local by IPv4, ping belize.mait.local by IPv4, and ping chile.mait.local by IPv4.

9/13/2011

win7_x64-office2010 - VMware Player File Virtual Machine Help

Recycle Bin

First, we need to start our Windows system. In this case, we are using a VMware virtual machine.

7:15 PM

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Recycle Bin

Virtual Machine Settings

Hardware | Options

Device	Summary
Memory	2048 MB
Processors	1
Hard Disk (SCSI)	40 GB
CD/DVD (IDE)	Auto detect
Network Adapter	Bridged
USB Controller	Present
Sound Card	Auto dete
Display	Auto dete

Add... Remove

Device status

- [x] Connected
- [x] Connect at power on

Network connection

- (•) Bridged: Connected directly to the physical network
  - [x] Replicate physical network connection state
- ( ) NAT: Used to share the host's IP address
- ( ) Host-only: A private network shared with the host

OK Cancel Help

We want the network adapter to be set for bridged. We want our wired ethernet to connect to the 192.168.64.0/22 network at MSCTC.

It is optional to check the replicate physical network connection state.

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Command Prompt

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Users\preuss>
```

We will open a command prompt in Windows 7 to test our commands for the batch file.

7:17 PM

To direct input to this virtual machine, press Ctrl+G.

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ipconfig_
```

The ipconfig command in Windows 7 will provide the IPv4 address and subnet mask.

7:19 PM

To return to your computer, press Ctrl+Alt.

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
Windows IP Configuration

Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . : mait.local
   Site-local IPv6 Address . . . . . : fec2::68c1:e956:5582:9c6d%1
   Link-local IPv6 Address . . . . . : fe80::68c1:e956:5582:9c6d%10
   IPv4 Address. . . . . . . . . . . : 192.168.65.29
   Subnet Mask . . . . . . . . . . . : 255.255.252.0
   Default Gateway . . . . . . . . . : fe80::211:43ff:fee7:f195%10
                                       192.168.64.1

Tunnel adapter Local Area Connection* 11:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . :

Tunnel adapter isatap.mait.local:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . : mait.local

C:\Users\preuss>
```

This is the result of the ipconfig command running on Windows 7.

7:19 PM

To return to your computer, press Ctrl+Alt.

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping 127.0.0.1_
```

We are pinging the loopback address in IPv4.

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Command Prompt

```
C:\Users\preuss>ping 127.0.0.1

Pinging 127.0.0.1 with 32 bytes of data:
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128

Ping statistics for 127.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\preuss>
```

This is the result of the loopback ping.

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To return to your computer, press Ctrl+Alt.

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Command Prompt

```
C:\Users\preuss>ping -4 127.0.0.1
```

We really should force ping to use IPv4 in pinging the loopback address. We added the -4 to force the issue.

7:19 PM

To return to your computer, press Ctrl+Alt.

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 127.0.0.1

Pinging 127.0.0.1 with 32 bytes of data:
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128
Reply from 127.0.0.1: bytes=32 time<1ms TTL=128

Ping statistics for 127.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\preuss>
```

Once again, the results of our loopback ping.

7:20 PM

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 argentina.mait.local_
```

We are pinging argentina.mait.local by IPv4.

7:20 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 argentina.mait.local

Pinging argentina.mait.local [192.168.64.13] with 32 bytes of data:
Reply from 192.168.64.13: bytes=32 time<1ms TTL=128
Reply from 192.168.64.13: bytes=32 time<1ms TTL=128
Reply from 192.168.64.13: bytes=32 time<1ms TTL=128
Reply from 192.168.64.13: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.64.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Users\preuss>
```

This is the result of pinging argentina.mait.local by IPv4.

7:20 PM

To return to your computer, press Ctrl+Alt.

win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 belize.mait.local_
```

We are pinging belize.mait.local by IPv4.

7:21 PM

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt - ping -4 belize.mait.local

```
C:\Users\preuss>ping -4 belize.mait.local

Pinging belize.mait.local [192.168.64.14] with 32 bytes of data:
Reply from 192.168.64.14: bytes=32 time=1ms TTL=128
Reply from 192.168.64.14: bytes=32 time<1ms TTL=128
Reply from 192.168.64.14: bytes=32 time<1ms TTL=128
```

We don't see the full results. We do see enough of successful ping by IPv4 to belize.mait.local.

