

**Openstack 16.1 offline registry** ..... 3  
    *Shell Script* ..... 9  
    ..... 11



# Openstack 16.1 offline registry

```
Podman  httpd-tools          . podman          httpd-tools
        httpasswd           .
```

```
[root@registry ~]# dnf install -y podman httpd-tools
```

```
        .          /opt/registry/          .
```

```
[root@registry ~]# mkdir -p /opt/registry/{auth,certs,data}
```

```

• Auth          httpasswd          .
• Certs          .
• Data          .

        .          httpasswd          SSL
        . httpasswd
        .
```

```
[root@registry ~]# htpasswd -bBc /opt/registry/auth/htpasswd <username>
<password>
```

```

        (          )
        TLS          .
```

```
[root@registry ~]# openssl req -newkey rsa:4096 -nodes -sha256 -keyout
/opt/registry/certs/domain.key -x509 -days 365 -out
/opt/registry/certs/domain.crt
```

```
[root@registry ~]# cp /opt/registry/certs/domain.crt /etc/pki/ca-
trust/source/anchors/
[root@registry ~]# update-ca-trust
[root@registry ~]# trust list | grep -i "registry"
        label: registry
```

```
        (5000)
```

```
[root@registry ~]# podman run --name myregistry \
-p 5000:5000 \
```

```
-v /opt/registry/data:/var/lib/registry:z \  
-v /opt/registry/auth:/auth:z \  
-v /opt/registry/certs:/certs:z \  
-e "REGISTRY_AUTH=htpasswd" \  
-e "REGISTRY_AUTH_HTPASSWD_REALM=Registry Realm" \  
-e REGISTRY_AUTH_HTPASSWD_PATH=/auth/htpasswd \  
-e "REGISTRY_HTTP_TLS_CERTIFICATE=/certs/domain.crt" \  
-e "REGISTRY_HTTP_TLS_KEY=/certs/domain.key" \  
-e REGISTRY_COMPATIBILITY_SCHEMA1_ENABLED=true \  
-d docker.io/library/registry:latest
```

(5000)

```
[root@registry ~]# firewall-cmd --add-port=5000/tcp --zone=internal --permanent  
[root@registry ~]# firewall-cmd --add-port=5000/tcp --zone=public --permanent  
[root@registry ~]# firewall-cmd --reload
```

```
[root@registry ~]# curl https://registry:5000/v2/_catalog  
{ "repositories": [] }
```

```
[root@registry ~]# openssl s_client -connect registry:5000 -servername registry
```

```
[root@registry ~]# podman generate systemd myregistry > /etc/systemd/system/podman.registry.service
```

```
# container-  
fb88c601f4b822ea5035f4a6f5fbff492b136cf991114e473085f60ec9b722fb.service  
# autogenerated by Podman 1.9.3  
# Thu Jan 28 19:38:46 -03 2021  
  
[Unit]  
Description=Podman container-
```

```
fb88c601f4b822ea5035f4a6f5fbff492b136cf991114e473085f60ec9b722fb.service
Documentation=man:podman-generate-systemd(1)
Wants=network.target
After=network-online.target

[Service]
Environment=PODMAN_SYSTEMD_UNIT=%n
Restart=on-failure
ExecStart=/usr/bin/podman start
fb88c601f4b822ea5035f4a6f5fbff492b136cf991114e473085f60ec9b722fb
ExecStop=/usr/bin/podman stop -t 10
fb88c601f4b822ea5035f4a6f5fbff492b136cf991114e473085f60ec9b722fb
PIDFile=/var/run/containers/storage/overlay-
containers/fb88c601f4b822ea5035f4a6f5fbff492b136cf991114e473085f60ec9b722fb/
userdata/common.pid
KillMode=none
Type=forking

[Install]
WantedBy=multi-user.target default.target
```

가

```
[root@registry ~]# systemctl daemon-reload
[root@registry ~]# systemctl enable podman.registry.service
```

podman  
registry.access.redhat.com, registry.redhat.io, docker.io

가

```
[root@registry ~]# podman login registry:5000
Enter Username:xxxxxxx
Enter Password:yyyyyyyy
Login Succeeded!
```

가

```
[root@registry ~]# podman login registry.redhat.io
Enter Username:xxxxxxx
Enter Password:yyyyyyyy
Login Succeeded!
```

