

Linux Log Files 01

This presentation uses Kali 1.0.6 for three examples and OpenSUSE 13.1 for one example of log file capture. Kali example collects a failed login, failed file access, and failed privilege service stop. OpenSUSE example shows a firewall log.

Preuss

2/20/2014



Computer



Kali Live

The presentation logs into Kali as root.

KALI LINUX

The quieter you become, the more you are able to hear.



Computer



Kali Live

Terminal window titled "root@kali: ~" with a menu bar (File, Edit, View, Search, Terminal, Help) and a prompt "root@kali:~#". A yellow sticky note is overlaid on the terminal with the text: "The presentation opens a terminal window on Kali." The background of the terminal window shows the Kali Linux logo and the slogan "The quieter you become, the more you are able to hear."



Computer



Kali Live

root@kali: ~

File Edit View Search Terminal Help

```
root@kali:~# adduser alphonse
```

The presentation creates a login for Alphonse Albatross.

KALI LINUX

The quieter you become, the more you are able to hear.



Computer



Kali Live

root@kali: ~

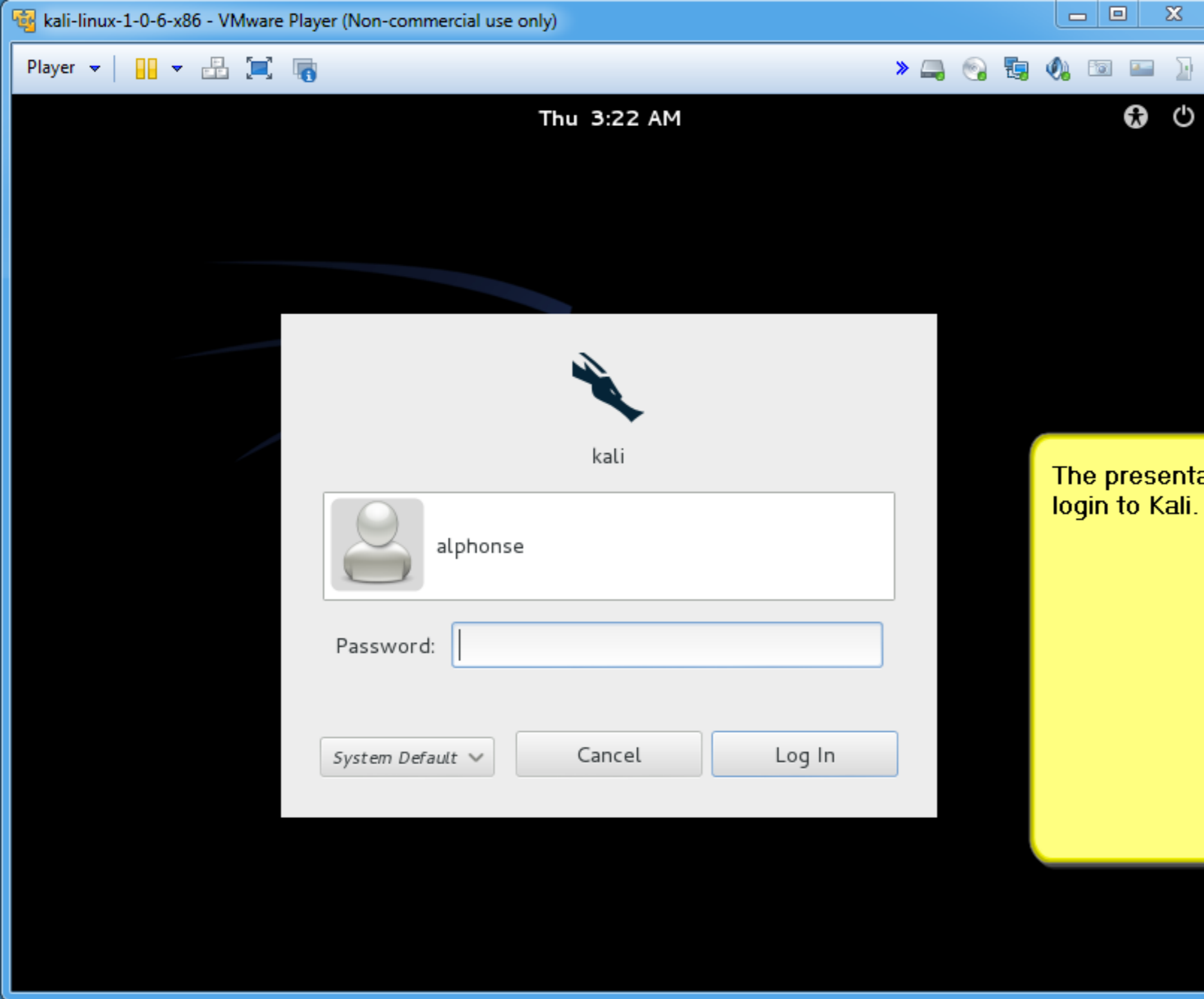
File Edit View Search Terminal Help

```
root@kali:~# adduser alphonse
Adding user `alphonse' ...
Adding new group `alphonse' (1002) ...
Adding new user `alphonse' (1001) with group `alphonse' ...
Creating home directory `/home/alphonse' ...
Copying files from `/etc/skel' ...
Enter new UNIX password:
Retype new UNIX password:
Sorry, passwords do not match
passwd: Authentication token manipulation error
passwd: password unchanged
Try again? [y/N] y
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
Changing the user information for alphonse
Enter the new value, or press ENTER for the default
    Full Name []:
    Room Number []:
    Work Phone []:
    Home Phone []:
    Other []:
Is the information correct? [Y/n]
```

