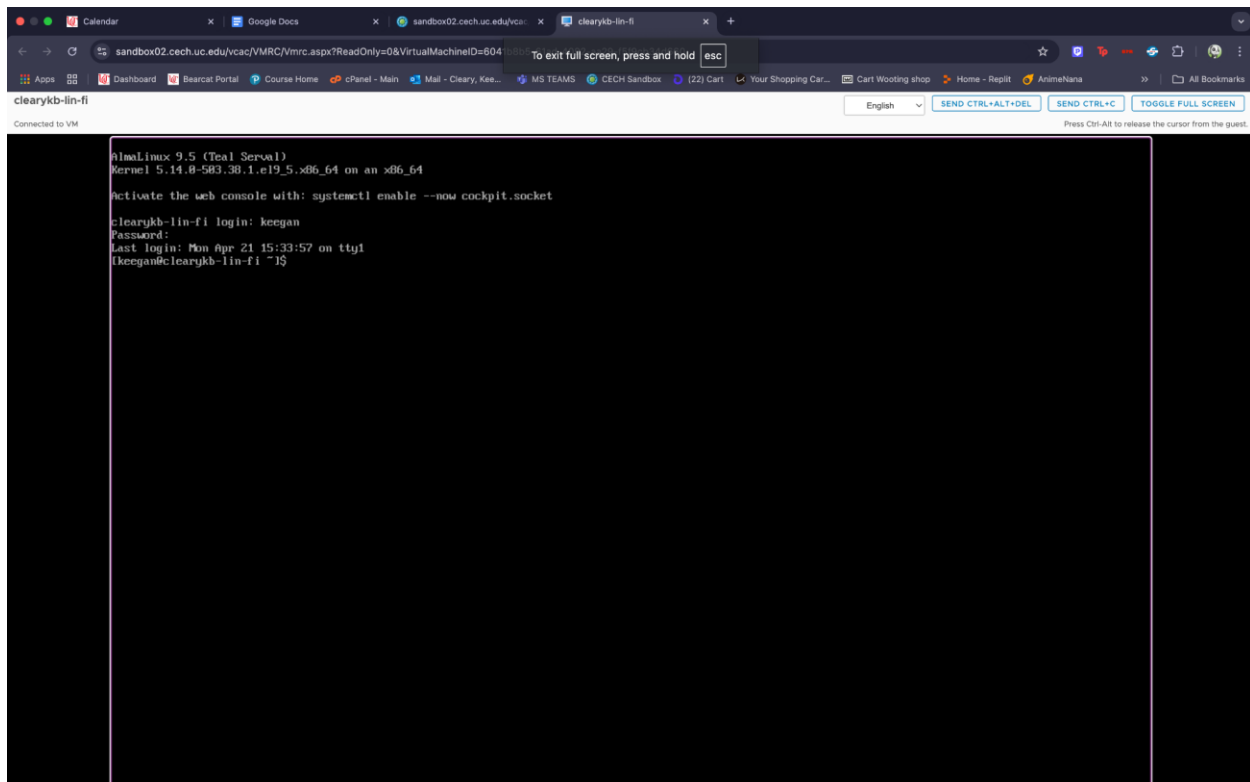


The command prompt for the server.

