Technical Fast Start for Onboarding to the Oracle Container Native Application Development Platform (short version)

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Introduction

This document describes the basic technical steps for quickly onboarding a new user to the Oracle Container Native Application Development platform.

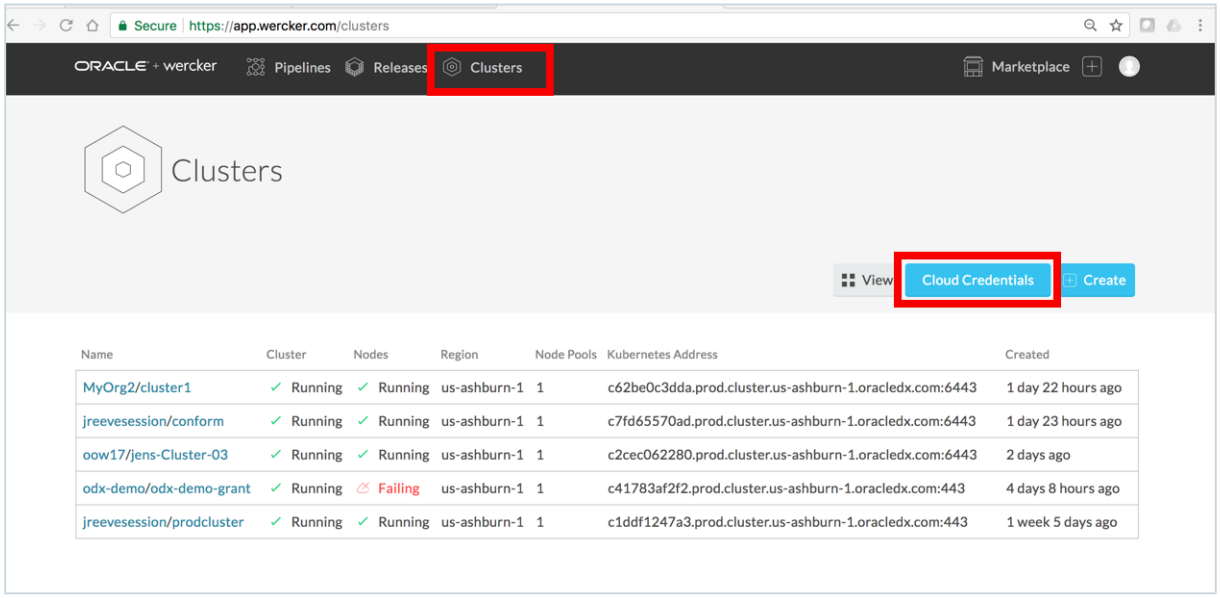
We assume that you have available:

- Account on github.com
- Account on wercker.com (associated with github)
- OCI account with required capacity

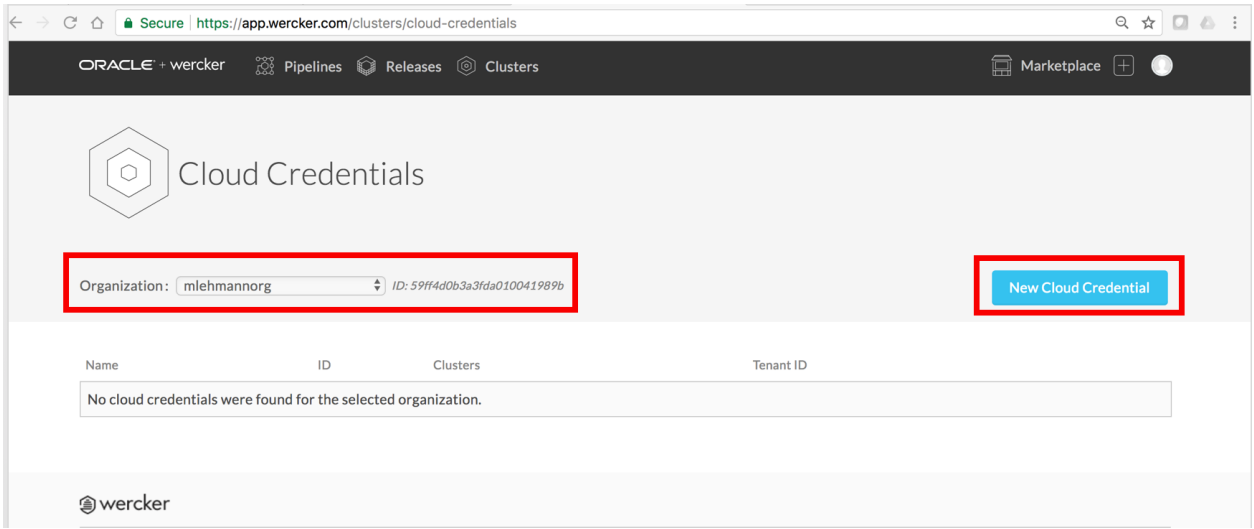
Connecting Wercker and Oracle Cloud Infrastructure to Enable Creation of Kubernetes Clusters

This section of the technical onboarding document focuses on connecting your Oracle Wercker environment to Oracle Cloud Infrastructure to enable you to create Kubernetes clusters.

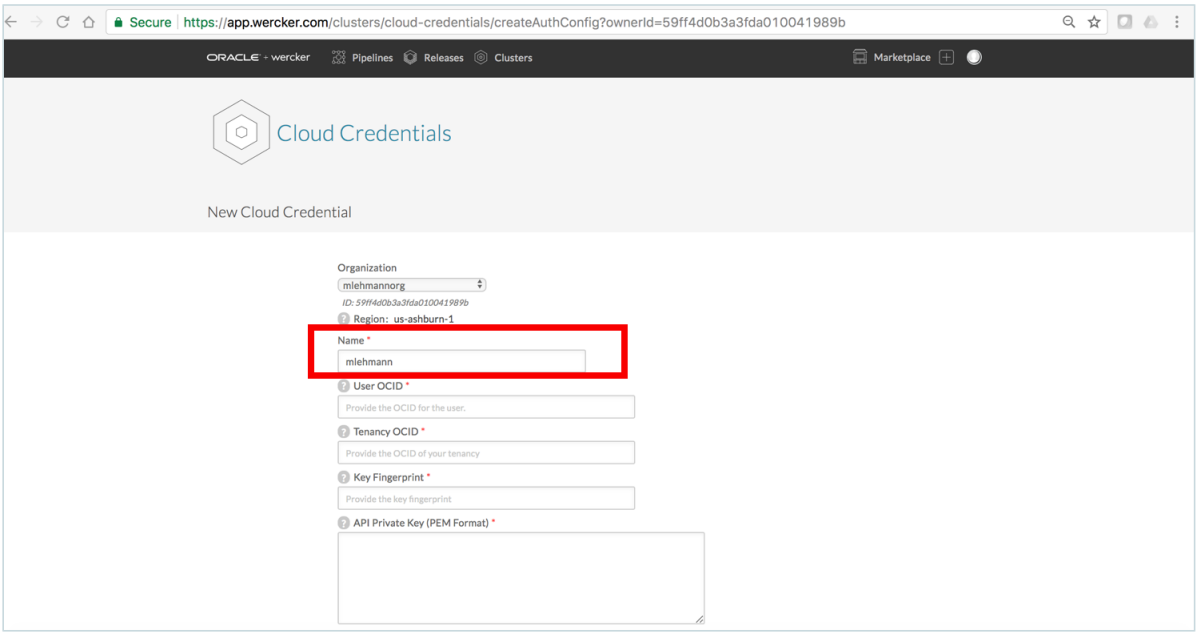
1. Log into your Wercker account and go to the Clusters screen and from the Clusters screen click on the Cloud Credentials button:



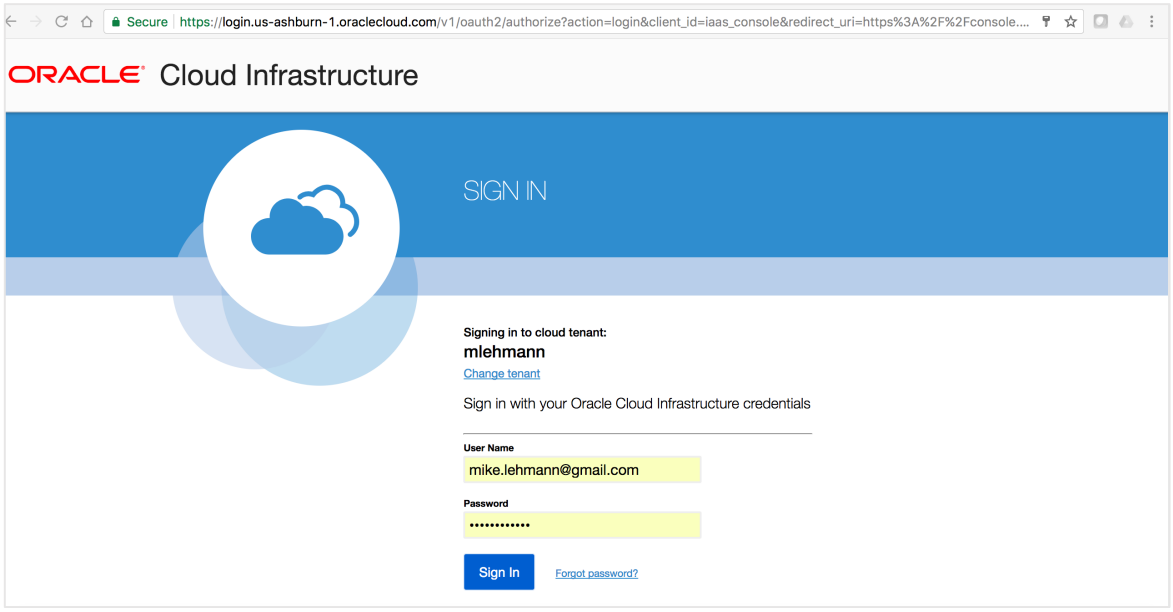
2. Select the organization you created previously in the drop down list box of Organizations and then click on the Create Cloud Credentials button



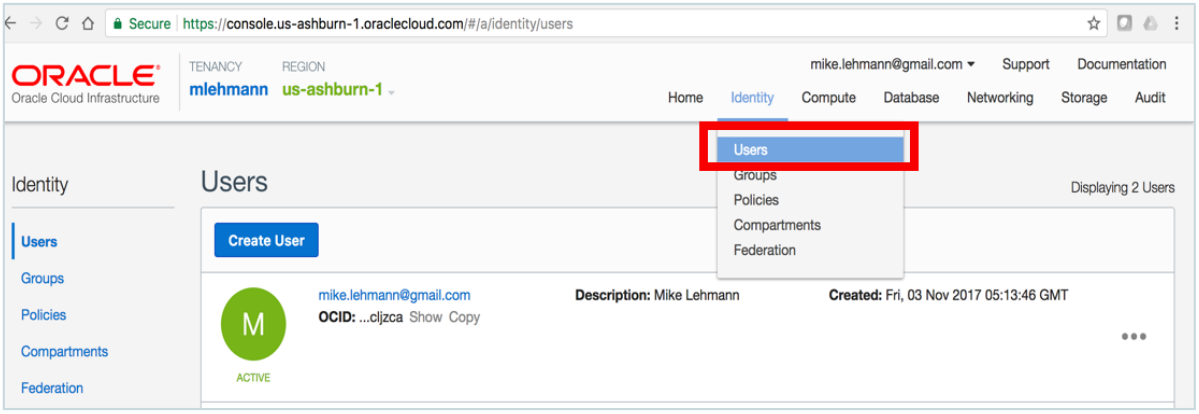
3. You will then be on the create Cloud Credential page where you can enter a name of the credential you are creating (use your username as recommended value)



4. In order to get the User OCID and Tenancy OCID, in a different tab in your browser, log into your Oracle Cloud Infrastructure account