KALI LINUX

The quieter you become, the more you are able to hear.

The presentation finishes creating the login by answering Y to the final question.



The presentation intentionally fails to login to Kali.



Computer



Kali Live

root@kali: ~

File Edit View Search Terminal Help

```
root@kali:~# cat /var/log/auth.log | grep alphonse
Feb 20 03:21:13 kali groupadd[3206]: group added to /etc/group: name=alphonse, G
ID=1002
Feb 20 03:21:13 kali groupadd[3206]: group added to /etc/gshadow: name=alphonse
Feb 20 03:21:13 kali groupadd[3206]: new group: name=alphonse, GID=1002
Feb 20 03:21:13 kali useradd[3210]: new user: name=alphonse, UID=1001, GID=1002,
home=/home/alphonse, shell=/bin/bash
Feb 20 03:21:37 kali passwd[3218]: pam_unix(passwd:chauthtok): password changed
for alphonse
Feb 20 03:21:45 kali chfn[3219]: changed user 'alphonse' information
Feb 20 03:22:29 kali gdm3][3306]: pam_unix(gdm3:auth): authentication failure; l
ogname= uid=0 euid=0 tty=:0 ruser= rhost= user=alphonse
root@kali:~#
```

The presentation logs on Kali Linux as root. The presentation opens a terminal window. The presentation searches `/var/log/auth.log` for the failed login. The last entry is the failed login.



Computer



Kali Live

```
alphonse@kali: ~  
File Edit View Search Terminal Help  
alphonse@kali:~$ cat /etc/shadow
```

The presentation logs in as Alphonse. The presentation as Alphonse tries to view `/etc/shadow` as shown.



Computer



Kali Live

```
alphonse@kali: ~  
File Edit View Search Terminal Help  
alphonse@kali:~$ cat /etc/shadow  
cat: /etc/shadow: Permission denied  
alphonse@kali:~$
```

The presentation as Alphonse receives the expected message.