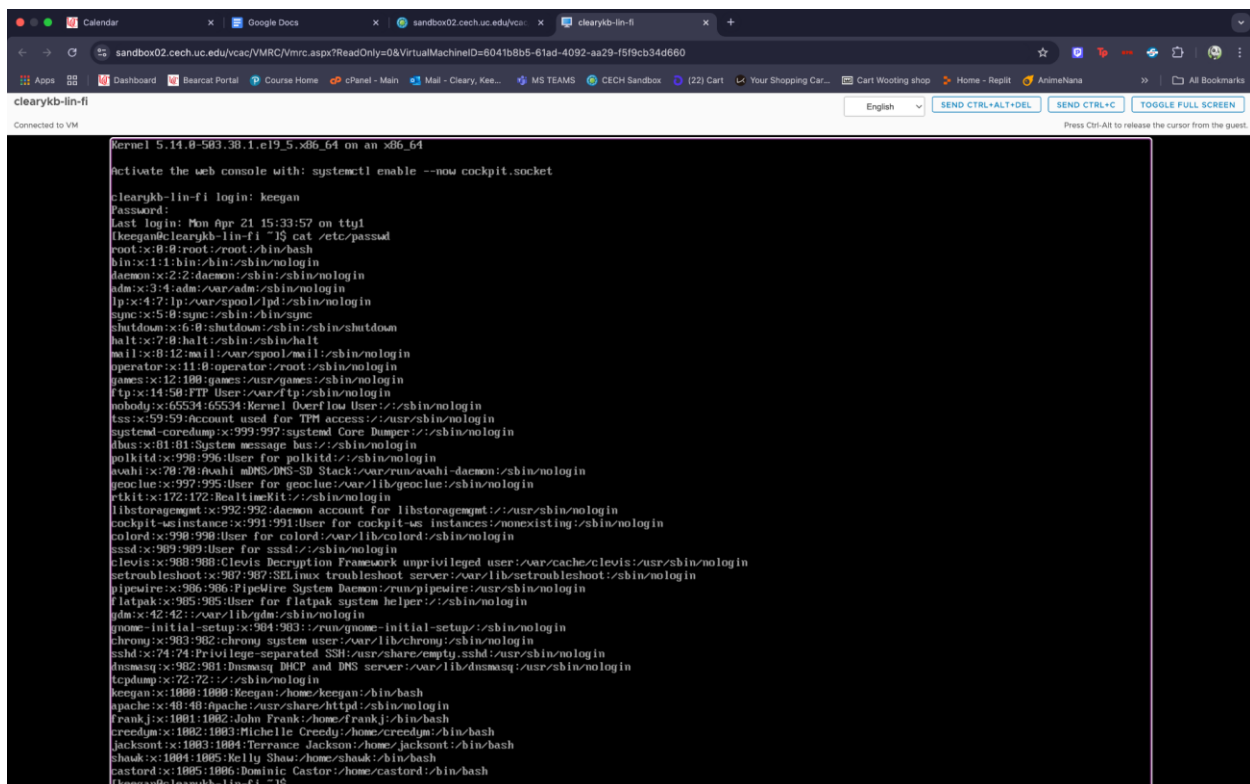


```
AlmaLinux 9.5 (Teal Server)
Kernel 5.14.0-503.30.1.el9_5.x86_64 on an x86_64

Activate the web console with: systemctl enable --now cockpit.socket

clearykb-lin-fi login: keegan
Password:
Last login: Mon Apr 21 15:33:57 on tty1
[keegan@clearykb-lin-fi ~]$
```

The /etc/passwd file showing user accounts for the Web Dev team.

