

SPT - Using SPT Container Images

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1. Create an IBMid if you don't already have one

1.1. See instructions here: <https://www.ibm.com/support/pages/create-active-my-ibm-account>

1.1.1. If you are an IBM employee, your IBMid must match your w3id and, optionally, you can log into ibmcloud to create the account. You will use SSO (Single Sign On)

1.1.2. Note that if you have an IBM Customer number, please associate it with your account. If you do not have one, things will work without it

1.2. Send your IBMid to sptsuppo@in.ibm.com email and ask to be given pull access to the SPT container registry. Do not proceed beyond step 3 until you have acknowledgement that access has been granted.

1.2.1. You will receive an email from IBM Cloud asking you to join an account. The email will be from either GPE SME Advisor or an SPT team member. Select the 'Join now' link and follow prompts to join.

2. Install one of the following Container Management software in your OS environment

2.1. Installing Docker Desktop

2.1.1. Note that if you had this installed already, there's no need to re-install. If you want to install Docker without using Docker Desktop on a Mac, please refer to 2.2.

2.1.2. Link to help with this: <https://docs.docker.com/engine/install/>

2.1.3. Note that if you are installing on an Apple Mac M1 processor machine (Apple Silicon, arm64 architecture), please be sure to install the appropriate version of the Docker software to match that.

2.2. Installing Docker CLI on Mac (Without Docker Desktop):

2.2.1. Install Homebrew package manager on your Mac, if you haven't already done so. You can install Homebrew by running the following command in a terminal window:

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

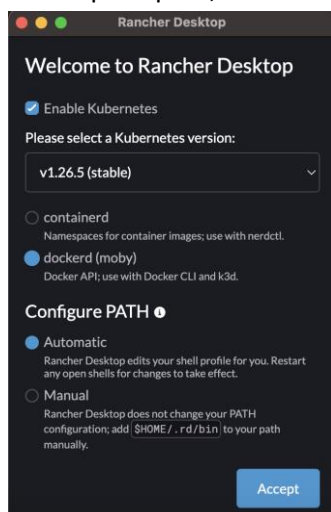
2.2.2. Install Docker using the following command in a terminal window:

```
brew install docker
```

2.2.3. Download Rancher Desktop from <https://rancherdesktop.io/> (select the version according to your processor).

2.2.4. Install Rancher Desktop. After the installation is done, open it.

2.2.5. When prompted, select "dockerd (moby)" as the image below and click accept:



2.2.6. After the downloads and configurations are done, run the following command in a terminal window to check if Docker is working:

docker ps

The result should have at least the header line (CONTAINER ID, IMAGE, etc.) from the following image:

```
Caches % docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS        NAMES
a3e5589daed8   f7fa39db0cea                       "/entrypoint.sh --gl..." 2 minutes ago Up 2 minutes          k8s_traefik-57c84cf78d-mm
7aa4b4171eaf   rancher/mirrored-pause:3.6         "/pause"                 2 minutes ago Up 2 minutes          k8s_POD_t
raefik-57c84cf78d-mm
70a4670855c2   1c3d6ab0f26a                       "entry"                   2 minutes ago Up 2 minutes          k8s_lb-tc
p-443_svc1b-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0
1e1cbf60c32b   1c3d6ab0f26a                       "entry"                   2 minutes ago Up 2 minutes          k8s_lb-tc
p-80_svc1b-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0
b5ce911144d3   rancher/mirrored-pause:3.6         "/pause"                 2 minutes ago Up 2 minutes          k8s_POD_s
vclb-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0
4bd841e7869a   10ada9a7f8ab                       "local-path-provisio..." 2 minutes ago Up 2 minutes          k8s_local
-path-provisioner_local-path-provisioner-76d776f6f9-hrk9c_kube-system_acb5aeaa-54d3-4751-a715-21a1b4b6a5c2_0
072d01c5081c   rancher/mirrored-pause:3.6         "/pause"                 2 minutes ago Up 2 minutes          k8s_POD_1
ocal-path-provisioner-76d776f6f9-hrk9c_kube-system_acb5aeaa-54d3-4751-a715-21a1b4b6a5c2_1
d2f5ab704e5e   ea7b05ebc8e8                       "/metrics-server --c..." 2 minutes ago Up 2 minutes          k8s_metri
cs-server_metrics-server-7b67f64457-zn6h6_kube-system_6ffda6d2-41d4-466c-adb1-60840424eeb9_0
652b3b73a2dc   97e04611ad43                       "/coredns -conf /etc..." 2 minutes ago Up 2 minutes          k8s_cored
ns_coredns-59b4f5bbd5-rwppj_kube-system_8ff06c4d-d39b-4558-9e64-f97b30fc37f0_0
f5691a0d904e   rancher/mirrored-pause:3.6         "/pause"                 2 minutes ago Up 2 minutes          k8s_POD_c
oredns-59b4f5bbd5-rwppj_kube-system_8ff06c4d-d39b-4558-9e64-f97b30fc37f0_0
5316dd3b72ab   rancher/mirrored-pause:3.6         "/pause"                 2 minutes ago Up 2 minutes          k8s_POD_m
```