Computer



Kali Live

root@kali: ~

File Edit View Search Terminal Help

```
root@kali:~# cat /var/log/auth.log | grep alphonse
Feb 20 03:21:13 kali groupadd[3206]: group added to /etc/group: name=alphonse, G
ID=1002
Feb 20 03:21:13 kali groupadd[3206]: group added to /etc/gshadow: name=alphonse
Feb 20 03:21:13 kali groupadd[3206]: new group: name=alphonse, GID=1002
Feb 20 03:21:13 kali useradd[3210]: new user: name=alphonse, UID=1001, GID=1002,
home=/home/alphonse, shell=/bin/bash
Feb 20 03:21:37 kali passwd[3218]: pam_unix(passwd:chauthtok): password changed
for alphonse
Feb 20 03:21:45 kali chfn[3219]: changed user 'alphonse' information
Feb 20 03:22:29 kali gdm3[3306]: pam_unix(gdm3:auth): authentication failure; l
ogname= uid=0 euid=0 tty=:0 ruser= rhost= user=alphonse
Feb 20 03:25:07 kali gdm3[3674]: pam_unix(gdm3:session): session opened for use
r alphonse by (uid=0)
Feb 20 03:25:07 kali gnome-keyring-daemon[3678]: couldn't bind to control socket
: /home/alphonse/.cache/keyring-3Ds5bz/control: No such file or directory
root@kali:~#
```

KALI

The quieter you become, the

The presentation logs in to Kali as root. The presentation opens a terminal window. The presentation searches `/var/log/auth.log` for the failed file access. The last line shown is the failed file access.



Computer



Kali Live

alphonse@kali: ~

File Edit View Search Terminal Help

```
alphonse@kali:~$ ps aux
```

The presentation logs in as Alphonse.
The presentation generates a list of
process status.

The quieter you become, the more you are able to hear.



Computer



Kali Live

```

alphonse@kali: ~
File Edit View Search Terminal Help
root      2719  0.0  0.3  34560  3796 ?      Sl    04:17  0:00 /usr/lib/upower/upowerd
rtkit     2900  0.0  0.1  18988  1224 ?      SNI   04:17  0:00 /usr/lib/rtkit/rtkit-daemo
root      2932  0.0  0.3  26808  4056 ?      Sl    04:18  0:00 gdm-session-worker [pam/gd
alphonse  2939  0.0  0.3  59840  4032 ?      Sl    04:18  0:00 /usr/bin/gnome-keyring-dae
root      2941  0.0  0.0  0 0 ?      S     04:18  0:00 [kauditd]
alphonse  2957  0.0  0.8  48956  9040 ?      Ssl   04:18  0:00 x-session-manager
alphonse  2999  0.0  0.0  3516  532 ?      S     04:18  0:00 dbus-launch --autolaunch=7
alphonse  3000  0.0  0.0  3012  924 ?      Ss    04:18  0:00 /usr/bin/dbus-daemon --for
alphonse  3003  0.0  0.2  30332  2400 ?      Sl    04:18  0:00 /usr/lib/dconf/dconf-servi
alphonse  3016  0.0  0.0  3868  212 ?      Ss    04:18  0:00 /usr/bin/ssh-agent /usr/bi
alphonse  3019  0.0  0.0  3516  532 ?      S     04:18  0:00 /usr/bin/dbus-launch --exi
alphonse  3020  0.0  0.1  4468  1764 ?      Ss    04:18  0:00 /usr/bin/dbus-daemon --for
alphonse  3027  0.1  1.3 152456 14428 ?      Sl    04:18  0:00 /usr/lib/gnome-settings-da
alphonse  3035  0.0  0.2  8552  2424 ?      S     04:18  0:00 /usr/lib/gvfs/gvfsd
alphonse  3044  0.1  0.5  97516  5680 ?      S<l   04:18  0:00 /usr/bin/pulseaudio --star
alphonse  3048  0.0  0.3  33996  3796 ?      S     04:18  0:00 /usr/lib/gvfs/gvfs-gdu-vol
root      3050  0.0  0.3  22968  3404 ?      Sl    04:18  0:00 /usr/lib/udisks/udisks-dae
root      3051  0.0  0.0  6352  724 ?      S     04:18  0:00 udisks-daemon: polling /de
alphonse  3054  0.0  0.2  8600  2176 ?      S     04:18  0:00 /usr/lib/gvfs/gvfs-gphoto2
alphonse  3056  0.0  0.2  19068  2356 ?      Sl    04:18  0:00 /usr/lib/gvfs/gvfs-afc-vol
colord    3060  0.0  0.4  24584  4264 ?      Sl    04:18  0:00 /usr/lib/i386-linux-gnu/co
root      3061  0.0  0.5  55732  5648 ?      Sl    04:18  0:00 /usr/lib/packagekit/packag
alphonse  3062  0.0  1.0 115908 11268 ?      Sl    04:18  0:00 /usr/bin/metacity
alphonse  3064  0.0  0.3  46268  46268 ?      Sl    04:18  0:00 /usr/lib/gnome-settings-da