/

Example: podman pull <Registry Hostname>:<Registry Port>/<Repository>/<Image Name>

```
[root@registry ~]# podman pull registry.redhat.io/rhosp-rhel8/openstack-ceilometer-base:16.1
Trying to pull registry.redhat.io/rhosp-rhel8/openstack-ceilometer-base:16.1...
Getting image source signatures
Copying blob 59ba4923ade0 done
Copying blob f7db571f3a05 done
Copying blob 97b855f4d380 done
Copying blob fecf0868d374 done
Copying blob 4ad79ef7dca0 done
Copying config 0bce4d1d0e done
Writing manifest to image destination
Storing signatures
0bce4d1d0e3024e0427e70d65bb14a1db0418699b8466cb1a8953e77ef5e6d1d
```

16.1

```
[root@registry ~]# for i in `podman search --limit 1000
"registry.redhat.io/rhosp" | grep rhosp-rhel8 | awk '{ print $2 }' | grep -v
beta | sed "s/registry.redhat.io\\///g" | tail -n+2`; do podman pull
registry.redhat.io/$i:16.1 ; done
```

podman

```
Example: podman tag <image id|<repo name/image name>
registry:5000/<repo>/<image>
podman push <image id|<repo name/image name>
registry:5000/<repo>/<image>
[root@registry ~]# podman tag registry.redhat.io/rhosp-rhel8/openstack-ceilometer-base:16.1 registry:5000/rhosp-rhel8/openstack-ceilometer-base:16.1
[root@registry ~]# podman push registry:5000/rhosp-rhel8/openstack-ceilometer-base:16.1
Getting image source signatures
Copying blob 226bfaae015f done
...
Storing signatures
```

```
[root@registry ~]# for i in `podman search --limit 1000
```

```
"registry.redhat.io/rhosp" | grep rhosp-rhel8 | awk '{ print $2 }' | grep -v
beta | sed "s/registry.redhat.io\///g" | tail -n+2`; do podman tag
registry.redhat.io/$i:16.1 registry:5000/$i:16.1 ; done
[root@registry ~]# for i in `podman search --limit 1000
"registry.redhat.io/rhosp" | grep rhosp-rhel8 | awk '{ print $2 }' | grep -v
beta | sed "s/registry.redhat.io\///g" | tail -n+2`; do podman push
registry:5000/$i:16.1 ; done
Getting image source signatures
Copying blob 96c54a12373b done
Copying blob a196c162c139 done
Copying blob c483fe8f3e2d done
Copying blob 909bef9af69e done
Copying blob a79745bee9c6 done
Copying blob ca4f647c4fbb done
Copying config 7a7dbd538a done
Writing manifest to image destination
Storing signatures
(...)
```

curl

가

.

```
[root@registry ~]# curl -u <username>:<password>
https://registry:5000/v2/_catalog
{"repositories":["rhosp-rhel8/openstack-ceilometer-base"]}
```

/

가

.

```
[stack@director ~]$ sudo su -
[root@director ~]# vim /etc/pki/ca-trust/source/anchors/domain-registry.crt
[root@director ~]# update-ca-trust
[root@director ~]# trust list | grep -i "registry"
    label: registry
[root@director ~]# logout
```

```
[stack@director ~]$ podman login registry:5000
Username: user
Password:
Login Succeeded!
[stack@director ~]$ podman search --limit 1000 "registry:5000/rhosp" | grep
rhosp-rhel8 | awk '{ print $2 }' | grep -v beta | sed "s/registry:5000\///g"
| tail -n+2
rhosp-rhel8/openstack-aodh-base
(...)
```



```
[root@registry ~]# podman stop myregistry
```

```
[root@registry ~]# podman container rm myregistry
```

```
[root@registry ~]# podman image rm registry:latest
```

```
[root@registry ~]# rm /etc/pki/ca-trust/source/anchors/domain.crt  
[root@registry ~]# update-ca-trust  
[root@registry ~]# trust list | grep "registry"
```

