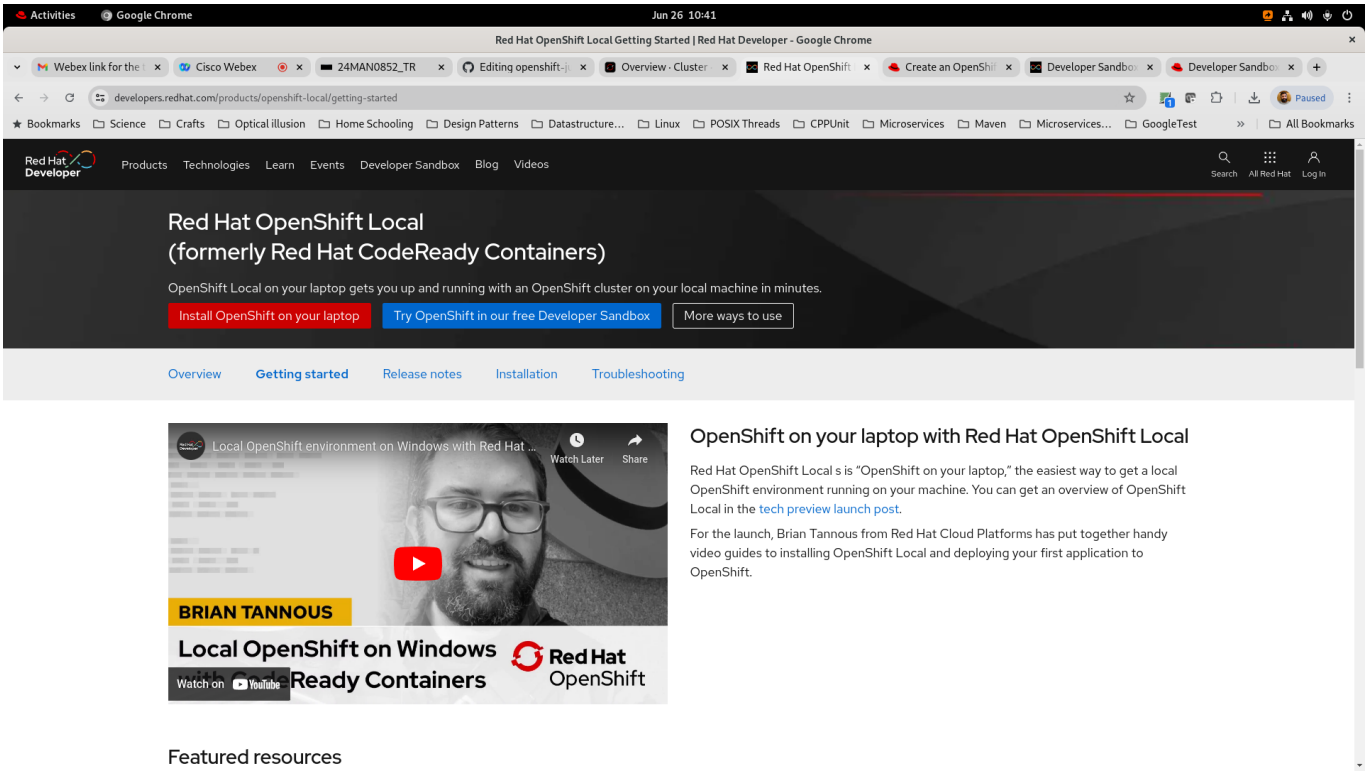
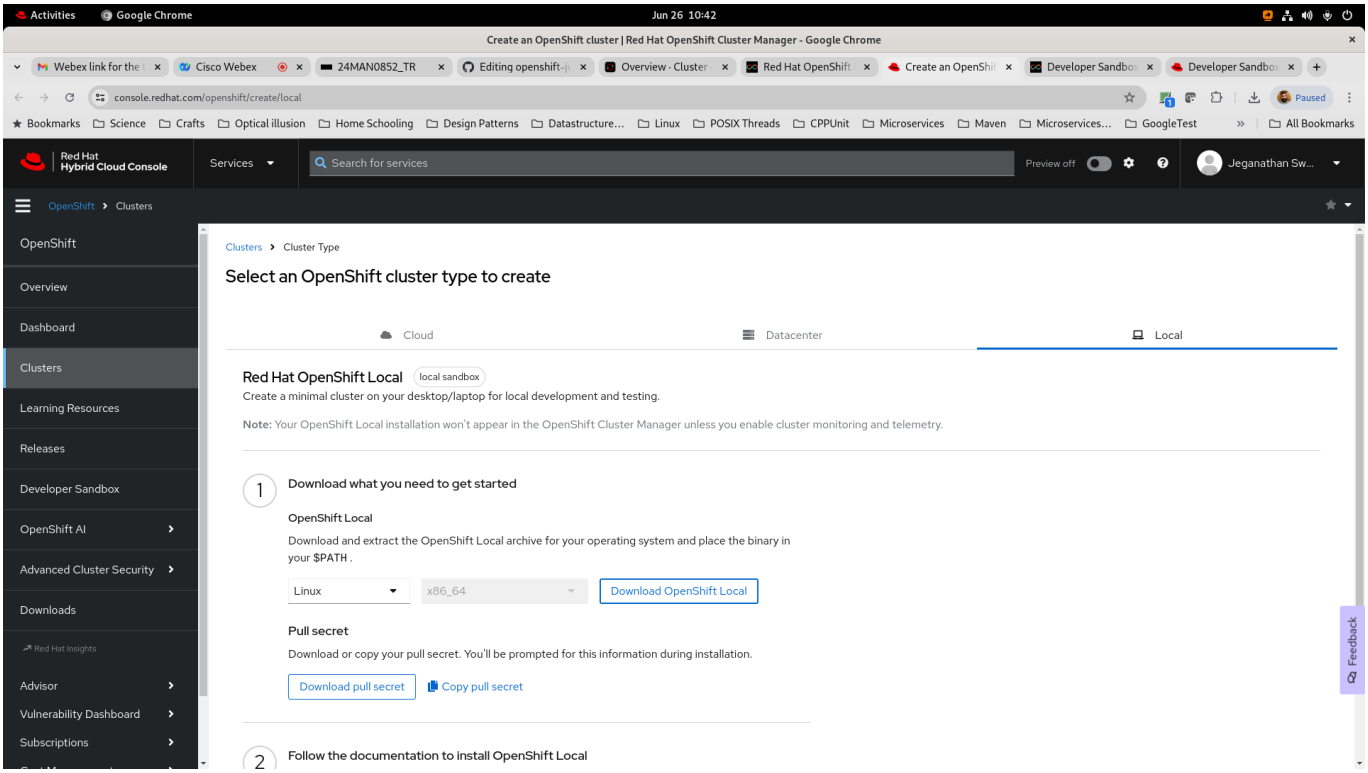
Red Hat Openshift 2024 (24 June to 28 June 2024)

Installing Red Hat Openshift on your laptop

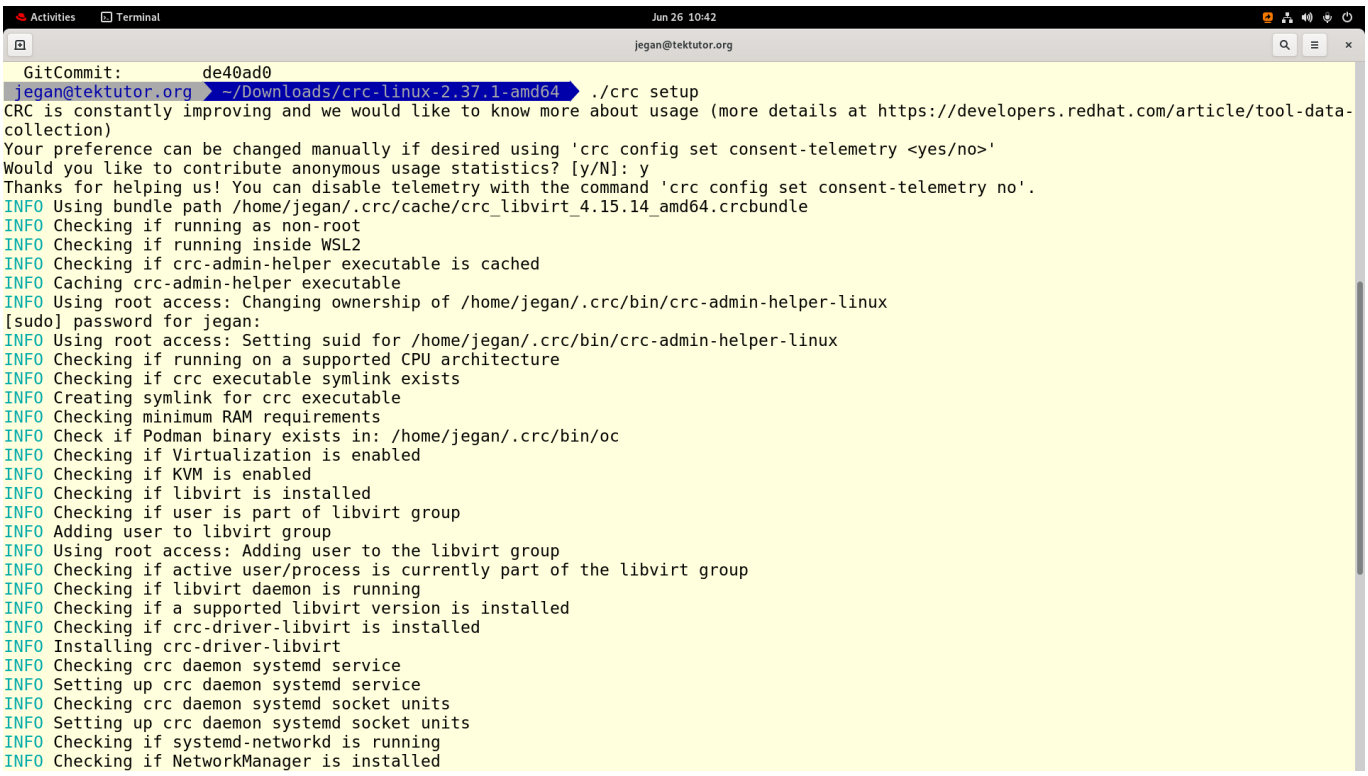
```
https://developers.redhat.com/products/openshift-local/getting-started
```