7:21 PM

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win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 chile.mait.local
```

We are pinging chile.mait.local by IPv4 only.

7:21 PM

To return to your computer, press Ctrl+Alt.

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Command Prompt

```
C:\Users\preuss>ping -4 chile.mait.local

Pinging chile.mait.local [192.168.64.16] with 32 bytes of data:
Reply from 192.168.64.16: bytes=32 time=1ms TTL=128
Reply from 192.168.64.16: bytes=32 time<1ms TTL=128
Reply from 192.168.64.16: bytes=32 time<1ms TTL=128
Reply from 192.168.64.16: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.64.16:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\preuss>
```

This is our result of pinging chile.mait.local by IPv4.

7:21 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

Now that we know the command to use. We will now create a batch file to run the commands for us.

We begin by opening Windows notepad.

7:21 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
```

The REM statement identifies a remark. This will be ignored by the batch file.

We use the remark statement to document our batch file. The remark statements may appear anywhere in the batch file.

Our first remark indicates the purpose of the batch file. You will thank yourself for these remarks after you change from full caffine full sugar Mountain Dew to no caffine no sugar Mountain Dew.

7:22 PM

To return to your computer, press Ctrl+Alt.

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011
```

Our second remark identifies the author and date of the batch file creation.

7:22 PM

To return to your computer, press Ctrl+Alt.

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011


ipconfig
ping -4 127.0.0.1
ping -4 argentina.mait.local
ping -4 belize.mait.local
ping -4 chile.mait.local
```

We now enter the commands as we did on the command prompt. This will work, but the output of the commands will go to the screen. We can do better.

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011


ipconfig /all
ping -4 127.0.0.1
ping -4 argentina.mait.local
ping -4 belize.mait.local
ping -4 chile.mait.local
```

We changed the ipconfig to ipconfig /all, just because we could. This still does not solve our problem of the output going to the screen.

7:24 PM

To direct input to this virtual machine, press Ctrl+G.

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011

echo > lab14.txt
ipconfig /all >> lab14.txt
ping -4 127.0.0.1 >> lab14.txt
ping -4 argentina.mait.local >> lab14.txt
ping -4 belize.mait.local >> lab14.txt
ping -4 chile.mait.local >> lab14.txt
```

We made a couple of changes at this point.

We added >> lab14.txt at the end of each command to run. This will append the output of each command to the file lab14.txt.

We added the line echo > lab14.txt. This will send the output of the echo command to a file named lab14.txt. This will be a new file because only one > does not append, just create new.

7:25 PM

To return to your computer, press Ctrl+Alt.

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011

echo > lab14.txt
echo
ipconfig /all >> lab14.txt
echo
echo
ping -4 127.0.0.1 >> lab14.txt
echo
echo
ping -4 argentina.mait.local >> lab14.txt
echo
echo
ping -4 belize.mait.local >> lab14.txt
ping -4 chile.mait.local >> lab14.txt
```

We added these echo statements to make the output look better in the lab14.txt file.

7:26 PM

To return to your computer, press Ctrl+Alt.

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011

echo > lab14.txt
echo 'ipconfig /all' >> lab14.txt
ipconfig /all >> lab14.txt
echo >> lab14.txt
echo 'ping -4 127.0.0.1' >> lab14.txt
ping -4 127.0.0.1 >> lab14.txt
echo >> lab14.txt
echo 'ping -4 argentina.mait.local' >> lab14.txt
ping -4 argentina.mait.local >> lab14.txt
echo >> lab14.txt
echo 'ping -4 belize.mait.local' >> lab14.txt
ping -4 belize.mait.local >> lab14.txt
echo >> lab14.txt
echo 'ping -4 chile.mait.local' >> lab14.txt
ping -4 chile.mait.local >> lab14.txt
echo >> lab14.txt
echo 'date /T' >> lab14.txt
date /T >> lab14.txt
```

Now the output in lab14.txt will look better. You will see before each command, we echo the command. This will cause the system to write the command to lab14.txt and then write the output of the command. This just makes nicer reading.

