### Vim, Wget, and Scp

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#### Exercise 1 - Open a File in Vim

Objective: Open an existing file named example.txt in the current directory using Vim. Instructions:

- 1. Navigate to the directory containing example.txt.
- 2. Use the Vim command to open the file by typing vim example.txt.
- 3. Once open, navigate through the file using the arrow keys.
- 4. Exit Vim without making changes by pressing :q! and then Enter.

### **Exercise 2 - Editing and Saving Changes**

Objective: Edit document.txt by adding a new line of text and save the changes. Instructions:

- 1. Open document.txt with Vim by typing vim document.txt.
- 2. Enter insert mode by pressing i.
- 3. Move to the end of the file and add the following line: "This is a new line of text."

4. Save the changes and exit Vim by pressing Esc to leave insert mode, then type :wq and press Enter.

rec0nrat@demoserver1:~\$ vim document.txt

#### **Exercise 3 - Search for Text within a File**

Objective: Open report.txt, search for the word "summary", and navigate to the first occurrence.

Instructions:

- 1. Open report.txt in Vim by typing vim report.txt.
- 2. To search for "summary", type :/summary and press Enter.
- 3. Once the first occurrence is highlighted, you can press n to move to the next occurrence or N to move to the previous one.
- 4. Exit Vim by typing :q! and press Enter.

rec0nrat@demoserver1:~\$ vim report.txt

## Summary

Cyber security incidents continue to challenge organizations globally, with phishing, ransomware, data and the der threats, and DoS attacks as the predominant threats that enterprises face in the workplace. By under nature of these threats and implementing robust mitigation strategies such as regular employee training the use of security software, and adherence to strict access controls, organizations can significantly enterprises against cyber-attacks. Moreover, developing an effective incident response plan is essential in mitigating these risks promptly and efficiently, thereby safeguarding organizational assets against post threats. Ensuring the continuous update of security policies in response to the evolving cyber threat is no a top priority for maintaining comprehensive workplace security.

/Summary

```
### 3. **Data Encryption**
Encrypting data stored on networks and transmitted across network
. Even if data is intercepted, encryption ensures that it cannot
### 4. **Regular Security Audits**
@@@
:q!
```

# Exercise 4 - Download and Open a file from the Gutenberg Project

Objective: Download, and then open an existing file named pg25973.txt in the current directory using Vim.

Instructions:

- 1. wget https://www.gutenberg.org/cache/epub/25973/pg25973.txt
- 2. Validate that the file pg25973.txt is in your working directory.
- 3. Use the Vim command to open the file pg25973.txt.
- 4. Once open, navigate through the file using the arrow keys.
- 5. Exit Vim without making changes by pressing :q! and then Enter

```
-2024-04-13 22:56:29-- https://www.gutenberg.org/cache/epub/25973/pg25973.txt
Resolving www.gutenberg.org (www.gutenberg.org)... 152.19.134.47, 2610:28:3090:3000:0:bad:cafe:47
Connecting to www.gutenberg.org (www.gutenberg.org)|152.19.134.47|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 429863 (420K) [text/plain]
Saving to: 'pg25973.txt'
                                   100%[======>] 419.79K 1.33MB/s
                                                                                                                          in 0.3s
pg25973.txt
2024-04-13 22:56:30 (1.33 MB/s) - 'pg25973.txt' saved [429863/429863]
 ec0nrat@demoserver1:~$ ls
192.168.1.0_vulscan dvl_oG_volscan Linux64.zip
                                                                                     notmalwarenoreally.txt report.txt Stego
 192.168.1.190_scan dvl_vulscan
                                           malware.txt
                                                                                     pg25973.txt
                                           Nessus-10.7.0-ubuntu1404 amd64.deb RA-logs
document.txt
                        example.txt
 ec0nrat@demoserver1:~$ vim pg25973.txt
```

```
This website includes information about Project Gutenberg™, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.
```

#### **Exercise 5 - Edit a file from the Gutenberg Project**

Objective: Open and edit an existing file named pg25973.txt in the current directory using Vim.