For a completely functional local openshift cluster, you may go for CRC(Code Ready Containers) setup in Windows, Mac or Linux





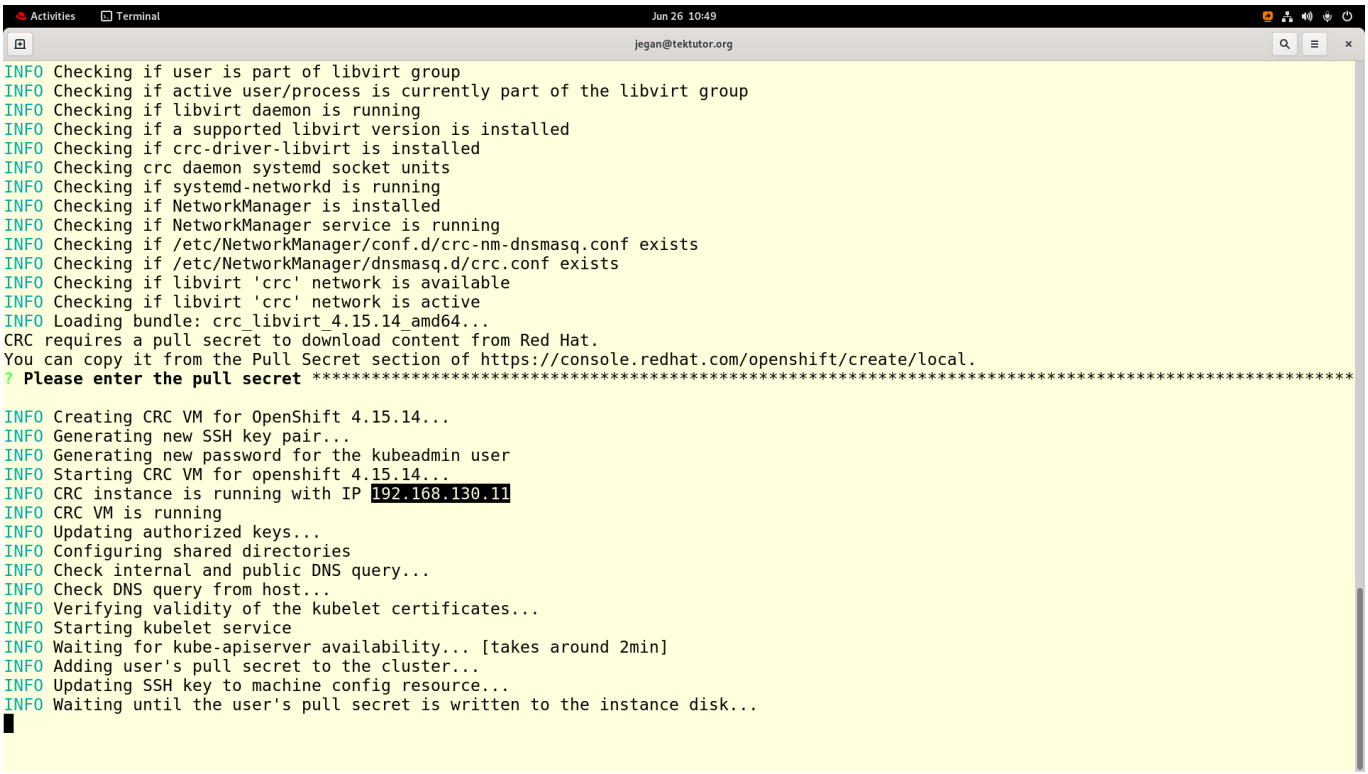
```
Activities  Terminal                    Jun 26 10:40
jegan@tektutor.org
jegan@tektutor.org ~/Downloads/crc-linux-2.37.1-amd64 ./crc setup
CRC is constantly improving and we would like to know more about usage (more details at https://developers.redhat.com/article/tool-data-collection)
Your preference can be changed manually if desired using 'crc config set consent-telemetry <yes/no>'
Would you like to contribute anonymous usage statistics? [y/N]: y
Thanks for helping us! You can disable telemetry with the command 'crc config set consent-telemetry no'.