```

The presentation as Alphonse decides to stop the process 3061 owned by root.



Computer



Kali Live

```

alphonse@kali: ~
File Edit View Search Terminal Help
colord 3078 0.0 0.7 34232 7812 ? SL 04:18 0:00 /usr/lib/i386-linux-gnu/co
alphonse 3090 0.0 0.2 8328 2768 ? S 04:18 0:00 /usr/lib/i386-linux-gnu/gc
alphonse 3092 0.0 0.2 30332 2412 ? SL 04:18 0:00 /usr/lib/dconf/dconf-servi
alphonse 3096 0.1 1.4 71784 15452 ? SL 04:18 0:00 nm-applet
alphonse 3097 0.0 0.8 39552 8492 ? SL 04:18 0:00 /usr/lib/notification-daem
alphonse 3098 0.0 0.8 24848 8308 ? S 04:18 0:00 /usr/lib/gnome-disk-utilit
alphonse 3099 0.2 2.0 90712 21188 ? SL 04:18 0:00 nautilus -n
alphonse 3102 0.0 0.8 56048 8292 ? SL 04:18 0:00 /usr/lib/gnome-settings-da
alphonse 3104 0.0 0.8 40100 8352 ? SL 04:18 0:00 gnome-screensaver
alphonse 3113 0.0 1.1 54156 11644 ? SL 04:18 0:00 bluetooth-applet
alphonse 3116 0.0 0.7 31480 8016 ? SL 04:18 0:00 /usr/lib/policykit-1-gnome
alphonse 3117 0.0 0.7 49304 7888 ? SNL 04:18 0:00 /usr/lib/tracker/tracker-m
alphonse 3126 0.0 1.3 115244 13680 ? SL 04:18 0:00 gnome-sound-applet
alphonse 3141 0.0 0.8 63808 8392 ? SL 04:18 0:00 /usr/lib/tracker/tracker-s
alphonse 3159 0.0 0.3 9080 3160 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-trash
alphonse 3161 0.0 0.2 8552 2524 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-burn -
alphonse 3164 0.0 0.5 37016 5220 ? SL 04:18 0:00 /usr/lib/telepathy/mission
alphonse 3169 0.0 0.9 92016 9576 ? SL 04:18 0:00 /usr/lib/gnome-online-acco
alphonse 3178 0.5 1.5 74512 16072 ? SL 04:18 0:01 gnome-terminal
alphonse 3185 0.0 0.0 2080 700 ? S 04:18 0:00 gnome-pty-helper
alphonse 3186 0.0 0.3 6136 3452 pts/0 Ss 04:18 0:00 bash
alphonse 3304 0.0 0.1 4280 1188 pts/0
alphonse@kali:~$
alphonse@kali:~$ kill 3061

```

The presentation issues the command to stop the process owned by root.



