Setting up doas

Enable `doas` for user

It is generally not recommended on any *NIX-based system to login as `root` on a regular basis. Apart from security reasons, not logging directly as `root` also prevents you from making dumb mistakes and causing issues (with a less privileged account, usually less stuff can break). On Linux, this is solved by leveraging the `sudo` program. It allows you to elevate privileges to `root`, set which accounts are allowed to do so, perform actions on behalf of different accounts, restrict accounts to execute only some commands as `root` etc. The amount of options makes `sudo` rather bloated according to some people. To offer a simpler alternative to `sudo`, `doas` was created. `Doas`'s main fuction is essentially the same as `sudo` - safely elevate privileges, run commands as another user etc. Due to it's simplicity and smaller codebase (easier to audit, less room for error), OpenBSD uses the simpler `doas` program.

We currently have two accounts - `root` and the user account you have created during the setup, let's say it's `bob`.

Login as `root` to create configuration file. `Doas` comes preinstalled, but doesn't create the configuration file by default, we have to do it manually.

```
(root)$ touch /etc/doas.conf
```

We are going to allow a special group called `wheel` (which our account `bob` should be part of by default) to execute commands as `root`. To check if your account is in the `wheel` group, use the `groups {user}` command or `groupinfo wheel`

```
$ groups bob
bob wheel
```

```
$ groupinfo wheel
name␣wheel
passwd␣*
gid␣␣0
members root bob
```

Open `/etc/doas.conf` in your favorite editor and add the following to the first line. For additional commands and information, run `man doas.conf`.

- `permit` - We want to permit the `wheel` group to do certain things, use `deny` to deny

- `nopass` - I have a long password and I'm fine with typing in only to log in, this option makes sure that when I call `doas`, it doesn't ask for a password. To type password every time you want to use `doas`, omit this option. Alternatively, replace with `persist` so it won't ask you for a password for 5 minutes after issuing the first elevated command.
- `:wheel` - Apply the previously mentioned options to the `wheel` group.

```
(root)$ nvim /etc/doas.conf
```

> The command above will only work if you have `neovim` installed. If not, use the default `vi`.

```
permit nopass :wheel - /etc/doas.conf
```

To test your configuration file, run `doas -C /etc/doas.conf {command}`, replace `{command}` with anything like `cat`, `vi` etc. This will tell you whether you are allowed to run that specific command as `root`. We should be now able to run all commands as `root`. You may need to log in/log out if it doesn't work at first.

After you are done with the steps above, make sure `/etc/doas.conf` is owned by `root` and group `wheel` and has sane permissions (only writable by `root`). I also like tightening permissions even further, you might **not want to** do the same.

```
doas chmod 400 /etc/doas.conf
```

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