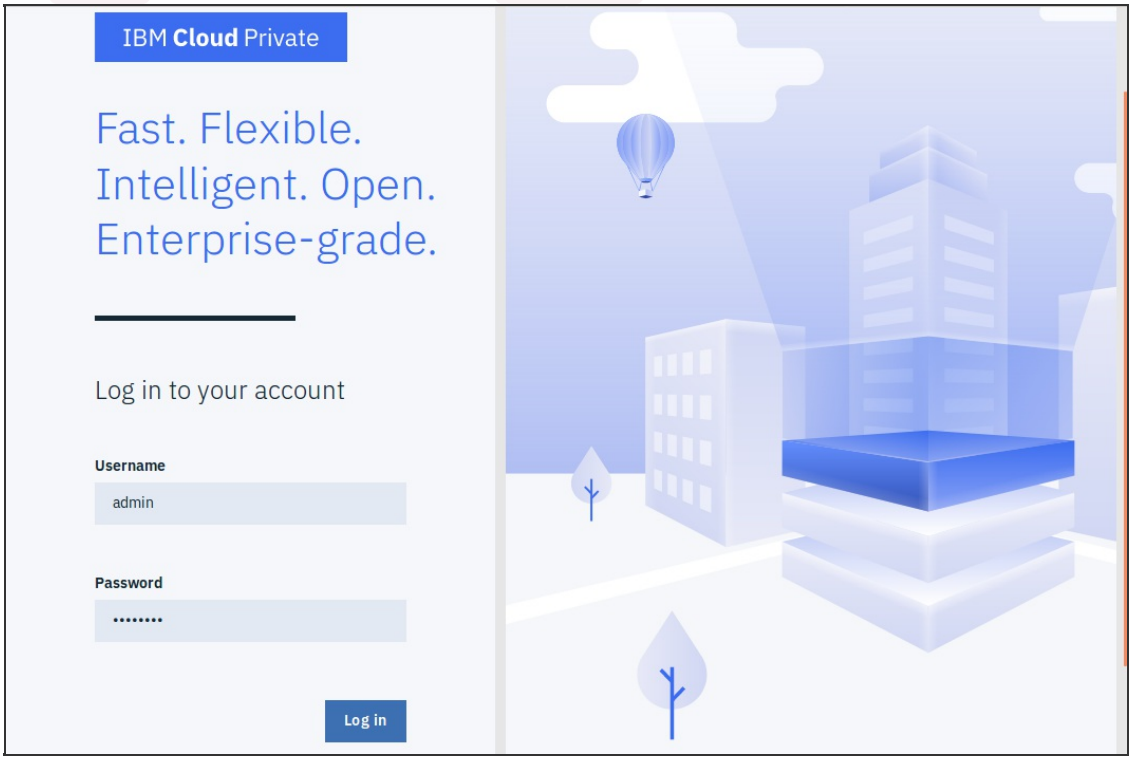
Initial Setup of IBM Cloud Private

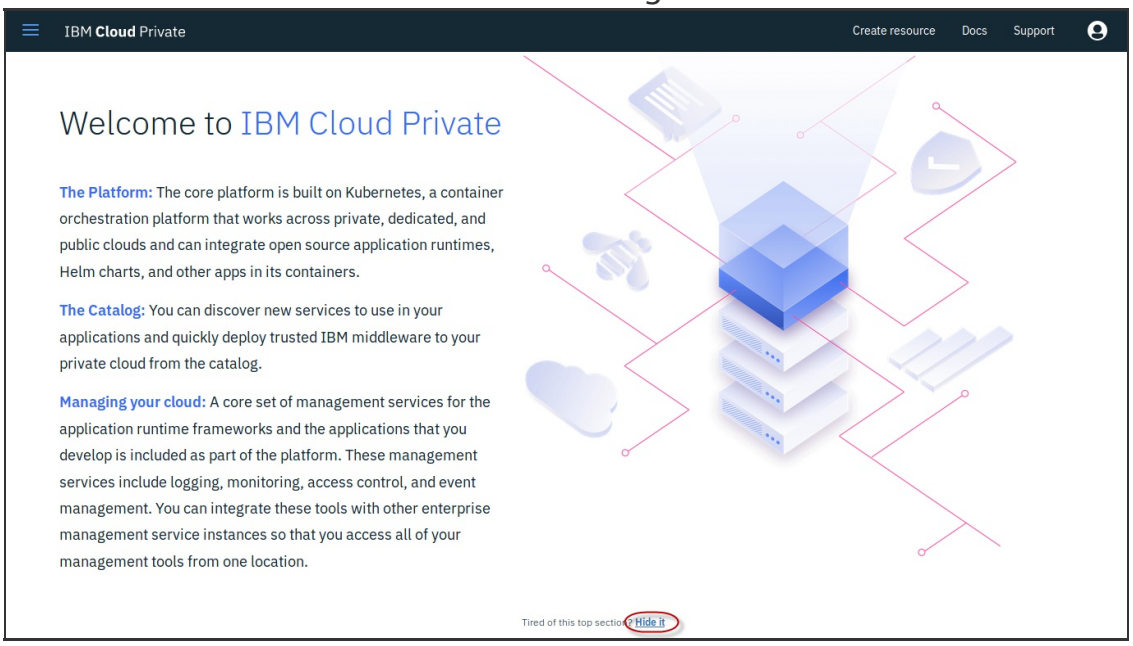
Exercise 1: The Web User Interface

This exercise familiarizes you with the IBM Cloud Private Web User interface.