Computer



Kali Live

alphonse@kali: ~

```

File Edit View Search Terminal Help
alphonse 3092 0.0 0.2 30332 2412 ? SL 04:18 0:00 /usr/lib/dconf/dconf-servi
alphonse 3096 0.1 1.4 71784 15452 ? SL 04:18 0:00 nm-applet
alphonse 3097 0.0 0.8 39552 8492 ? SL 04:18 0:00 /usr/lib/notification-daem
alphonse 3098 0.0 0.8 24848 8308 ? S 04:18 0:00 /usr/lib/gnome-disk-utilit
alphonse 3099 0.2 2.0 90712 21188 ? SL 04:18 0:00 nautilus -n
alphonse 3102 0.0 0.8 56048 8292 ? SL 04:18 0:00 /usr/lib/gnome-settings-da
alphonse 3104 0.0 0.8 40100 8352 ? SL 04:18 0:00 gnome-screensaver
alphonse 3113 0.0 1.1 54156 11644 ? SL 04:18 0:00 bluetooth-applet
alphonse 3116 0.0 0.7 31480 8016 ? SL 04:18 0:00 /usr/lib/policykit-1-gnome
alphonse 3117 0.0 0.7 49304 7888 ? SNL 04:18 0:00 /usr/lib/tracker/tracker-m
alphonse 3126 0.0 1.3 115244 13680 ? SL 04:18 0:00 gnome-sound-applet
alphonse 3141 0.0 0.8 63808 8392 ? SL 04:18 0:00 /usr/lib/tracker/tracker-s
alphonse 3159 0.0 0.3 9080 3160 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-trash
alphonse 3161 0.0 0.2 8552 2524 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-burn -
alphonse 3164 0.0 0.5 37016 5220 ? SL 04:18 0:00 /usr/lib/telepathy/mission
alphonse 3169 0.0 0.9 92016 9576 ? SL 04:18 0:00 /usr/lib/gnome-online-acco
alphonse 3178 0.5 1.5 74512 16072 ? SL 04:18 0:01 gnome-terminal
alphonse 3185 0.0 0.0 2080 700 ? S 04:18 0:00 gnome-pty-helper
alphonse 3186 0.0 0.3 6136 3452 pts/0 Ss 04:18 0:00 bash
alphonse 3304 0.0 0.1 4280 1188 pts/0 R+ 04:21 0:00 ps aux
alphonse@kali:~$
alphonse@kali:~$ kill 3061
bash: kill: (3061) - Operation not permitted
alphonse@kali:~$

```

The presentation receives the expected response.



Computer



Kali Live

```

root@kali: /home/alphonse
File Edit View Search Terminal Help
alphonse 3097 0.0 0.8 39552 8492 ? SL 04:18 0:00 /usr/lib/notification-daem
alphonse 3098 0.0 0.8 24848 8308 ? S 04:18 0:00 /usr/lib/gnome-disk-utilit
alphonse 3099 0.2 2.0 90712 21188 ? SL 04:18 0:00 nautilus -n
alphonse 3102 0.0 0.8 56048 8292 ? SL 04:18 0:00 /usr/lib/gnome-settings-da
alphonse 3104 0.0 0.8 40100 8352 ? SL 04:18 0:00 gnome-screensaver
alphonse 3113 0.0 1.1 54156 11644 ? SL 04:18 0:00 bluetooth-applet
alphonse 3116 0.0 0.7 31480 8016 ? SL 04:18 0:00 /usr/lib/policykit-1-gnome
alphonse 3117 0.0 0.7 49304 7888 ? SNL 04:18 0:00 /usr/lib/tracker/tracker-m
alphonse 3126 0.0 1.3 115244 13680 ? SL 04:18 0:00 gnome-sound-applet
alphonse 3141 0.0 0.8 63808 8392 ? SL 04:18 0:00 /usr/lib/tracker/tracker-s
alphonse 3159 0.0 0.3 9080 3160 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-trash
alphonse 3161 0.0 0.2 8552 2524 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-burn -
alphonse 3164 0.0 0.5 37016 5220 ? SL 04:18 0:00 /usr/lib/telepathy/mission
alphonse 3169 0.0 0.9 92016 9576 ? SL 04:18 0:00 /usr/lib/gnome-online-acco
alphonse 3178 0.5 1.5 74512 16072 ? SL 04:18 0:01 gnome-terminal
alphonse 3185 0.0 0.0 2080 700 ? S 04:18 0:00 gnome-pty-helper
alphonse 3186 0.0 0.3 6136 3452 pts/0 Ss 04:18 0:00 bash
alphonse 3304 0.0 0.1 4280 1188 pts/0 R+ 04:21 0:00 ps aux
alphonse@kali:~$
alphonse@kali:~$ kill 3061
bash: kill: (3061) - Operation not permitted
alphonse@kali:~$ su
Password:
root@kali:/home/alphonse#

```

The presentation becomes root to view the log files.