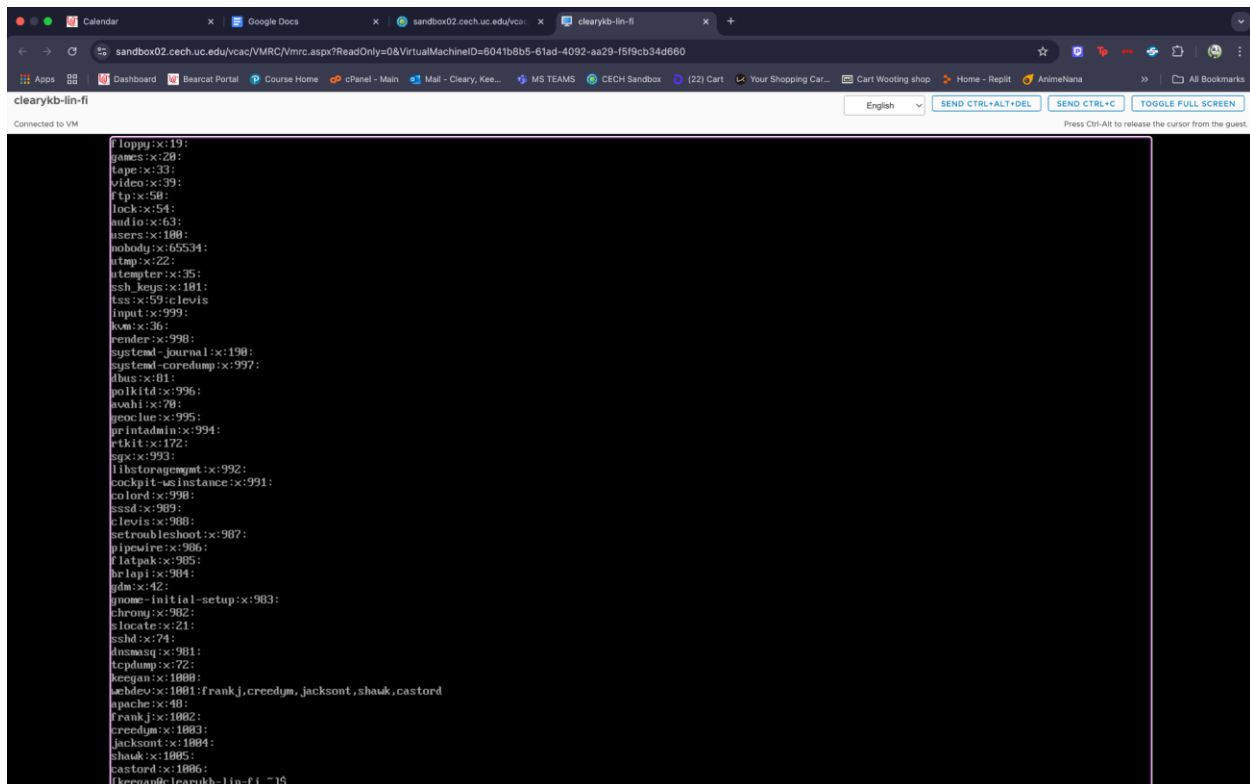


```
Kernel 5.14.0-503.30.1.el9_5.x86_64 on an x86_64

Activate the web console with: systemctl enable --now cockpit.socket

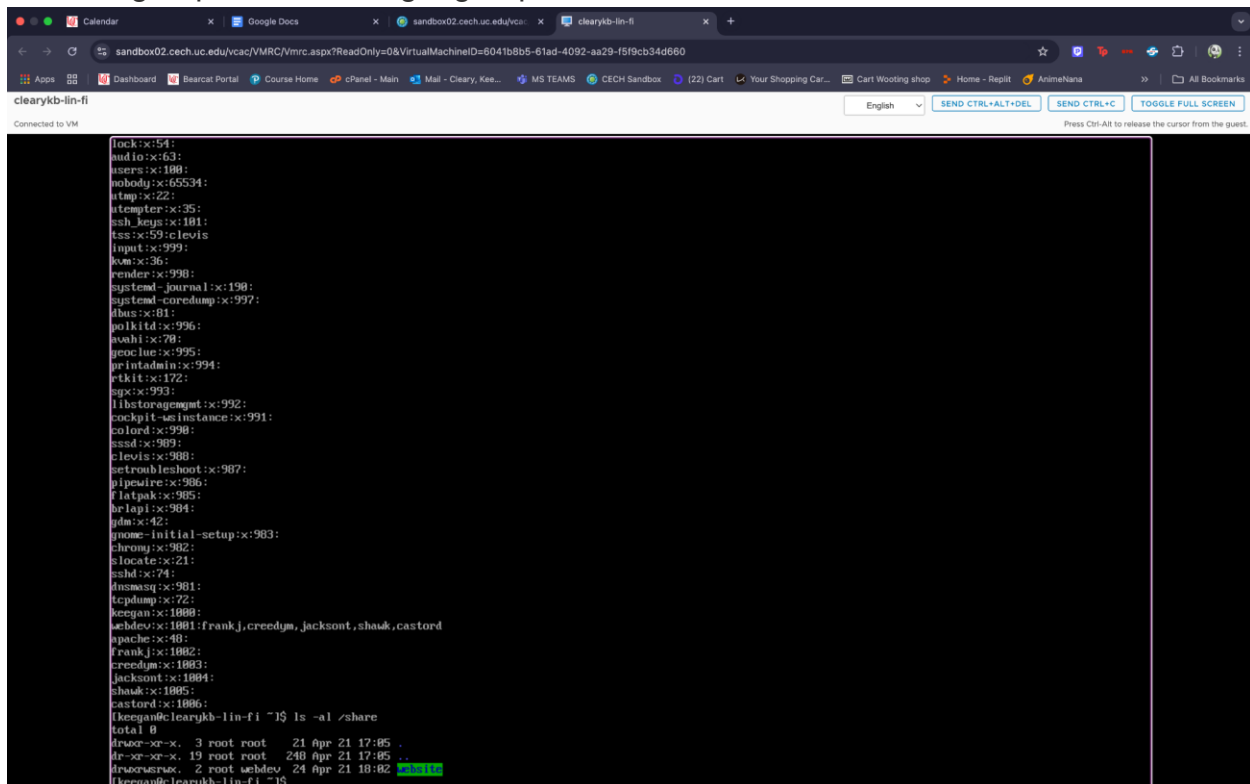
clearykb-lin-fi login: keegan
Password:
Last login: Mon Apr 21 15:33:57 on tty1
[keegan@clearykb-lin-fi ~]$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:65534:65534:Kernel User:Low User::/sbin/nologin
tss:x:59:59:Account used for TPM access::/usr/sbin/nologin
systemd-coredump:x:999:997:systemd Core Dumper::/sbin/nologin
dbus:x:81:81:System message bus::/sbin/nologin
polkitd:x:998:996:User for polkitd::/sbin/nologin
avahi:x:70:70:Avahi mDNS-Browser Stack:/var/run/avahi-daemon:/sbin/nologin
geoclue:x:997:995:User for geoclue:/var/lib/geoclue:/sbin/nologin
rtkit:x:172:172:RealtimeKit::/sbin/nologin
libstoragemgmt:x:992:992:daemon account for libstoragemgmt::/usr/sbin/nologin
cockpit-ws-instance:x:991:991:User for cockpit-ws instances:/nonexistent:/sbin/nologin
colord:x:998:998:User for colord:/var/lib/colord:/sbin/nologin
sasl:x:909:909:User for sasl:/sbin/nologin