1. Open a Firefox Web browser and go to `https://10.10.1.10:8443`. Login as `admin` with the password of `passw0rd`.

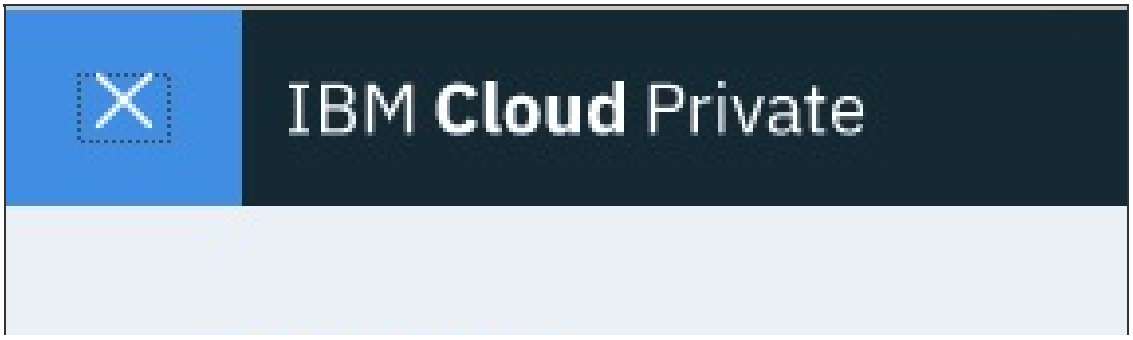


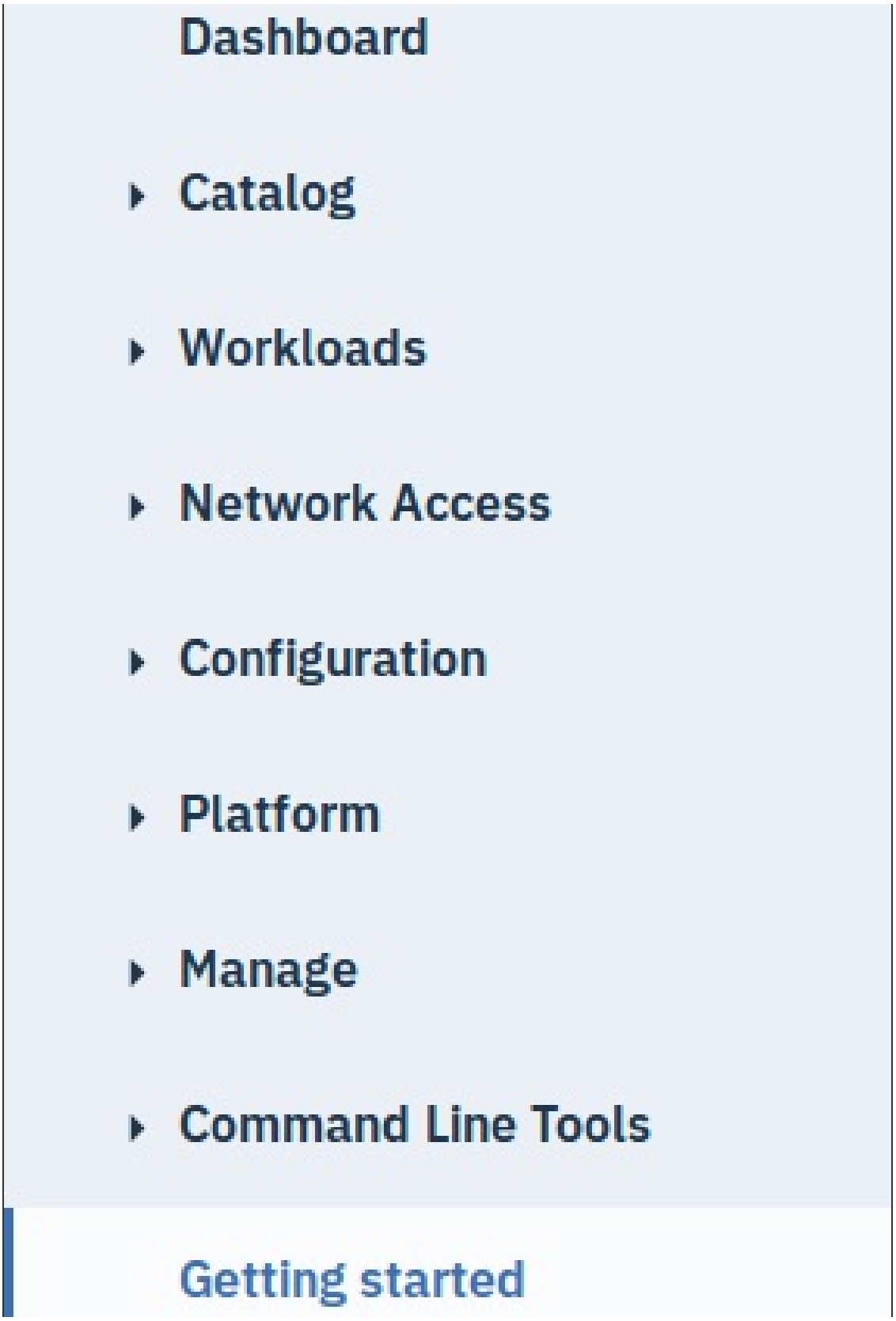
2. Scroll down and hide the Welcome message.



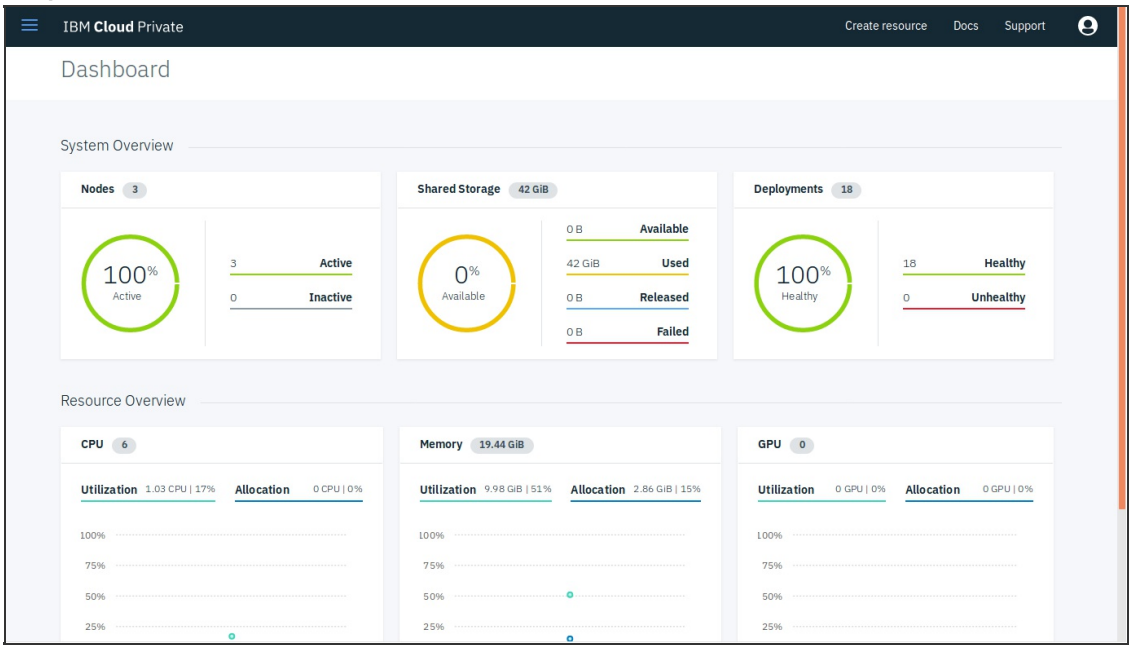
3. Click on the menu icon (

) and look at the various components.