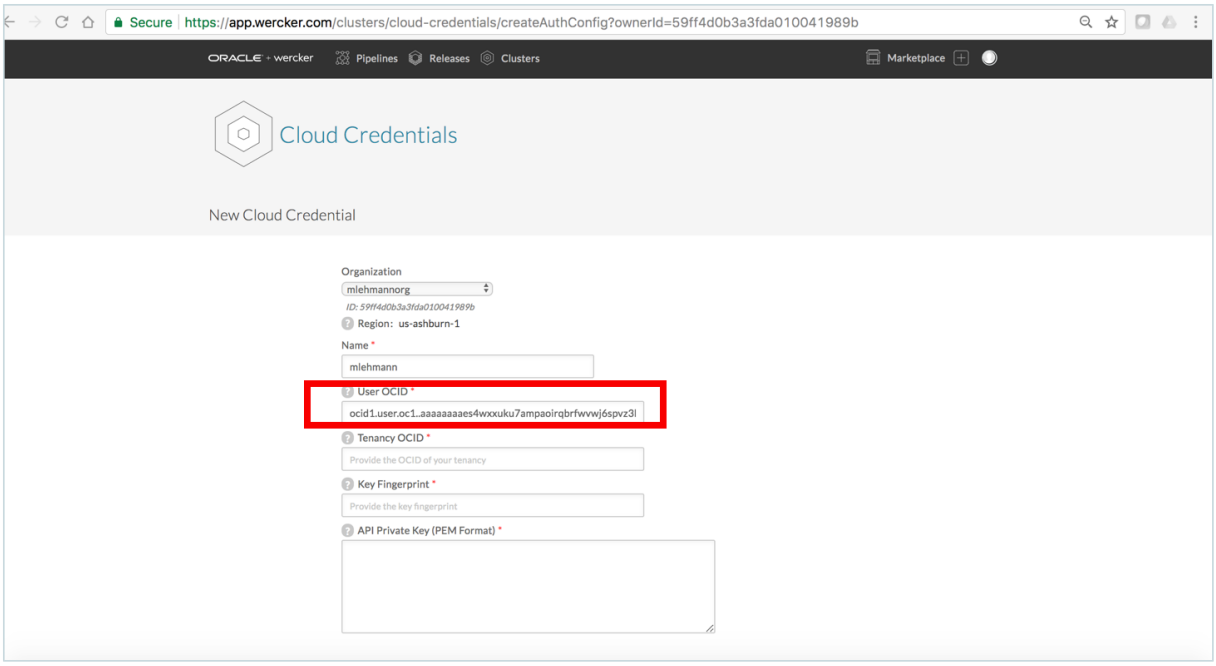


5. Go to the User menu choice under Identity

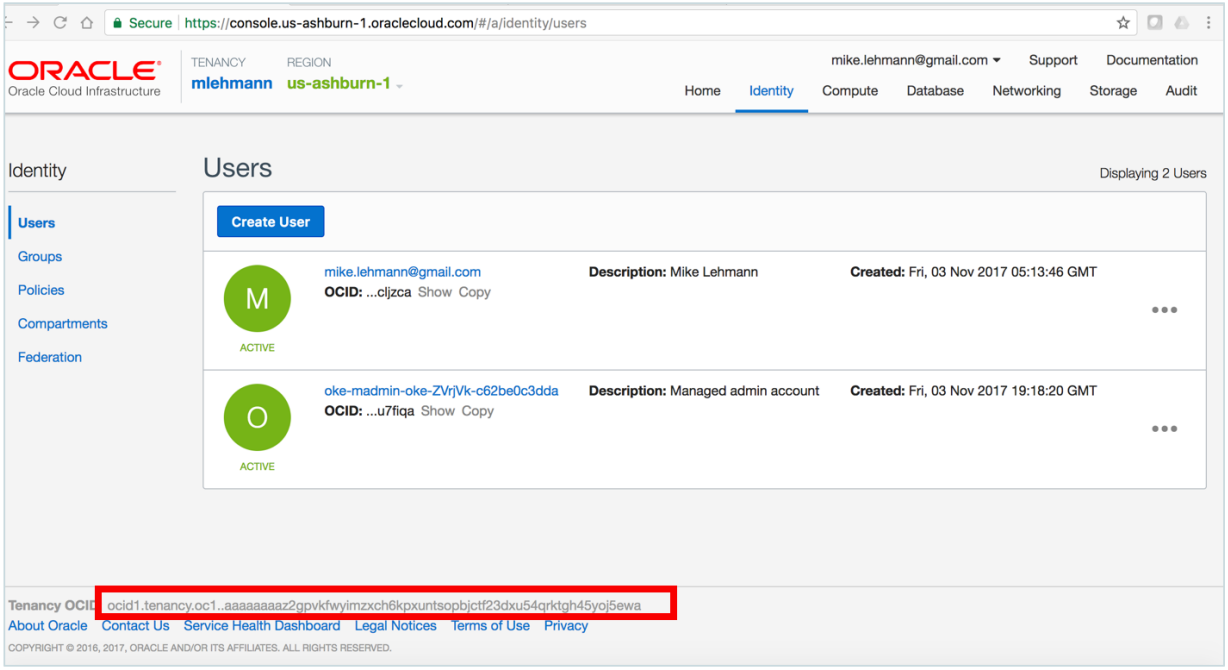


6. You should see your user account there and the ability to show and copy the User OCI on this page. Copy the OCID user key by clicking on the “Show” link and then selecting “Copy”. This will copy the User OCID into your clipboard.

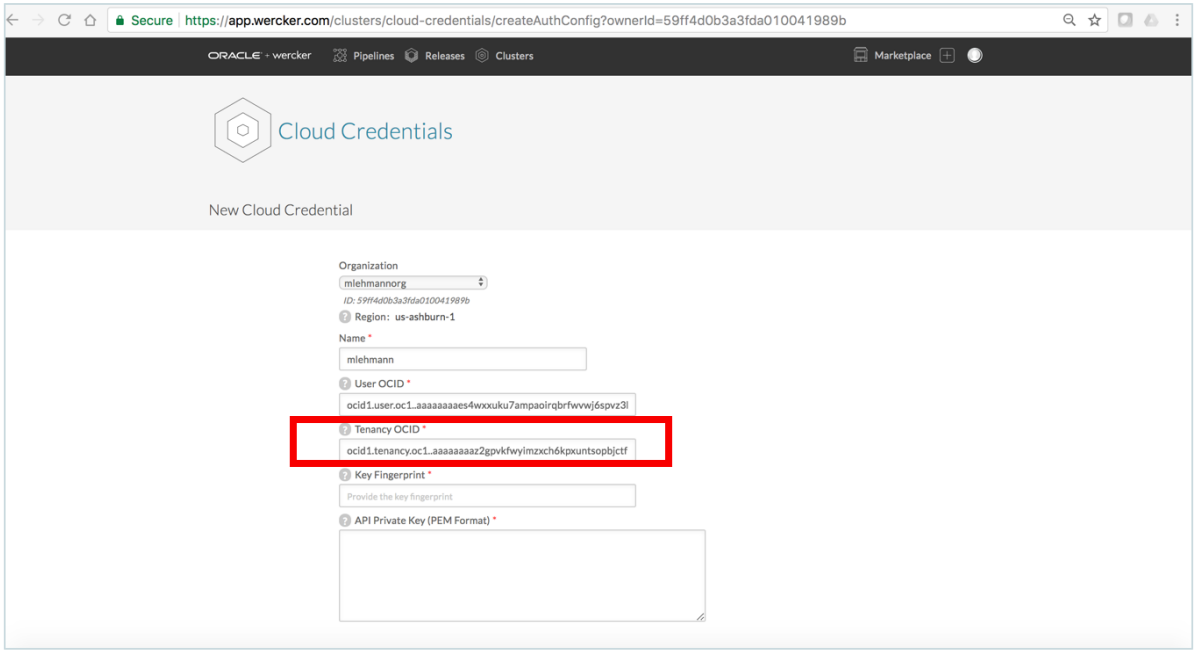
7. Switch back to the Wercker Cloud Credential page and paste the User OCID User into the Wercker Cloud Credential User OCID



8. Return to the Oracle Cloud Infrastructure page and scroll to the bottom of the page. From the bottom of the page you will be able to select and copy the OCID Tenancy ID into your clipboard.



9. Paste the OCID Tenancy ID into the Wercker OCID Tenancy ID

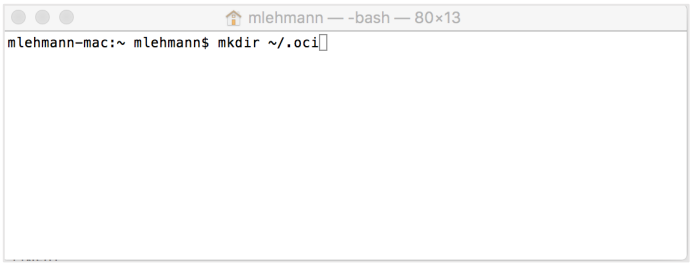


10. In order to create the Key Fingerprint needed in the Wercker Cloud Credential screen you will be required to create a private/public PEM key. This is documented here - https://docs.us-phoenix-1.oraclecloud.com/Content/API/Concepts/apisigningkey.htm - and below is a simplified minimum number of steps.

    a. Open a shell window on your local computer (if you are having Windows machine we recommend to make these steps within VBox Linux image).