Computer



Kali Live

```

root@kali: /home/alphonse
File Edit View Search Terminal Help
alphonse 3097 0.0 0.8 39552 8492 ? SL 04:18 0:00 /usr/lib/notification-daem
alphonse 3098 0.0 0.8 24848 8308 ? S 04:18 0:00 /usr/lib/gnome-disk-utilit
alphonse 3099 0.2 2.0 90712 21188 ? SL 04:18 0:00 nautilus -n
alphonse 3102 0.0 0.8 56048 8292 ? SL 04:18 0:00 /usr/lib/gnome-settings-da
alphonse 3104 0.0 0.8 40100 8352 ? SL 04:18 0:00 gnome-screensaver
alphonse 3113 0.0 1.1 54156 11644 ? SL 04:18 0:00 bluetooth-applet
alphonse 3116 0.0 0.7 31480 8016 ? SL 04:18 0:00 /usr/lib/policykit-1-gnome
alphonse 3117 0.0 0.7 49304 7888 ? SNL 04:18 0:00 /usr/lib/tracker/tracker-m
alphonse 3126 0.0 1.3 115244 13680 ? SL 04:18 0:00 gnome-sound-applet
alphonse 3141 0.0 0.8 63808 8392 ? SL 04:18 0:00 /usr/lib/tracker/tracker-s
alphonse 3159 0.0 0.3 9080 3160 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-trash
alphonse 3161 0.0 0.2 8552 2524 ? S 04:18 0:00 /usr/lib/gvfs/gvfsd-burn -
alphonse 3164 0.0 0.5 37016 5220 ? SL 04:18 0:00 /usr/lib/telepathy/mission
alphonse 3169 0.0 0.9 92016 9576 ? SL 04:18 0:00 /usr/lib/gnome-online-acco
alphonse 3178 0.5 1.5 74512 16072 ? SL 04:18 0:01 gnome-terminal
alphonse 3185 0.0 0.0 2080 700 ? S 04:18 0:00 gnome-pty-helper
alphonse 3186 0.0 0.3 6136 3452 pts/0 Ss 04:18 0:00 bash
alphonse 3304 0.0 0.1 4280 1188 pts/0 R+ 04:21 0:00 ps aux
alphonse@kali:~$
alphonse@kali:~$ kill 3061
bash: kill: (3061) - Operation not permitted
alphonse@kali:~$ su
Password:
root@kali:/home/alphonse# cat /var/log/auth.log