7:29 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

```
REM This batch file will collect the answer for NOS lab 1.4
REM Preuss 9/13/2011

echo > lab14.txt
echo 'ipconfig /all' >> lab14.txt
ipconfig /all >> lab14.txt
echo >> lab14.txt
echo 'ping -4 127.0.0.1' >> lab14.txt
ping -4 127.0.0.1 >> lab14.txt
echo >> lab14.txt
echo 'ping -4 argentina.mait.local' >> lab14.txt
ping -4 argentina.mait.local >> lab14.txt
echo >> lab14.txt
echo 'ping -4 belize.mait.local' >> lab14.txt
ping -4 belize.mait.local >> lab14.txt
echo >> lab14.txt
echo 'ping -4 chile.mait.local' >> lab14.txt
ping -4 chile.mait.local >> lab14.txt
echo >> lab14.txt
echo 'date /T' >> lab14.txt
date /T >> lab14.txt
notepad lab14.txt
```

The last line indicates how lazy we are. The last line starts notepad and automatically loads the lab14.txt file in notepad.

7:30 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Untitled - Notepad

File Edit Format View Help

Save As

Libraries ▸ Documents ▸ Search Documents

Organize New folder

Favorites
Desktop
Downloads
Recent Places

Libraries
Documents
Music
Pictures
Videos

Computer

Documents library

Includes: 2 locations

Arrange by: Folder

Name	Date modified	Type
My Data Sources	9/8/2011 5:35 PM	File folde
lab21	9/12/2011 2:32 PM	Windows
lab21	9/12/2011 2:32 PM	Text Docu
lab22	9/12/2011 3:13 PM	Windows
lab22	9/12/2011 3:13 PM	Text Docu
lab25	9/13/2011 2:53 PM	Text Docu
Leave_request-travel_form-Faculty-6-2011	7/27/2011 11:58 AM	Microsoft

File name: lab14.bat

Save as type: All Files

Hide Folders Encoding: ANSI Save Cancel

We need to save our batch file.

We prefer very short names with no spaces.
The batch file must end with .bat
You may not have any periods except the .bat at the end.
The save type in notepad must be All Files.

7:31 PM

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Recycle Bin

Libraries ▸ Documents ▸ Search Documents

Organize Open Share with Print E-mail Burn New folder

Favorites
Desktop
Downloads
Recent Places

Libraries
Documents
Music
Pictures
Videos

Computer

Network

Documents library

Includes: 2 locations

Arrange by: Folder

Name	Date modified	Type	Size
My Data Sources	9/8/2011 5:35 PM	File folder	
lab14	9/13/2011 7:31 PM	Windows Batch File	1 KB

Our batch file is ready to go. We may double click on the file to run the file.

lab14 Date modified: 9/13/2011 7:31 PM Date created: 9/13/2011 7:31 PM
Windows Batch File Size: 668 bytes

7:32 PM

To return to your computer, press Ctrl+Alt.

vmware

win7_x64-office2010 - VMware Player File Virtual Machine Help

Recycle Bin

C:\Windows\system32\cmd.exe

```
C:\Users\preuss\Documents>REM This batch file will collect the answer for NOS la
b 1.4

C:\Users\preuss\Documents>REM Preuss 9/13/2011

C:\Users\preuss\Documents>echo  1>lab14.txt

C:\Users\preuss\Documents>echo 'ipconfig /all'  1>>lab14.txt

C:\Users\preuss\Documents>ipconfig /all  1>>lab14.txt

C:\Users\preuss\Documents>echo  1>>lab14.txt

C:\Users\preuss\Documents>echo 'ping -4 127.0.0.1'  1>>lab14.txt

C:\Users\preuss\Documents>ping -4 127.0.0.1  1>>lab14.txt
```

This is our batch file running.

lab14
Windows Batch File
2011 7:31 PM

7:32 PM

To direct input to this virtual machine, press Ctrl+G.

vmware