#### Instructions:

- 1. Use the Vim command to open the file pg25973.txt.
- 2. Once open, navigate through the file using the arrow keys.
- 3. Navigate to where it states, "Title: Birds of the Rockies"
- 4. Switch from NORMAL MODE to INSERT MODE
- 5. Modify, "Title: Birds of the Rockies" to "Title: Birds of the Coasts"
- 6. Exit vim without making changes by pressing :q! and then Enter.
- 7. Use the Vim command to open the file pg25973.txt.
- 8. Once open, navigate through the file using the arrow keys.
- 9. Navigate to where it states, "Title: Birds of the Rockies", validate that if you exit without making changes, it indeed abandons your changes.
- 10. Switch from NORMAL MODE to INSERT MODE
- 11. Modify, "Title: Birds of the Rockies" to "Title: Birds of the Coasts" and exit INSERT MODE
- 12. While in NORMAL MODE, save your changes via vim by switching to COMMAND MODE
- 13. While in COMMAND MODE, save by typing :w
- 14. Re-enter COMMAND MODE, and exit vim by typing :q
- 15. Validate your changes by using the head -n 15 pg25973.txt command.

```
reconrat@demoserver1:~$ vim pg25973.txt

by tools AdASSIZ FORKIES, Many Illustrations
in the Text by BRUCE HORSFALL, and
Eight Views of Localities from Photographs

/Title_

before using this eBook.

Title: Birds of the Coasts

Author: Leander S. Keyser

Eight Views of Localities from Photographs

:q!
```

```
Title: Birds of the Rockies
Author: Leander S. Keyser
Release date: July 5, 2008 [eBook #25973]
 Title: Birds of the Coasts
 Author: Leander S. Keyser
Eight Views of Localities from Photographs
Eight Views of Localities from Photographs
 'pg25973.txt" [dos] 7972L, 429862B written
Eight Views of Localities from Photographs
               erver1:~$ head -n 15 pg25973.txt
T he Project Gutenberg eBook of Birds of the Rockies
This ebook is for the use of anyone anywhere in the United States and
most other parts of the world at no cost and with almost no restrictions
whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this ebook or online at www.gutenberg.org. If you are not located in the United States,
you will have to check the laws of the country where you are located
before using this eBook.
Title: Birds of the Coasts
Author: Leander S. Keyser
Release date: July 5, 2008 [eBook #25973]
```

# Exercise 6 - Download and Open a file from the Gutenberg Project v2

Objective: Download, and then open an existing file named pg100.txt in the current directory using Vim. This is the "Complete Works of William Shakespeare" https://www.gutenberg.org/cache/epub/100/pg100.txt Instructions:

- 1. Open it in vim, edit it, and abandon your changes.
- 2. Validate your changes didn't get saved.

Open it in vim, edit it, and save your changes.

4. Validate your changes did get saved.

```
https://www.gutenberg.org/cache/epub/100/pg100.txt
 -2024-04-13 23:09:30-- https://www.gutenberg.org/cache/epub/100/pg100.txt
Resolving www.gutenberg.org (www.gutenberg.org)... 152.19.134.47, 2610:28:3090:3000:0:bad:cafe:47
Connecting to www.gutenberg.org (www.gutenberg.org)|152.19.134.47|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 5638519 (5.4M) [text/plain]
Saving to: 'pg100.txt'
                                100%[======>] 5.38M 8.17MB/s
pg100.txt
                                                                                                                 in 0.7s
2024-04-13 23:09:31 (8.17 MB/s) - 'pg100.txt' saved [5638519/5638519]
 ec0nrat@demoserver1:~$ vim pg100.txt
Release date: January 1, 1994 [eBook #100]
                    Most recently updated: January 18, 2024
Language: Engrish
       KING RICHARD THE THIRD
       THE TRAGEDY OF ROMEO AND JULIET
 :q!
Release date: January 1, 1994 [eBook #100]
                        Most recently updated: January 18, 2024
Language: English
       KING RICHARD THE THIRD
       THE TRAGEDY OF ROMEO AND JULIET
 :wq
                     r1:~$ head -n 18 pg100.txt
 T he Project Gutenberg eBook of The Complete Works of William Shakespeare
 This ebook is for the use of anyone anywhere in the United States and
most other parts of the world at no cost and with almost no restrictions
whatsoever. You may copy it, give it away or re-use it under the terms
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you will have to check the laws of the country where you are located
before using this eBook.
Title: The Complete Works of William Shakespeare
 Author: William Shakespeare
Release date: January 1, 1994 [eBook #100]
                  Most recently updated: January 18, 2024
 Language: Engrish
```

