## RedHat Certified System Administrator (RHEL 9)

SUMMARY

## Create a Rootless Container (Example with httpd)

- 1. Make sure container-tools is installed
  - `yum install container-tools`
- 2. Connect With ssh to the user that will run the container
  - `ssh user@127.0.0.1'`
- 3. Login to the Red Hat Container Registry
  - `podman login registry.redhat.io`
- 4. Pull the image httpd from the Red Hat Container Registry
  - `podman pull registry.redhat.io/rhel9/httpd-24`
- 5. Run a rootless container from the image httpd
  - `podman run -d --name httpd -p 8080:8080 -v

~/html:/var/www/html:z registry.redhat.io/rhel9/httpd-24

- + -d: Run the container in the background (detached)
- + --name: Name of the container
- + -p: Map the port 8080 on the host to the port 8080 in the container
- + -v: Map the directory ~/html on the host to the directory /var/www/html in the container
- 6. Check the status of the container
  - `podman ps`
- 7. Make and cd to the directory ~/.config/systemd/user
  - `mkdir -p ~/.config/systemd/user
  - `cd ~/.config/systemd/user`
- 8. Make the current user linger
  - `loginctl enable-linger <username/UID>`
    - + Linger: Allow the user to run services when the user is not logged in.
- 9. Create a service file httpd.service using podman generate

- `podman generate systemd --name httpd --files`
  - + Make sure there is a container named httpd
- 10. Enable & Start the rootless container as a service

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- `systemctl --user enable --now
container-[Conatiner-Name].service`
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- 11. Do Not remove the container, you may stop it (But not remove it)
  - `podman stop httpd`
- 12. Add the port to the firewall
  - `firewall-cmd --add-port=8080/tcp --permanent`
  - `firewall-cmd --reload`