2.3. Installing podman

2.3.1. Please follow instructions as seen on <https://podman.io/docs/installation>

2.3.2. Note: For MacOS, ensure Homebrew package manager is installed as per 2.2.1, above

3. Install ibmcloud CLI and plugins as appropriate in your OS environment

3.1. See "Installing the IBM Cloud CLI and plug-ins" instructions (specifically "To install the CLIs:") here: <https://cloud.ibm.com/docs/cli?topic=cli-getting-started>

3.1.1. Note that only the 'container-registry' plugin is required (**ibmcloud plugin install container-registry**) – see https://cloud.ibm.com/docs/Registry?topic=Registry-registry_setup_cli_namespace

4. Login to ibmcloud using your IBMid

4.1. Ensure you have been granted access from the team before proceeding

4.2. In the following commands, when asked which account to use, use your IBMid account, not the GPE SME Advisor account

4.3. Update the ibmcloud CLI and plugins. From the command line, use both commands:

```
ibmcloud update
```

and

```
ibmcloud plugin update
```

4.4. From the command line, use command:

```
ibmcloud login
```

or

```
ibmcloud login -sso if you are an IBM employee
```

4.4.1. Again, please select your own IBMid account

4.4.2. Hit 'enter' when asked to select a region (*no region should be selected*)

4.5. Target the container registry 'global' region by running the command:

```
ibmcloud cr region-set global
```

5. Log your local Docker daemon (or podman) into ibmcloud

5.1. For Docker installation, enter in the command line:

```
ibmcloud cr login
```

5.2. For podman installation, enter in the command line:

```
ibmcloud cr login --client podman
```

6. Pull the SPT image from the SPT registry

6.1. For Docker install, enter in the command line:

```
docker pull icr.io/spt_namespace/spt_repository:spt-1.0
```

6.2. For podman install, enter in the command line:

```
podman pull icr.io/spt_namespace/spt_repository:spt-1.0
```

7. Run the Image

7.1. For Docker install, enter in the command line:

```
docker run -p 127.0.0.1:6001:6001/tcp icr.io/spt_namespace/spt_repository:spt-1.0
```

7.2. For podman install, enter in the command line:

```
podman run -p 127.0.0.1:6001:6001/tcp icr.io/spt_namespace/spt_repository:spt-1.0
```

7.3. Adjust the above as appropriate for your environment. The above ensures that only localhost will be able to access the exposed 6001 port. **Note:** You can map the container port to a different host port if you need to due to a conflict with another application (-p <host port>:<container port>):

```
docker run -p 127.0.0.1:6002:6001/tcp icr.io/spt_namespace/spt_repository:spt-1.0
```

7.4. If using the Docker GUI instead of the command line, remember to set the host port in the text box provided

8. Access SPT

8.1. Open a browser, enter in the address bar:

```
http://localhost:6001/spt
```