# **Exercise 7 - Download and Copy a file from the Gutenberg Project to Linux**

Objective: Download pg100.txt in Windows and then copy it out to your Linux server via scp.

```
PS C:\Users\tyler\Downloads> wget https://www.gutenberg.org/cache/epub/100/pg100.txt -0 ./pg100.txt
PS C:\Users\tyler\Downloads> dir .\pg100.txt
     Directory: C:\Users\tyler\Downloads
Mode
                      LastWriteTime
                                             Length Name
              4/13/2024 5:18 PM
                                            5638519 pg100.txt
PS C:\Users\tyler\Downloads>
 ec0nrat@demoserver1:~$ ls -l
total 90728
 rw-rw-r-- 1 rec0nrat rec0nrat 3257812 Feb 26 17:55 192.168.1.190_scan
-rw-rw-r-- 1 reconrat reconrat 1872 Apr 13 22:53 document.txt
 rw-r--r-- 1 root root
                                          386 Feb 26 20:38 dvl_oG_volscan
-rw-rw-r-- 1 rec0nrat rec0nrat 306199 Feb 26 20:38 dvl_vulscan
-rw-rw-r-- 1 rec0nrat rec0nrat 3716 Apr 13 22:06 example.txt
-rw-rw-r-- 1 rec0nrat rec0nrat 7120233 Nov 27 14:28 Linux64.zip
-rw-rw-r-- 1 rec0nrat rec0nrat 37 Feb 22 20:12 malware.txt
rw-rw-r-- 1 rec0nrat rec0nrat 68540738 Feb 27 16:33 Nessus-10.7.0-ubuntu1404_amd64.deb-
-rw-rw-r-- 1 rec0nrat rec0nrat 53 Feb 22 20:12 notmalwarenoreally.txt
-rw-rw-r-- 1 rec0nrat rec0nrat 429862 Apr 13 23:06 pg25973.txt
drwxrwxr-x 5 rec@nrat rec@nrat 4096 Mar 28 02:16 RA-logs
-rw-rw-r-- 1 rec@nrat rec@nrat 5024 Apr 13 22:21 report.txt
drwxrwxr-x 3 rec@nrat rec@nrat 4096 Apr 9 14:46 slowloris
drwx----- 3 rec@nrat rec@nrat 4096 Feb 22 22:45 snap
drwxrwxr-x 2 rec@nrat rec@nrat 4096 Mar 27 15:34 Stego
-rwxrwxr-x 1 rec0nrat rec0nrat 12998261 Nov 27 14:27 vt
 ec0nrat@demoserver1:~$
   C:\Users\tyler\Downloads> scp .\pg100.txt rec0nrat@192.168.1.210:.
(rec0nrat@192.168.1.210) Password:
(rec0nrat@192.168.1.210) Verification code:
pg100.txt
                                                                                 100% 5506KB 167.0MB/s
                                                                                                        00:00
 S C:\Users\tyler\Downloads>
 ec0nrat@demoserver1:~$ ls -l pg100.txt
 rw-r--r-- 1 rec0nrat rec0nrat 5638519 Apr 13 23:47 pg100.txt
 ec0nrat@demoserver1:~$
```

### Exercise 8 - Create a text file and then copy it to Windows

Objective: Create a file via vim and then copy it out to your Windows workstation via scp.

```
recOnrat@demoserver1:~$ vim scpfile-linux.txt
recOnrat@demoserver1:~$ head -n 1 scpfile-linux.txt
This is a linux file being moved to Windows via scp
recOnrat@demoserver1:~$
```

```
S C:\Users\tyler\Downloads> scp rec0nrat@192.168.1.210:~/scpfile-linux.txt ./
(rec0nrat@192.168.1.210) Password:
(rec0nrat@192.168.1.210) Verification code:
(rec0nrat@192.168.1.210) Password:
(rec0nrat@192.168.1.210) Verification code:
scpfile-linux.txt
                                                                                  100%
                                                                                               26.0KB/s
                                                                                                          00:00
PS C:\Users\tyler\Downloads> dir .\scpfile-linux.txt
    Directory: C:\Users\tyler\Downloads
                     LastWriteTime
Mode
                                            Length Name
              4/13/2024 6:36 PM 52 scpfile-linux.txt
-a----
PS C:\Users\tyler\Downloads>
```

#### Exercise 9 - Create a text file and then copy it to Windows

Objective: Ensure you have 3 or more text files in your Linux home folder, and then copy it to Windows workstation via scp with one command.

```
      recOnrat@demoserver1:~$ scp document.txt report.txt example.txt tyler@192.168.1.190:./Downloads tyler@192.168.1.190's password:

      document.txt
      100% 1872 2.6MB/s 00:00 colspan="2">2.6MB/s 00:
```