INFO Using bundle path /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle
INFO Checking if running as non-root
INFO Checking if running inside WSL2
INFO Checking if crc-admin-helper executable is cached
INFO Caching crc-admin-helper executable
INFO Using root access: Changing ownership of /home/jegan/.crc/bin/crc-admin-helper-linux
[sudo] password for jegan:
INFO Using root access: Setting suid for /home/jegan/.crc/bin/crc-admin-helper-linux
INFO Checking if running on a supported CPU architecture
INFO Checking if crc executable symlink exists
INFO Creating symlink for crc executable
INFO Checking minimum RAM requirements
INFO Check if Podman binary exists in: /home/jegan/.crc/bin/oc
INFO Checking if Virtualization is enabled
INFO Checking if KVM is enabled
INFO Checking if libvirt is installed
INFO Checking if user is part of libvirt group
INFO Adding user to libvirt group
INFO Using root access: Adding user to the libvirt group
INFO Checking if active user/process is currently part of the libvirt group
INFO Checking if libvirt daemon is running
INFO Checking if a supported libvirt version is installed
INFO Checking if crc-driver-libvirt is installed
INFO Installing crc-driver-libvirt
INFO Checking crc daemon systemd service
INFO Setting up crc daemon systemd service
INFO Checking crc daemon systemd socket units
INFO Setting up crc daemon systemd socket units
INFO Checking if systemd-networkd is running
INFO Checking if NetworkManager is installed
INFO Checking if NetworkManager service is running
```

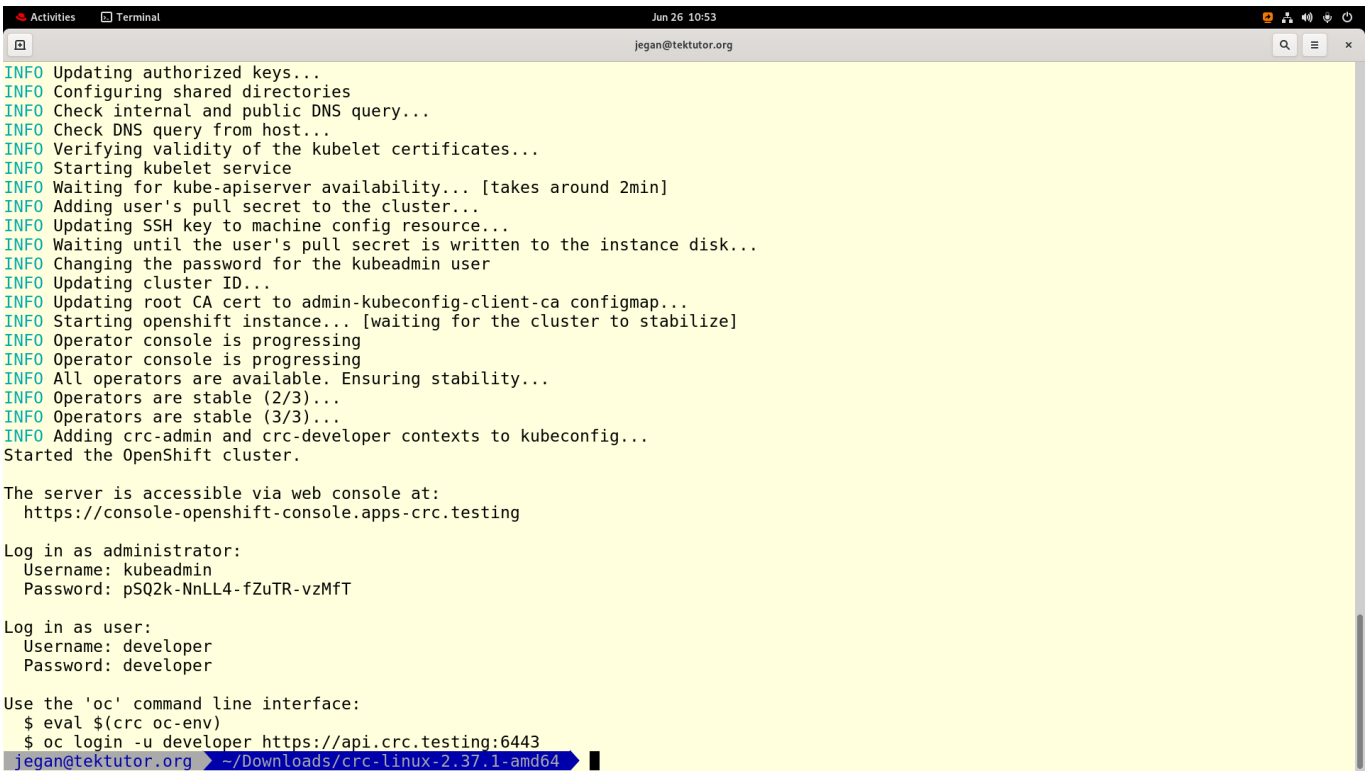


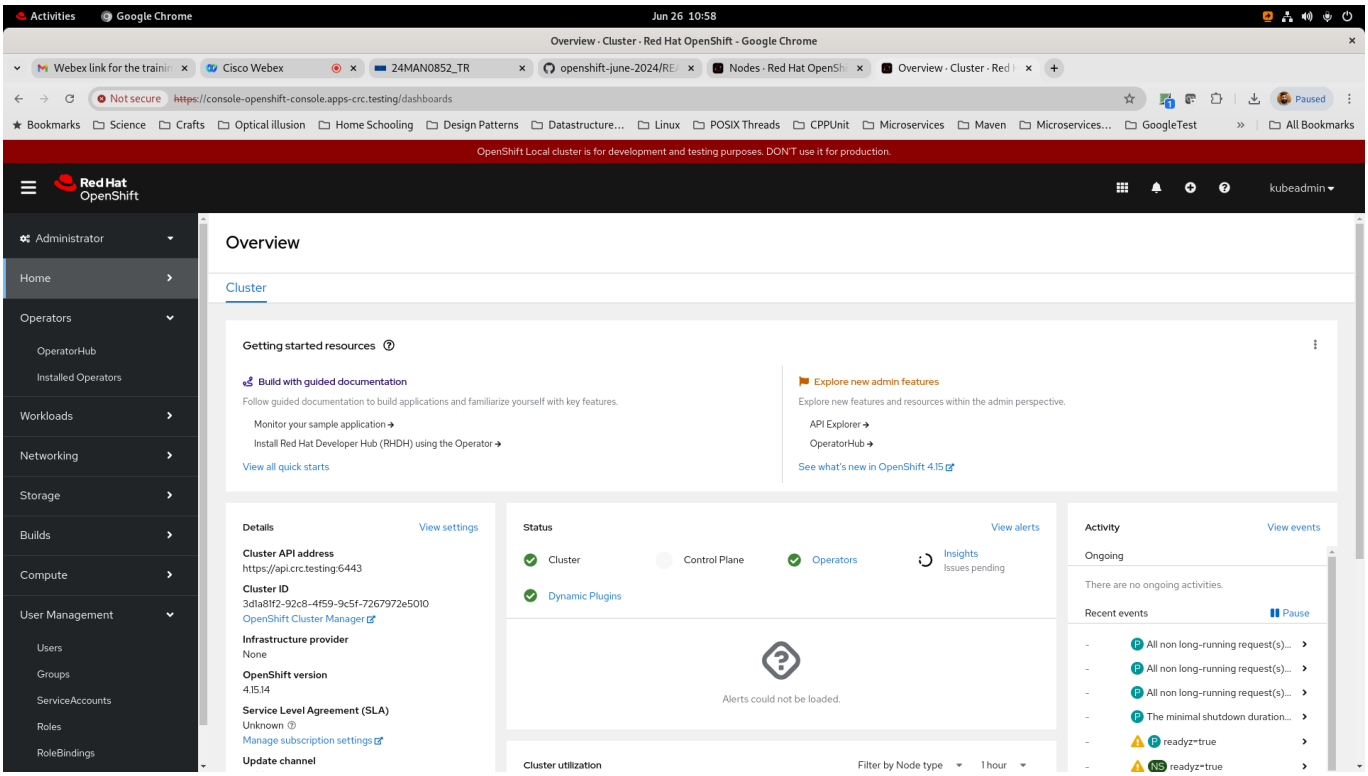
```
Activities  Terminal                    Jun 26 10:42
jegan@tektutor.org
  GitCommit:        de40ad0
jegan@tektutor.org ~/Downloads/crc-linux-2.37.1-amd64 ./crc setup
CRC is constantly improving and we would like to know more about usage (more details at https://developers.redhat.com/article/tool-data-collection)
Your preference can be changed manually if desired using 'crc config set consent-telemetry <yes/no>'
Would you like to contribute anonymous usage statistics? [y/N]: y
Thanks for helping us! You can disable telemetry with the command 'crc config set consent-telemetry no'.