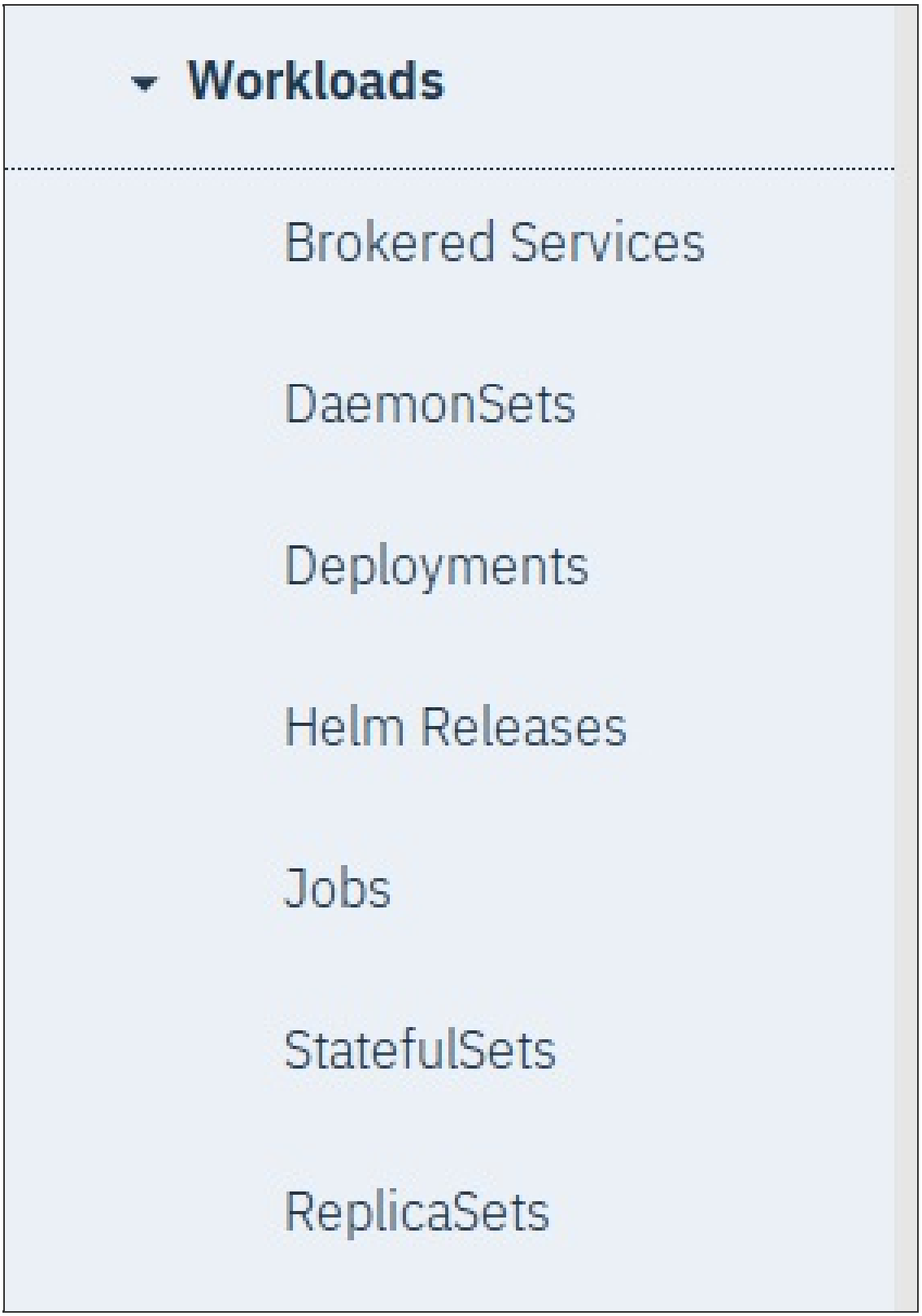




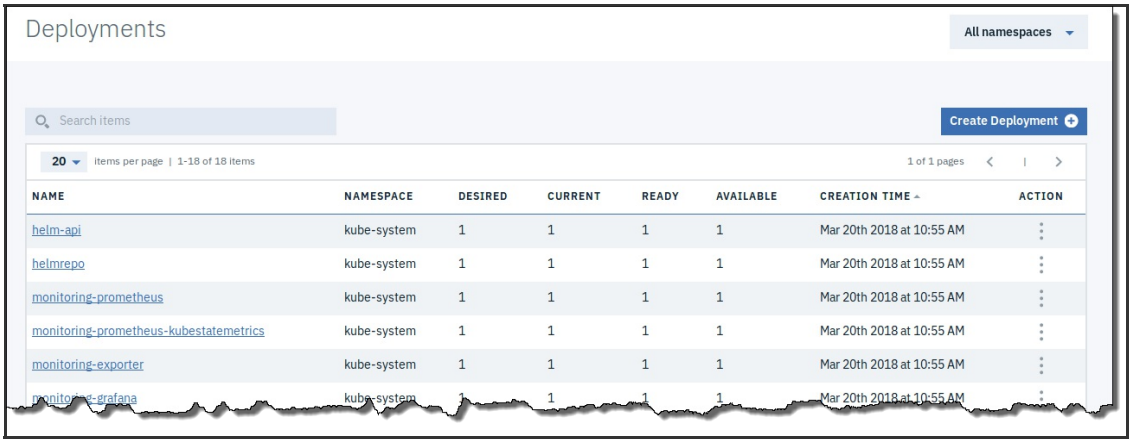
4. In the dashboard page, you can see the snapshot of the current status of your cluster.