```

The presentation, as root, issues the command to view /var/log/auth.log



Computer



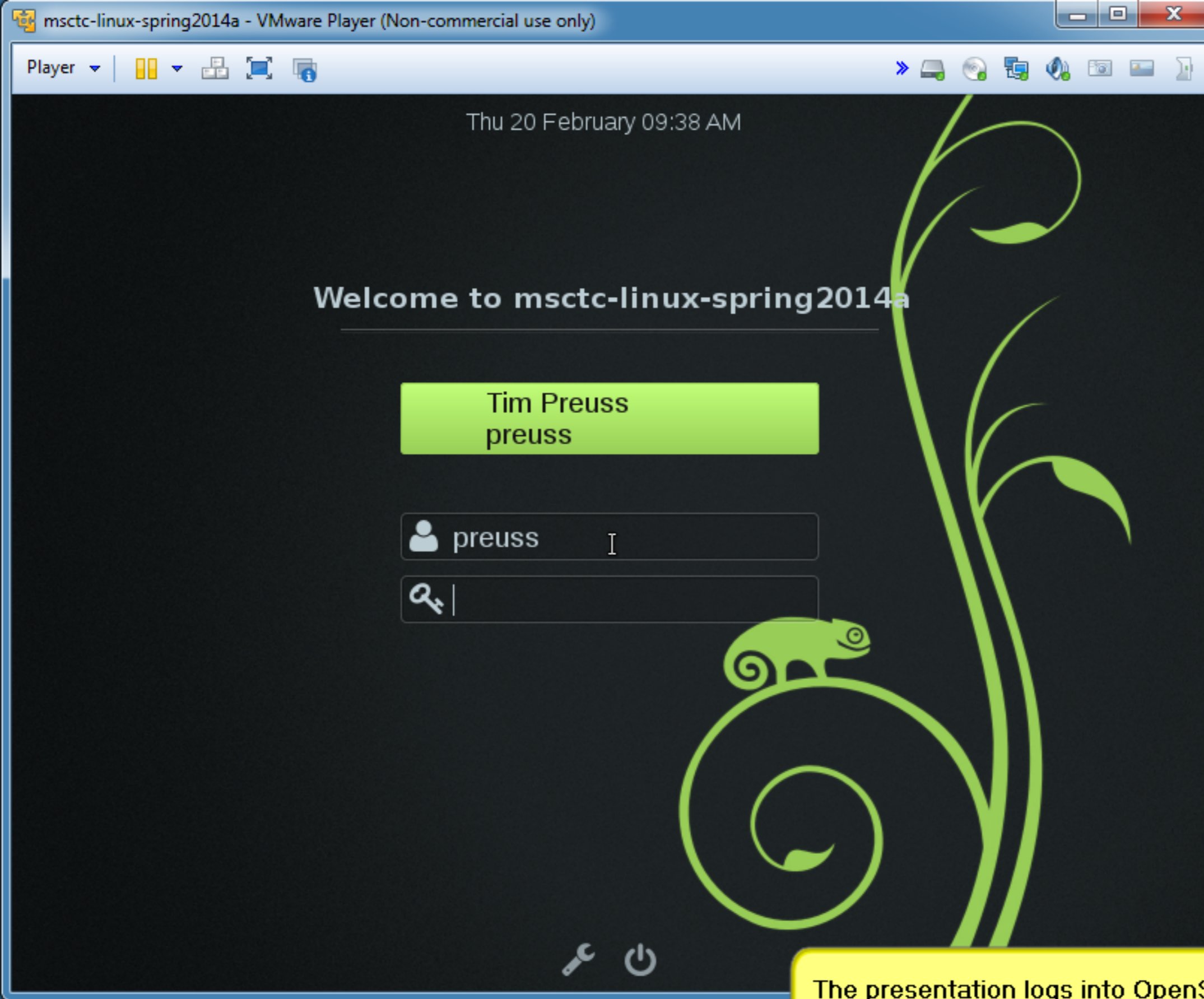
Kali Live

root@kali: /home/alphonse

File Edit View Search Terminal Help

```
= "0" destination=":1.9" (uid=0 pid=2621 comm="/usr/sbin/console-kit-daemon --no-daemon ")  
Feb 20 04:18:13 kali gdm3][2932]: pam_unix(gdm3:session): session opened for user alphonse  
by (uid=0)  
Feb 20 04:18:13 kali gdm3][2932]: pam_ck_connector(gdm3:session): nox11 mode, ignoring PAM_  
TTY :0  
Feb 20 04:18:13 kali gdm-welcome][2612]: pam_unix(gdm-welcome:session): session closed for  
user Debian-gdm  
Feb 20 04:18:13 kali polkitd(authority=local): Unregistered Authentication Agent for unix-s  
ession:/org/freedesktop/ConsoleKit/Session1 (system bus name :1.26, object path /org/gnome/  
PolicyKit1/AuthenticationAgent, locale en_US.UTF-8) (disconnected from bus)
```

The log entry Feb 20 04:18:13 shows the failure. This is shown by disconnection from the bus



The presentation logs into OpenSUSE 13.1



Firefox



KInfoCenter



Office



Online Help



openSUSE

YaST Control Center @ msctc-linux-spring2014a

Search

- Software
- Hardware
- System
- Network Devices
- Network Services
- Security and Users
- Support
- Miscellaneous