clevis:x:980:980:clevis Decryption Framework unprivileged user:/var/cache/clevis:/usr/sbin/nologin
setroubleshoot:x:987:987:SELinux troubleshoot server:/var/lib/setroubleshoot:/sbin/nologin
pipewire:x:986:986:PipeWire System Daemon:/run/pipewire:/usr/sbin/nologin
flatpak:x:905:905:User for flatpak system helper::/sbin/nologin
dmccs:x:42:42:/var/lib/dmccs:/sbin/nologin
gnome-initial-setup:x:984:983::/run/gnome-initial-setup:/sbin/nologin
chrony:x:983:982:chrony system user:/var/lib/chrony:/sbin/nologin
dnsmasq:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/usr/sbin/nologin
dnsmasq:x:982:981:dnsmasq DHCP and DNS server:/var/lib/dnsmasq:/usr/sbin/nologin
keegan:x:1000:1000:Keegan:/home/keegan:/bin/bash
apache:x:48:48:Apache:/usr/share/httpd:/sbin/nologin
frankj:x:1001:1002:John Frank:/home/frankj:/bin/bash
creedy:x:1002:1003:Michelle Creedy:/home/creedy:/bin/bash
jackson:x:1003:1004:Terrance Jackson:/home/jackson:/bin/bash
shank:x:1004:1005:Kelly Shank:/home/shank:/bin/bash
castord:x:1005:1006:Dominic Castor:/home/castord:/bin/bash
[keegan@clearykb-lin-fi ~]$
```