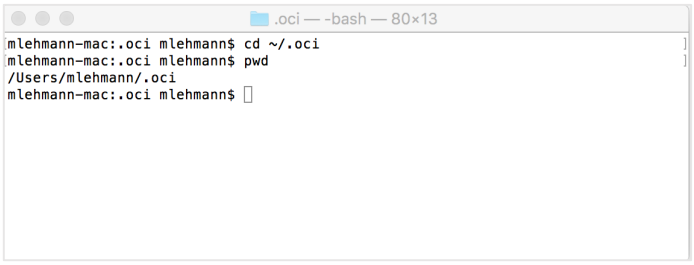
    b. Make a directory to store your key using this command:

       mkdir ~/.oci



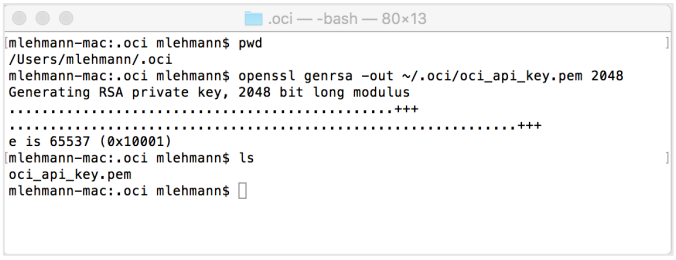
c. Change into the .oci directory

cd ~/.oci



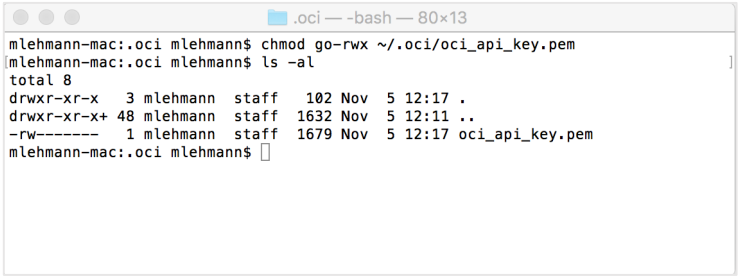
d. Generate a key with no passphrase using the openssl command line.

openssl genrsa -out ~/.oci/oci_api_key.pem 2048



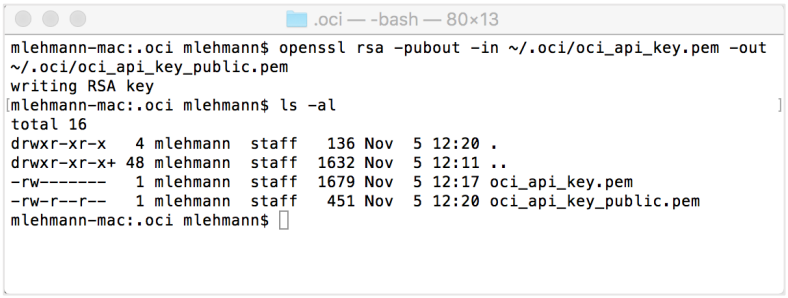
e. Make sure only you can read the key by chmod'ing it with this command:

chmod go-rwx ~/.oci/oci_api_key.pem



f. Generate the public key using this command:

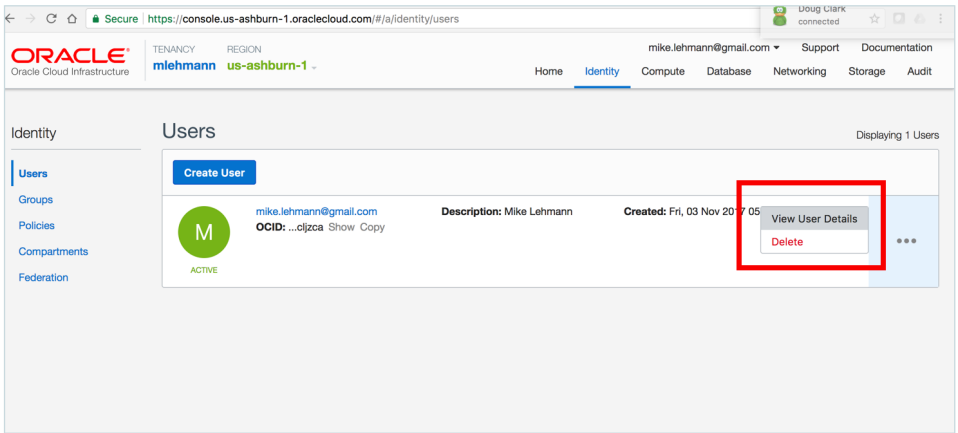
openssl rsa -pubout -in ~/.oci/oci_api_key.pem -out ~/.oci/oci_api_key_public.pem



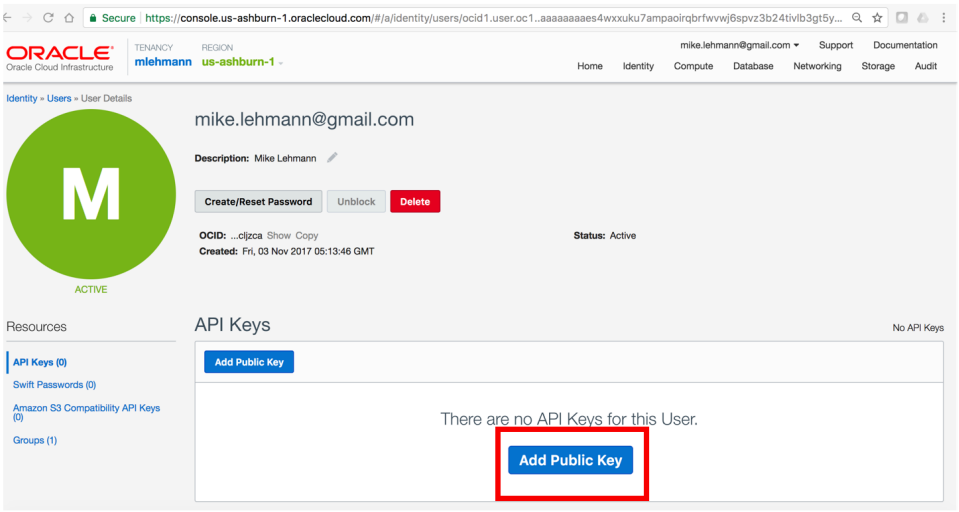
g. Copy the contents of the public key to the clipboard using pbcopy, xclip or a similar tool (you'll need to paste the value into the Console later). For example:

cat ~/.oci/oci_api_key_public.pem | pbcopy

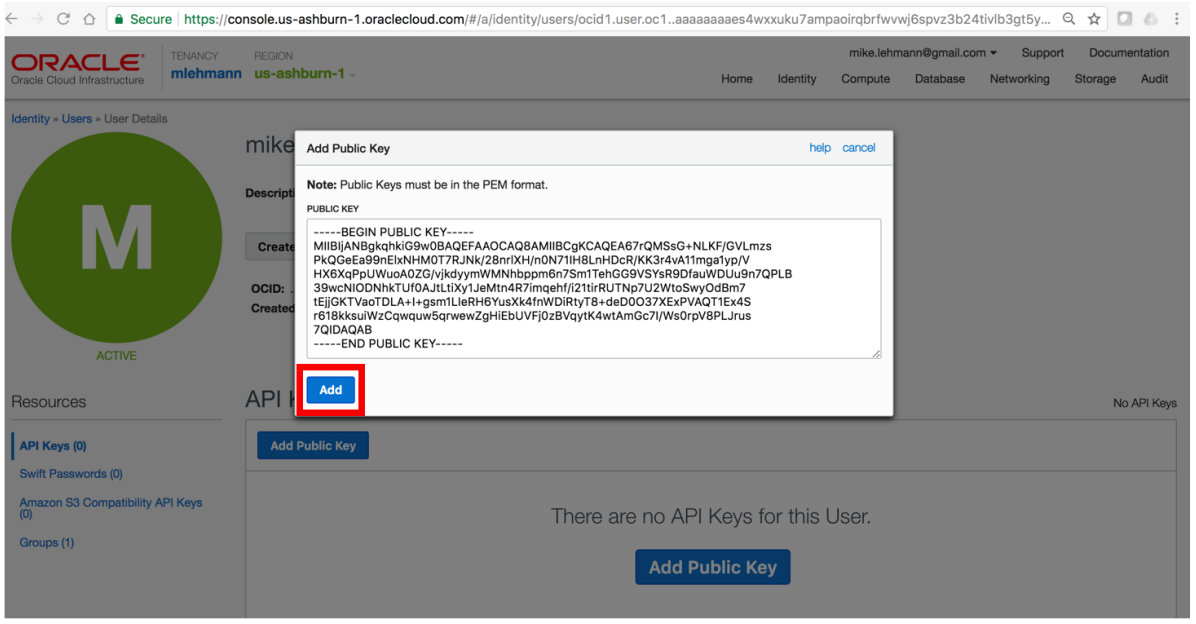
h. Return to the Oracle Cloud Infrastructure console and click to the View User Details screen as seen below.



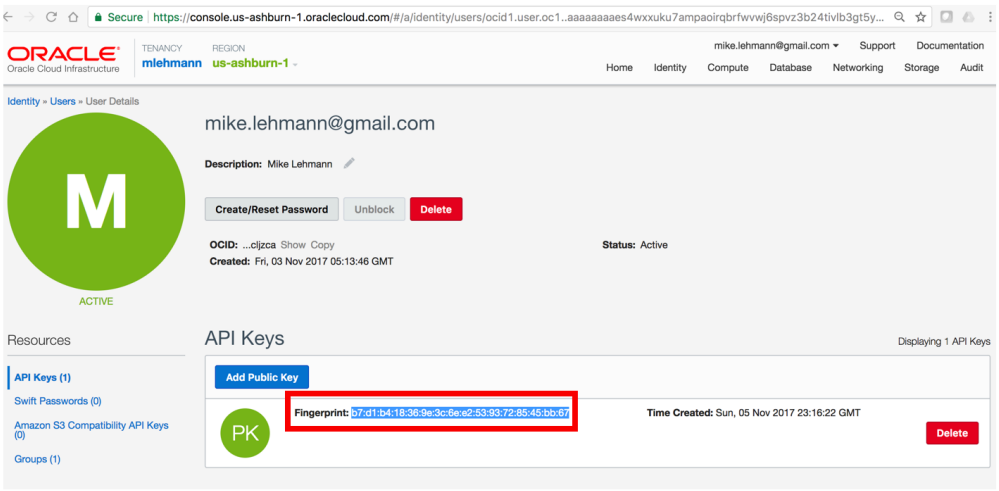
i. In the View User Details screen click on Add Public Key.



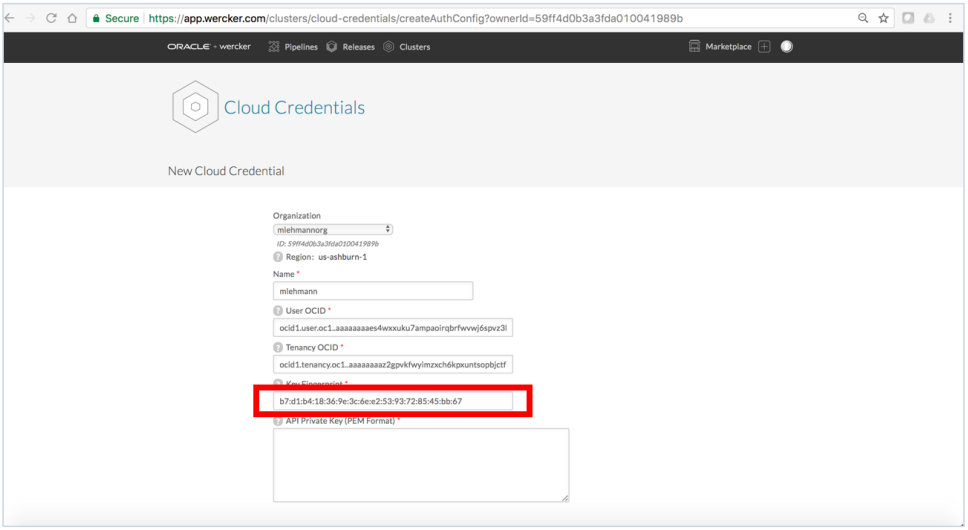
j. In the popup dialog copy the public key from your clipboard and save it by clicking on Add.



k. You can get the fingerprint you need for Wercker Cloud Credential field off the resulting screen by simply copying it to your clipboard.

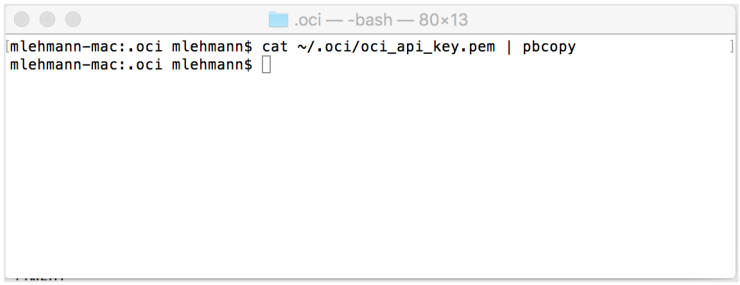


l. Return to the Wercker Cloud Credential screen and paste in the fingerprint you got either from the Oracle Cloud Infrastructure screen.