Ready

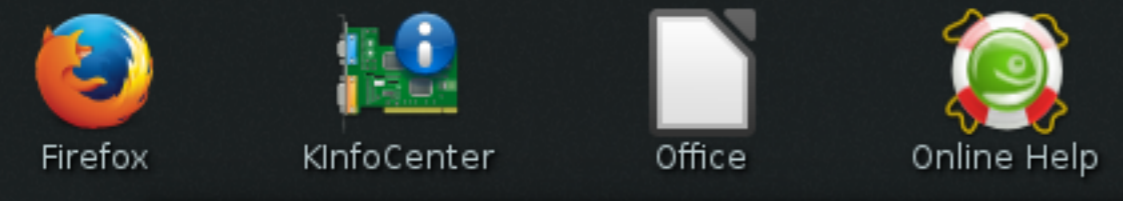
Software

- Add-On Products
- Media Check
- Online Update
- Online Update Configuration
- Software Management
- Software Repositories

Hardware

- Hardware Information

The presentation opens YaST.



YaST Control Center @ msctc-linux-spring2014a

Search []

- Software
- Hardware
- System
- Network Devices
- Network Services
- Security and Users**
- Support
- Miscellaneous

Security and Users

- AppArmor Configuration
- Start-Up
- Interfaces
- Allowed Services
- Masquerading
- Broadcast
- Logging Level**
- Custom Rules

YaST2

Firewall Configuration: Logging Level

Logging Level

Logging Accepted Packets
Log Only Critical

Logging Not Accepted Packets
Log Only Critical

Help Cancel Back Next

The presentation opens the YaST firewall configuration. The configuration shown will work in many cases. It is possible to log all packets to be sure.



Firefox



KInfoCenter



Office



Online Help



openSUSE

```
preuss : bash - Konsole
File Edit View Bookmarks Settings Help
msctc-linux-spring2014a:/home/preuss #
```

The presentation opens the command prompt. The presentation becomes root, as shown.



Firefox



KInfoCenter



Office



Online Help



openSUSE

```
preuss : bash - Konsole
File Edit View Bookmarks Settings Help
msctc-linux-spring2014a:/home/preuss # cat /var/log/firewall | grep DROP
```

The presentation searches the `/var/log/firewall` for dropped packets.



Firefox



KInfoCenter



Office



Online Help



openSUSE

```
preuss : bash - Konsole
File Edit View Bookmarks Settings Help
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=557 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP
SPT=5353 DPT=5353 LEN=517
2014-02-20T09:38:28.179901-06:00 msctc-linux-spring2014a kernel: [ 44.050954] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:38:29.180867-06:00 msctc-linux-spring2014a kernel: [ 45.052967] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:38:31.183091-06:00 msctc-linux-spring2014a kernel: [ 47.056957] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:38:35.186064-06:00 msctc-linux-spring2014a kernel: [ 51.063070] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:38:43.187412-06:00 msctc-linux-spring2014a kernel: [ 59.070673] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:38:59.227772-06:00 msctc-linux-spring2014a kernel: [ 75.111073] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:39:31.240905-06:00 msctc-linux-spring2014a kernel: [ 107.165731] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:40:35.246666-06:00 msctc-linux-spring2014a kernel: [ 171.228115] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
2014-02-20T09:42:43.300678-06:00 msctc-linux-spring2014a kernel: [ 299.396580] SPW2-INext-DROP-DEFLT IN=eth0 OUT= MAC= SRC=fe8
0:0000:0000:0000:020c:29ff:fe80:bbc6 DST=ff02:0000:0000:0000:0000:0000:0000:00fb LEN=84 TC=0 HOPLIMIT=255 FLOWLBL=0 PROTO=UDP S
PT=5353 DPT=5353 LEN=44
msctc-linux-spring2014a:/home/preuss #
```

The presentation shows IPv6 multicast packets being dropped.