INFO Using bundle path /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle
INFO Checking if running as non-root
INFO Checking if running inside WSL2
INFO Checking if crc-admin-helper executable is cached
INFO Caching crc-admin-helper executable
INFO Using root access: Changing ownership of /home/jegan/.crc/bin/crc-admin-helper-linux
[sudo] password for jegan:
INFO Using root access: Setting suid for /home/jegan/.crc/bin/crc-admin-helper-linux
INFO Checking if running on a supported CPU architecture
INFO Checking if crc executable symlink exists
INFO Creating symlink for crc executable
INFO Checking minimum RAM requirements
INFO Check if Podman binary exists in: /home/jegan/.crc/bin/oc
INFO Checking if Virtualization is enabled
INFO Checking if KVM is enabled
INFO Checking if libvirt is installed
INFO Checking if user is part of libvirt group
INFO Adding user to libvirt group
INFO Using root access: Adding user to the libvirt group
INFO Checking if active user/process is currently part of the libvirt group
INFO Checking if libvirt daemon is running
INFO Checking if a supported libvirt version is installed
INFO Checking if crc-driver-libvirt is installed
INFO Installing crc-driver-libvirt
INFO Checking crc daemon systemd service
INFO Setting up crc daemon systemd service
INFO Checking crc daemon systemd socket units
INFO Setting up crc daemon systemd socket units
INFO Checking if systemd-networkd is running
INFO Checking if NetworkManager is installed
```

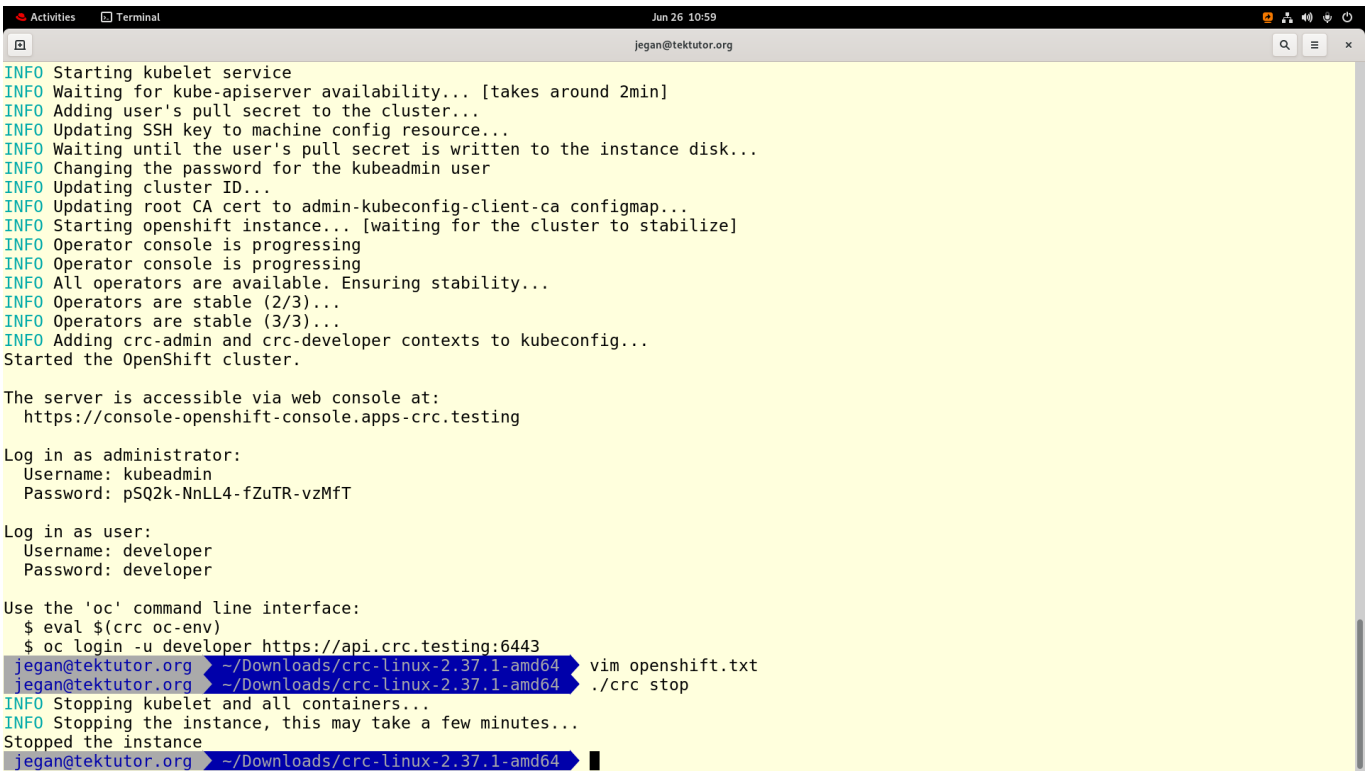
Activities
Terminal
Jun 26 10:42
jegan@tektutor.org
INFO Adding user to libvirt group
INFO Using root access: Adding user to the libvirt group
INFO Checking if active user/process is currently part of the libvirt group
INFO Checking if libvirt daemon is running
INFO Checking if a supported libvirt version is installed
INFO Checking if crc-driver-libvirt is installed
INFO Installing crc-driver-libvirt
INFO Checking crc daemon systemd service
INFO Setting up crc daemon systemd service
INFO Checking crc daemon systemd socket units
INFO Setting up crc daemon systemd socket units
INFO Checking if systemd-networkd is running
INFO Checking if NetworkManager is installed
INFO Checking if NetworkManager service is running
INFO Checking if /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf exists
INFO Writing Network Manager config for crc
INFO Using root access: Writing NetworkManager configuration to /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf
INFO Using root access: Changing permissions for /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf to 644
INFO Using root access: Executing systemctl daemon-reload command
INFO Using root access: Executing systemctl reload NetworkManager
INFO Checking if /etc/NetworkManager/dnsmasq.d/crc.conf exists
INFO Writing dnsmasq config for crc
