

Exercise 3 – Shell Programming

Announced Date: 2004/11/1

Due Date: 2004/11/10

Bonus Due Date: 2004/11/5

1. 利用 **nctu.virus** 察看中毒 (1)

> 看這個

- <http://netnews.nctu.edu.tw/pnews/indexing.php?server=netnews.nctu.edu.tw&group=nctu.virus&magic=0>
- 此 page 會列出 90 分鐘內, nctu.virus 所偵測出的疑似中毒列表
- 點進去每一個列表後, 會列出可疑中毒 IPs

> 作業需求:

- 寫一個 script, 會去檢查每一個 IP 列表是否有自己的 IP, 如果有的話, 寄一封給自己

1. 利用 **nctu.virus** 察看中毒 (2)

> 提示:

- 使用 wget
 - % wget --output_document="haha" \
http://netnews.nctu.edu.tw/pnews/indexing.php? \
server=netnews.nctu.edu.tw&group=nctu.virus&magic=0
- 抓出 Num
 - **grep "*[0-9]**"**
- 使用 wget 抓出 detail 網頁
 - <http://netnews.nctu.edu.tw/pnews/read-art.php?server=netnews.nctu.edu.tw&group=nctu.virus&artnum=87568>
- 抓出自己的 IP
 - **grep "你的IP"**

1. 利用 **nctu.virus** 察看中毒 (3)

> 使用方式

```
— % /path-to-your-script/yourhwk2.sh 140.113.99.88 \  
> 140.113.99.89 140.113.99.90  
140.113.99.88 Not found  
140.113.99.89 Not found  
140.113.99.90 Found, Hurry!
```

2. 一行指令KO

從 `/etc/passwd` 中, 取出 `cp86` 的學號及帳號對照, 並依學號順序排出

`/etc/passwd`

```
jwwang:##jwwang:10565:200:Jian-Wei Wang:/u/dcp/87/8717802:/bin/tcsh
jiunming:##jiunming:11860:400:jiunming:/u/cp/86/8617010:/bin/tcsh
phlee:##phlee:13554:400:phlee:/u/cp/89/8917011:/bin/tcsh
thtsao:##thtsao:11856:400:John Tsao:/u/cp/86/8617006:/bin/tcsh
changyc:##changyc:11852:400:Mike Chang:/u/cp/86/8617002:/bin/tcsh
wuhy:##wuhy:13811:400:unknown:/u/cp/89/8917071:/bin/tcsh
yunchin:##yunchin:11858:400:Chen Yun Ching:/u/cp/86/8617008:/bin/tcsh
slchou:##slchou:10076:100:slchou:/u/faculty/slchou:/bin/tcsh
ijliao:##ijliao:11851:400:Liao Ying Chieh:/u/cp/86/8617001:/bin/tcsh
chiaming:##chiaming:11854:400:Evelyn:/u/cp/86/8617004:/bin/tcsh
thtsai:##thtsai:11855:400:Willy:/u/cp/86/8617005:/bin/tcsh
p8867593:##p8867593:13444:650:p8867593:/u/pgcp/88/8867593:/bin/tcsh
jstien:##jstien:12746:400:jstien:/u/cp/87/8717031:/bin/tcsh
chschang:##chschang:11859:400:JASON:/u/cp/86/8617009:/bin/tcsh
jcchang:##jcchang:11956:200:Jen-Chun Chang:/u/dcp/86/8617801:/bin/tcsh
ylchoo:##ylchoo:11247:300:Ahmad:/u/gcp/88/8817539:/bin/tcsh
yclin:##yclin:11857:400:Yao Chung Lin:/u/cp/86/8617007:/bin/tcsh
sdlee:##sdlee:11968:300:sdlee:/u/gcp/86/8617565:/bin/tcsh
cilin:##cilin:11853:400:cilin:/u/cp/86/8617003:/bin/tcsh
fengww:##fengww:12670:400:fengww:/u/cp/87/8717025:/bin/tcsh
```

result

```
8617001 ijliao
8617002 changyc
8617003 cilin
8617004 chiaming
8617005 thtsai
8617006 thtsao
8617007 yclin
8617008 yunchin
8617009 chschang
8617010 jiunming
```

3. Login count

從 login 記錄檔(remote.log)中, 計算每部機器的 login 次數, 並由大到小依序排出

5 magpie
4 ccsun2
3 ccsun3
1 ccsun1

remote.log

```
Oct 10 00:02:09 ccsun1 ptelnetd[24801]: success from [unknown@nsl4] (via ptelnet)
Oct 10 00:01:42 magpie ptelnetd[29676]: success from [unknown@great.dorm7.NCTU.edu.tw] (via ptelnet)
Oct 10 00:05:14 ccsun3 ptelnetd[13087]: success from [unknown@magpie] (via ptelnet)
Oct 10 00:06:46 ccsun2 ptelnetd[619]: success from [unknown@coolpen.dorm7.NCTU.edu.tw] (via ptelnet)
Oct 10 00:05:50 magpie ptelnetd[29730]: success from [unknown@g894388.CHING.ab.nthu.edu.tw] (via ptelnet)
Oct 10 00:08:30 ccsun2 ptelnetd[650]: success from [unknown@coolpen.dorm7.NCTU.edu.tw] (via ptelnet)
Oct 10 00:07:47 ccsun2 ptelnetd[25485]: success from [unknown@Drakhelm.dorm4.NCTU.edu.tw] (via ptelnet)
Oct 10 00:10:11 ccsun3 ptelnetd[16416]: success from [unknown@TechEasy.dorm5.NCTU.edu.tw] (via ptelnet)
Oct 10 00:23:44 ccsun3 ptelnetd[14050]: success from [unknown@zwlu.dorm3.NCTU.edu.tw] (via ptelnet)
Oct 10 00:24:39 magpie ptelnetd[29588]: success from [wychen@Dennis1.dorm8.NCTU.edu.tw] (via ptelnet)
Oct 10 00:27:37 magpie ptelnetd[29990]: success from [unknown@g894388.CHING.ab.nthu.edu.tw] (via ptelnet)
Oct 10 00:28:53 magpie ptelnetd[30022]: success from [unknown@banyan] (via ptelnet)
Oct 10 00:31:34 ccsun2 ptelnetd[25634]: success from [unknown@pdptlg1] (via ptelnet)
```

3. Login count (2)

> 使用 awk 配合 array