The /etc/group file containing a group for the Web Dev team with user accounts.



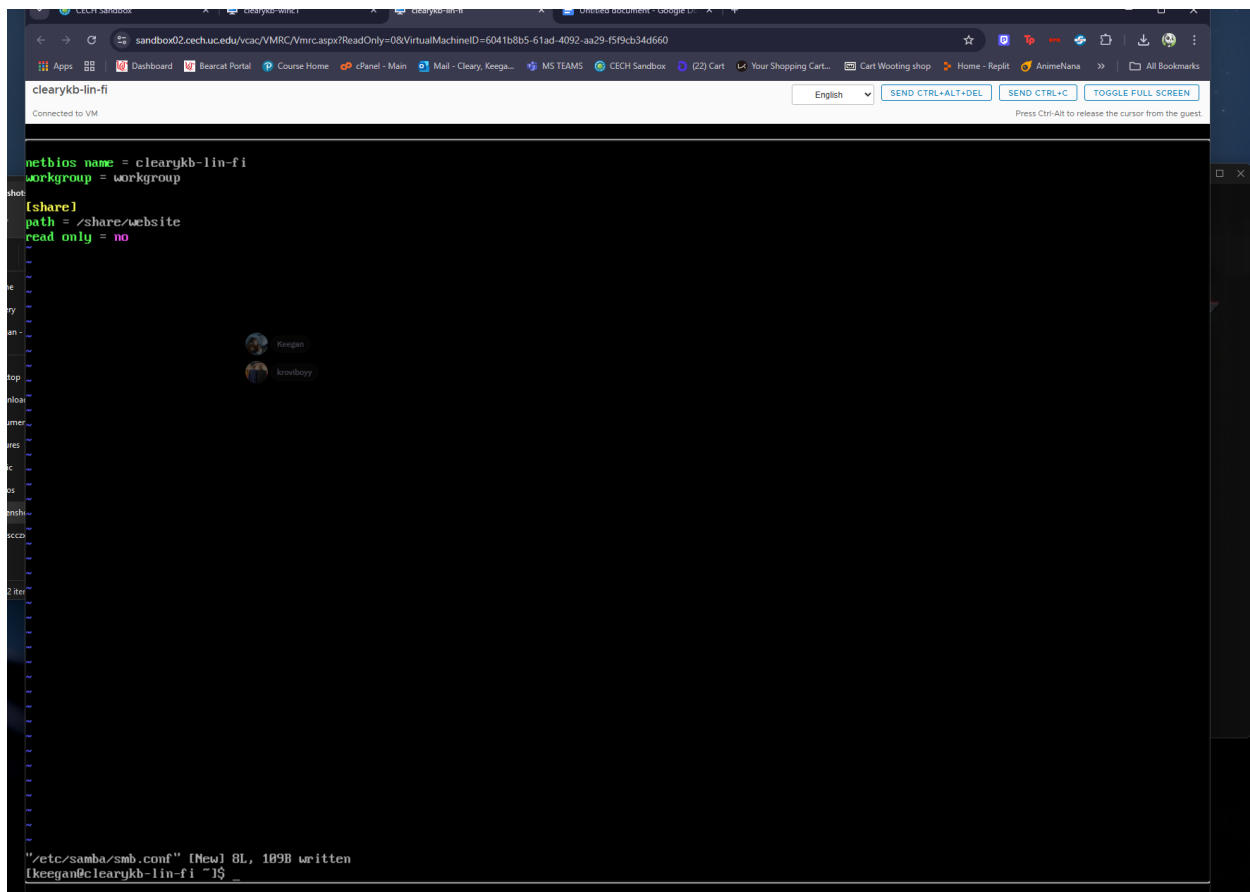
```
floppy:x:19:
games:x:20:
tape:x:33:
video:x:39:
ftp:x:50:
lock:x:54:
audio:x:63:
users:x:100:
nobody:x:65534:
utmp:x:22:
atmptpr:x:35:
ssh_keys:x:101:
tss:x:59:clevi5
input:x:999:
kvm:x:36:
render:x:990:
systemd-journal:x:190:
systemd-coredump:x:997:
dbus:x:81:
polkitd:x:996:
uuhl:x:70:
geoclue:x:995:
printadmin:x:994:
rtkit:x:172:
sgx:x:993:
libstoragemgmt:x:992:
cockpit-ws-instance:x:991:
colord:x:998:
sssd:x:989:
clevi5:x:980:
setroubleshoot:x:987:
pipewire:x:986:
flatpak:x:985:
brlapi:x:984:
pdm:x:42:
gnome-initial-setup:x:983:
chromy:x:982:
bllocate:x:21:
sshd:x:74:
dnsmasq:x:981:
tcpdump:x:72:
keegan:x:1000:
webdev:x:1001:frankj,creedym,jacksont,shawk,castord
apache:x:40:
frankj:x:1002:
creedym:x:1003:
jacksont:x:1004:
shawk:x:1005:
castord:x:1006:
[keegan@clearykb-lin-fi ~]$
```

