



Hewlett Packard
Enterprise

KubeFlow: ml-pipeline Pods Fails to Create

Issue

- ml-pipeline pods fails to create in a fresh KubeFlow setup
- Below are the errors reported in the events of pods in question:

kubectl describe pod *pod_name* -n *namespace*

Warning Failed 13 m (x4 over 25 m) kubelet, xxx-xxx-xxx.localdomain Failed to pull image "gcr.io/mapr-252711/ml-pipeline/api-server:1.0.0-dev": rpc error: code = Unknown desc = Error response from daemon: unauthorized: You don't have the needed permissions to perform this operation, and you may have invalid credentials. To authenticate your request, follow the steps in:

<https://cloud.google.com/container-registry/docs/advanced-authentication>

Warning Failed 13 m (x4 over 25 m) kubelet, xxx-xxx-xxx.localdomain Error: ErrImagePull
Warning Failed 11 m (x14 over 25 m) kubelet, xxx-xxx-xxx.localdomain Error: ImagePullBackOff
Normal BackOff 89s (x57 over 25 m) kubelet, xxx-xxx-xxx.localdomain Back-off pulling image

Environment

- HPECP 5.2
- KubeFlow

Cause

- kubelet fails to pull ml-pipeline image from google repository
- kubelet needs credentials(secret) to validate against the repository to fetch the required image

Resolution

- Edit ml-pipeline deployment using below command:

```
kubectl get deployments -n kubeflow
```

```
kubectl edit deployment < ml-pipeline-deployment_name > -n kubeflow
```

- Put line numbers:->Press ':' + 'set numbers'
- Provide required secret for the registry by adding lines 229,230 as below:

```
226 serviceAccount: ml-pipeline
227 serviceAccountName: ml-pipeline
228 terminationGracePeriodSeconds: 30
229 imagePullSecrets:
230 - name: hpe-imagepull-secrets
231 volumes:
232 - configMap:
```

- Save the changes. Pods creation will complete now byitself.

