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| **Title:** | Check Link Status and Find Loss |
| Updated: | Jan 27th 2013 |
| Overview: | Two scripts are used in this lab. One script will repeatedly ping a host and collect ICMP packet loss/success statistics. The second script will filter the collected statistics and display them to the user in a text report. |
| Task/Activity: | 1. Build the Link-Status-Check.bat File |
|  | 1. Build the Link-Status-Report.bat File |

1. **Build the Link-Status-Check.bat File**

A customer has been complaining that their Internet connection is intermittent. They tell us it appears to be stable during the morning and afternoon hours, and seems to be unreliable between the hours of 6-9 PM. The customer’s ISP has responded to the service complaint by performing the following activities:

* Customer support has walked the customer through diagnostics on their system.
* A technician was sent onsite to re-terminate the RG/RJ connectors and verify a “good” signal is coming in to the NID and the premise cabling has been verified as “good”.
* A replacement Cable/DSL modem was cross shipped to the customer.

The problem still persists and we are now brought into the troubleshooting process to help find a cost effective method to record (within reasonable accuracy) the exact time of connection instability. We would also like to determine whether the issue is localized to the customer’s hardware, or whether the ISPs equipment could be playing a role in the connectivity problems.

1. Using notepad, create a script file called **Link-Status-Check.bat** and enter the following commands in the script:

C:\>**notepad Link-Status-Check.bat**

**@ECHO OFF**

**:BEGIN**

**ECHO ------------------------------------------->>Link-Status.txt**

**ECHO %date% %time%>>Link-Status.txt**

**ping 10.10.200.1 -n 2 -l 1 >>Link-Status.txt**

**ping 8.8.8.8 -n 2 -l 1 >>Link-Status.txt**

**ping 10.10.200.1 -n 2 -l 100 >>Link-Status.txt**

**ping 8.8.8.8 -n 2 -l 100 >>Link-Status.txt**

**ping 10.10.200.1 -n 2 -l 1000 >>Link-Status.txt**

**ping 8.8.8.8 -n 2 -l 1000 >>Link-Status.txt**

**ECHO ------------------------------------------->>Link-Status.txt**

**ECHO ###########################################>>Link-Status.txt**

**TIMEOUT /T 2 /NOBREAK**

**CLS**

**GOTO BEGIN**

1. Now launch the script file from the cmd shell with the following START parameters:

C:\>**START “Link Check” /MIN Link-Status-Check.bat**

Let the GOTO loop run 4-5 times then physically remove the Ethernet cable from your system. Allow the GOTO loop to run 2-3 times with the cable unplugged, then plug the cable back in—and let the GOTO loop cycle another 2-3 times.

1. **Build the Link-Status-Report.bat File**

We will now create a script to parse the results of the Link-Status-Check.bat script and display the filtered results to us in a text file.

1. Using notepad, create a script file called **Find-Loss-Summary.bat** and enter the following commands in the script:

C:\>**notepad Find-Loss-Summary.bat**

*The FINDSTR command needs to be on one line.*

**@ECHO OFF**

**IF EXIST find-loss-outfile.txt DEL find-loss-outfile.txt**

**FINDSTR "loss Sun Mon Tue Wed Thu Fri Sat" "%1" | findstr /V "(0" >>find-loss-outfile.txt**

**START notepad find-loss-outfile.txt**

1. To run the **Find-Loss-Summary.bat** script, open Windows Explorer and navigate to the folder where you created the **Link-Status-Check.bat** and the **Find-Loss-Summary.bat** scripts. Click on the **Link-Status.txt** file, then drag-and-drop the text file onto the **Find-Loss-Summary.bat** script.