The /etc/group file containing a group for the Web Dev team with user accounts.



```
[lock:x:54:
audio:x:63:
users:x:100:
nobody:x:65534:
utmp:x:22:
atmptpr:x:35:
ssh_keys:x:101:
tss:x:59:clevi5
input:x:999:
kvm:x:36:
render:x:990:
systemd-journal:x:190:
systemd-coredump:x:997:
dbus:x:81:
polkitd:x:996:
uuhl:x:70:
geoclue:x:995:
printadmin:x:994:
rtkit:x:172:
sgx:x:993:
libstoragemgmt:x:992:
cockpit-ws-instance:x:991:
colord:x:998:
sssd:x:989:
clevi5:x:980:
setroubleshoot:x:987:
pipewire:x:986:
flatpak:x:985:
brlapi:x:984:
pdm:x:42:
gnome-initial-setup:x:983:
chromy:x:982:
bllocate:x:21:
sshd:x:74:
dnsmasq:x:981:
tcpdump:x:72:
keegan:x:1000:
webdev:x:1001:frankj,creedym,jacksont,shawk,castord
apache:x:40:
frankj:x:1002:
creedym:x:1003:
jacksont:x:1004:
shawk:x:1005:
castord:x:1006:
[keegan@clearykb-lin-fi ~]$ ls -al /share
total 0
drwxr-xr-x. 3 root root 21 Apr 21 17:05 .
drwxr-xr-x. 19 root root 240 Apr 21 17:05 ..
drwxr-xr-x. 2 root webdev 24 Apr 21 10:02 share
[keegan@clearykb-lin-fi ~]$
```

The settings for the shared directory in the samba configuration file.



The screenshot shows a terminal window titled 'clearykb-lin-fi' connected to a VM. The terminal displays the following configuration for a document root directory:

```
netbios name = clearykb-lin-fi
workgroup = workgroup

[share]
path = /share/website
read only = no
```

Below the configuration, there are two user avatars: 'Keeegan' and 'Keeegan@clearykb-lin-fi'. At the bottom of the terminal, a message indicates that the file '/etc/samba/smb.conf' has been updated with 8 lines and 189 bytes written. The prompt shows the user 'Keeegan@clearykb-lin-fi' at the root shell.