5. Expand the **Workloads** menu. These are the various available workloads that can run in IBM Cloud Private.

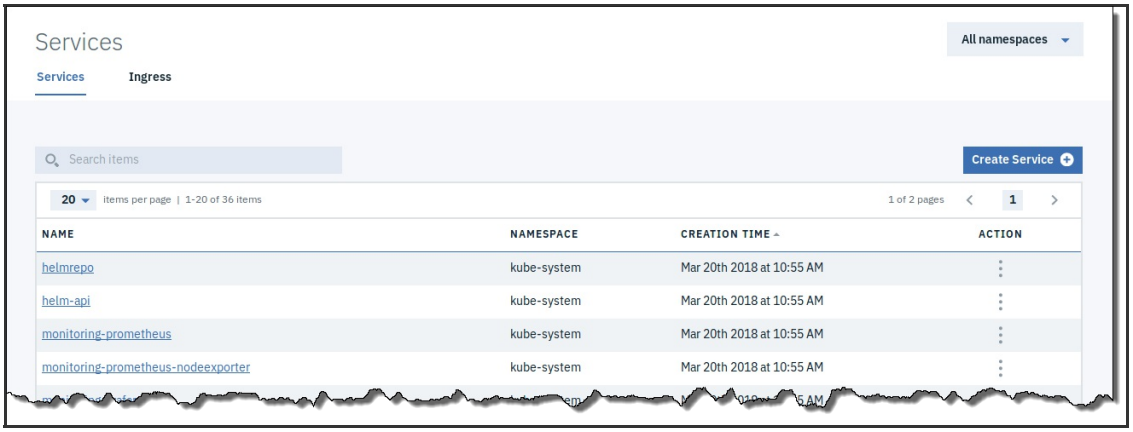


6. Currently there are only system workloads (namespace of `kube-system`). As an example, open the deployments workload (**Workloads** > **Deployments**) to see the system applications.



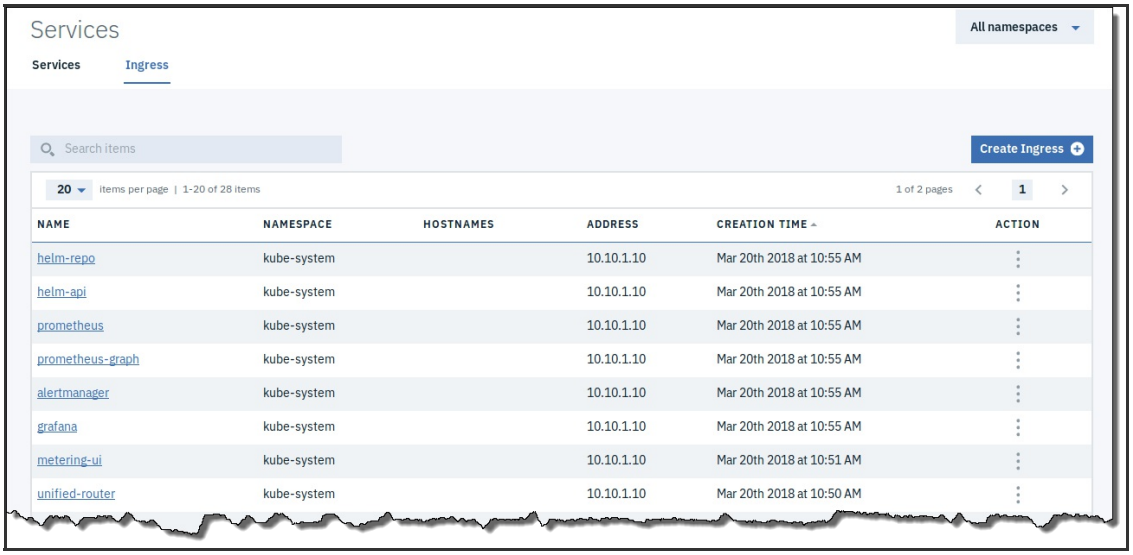
7. Other resources already defined are **Jobs**, **DaemonSet** and **StatefulSet**.

