

[illegible]

Name	Residue Metadata I
URL	https://www.attackdefense.com/challengedetails?cid=1039
Type	Code Repositories: Git

Important Note: This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic.

Step 1: Viewing files in directory

Command: ls -al

```
root@attackdefense:~# ls -al
total 36
drwx----- 1 root root 4096 May 16 13:41 .
drwxr-xr-x 1 root root 4096 May 16 18:35 ..
-rw-r--r-- 1 root root 3106 Apr  9  2018 .bashrc
drwxr-xr-x 8 root root 4096 May 16 13:30 .git
-rw-r--r-- 1 root root  46 May 16 13:26 .gitconfig
-rw-r--r-- 1 root root  38 May 16 13:34 .gitignore
-rw-r--r-- 1 root root 148 Aug 17  2015 .profile
drwxr-xr-x 6 root root 4096 May 16 13:30 bludit
drwxr-xr-x 2 root root 4096 May 16 13:27 secret
root@attackdefense:~#
```

Step 2: In the last step, we can observe a secret folder. Viewing files in secret folder.

Command: ls -l secret/
cat secret/flag.txt

```
root@attackdefense:~# ls -l secret/
total 4
-rw-r--r-- 1 root root 1 May 16 13:29 flag.txt
root@attackdefense:~# cat secret/flag.txt

root@attackdefense:~#
```

Step 3: The flag.txt file is empty. Viewing git log to find the modification in flag.txt

Command: git log

```
root@attackdefense:~# git log
commit afca042540e9b3d864e400a2c9b5590641b1bee8 (HEAD -> master)
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:30:41 2019 +0000

    Added README

commit c89c59294524eda318e5b6c08190819e271960a1
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:30:09 2019 +0000

    Updated flag.txt

commit 30a006e6e3267f1cd8874fef2b3054fffb2f9ac9
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:29:22 2019 +0000

    Removed unnecessary files

commit ff4b158c2941d90321fcb09567c59a06d21fad5a
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:28:45 2019 +0000

    Added Web application files
```

Step 4: Viewing modified files in each commit.

Command: `git show --stat afca042540e9b3d864e400a2c9b5590641b1bee8`

```
root@attackdefense:~# git show --stat afca042540e9b3d864e400a2c9b5590641b1bee8
commit afca042540e9b3d864e400a2c9b5590641b1bee8 (HEAD -> master)
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:30:41 2019 +0000

    Added README

bludit/README | 1 +
1 file changed, 1 insertion(+)
root@attackdefense:~#
```

Command: `git show --stat c89c59294524eda318e5b6c08190819e271960a1`

```
root@attackdefense:~# git show --stat c89c59294524eda318e5b6c08190819e271960a1
commit c89c59294524eda318e5b6c08190819e271960a1
Author: webdev <webdev@xyz.com>
Date: Thu May 16 13:30:09 2019 +0000

    Updated flag.txt

secret/flag.txt | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
root@attackdefense:~#
```

Step 5: The flag.txt file was modified in the second last commit. Reverting the git repository to 3rd last commit.

Command: `git checkout 30a006e6e3267f1cd8874fef2b3054fffb2f9ac9`


```
root@attackdefense:~# git checkout 30a006e6e3267f1cd8874fef2b3054fffb2f9ac9
Note: checking out '30a006e6e3267f1cd8874fef2b3054fffb2f9ac9'.
```

You are in 'detached HEAD' state. You can look around, make experimental changes and commit them, and you can discard any commits you make in this state without impacting any branches by performing another checkout.

If you want to create a new branch to retain commits you create, you may do so (now or later) by using -b with the checkout command again. Example:

```
git checkout -b <new-branch-name>
```

```
HEAD is now at 30a006e Removed unnecessary files
root@attackdefense:~#
```

Step 6: Viewing flag.txt

Command: cat secret/flag.txt

```
root@attackdefense:~# cat secret/flag.txt
5e9da93befddb6bb5f5941f55b0b27af
root@attackdefense:~#
```

This reveals the flag to us.

Flag: 5e9da93befddb6bb5f5941f55b0b27af

References:

1. Git (<https://git-scm.com/docs>)