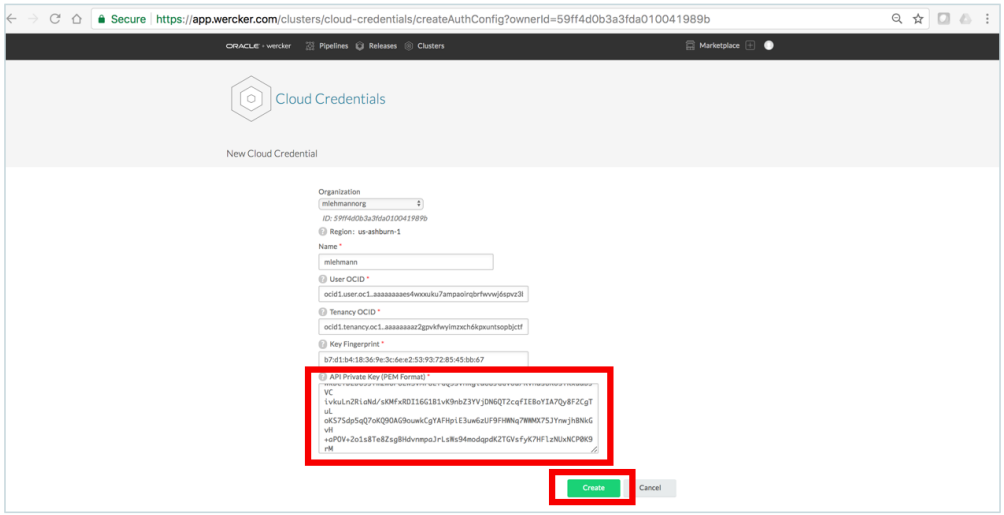


11. Next, we need to copy in the private key generated into the Wercker Cloud Credential field. This can be done back on your local machine from the same shell by copying it into clipboard using this command:

    cat ~/.oci/oci_api_key.pem | pbcopy



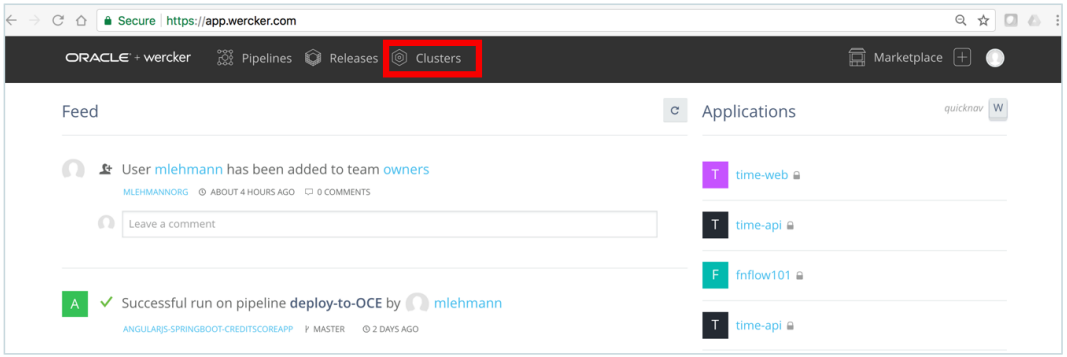
12. Return to the Wercker Cloud Credential screen and paste in the private key into the field. At this point all the fields have been filled in and you can click on the Create button.



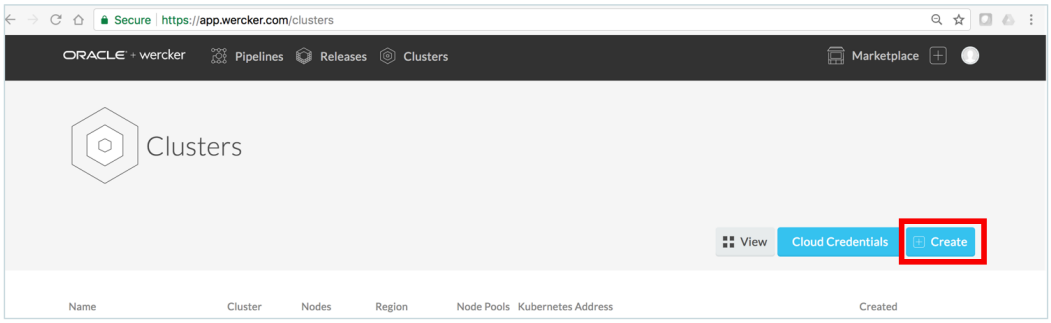
Creating Your First Kubernetes Cluster

At this point you are now ready to create your first Kubernetes cluster.

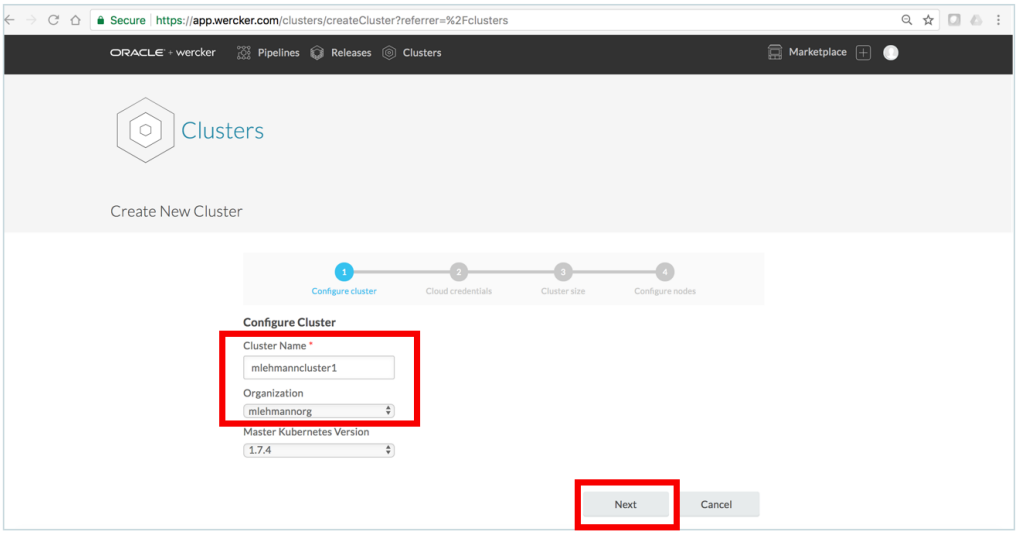
1. Go to Wercker.com and log into your account. Then click on Clusters at the top of the page.



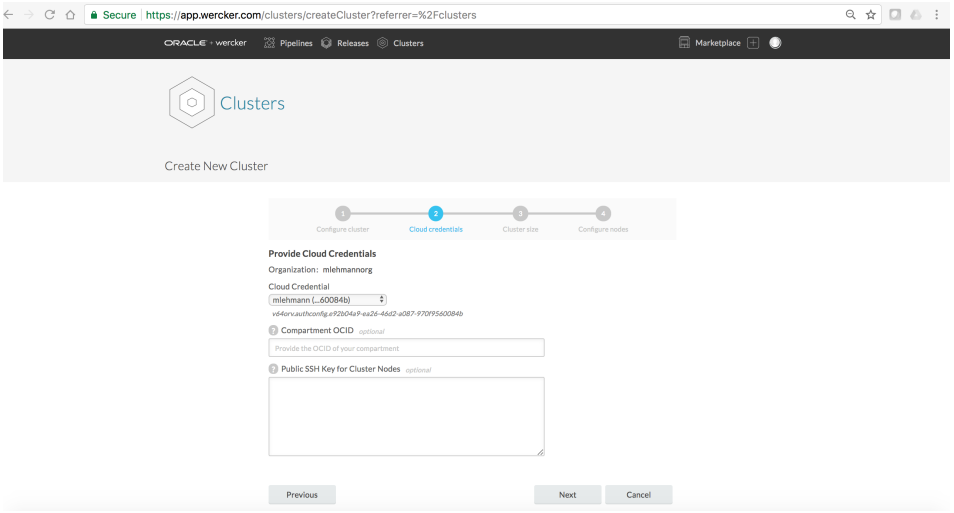
2. In the Clusters page, click on the Create cluster button to start the process of creating your Kubernetes cluster.