8. Under **Network Access** > **Services**, you can see the list of network endpoints for the workloads.

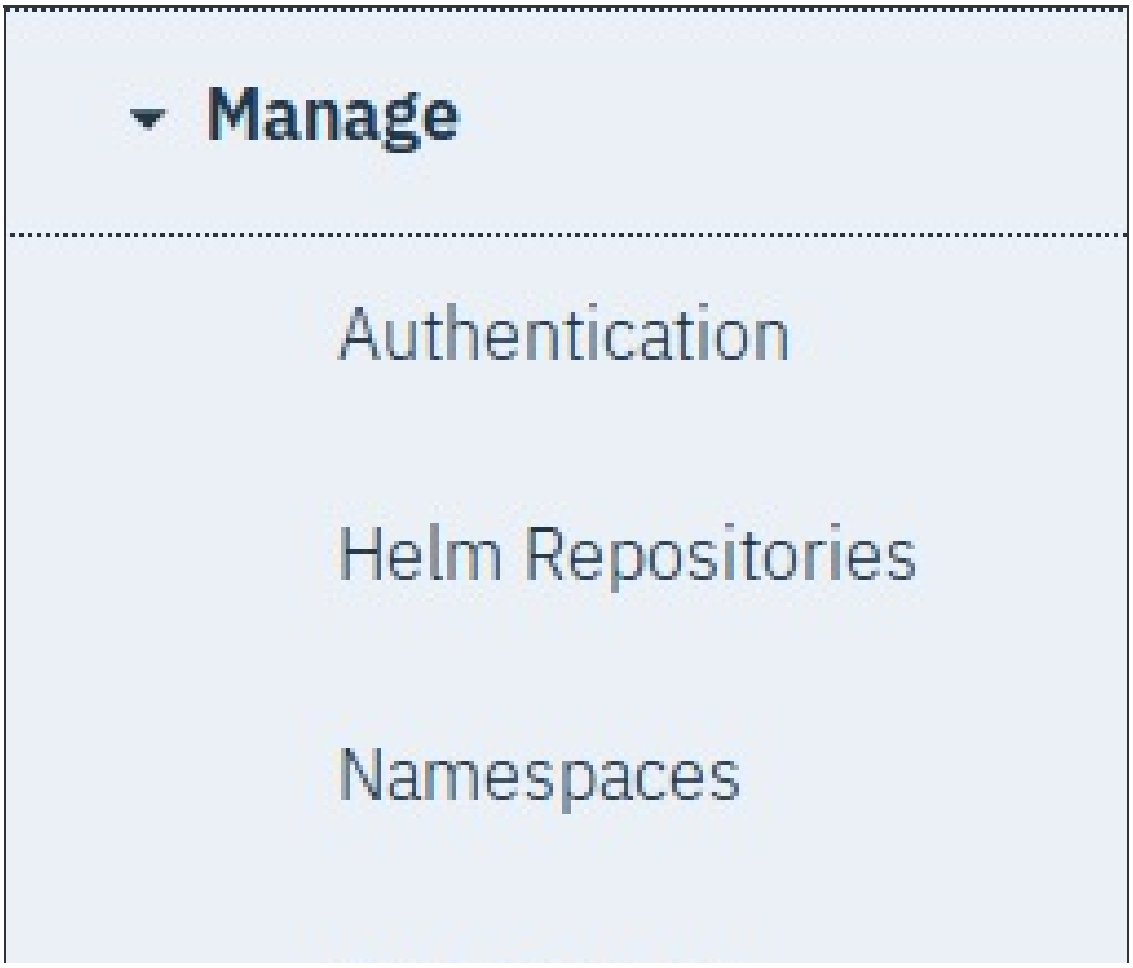


9. Still in the services view, click on the **Ingress** tab. This tab lists the various external access endpoints provided for exposing access to the

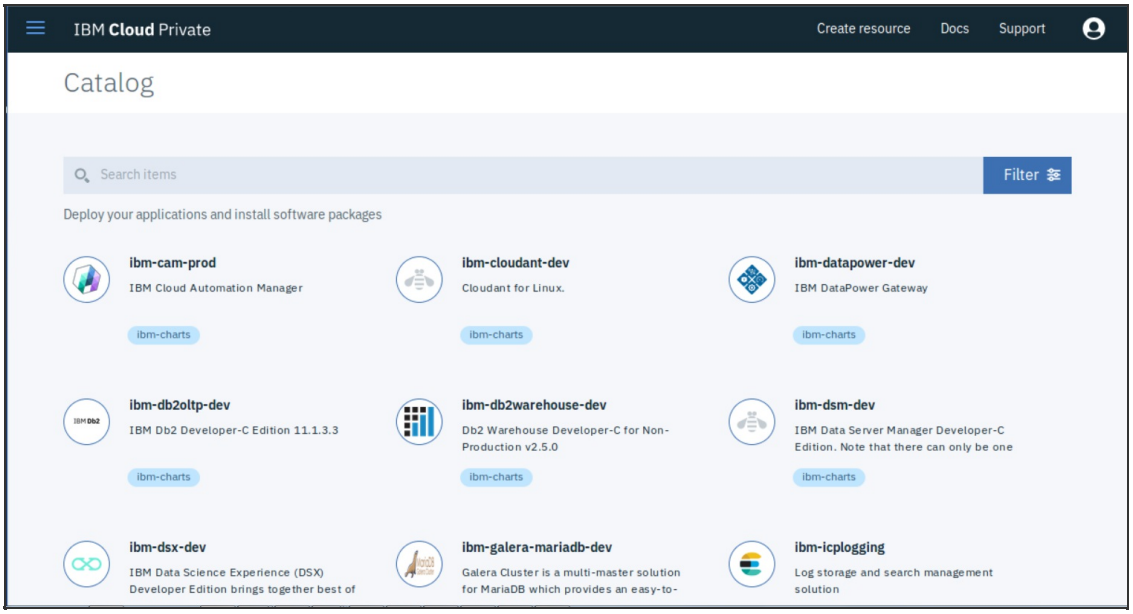
cluster.



10. Under the **Manage** menu, you can see various cluster management related resources.



11. Click on **Catalog** > **Helm Charts**. Listed here are the applications that can be deployed into IBM Cloud Private.



12. You can continue to explore various options in the Web UI.

Exercise 2: Set up CLI tools

In this exercise, you install and configure the CLI environments that you will need for IBM Cloud Private:

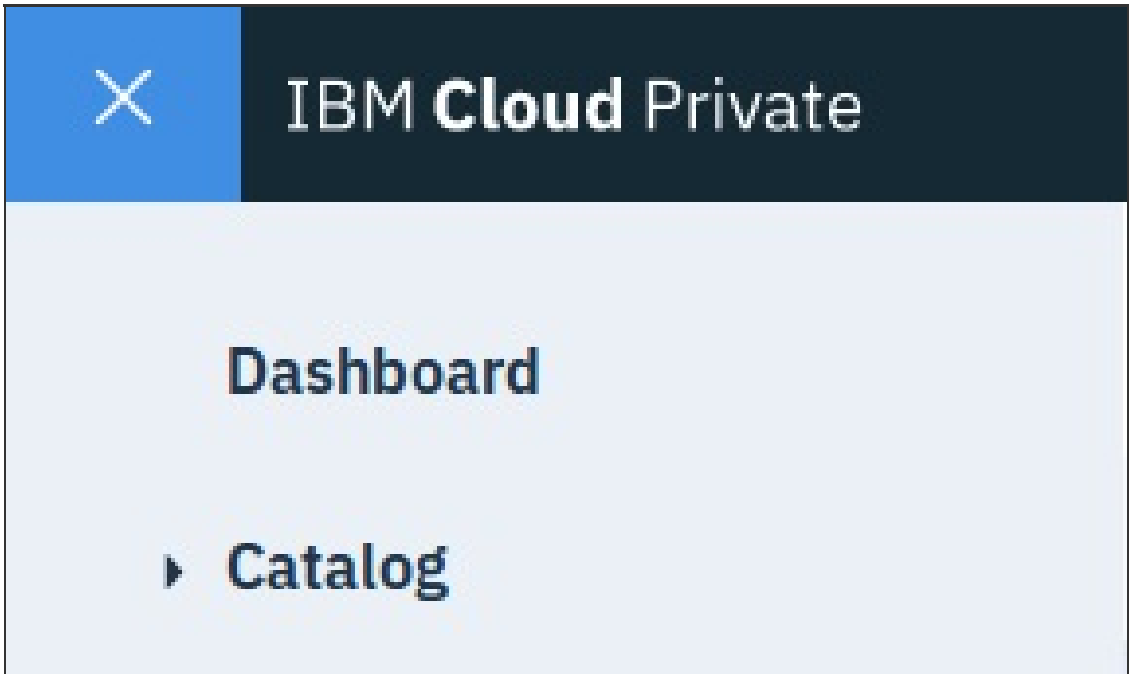
1. Open a terminal window.
2. Run the following command to download the Linux 64-bit binary `helm` binary for IBM Cloud Private.