The settings for the Document Root directory in the Apache configuration file.

```
GNU nano 5.6.1 /etc/httpd/conf/httpd.conf Modified
ServerName gives the name and port that the server uses to identify itself.
This can often be determined automatically, but we recommend you specify
it explicitly to prevent problems during startup.

If your host doesn't have a registered DNS name, enter its IP address here.
ServerName www.example.com:80

Deny access to the entirety of your server's filesystem. You must
explicitly permit access to web content directories in other
<Directory> blocks below.

Directory </>
    AllowOverride none
    Require all denied
</Directory>

Note that from this point forward you must specifically allow
particular features to be enabled - so if something's not working as
you might expect, make sure that you have specifically enabled it
below.

DocumentRoot: The directory out of which you will serve your
documents. By default, all requests are taken from this directory, but
symbolic links and aliases may be used to point to other locations.
DocumentRoot "/share/website"

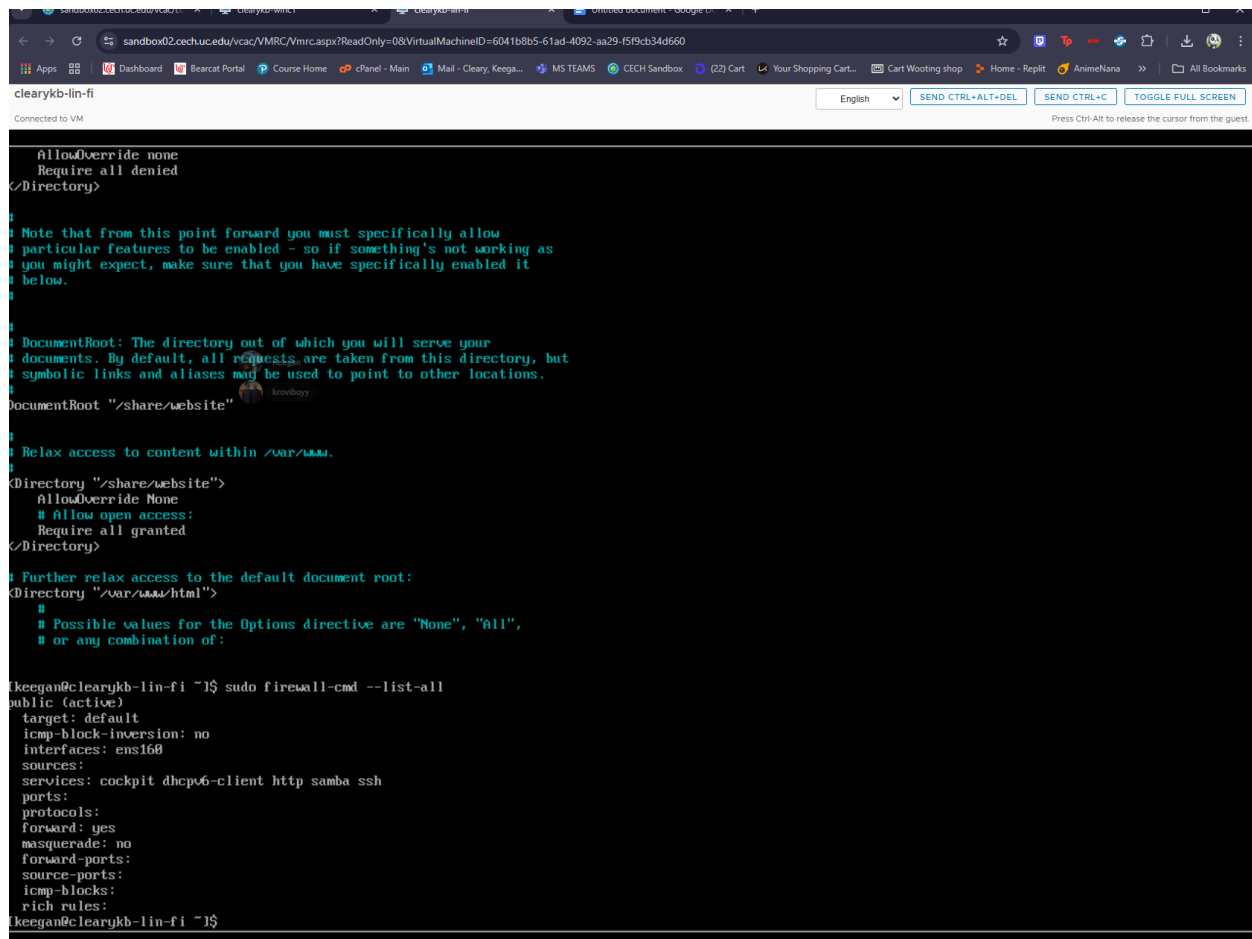
Relax access to content within /var/www.

Directory "/share/website">
    AllowOverride None
    # Allow open access:
    Require all granted
</Directory>

Further relax access to the default document root:
Directory "/var/www/html">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:

File Name to Write: /etc/httpd/conf/httpd.conf
[?] Help [?] D DQS Format [?] A Append [?] B Backup File
[C] Cancel [?] M Mac Format [?] P Prepend [?] Browse
```

Allowed services through the system firewall.