INFO Using root access: Writing NetworkManager configuration to /etc/NetworkManager/dnsmasq.d/crc.conf
INFO Using root access: Changing permissions for /etc/NetworkManager/dnsmasq.d/crc.conf to 644
INFO Using root access: Executing systemctl daemon-reload command
INFO Using root access: Executing systemctl reload NetworkManager
INFO Checking if libvirt 'crc' network is available
INFO Setting up libvirt 'crc' network
INFO Checking if libvirt 'crc' network is active
INFO Starting libvirt 'crc' network
INFO Checking if CRC bundle is extracted in '$HOME/.crc'
INFO Checking if /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle exists
INFO Getting bundle for the CRC executable
INFO Downloading bundle: /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle...
4.69 GiB / 4.69 GiB [] 100.00% 21.60 MiB/s
INFO Uncompressing /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle
crc.qcow2: 10.05 GiB / 20.11 GiB [] 49.96%

Activities
Terminal
Jun 26 10:48
jegan@tektutor.org
INFO Checking if libvirt daemon is running
INFO Checking if a supported libvirt version is installed
INFO Checking if crc-driver-libvirt is installed
INFO Installing crc-driver-libvirt
INFO Checking crc daemon systemd service
INFO Setting up crc daemon systemd service
INFO Checking crc daemon systemd socket units
INFO Setting up crc daemon systemd socket units
INFO Checking if systemd-networkd is running
INFO Checking if NetworkManager is installed
INFO Checking if NetworkManager service is running
INFO Checking if /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf exists
INFO Writing Network Manager config for crc
INFO Using root access: Writing NetworkManager configuration to /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf
INFO Using root access: Changing permissions for /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf to 644
INFO Using root access: Executing systemctl daemon-reload command
INFO Using root access: Executing systemctl reload NetworkManager
INFO Checking if /etc/NetworkManager/dnsmasq.d/crc.conf exists
INFO Writing dnsmasq config for crc
INFO Using root access: Writing NetworkManager configuration to /etc/NetworkManager/dnsmasq.d/crc.conf
INFO Using root access: Changing permissions for /etc/NetworkManager/dnsmasq.d/crc.conf to 644
INFO Using root access: Executing systemctl daemon-reload command
INFO Using root access: Executing systemctl reload NetworkManager
INFO Checking if libvirt 'crc' network is available
INFO Setting up libvirt 'crc' network
INFO Checking if libvirt 'crc' network is active
INFO Starting libvirt 'crc' network
INFO Checking if CRC bundle is extracted in '$HOME/.crc'
INFO Checking if /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle exists
INFO Getting bundle for the CRC executable
INFO Downloading bundle: /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle...
