Reset Root Password in Linux

Sometimes you inherit a Linux system where you don't know the current root password.

A Google search will turn up all kinds of hints, mostly to boot as a single user but this doesn't always give you access to a root prompt without a password.

Here is a reliable way to approach this problem.

At the Grub menu, press "e" to enter edit mode. You can stop the timeout on Grub by using the up/down arrow keys to toggle between two entries.

Go to the line starting with "linux", and add **init=/bin/bash** to the end of the line.

Ctl-x to boot, and you will see the # prompt without a password.

At this point, the file system is mounted read only so you need to enter **mount -o remount,rw** / to remount the root file system as writable.

Use the **nano** editor to edit the /etc/passwd file. Vi is not available at this point.

Look for an entry like this: **root:x:0:0:root:/root:/bin/bash** The **x** after the root indicates that this is using the shadow password file for user root. Simply remove the x and it will not look for the shadow password on the next boot.

Then do a **mount -o remount, ro** / to restore the root file system as read only and issue $\mathbf{ctl} + \mathbf{alt} + \mathbf{del}$ to reboot.

Once the machine is back up, you can log in as root with no password. At this point, you can go back and edit the /etc/passwd file to put the x back in place. Save the file, issue the **passwd** command to generate a new password for root, then use $\mathbf{ctl} + \mathbf{alt} + \mathbf{F2}$ to open a new terminal session and make sure you can log in using the new password.

Once you are comfortable that you have successfully changed the password, you can log out of the second terminal.

Once the machine is rebooted, you are back to normal with the new root password.