The screenshot shows a web browser window with a terminal interface. The browser's address bar displays a URL from a sandbox environment. The terminal window, titled 'clearykb-lin-fi', shows the contents of a configuration file, likely an Apache httpd.conf, with comments and directives such as 'AllowOverride none', 'Require all denied', and 'DocumentRoot "/share/website"'. It also shows the output of the 'sudo firewall-cmd --list-all' command, which lists the current firewall configuration, including the active public zone, target, interfaces, and allowed services and ports. The terminal prompt indicates the user is 'lkeegan' on the 'clearykb-lin-fi' machine.

```
allowOverride none
Require all denied
</Directory>

#
# Note that from this point forward you must specifically allow
# particular features to be enabled - so if something's not working as
# you might expect, make sure that you have specifically enabled it
# below.
#
# DocumentRoot: The directory out of which you will serve your
# documents. By default, all requests are taken from this directory, but
# symbolic links and aliases may be used to point to other locations.
#
DocumentRoot "/share/website"

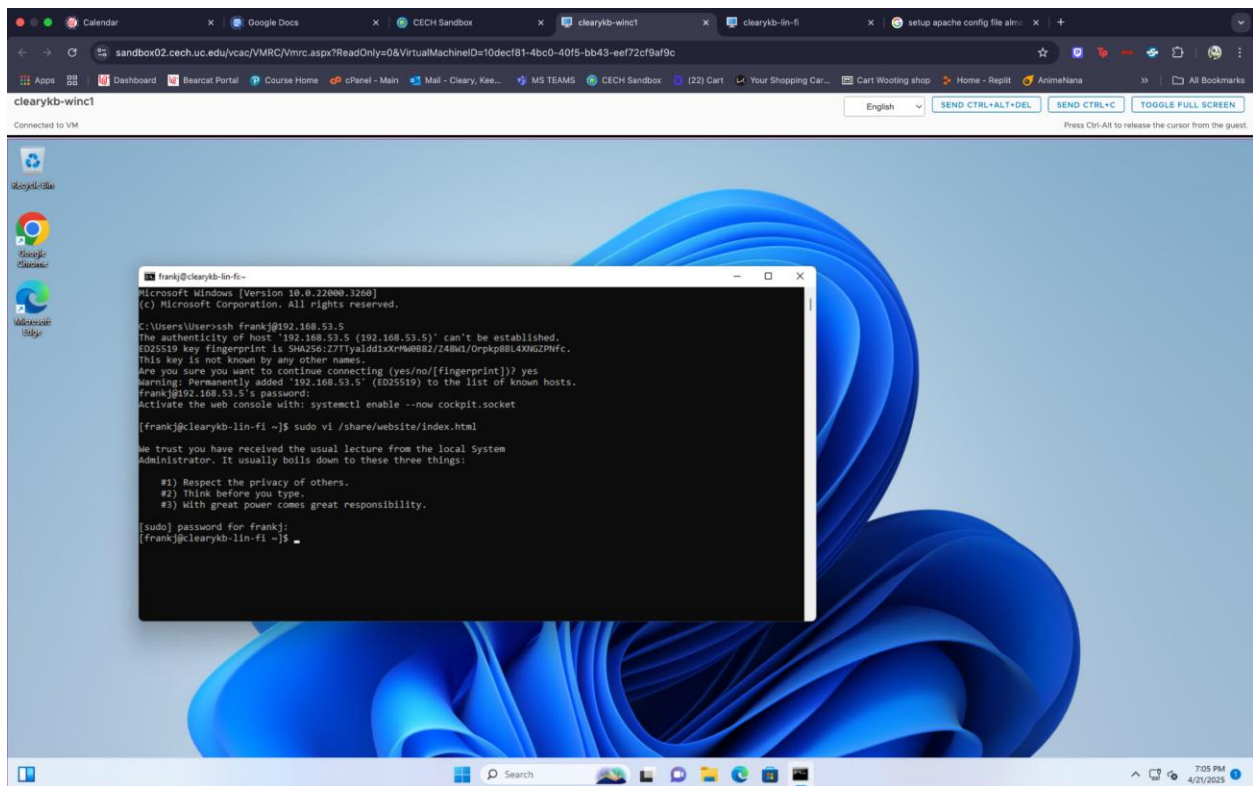
#
# Relax access to content within /var/www.
#
<Directory "/share/website">
    AllowOverride None
    # Allow open access:
    Require all granted
</Directory>

# Further relax access to the default document root:
<Directory "/var/www/html">
    #
    # Possible values for the Options directive are "None", "All",
    # or any combination of:

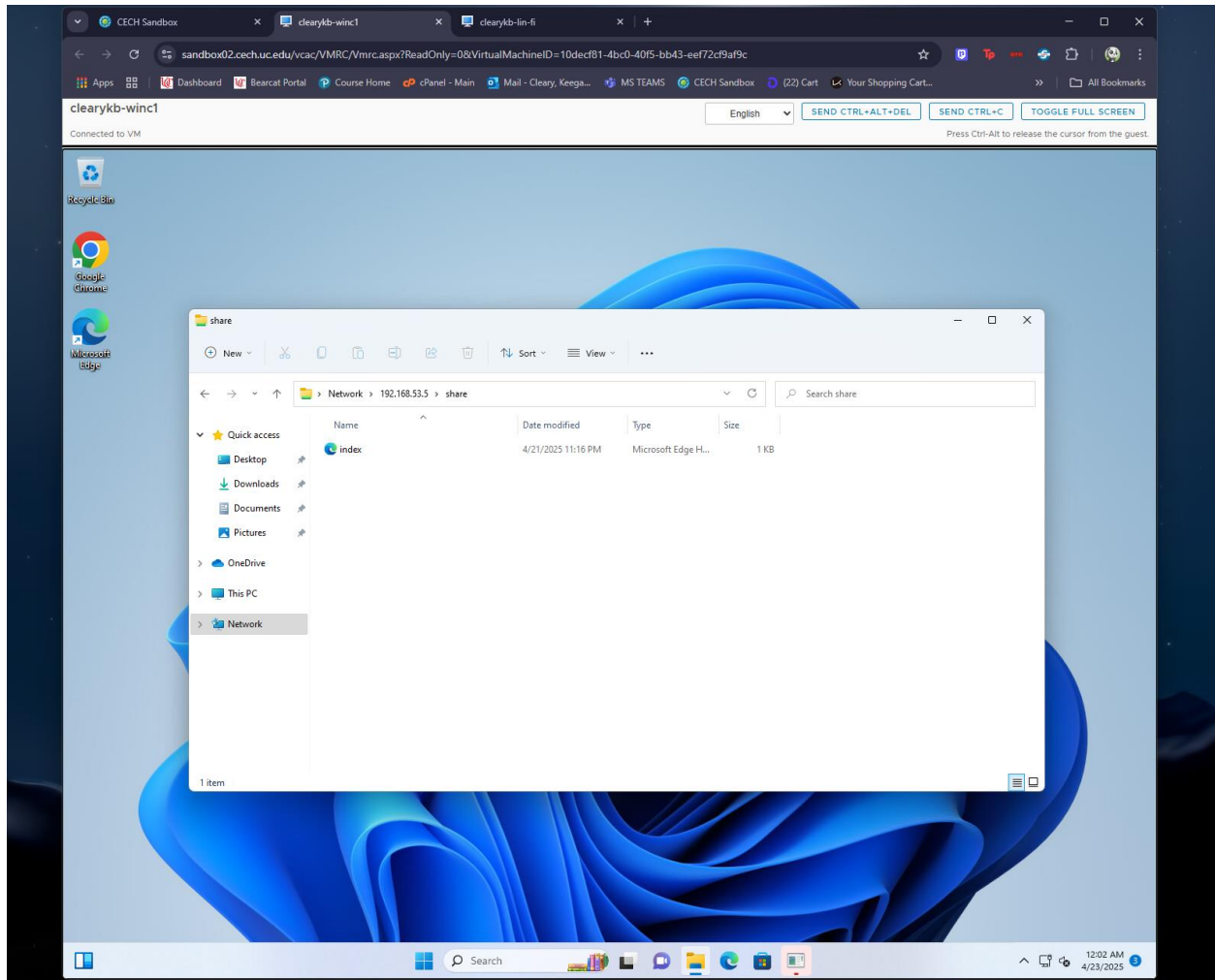
lkeegan@clearykb-lin-fi ~]$ sudo firewall-cmd --list-all
public (active)
target: default
icmp-block-inversion: no
interfaces: ens160
sources:
services: cockpit dhcpv6-client http samba ssh
ports:
protocols:
forward: yes
masquerade: no
forward-ports:
source-ports:
icmp-blocks:
rich rules:

lkeegan@clearykb-lin-fi ~]$
```

Connecting to the system from a Windows 11 workstation through SSH as one of the 5 users you created and running a command as sudo.



Connecting to the system from a Windows 11 workstation to access the shared directory through Windows File Explorer.



Connecting to the system from a Windows 11 workstation through a web browser using http.

