

## Lab09-BashScripting

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SYS255

FA23

Deliverables:

1. Screenshot showing awk command on /etc/group

```
wks-assessment-SYS-255-01-benjamin.weatherill

ben@web01-benjamin:~$
ben@web01-benjamin ~]$
ben@web01-benjamin ~]$ awk -F '[:]' '{print "group: " $1, ", groupid: " $3 ", members: " $4 }' /etc/group | grep wheel
group: wheel , groupid: 10, members: ben
ben@web01-benjamin ~]$
```

2. Screenshot showing awk command on /etc/passwd

```
wks-assessment-SYS-255-01-benjamin.weatherill

ben@web01-benjamin:~$
ben@web01-benjamin ~]$
ben@web01-benjamin ~]$ awk -F '[:]' '{print "Name: " $1, ", uid: " $3, ", group_id: " $4, ", homedir: " $6, ", shell: " $7 }' /etc/passwd
Name: root, uid: 0, group_id: 0, homedir: /root, shell: /bin/bash
Name: bin, uid: 1, group_id: 1, homedir: /bin, shell: /sbin/nologin
Name: daemon, uid: 2, group_id: 2, homedir: /sbin, shell: /sbin/nologin
Name: adm, uid: 3, group_id: 4, homedir: /var/adm, shell: /sbin/nologin
Name: lp, uid: 4, group_id: 7, homedir: /var/spool/lpd, shell: /sbin/nologin
Name: sync, uid: 5, group_id: 0, homedir: /sbin, shell: /bin/sync
Name: shutdown, uid: 6, group_id: 0, homedir: /sbin, shell: /sbin/shutdown
Name: halt, uid: 7, group_id: 0, homedir: /sbin, shell: /sbin/halt
Name: mail, uid: 8, group_id: 12, homedir: /var/spool/mail, shell: /sbin/nologin
Name: operator, uid: 11, group_id: 0, homedir: /root, shell: /sbin/nologin
Name: games, uid: 12, group_id: 100, homedir: /usr/games, shell: /sbin/nologin
Name: ftp, uid: 14, group_id: 50, homedir: /var/ftp, shell: /sbin/nologin
Name: nobody, uid: 99, group_id: 99, homedir: /, shell: /sbin/nologin
Name: systemd-network, uid: 192, group_id: 192, homedir: /, shell: /sbin/nologin
Name: dbus, uid: 81, group_id: 81, homedir: /, shell: /sbin/nologin
Name: polkitd, uid: 999, group_id: 998, homedir: /, shell: /sbin/nologin
Name: libstoragemgmt, uid: 998, group_id: 997, homedir: /var/run/lsm, shell: /sbin/nologin
Name: abrt, uid: 173, group_id: 173, homedir: /etc/abrt, shell: /sbin/nologin
Name: rpc, uid: 32, group_id: 32, homedir: /var/lib/rpcbind, shell: /sbin/nologin
Name: sshd, uid: 74, group_id: 74, homedir: /var/empty/ssh, shell: /sbin/nologin
Name: postfix, uid: 89, group_id: 89, homedir: /var/spool/postfix, shell: /sbin/nologin
Name: chrony, uid: 997, group_id: 995, homedir: /var/lib/chrony, shell: /sbin/nologin
Name: ntp, uid: 38, group_id: 38, homedir: /etc/ntp, shell: /sbin/nologin
Name: tcpdump, uid: 72, group_id: 72, homedir: /, shell: /sbin/nologin
Name: dhcpcd, uid: 177, group_id: 177, homedir: /, shell: /sbin/nologin
Name: ben, uid: 1000, group_id: 1000, homedir: /home/ben, shell: /bin/bash
Name: apache, uid: 48, group_id: 48, homedir: /usr/share/httpd, shell: /sbin/nologin
Name: tss, uid: 59, group_id: 59, homedir: /dev/null, shell: /sbin/nologin
Name: sssd, uid: 996, group_id: 993, homedir: /, shell: /sbin/nologin
ben@web01-benjamin ~]$
```

3. Screenshot showing pingsweeper script

```
ben@web01-benjamin ~]$ cat pingsweeper.sh
#!/bin/bash

for i in $(seq 1 10); do
#     echo "Pinging 192.168.4.$i"
ping -c1 192.168.4.$i
done
```