4.69 GiB / 4.69 GiB [] 100.00% 21.60 MiB/s
INFO Uncompressing /home/jegan/.crc/cache/crc_libvirt_4.15.14_amd64.crcbundle
crc.qcow2: 20.11 GiB / 20.11 GiB [] 100.00%
oc: 149.79 MiB / 149.79 MiB [] 100.00%
Your system is correctly setup for using CRC. Use 'crc start' to start the instance
jegan@tektutor.org ~/Downloads/crc-linux-2.37.1-amd64


Activities
Terminal
Jun 26 10:49
jegan@tektutor.org
INFO Checking if user is part of libvirt group
INFO Checking if active user/process is currently part of the libvirt group
INFO Checking if libvirt daemon is running
INFO Checking if a supported libvirt version is installed
INFO Checking if crc-driver-libvirt is installed
INFO Checking crc daemon systemd socket units
INFO Checking if systemd-networkd is running
INFO Checking if NetworkManager is installed
INFO Checking if NetworkManager service is running
INFO Checking if /etc/NetworkManager/conf.d/crc-nm-dnsmasq.conf exists
INFO Checking if /etc/NetworkManager/dnsmasq.d/crc.conf exists
INFO Checking if libvirt 'crc' network is available
INFO Checking if libvirt 'crc' network is active
INFO Loading bundle: crc_libvirt_4.15.14_amd64...
CRC requires a pull secret to download content from Red Hat.
You can copy it from the Pull Secret section of https://console.redhat.com/openshift/create/local.
? Please enter the pull secret
INFO Creating CRC VM for OpenShift 4.15.14...
INFO Generating new SSH key pair...
INFO Generating new password for the kubeadmin user
INFO Starting CRC VM for openshift 4.15.14...
INFO CRC instance is running with IP 192.168.130.11
INFO CRC VM is running
INFO Updating authorized keys...
INFO Configuring shared directories
INFO Check internal and public DNS query...
INFO Check DNS query from host...
INFO Verifying validity of the kubelet certificates...
INFO Starting kubelet service
INFO Waiting for kube-apiserver availability... [takes around 2min]
INFO Adding user's pull secret to the cluster...
INFO Updating SSH key to machine config resource...
INFO Waiting until the user's pull secret is written to the instance disk...


Activities
Terminal
Jun 26 10:53
jegan@tektutor.org
INFO Updating authorized keys...
INFO Configuring shared directories
INFO Check internal and public DNS query...
INFO Check DNS query from host...
INFO Verifying validity of the kubelet certificates...
INFO Starting kubelet service
INFO Waiting for kube-apiserver availability... [takes around 2min]
INFO Adding user's pull secret to the cluster...
INFO Updating SSH key to machine config resource...
INFO Waiting until the user's pull secret is written to the instance disk...
INFO Changing the password for the kubeadmin user
INFO Updating cluster ID...
INFO Updating root CA cert to admin-kubeconfig-client-ca configmap...
INFO Starting openshift instance... [waiting for the cluster to stabilize]
INFO Operator console is progressing
INFO Operator console is progressing
INFO All operators are available. Ensuring stability...
INFO Operators are stable (2/3)...
INFO Operators are stable (3/3)...
INFO Adding crc-admin and crc-developer contexts to kubeconfig...
Started the OpenShift cluster.
The server is accessible via web console at:
https://console-openshift-console.apps-crc.testing
Log in as administrator:
Username: kubeadmin
Password: pSQ2k-NnLL4-fZuTR-vzMfT
Log in as user:
Username: developer
Password: developer
Use the 'oc' command line interface:
$ eval $(crc oc-env)
$ oc login -u developer https://api.crc.testing:6443
jegan@tektutor.org ~/Downloads/crc-linux-2.37.1-amd64





Kindly provide your first day feedback

```
https://survey.zohopublic.com/zs/InDHab
```

Cloning this Training Repository

```
cd ~
git clone https://github.com/tektutor/openshift-june-2024.git
```

```
cd openshift-june-2024
```

Tea & Lunch break Schedules

```
Morning Tea break - 11:15 to 11:30 am
Lunch break - 1:15 to 2:00 pm
Second Half - Tea break: 4:15 to 4:30 pm
```

Kindly proceed with the pre-test

```
- You can reset your RPS cloud password to rps@123
- Once you login to your RPS Lab machine, you will find the pre-test url in
the desktop
- While registering for the pre-test, you may use your personal email not
the BOFA id
- You don't have to share your Date of Birth, you don't have to turn on the
camera
- Once you have completed the pre-test, kindly notify either via chat or
you can tell me
- Once everyone completes the test, we will start the training
```