SPT - Using SPT Container Images

2023/10/17 v1.5

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 not 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:

```
Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s_trae
                                                                                                                                                                             2 minutes ago
  aa4b4171eaf rancher/mirrored-pause:3.6 "/pause" 2 min
aefik-57c84cf78d-mmf52_kube-system_967bbf68-3312-4995-be82-04c876c500c2_0
                                                                                                                                                                                                                                                                                    k8s POD
 7aa4b4171eaf
                                                                                                                                                                             2 minutes ago
                                                                                                                                                                                                                    Up 2 minutes
 70a4670855c2
                                                                                                                                                                              2 minutes ago
                                                                                                                                                                                                                                                                                    k8s lb-to
                                    1c3d6ab0f26a
                                                                                                                                                                                                                    Up 2 minutes
    443_svclb-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0
                                                                                                                                                                             2 minutes ago
                                                                                                                                                                                                                     Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s lb-to
                                1c3d6ab0f26a
 Pentry 2 minutes ago p-80_svclb-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0 b5ce911144d3 rancher/mirrored-pause:3.6 "/pause" 2 minutes ago vclb-traefik-0c01bd78-tvvhk_kube-system_3815daa1-5ecb-4b40-a2d9-d58ded8f9299_0 4bd841e7869a 10ada9a7f8ab "local-path-provisio..." 2 minutes ago
                                                                                                                                                                                                                    Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s POD
4bd841e7869a 10ada9a7f8ab "local-path-provisio..." 2 minutes ago Up 2 minutes
-path-provisioner_local-path-provisioner-76d776f6f9-hrk9c_kube-system_acb5aeea-54d3-4751-a715-21a1b4b6a5c2_0
072d01c5081c rancher/mirrored-pause:3.6 "/pause" Z minutes ago Up 2 minutes
072d01c5081c 72d01c5081c 72d01c5081c
                                                                                                                                                                                                                                                                                    k8s loca
                                                                                                                                                                                                                                                                                    k8s POD

        072d01c5081c
        rancher/mirrored-pause:3.6
        "/pause"
        2 minutes ago
        Up 2 i

        0cal-path-provisioner-76d776f6f9-hrk9c_kube-system_acb5aeea-54d3-4751-a715-21alb4b6a5c2_1
        42f5ab704e5e
        e3f005ebc8e8
        "/metrics-server --c..."
        2 minutes ago
        Up 2 i

        cs-server_metrics-server-7b67f64457-zn6h6_kube-system_6ffda6d2-41d4-466c-adb1-60840424eeb9
        652b3b73a2dc
        97e04611ad43
        "/coredns -conf /etc..."
        2 minutes ago
        Up 2 i

        ns_coredns-59b4f5bbd5-rwppj_kube-system_8ff06c4d-d39b-4558-9e64-f97b30fc37f0_0
        2 minutes ago
        Up 2 i

        oredns-59b4f5bbd5-rwppj_kube-system_8ff06c4d-d39b-4558-9e64-f97b30fc37f0_0
        2 minutes ago
        Up 2 i

        5316dd3b72ab
        rancher/mirrored-pause:3.6
        "/pause"
        2 minutes ago
        Up 2 i

                                                                                                                                                                                                                   Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s metr
                                                                                                                                                                                                                    Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s cored
                                                                                                                                                                                                                                                                                    k8s_POD_c
                                                                                                                                                                                                                   Up 2 minutes
                                                                                                                                                                                                                                                                                    k8s_POD_
                                                                                                                                                                                                                    Up 2 minutes
```

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/containers?topic=containers-cs_cli_install
 - 3.1.1. Note that only the 'container-registry' plugin is required (ibmcloud plugin install container-registry)

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 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.

8. Access SPT

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

http://localhost:6001/spt