3. In the first step of the screen wizard, enter your cluster name and select your organization previously created in the named fields. Leave the defaults for the other fields. Click on Next to move ahead in the wizard.

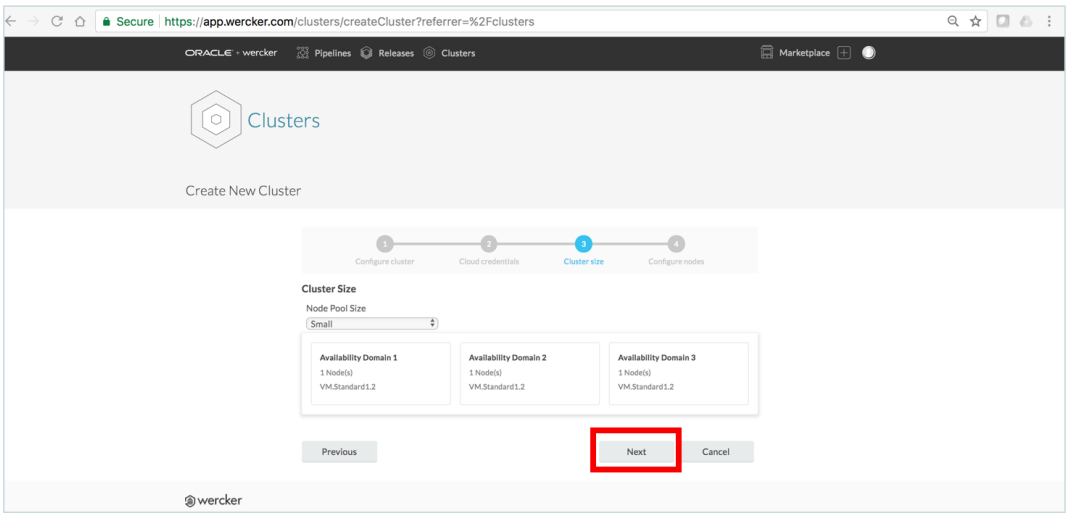


4. On the second step, if the Cloud Credential selected earlier was the only one for your Organization, it will default in this screen. Otherwise select the one you created.

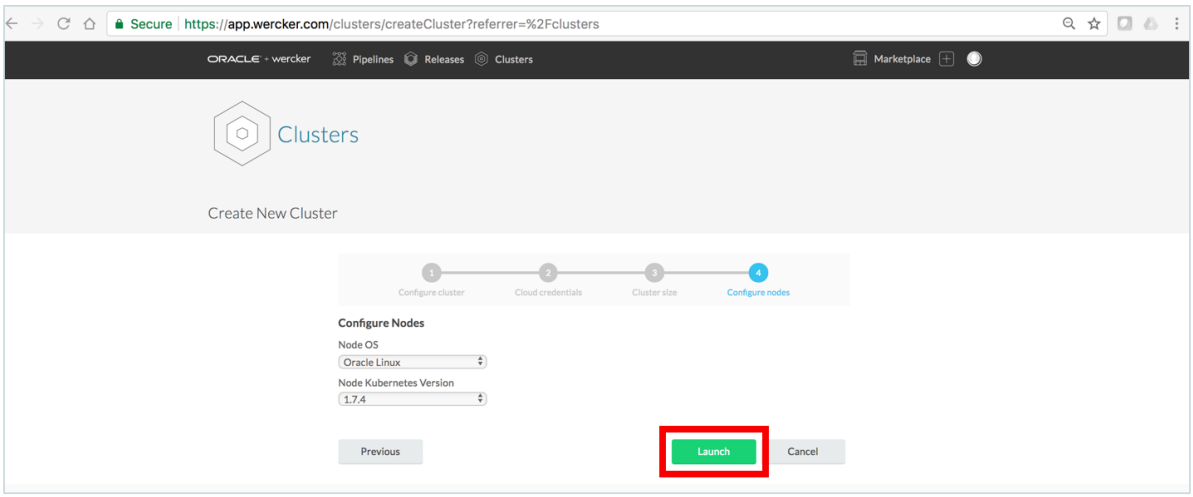


5. Leave Compartment OCID and SSH textboxes empty and click “Next”

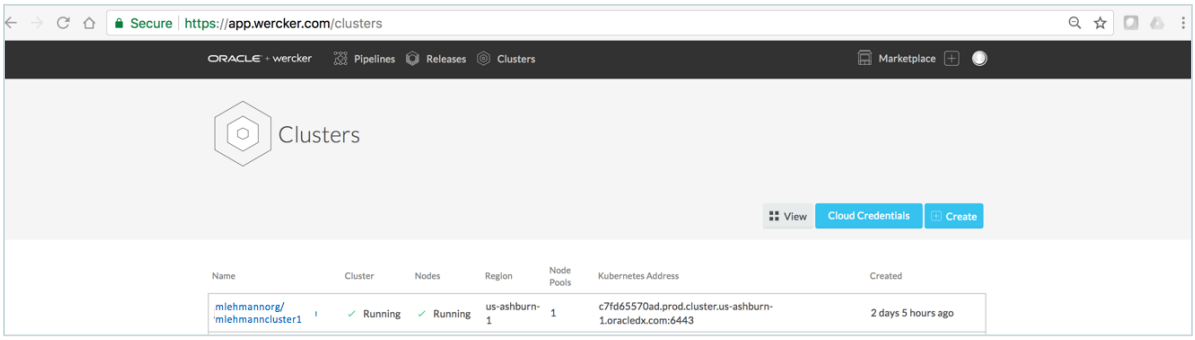
6. On the third step of the Cluster wizard, enter your cluster size. We recommend for your first cluster selecting a Small VM size.



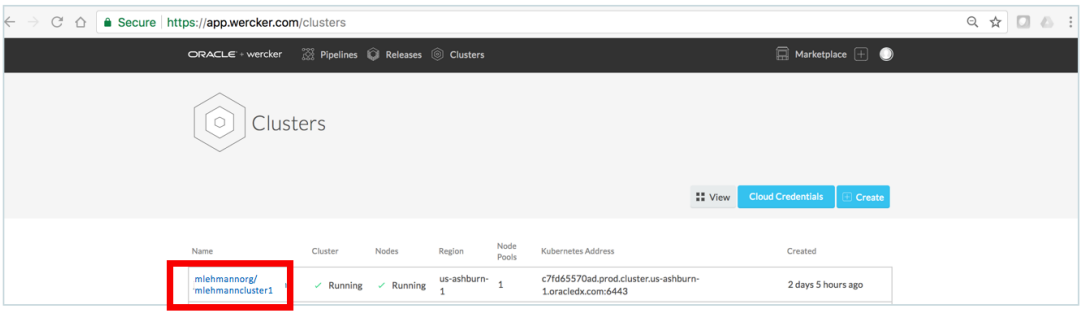
7. Finally, on the fourth step of the Cluster wizard, take the defaults on the final screen and click on Launch.