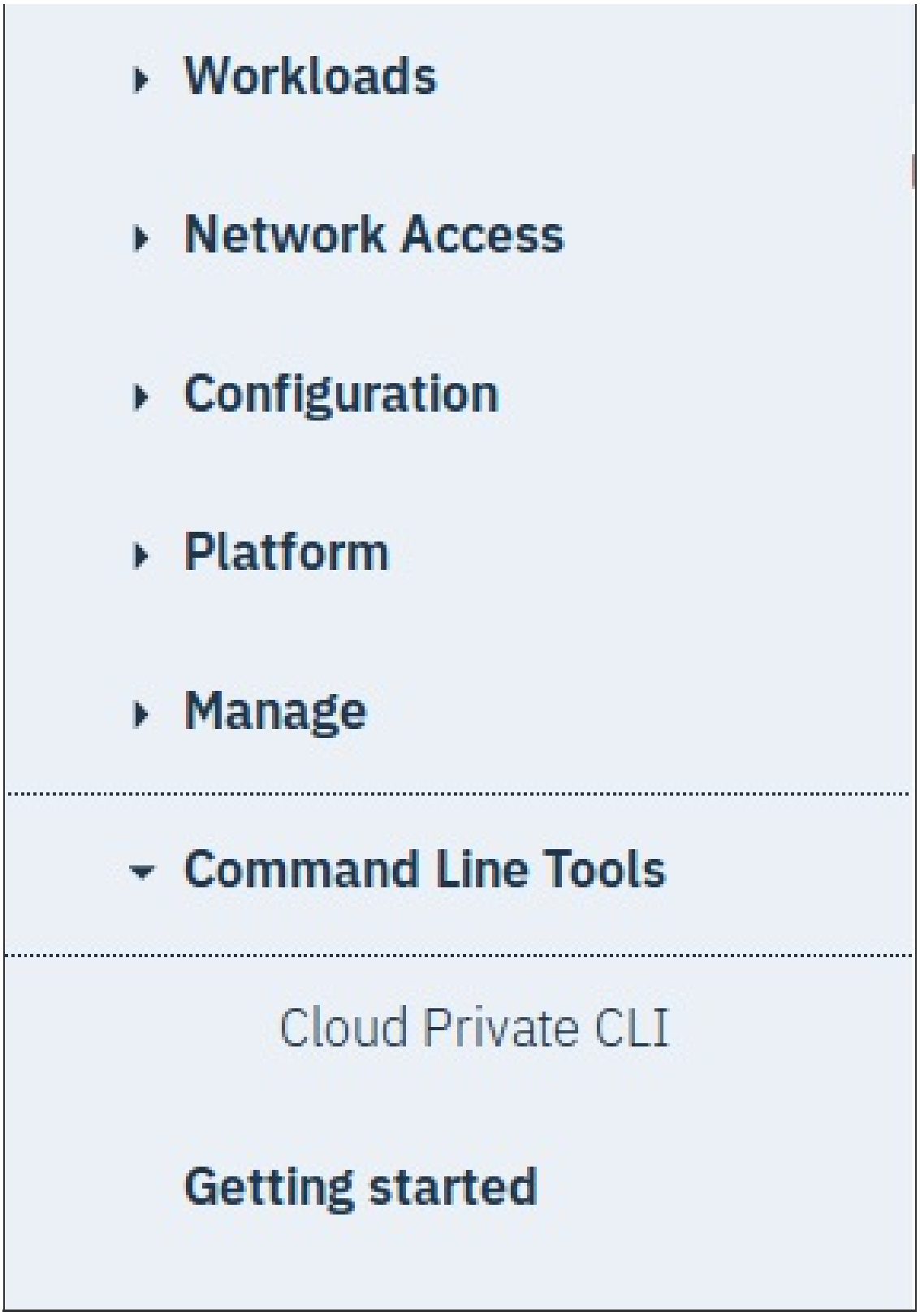
```
 docker run -e LICENSE=accept --net=host -v /usr/local/bin:/data
ibmcom/icp-helm-api:1.0.0 cp /usr/src/app/public/cli/linux-
amd64/helm /data
```

3. Set the `HELM_HOME` environment variable and move the `helm` executable into a directory in your `PATH`. The `sudo` password is `passw0rd`.

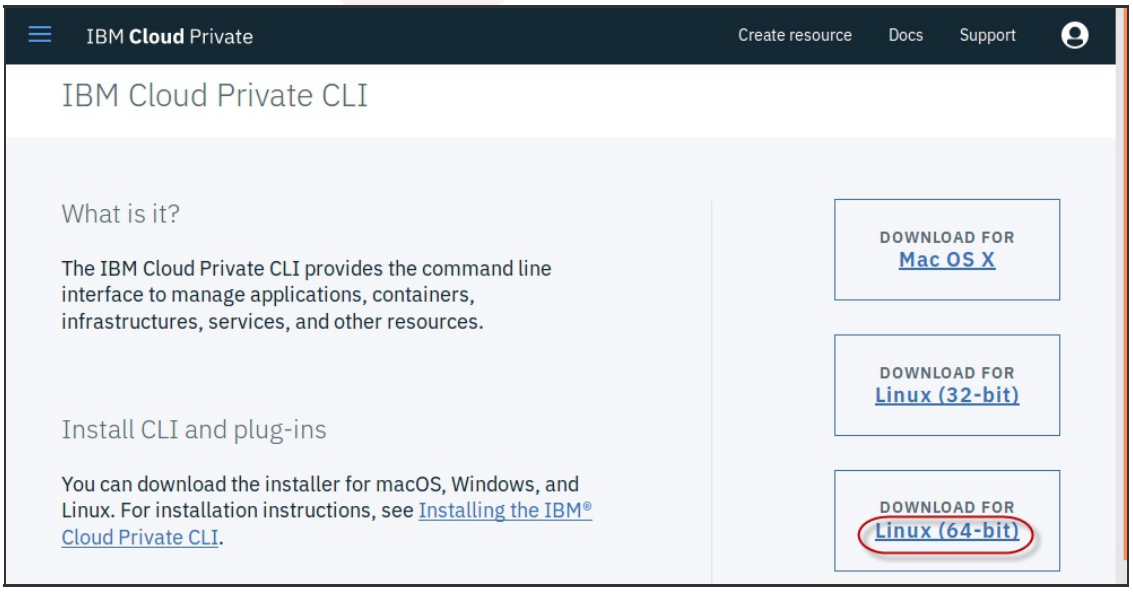
```
export HELM_HOME=~/.helm
sudo mv helm /usr/local/bin
```