## Shell Script

```
#!/bin/bash  
USERNAME="USERNAME"  
PASSWORD="PASSWORD"  
REGISTRY="registry.redhat.io"  
REGISTRY_STORAGE="registry.connect.redhat.com"  
NAMESPACE="rhosp-rhel8"  
TAG="16.2"  
LOCAL="registry:5000"  
NAMEPREFIX="openstack-"  
MODE=$1  
  
if [[ -z "${MODE}" ]]; then  
    echo "Usage: $0 <all|openstack|ceph|storage>";  
    exit;  
fi
```

```
fi

# login
podman login --username ${USERNAME} --password ${PASSWORD} ${REGISTRY}

# openstack image
if [[ "${MODE}" == "openstack" || "${MODE}" == "all" ]]; then
    echo -e "\e[1;32m### Openstack container image\e[0m";
    LIST=`podman search --limit 1000 "${REGISTRY}/${NAMESPACE}" | awk '{
print $2 }' | grep ${NAMEPREFIX} | grep -v beta | grep -v preview | sed
"s/${REGISTRY}\///g" | grep -v NAME`

    ###          pull
    for i in ${LIST[@]}; do echo -e "\e[1;32m${i}\e[0m"; podman pull
${REGISTRY}/${i}:${TAG} ; done
    ###          tag
    for i in ${LIST[@]}; do echo -e "\e[1;32m${i}\e[0m"; podman tag
${REGISTRY}/${i}:${TAG} ${LOCAL}/${i}:${TAG} ; done
    ###          push
    for i in ${LIST[@]}; do echo -e "\e[1;32m${i}\e[0m"; podman push
${LOCAL}/${i}:${TAG} --remove-signatures; done
fi

### ceph image
if [[ "${MODE}" == "ceph" || "${MODE}" == "all" ]]; then
    echo -e "\e[1;32m### Ceph Storage container image\e[0m";
    podman pull ${REGISTRY}/openshift4/ose-prometheus-alertmanager:v4.6
    podman pull ${REGISTRY}/rhceph/rhceph-4-dashboard-rhel8:4
    podman pull ${REGISTRY}/rhceph/rhceph-4-rhel8
    podman pull ${REGISTRY}/openshift4/ose-prometheus-node-exporter:v4.6
    podman pull ${REGISTRY}/openshift4/ose-prometheus:v4.6

    podman tag ${REGISTRY}/openshift4/ose-prometheus-alertmanager:v4.6
${LOCAL}/openshift4/ose-prometheus-alertmanager:v4.6
    podman tag ${REGISTRY}/rhceph/rhceph-4-dashboard-rhel8:4
${LOCAL}/rhceph/rhceph-4-dashboard-rhel8:4
    podman tag ${REGISTRY}/rhceph/rhceph-4-rhel8 ${LOCAL}/rhceph/rhceph-4-
rhel8
    podman tag ${REGISTRY}/openshift4/ose-prometheus-node-exporter:v4.6
${LOCAL}/openshift4/ose-prometheus-node-exporter:v4.6
    podman tag ${REGISTRY}/openshift4/ose-prometheus:v4.6
${LOCAL}/openshift4/ose-prometheus:v4.6

    podman push ${LOCAL}/openshift4/ose-prometheus-alertmanager:v4.6 --
remove-signatures
    podman push ${LOCAL}/rhceph/rhceph-4-dashboard-rhel8:4 --remove-
signatures
    podman push ${LOCAL}/rhceph/rhceph-4-rhel8 --remove-signatures
    podman push ${LOCAL}/openshift4/ose-prometheus-node-exporter:v4.6 --
remove-signatures
```

```
    podman push ${LOCAL}/openshift4/ose-prometheus:v4.6 --remove-signatures
fi

### purestorage image
if [[ "${MODE}" == "storage" || "${MODE}" == "all" ]]; then
    echo -e "\e[1;32m### Openstack Storage container image\e[0m";
    # login
    podman login --username ${USERNAME} --password ${PASSWORD}
    ${REGISTRY_STORAGE}

    #podman pull registry.connect.redhat.com/purestorage/openstack-cinder-
    volume-pure-rhosp-16-2:latest
    #podman tag registry.connect.redhat.com/purestorage/openstack-cinder-
    volume-pure-rhosp-16-2:latest ${LOCAL}/purestorage/openstack-cinder-volume-
    pure-rhosp-16-2:latest
    podman pull ${REGISTRY_STORAGE}/purestorage/openstack-cinder-volume-
    pure-rhosp-16-2:latest
    podman tag ${REGISTRY_STORAGE}/purestorage/openstack-cinder-volume-pure-
    rhosp-16-2:latest ${LOCAL}/purestorage/openstack-cinder-volume-pure-
    rhosp-16-2:latest
    podman push ${LOCAL}/purestorage/openstack-cinder-volume-pure-
    rhosp-16-2:latest --remove-signatures
fi
```

- <https://access.redhat.com/solutions/5752401>

From:  
<https://atl.kr/dokuwiki/> - **AllThatLinux!**

Permanent link:  
[https://atl.kr/dokuwiki/doku.php/openstack\\_16.1\\_offline\\_registry\\_%EA%B5%AC%EC%84%B1](https://atl.kr/dokuwiki/doku.php/openstack_16.1_offline_registry_%EA%B5%AC%EC%84%B1)

Last update: **2023/05/08 06:06**