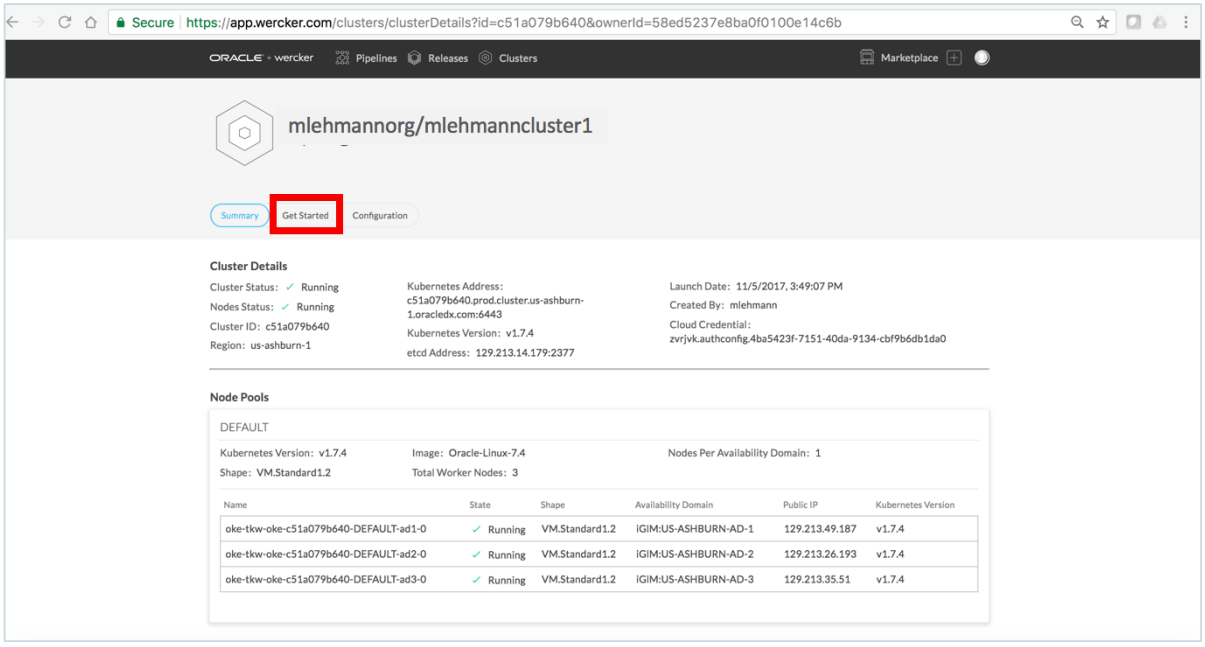
8. After pressing Launch you will be taken to the Cluster summary screen where you will see your cluster being created. After creation you will see a cluster summary screen such as the following.



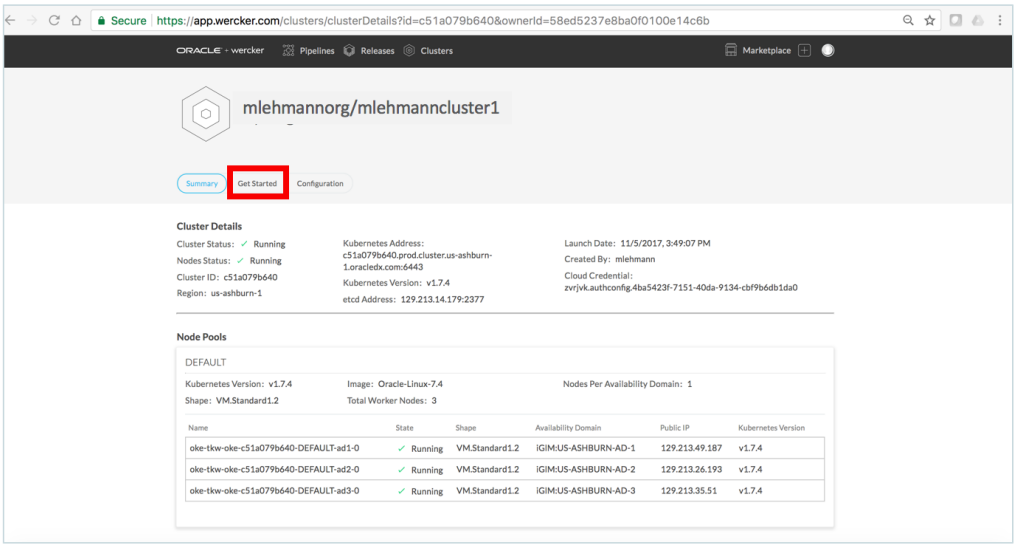
9. When your cluster is completed you can explore it by clicking on the cluster name link on the Cluster summary page.



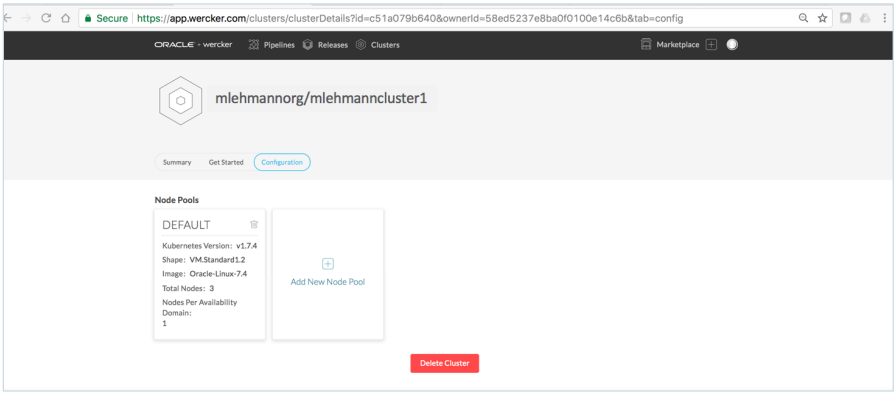
10. From the resulting Summary tab you can click on the Getting Started tab to find out more information about the cluster.



11. From the Getting started page you can see the necessary details to get the standard Kubernetes dashboard running in your browser. Finally, to see the Configuration page click on the Configuration tab.



12. Here is the Configuration page where you can delete clusters or add more node pools to an existing cluster.


Secure | https://app.wercker.com/clusters/clusterDetails?id=c51a079b640&ownerId=58ed5237e8ba0f0100e14c6b&tab=config
ORACLE - wercker
Pipelines
Releases
Clusters
Marketplace
mlehmannorg/mlehmanncluster1
Summary
Get Started
Configuration
Node Pools
DEFAULT
Kubernetes Version: v1.7.4
Shape: VM.Standard1.2
Image: Oracle-Linux-7.4
Total Nodes: 3
Nodes Per Availability Domain:
1
Add New Node Pool
Delete Cluster