4. In your browser, get the IBM Cloud Private CLI plugin from the menu icon and select **Command Line Tools** > **Cloud Private CLI**.

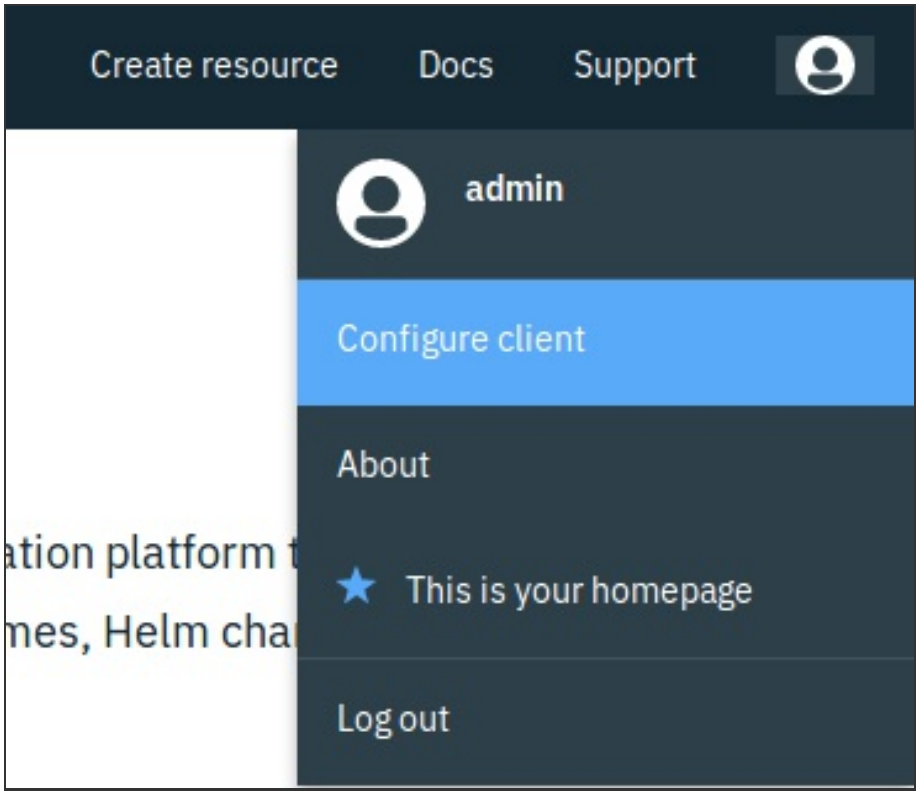




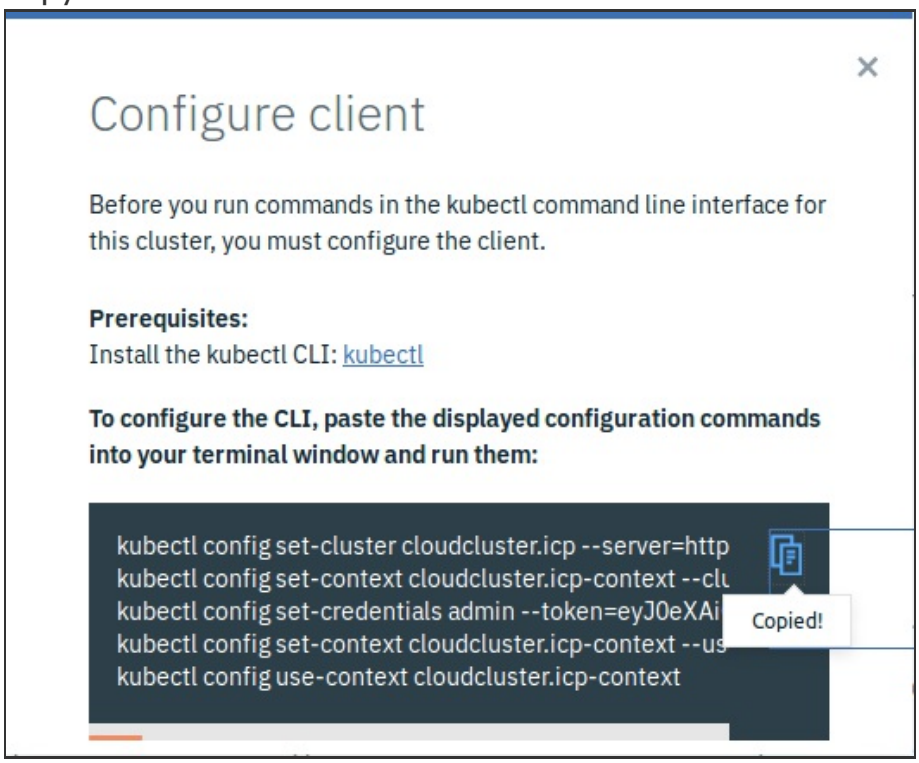
5. Click the Download link for **Linux (64-bit)** and click **Save file**. The file is downloaded to the `Downloads` folder.