## wks-assessment-SYS-255-01-benjamin.weatherill

ben@web01-benjamin:~

```
ben@web01-benjamin ~]$ ./pingsweeper.sh
PING 192.168.4.1 (192.168.4.1) 56(84) bytes of data.
From 10.0.17.2 icmp_seq=1 Destination Host Unreachable

--- 192.168.4.1 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms

PING 192.168.4.2 (192.168.4.2) 56(84) bytes of data.
From 10.0.17.2 icmp_seq=1 Destination Host Unreachable

--- 192.168.4.2 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms

PING 192.168.4.3 (192.168.4.3) 56(84) bytes of data.
64 bytes from 192.168.4.3: icmp_seq=1 ttl=126 time=1.44 ms

--- 192.168.4.3 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 1.449/1.449/1.449/0.000 ms
PING 192.168.4.4 (192.168.4.4) 56(84) bytes of data.
64 bytes from 192.168.4.4: icmp_seq=1 ttl=126 time=1.36 ms

--- 192.168.4.4 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 1.364/1.364/1.364/0.000 ms
PING 192.168.4.5 (192.168.4.5) 56(84) bytes of data.
64 bytes from 192.168.4.5: icmp_seq=1 ttl=126 time=1.58 ms

--- 192.168.4.5 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 1.587/1.587/1.587/0.000 ms
PING 192.168.4.6 (192.168.4.6) 56(84) bytes of data.
From 10.0.17.2 icmp_seq=1 Destination Host Unreachable

--- 192.168.4.6 ping statistics ---
1 packets transmitted, 0 received, +1 errors, 100% packet loss, time 0ms

PING 192.168.4.7 (192.168.4.7) 56(84) bytes of data.
64 bytes from 192.168.4.7: icmp_seq=1 ttl=62 time=2.00 ms

--- 192.168.4.7 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 2.009/2.009/2.009/0.000 ms
PING 192.168.4.8 (192.168.4.8) 56(84) bytes of data.
64 bytes from 192.168.4.8: icmp_seq=1 ttl=62 time=1.35 ms

--- 192.168.4.8 ping statistics ---
```

4. Screenshot showing nslookup script

```
[ben@web01-benjamin ~]$ cat nslu.sh
#!/bin/bash

for i in $(seq 1 4); do
    num=$((i*2))
    nslookup 10.0.5.$num
done
```

**wks-assessment-SYS-255-01-benjamin.weatherill**

ben@web01-benjamin:~

```
[ben@web01-benjamin ~]$ ./nslu.sh
2.5.0.10.in-addr.arpa    name = fw02-benjamin.ben.local.
4.5.0.10.in-addr.arpa    name = web01-benjamin.ben.local.
6.5.0.10.in-addr.arpa    name = ad02-benjamin.ben.local.
8.5.0.10.in-addr.arpa    name = fs01-benjamin.ben.local.
[ben@web01-benjamin ~]$
```

5. Screenshot showing nslu with user input

```
[ben@web01-benjamin ~]$ cat inputnslu.sh
#!/bin/bash

if [[ $# != 1 ]]; then
    echo "Please enter a network prefix as an argument!"
    exit 1
fi

for i in $(seq 1 4); do
    num=$((i*2))
    nslookup $1.$num
done
```

**wks-assessment-SYS-255-01-benjamin.weatherill**

ben@web01-benjamin:~

```
[ben@web01-benjamin ~]$ ./inputnslu.sh 10.0.5
2.5.0.10.in-addr.arpa    name = fw02-benjamin.ben.local.
4.5.0.10.in-addr.arpa    name = web01-benjamin.ben.local.
6.5.0.10.in-addr.arpa    name = ad02-benjamin.ben.local.
8.5.0.10.in-addr.arpa    name = fs01-benjamin.ben.local.
[ben@web01-benjamin ~]$
```

## 6. Nmap command script

```
[ben@web01-benjamin ~]$ cat nmp.sh
#!/bin/bash


# if [[ $# -eq 0 ]]; then
#     echo "Please supply at least one argument!"
#     exit 1
# fi

echo "Enter arguments for the nmap command: "
read args

echo "Your command will be nmap $args 10.0.5.0/24"

nmap $args 10.0.5.0/24
```

**wks-assessment-SYS-255-01-benjamin.weatherill**

 ben@web01-benjamin:~

```
[ben@web01-benjamin ~]$ ./nmp.sh
Enter arguments for the nmap command:
-sn
Your command will be nmap -sn 10.0.5.0/24

Starting Nmap 6.40 ( http://nmap.org ) at 2023-10-30 21:54 EDT
Nmap scan report for fw02-benjamin.ben.local (10.0.5.2)
Host is up (0.0016s latency).
Nmap scan report for web01-benjamin.ben.local (10.0.5.4)
Host is up (0.0011s latency).
Nmap done: 256 IP addresses (2 hosts up) scanned in 2.93 seconds
[ben@web01-benjamin ~]$
```