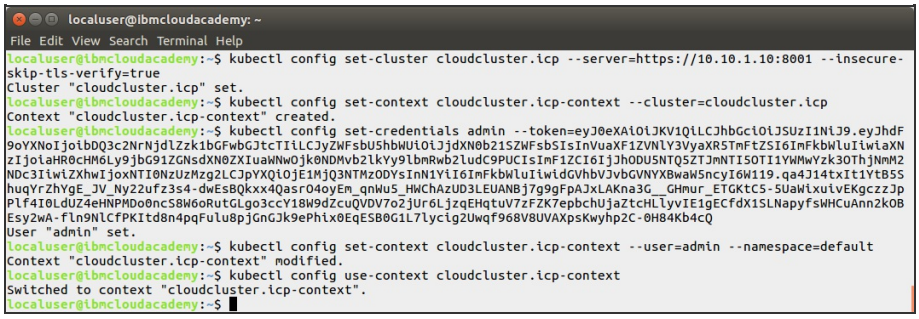
6. Set up the `kubectl` configuration. Click the "head" icon in the top-right corner of your browser window.
    - Click **Configure Client**.



- In the configure client pop-up, click the Copy icon to copy the CLI commands.



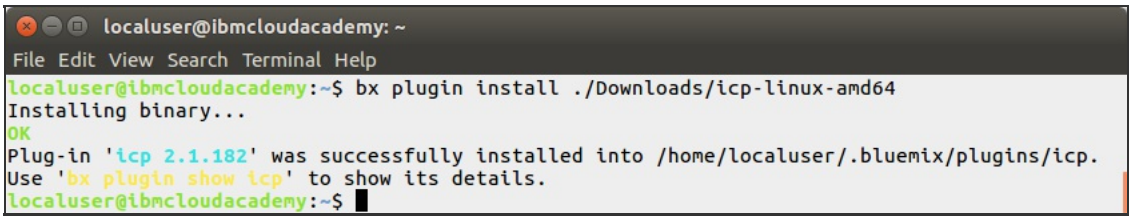
- Paste the commands into the terminal window to initialize kubectl.



7. Now you can invoke `kubectl`. Try to run `kubectl get pod -n kube-system` to list all pods related to the Kubernetes system.

8. Install the IBM Cloud CLI plugin.

```
ibmcloud plugin install ./Downloads/icp-linux-amd64
```



9. Initialize helm using the IBM Cloud Private CLI.
    - Initialize the helm client.

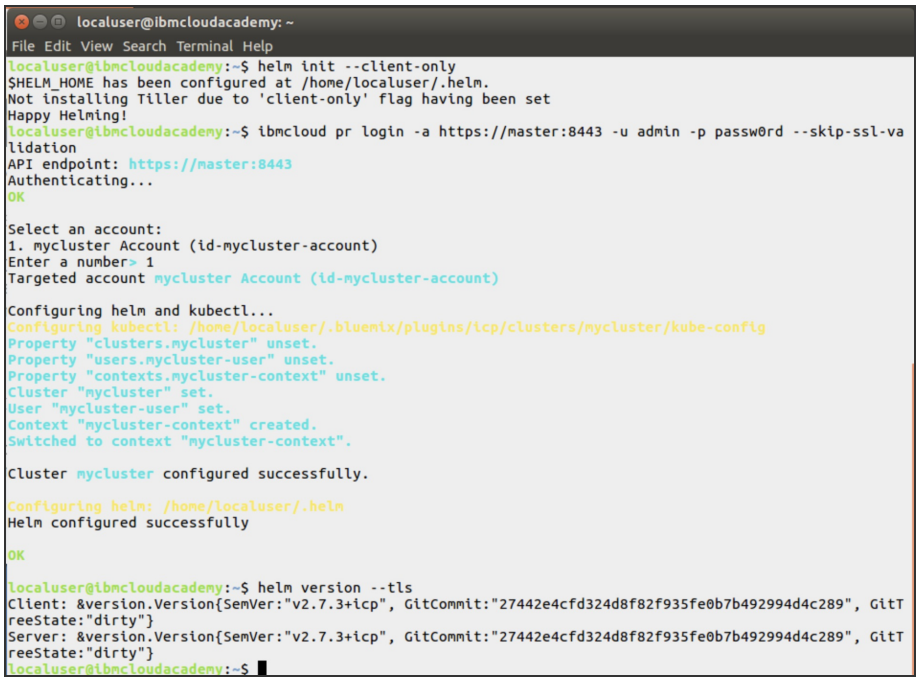
      ```
      helm init --client-only
      ```

    - Login to the IBM Cloud Private CLI. Select the `cloudcluster` account.

      ```
      ibmcloud pr login -a https://master:8443 -u admin -p passw0rd --skip-ssl-validation
      ```

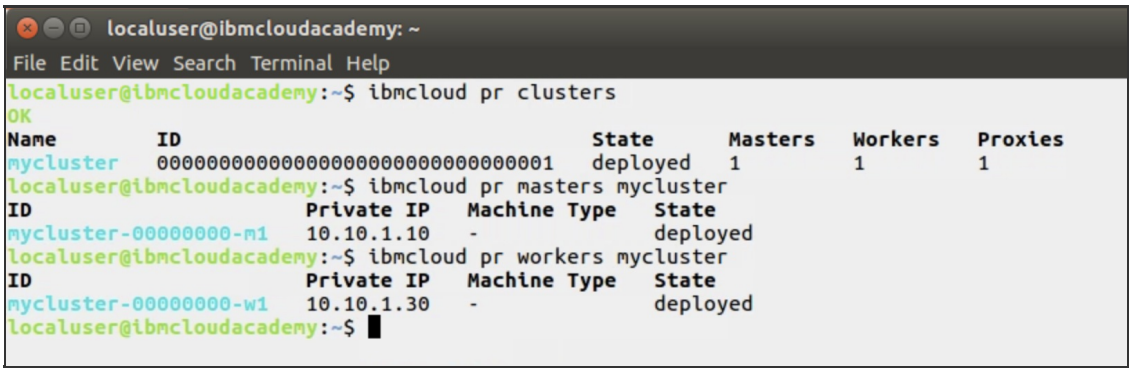
    - Check helm to tiller connectivity.

      ```
      helm version --tls
      ```



10. In your terminal window, use the following commands to view some details about your cluster.

```
ibmcloud pr clusters
ibmcloud pr masters mycluster
ibmcloud pr workers mycluster
```



*** End of exercises ***