How to: Connect to Kubernetes and AWS

This article describes connecting to the kubernetes console. Mendix apps are managed from Kubernetes console. Typical activities that require connecting to Kubernetes console are:

- see logging that is not shown in Datadog, because the app is failing before logging is sent to datadog
- HTTP error 503 for an app; this requires to delete the deployment and the pods

This requires authorizations that are preset via Okta. So unless you have kubernetes permissions, this article is not of any use. These are the windows/powershell commands. Similar can also be setup for cygwin or unix based OS.

Prerequisites

1. Install **Chocolatey** 🍫 **Installing Chocolatey**
   a. **PowerShell** it's easier than **CMD**.
2. Install **Minikube using Chocolatey**, following the instructions at 🚢**minikube start** .
3. Install **Kubectl on Windows using Chocolatey** ⚙**Install Tools** .
4. Get the config file from Mendix team member (intentionally not disclosed here), ensure that environment settings are correct. This should be better setup as currently this relies on 1 config file.

Connect to Kubernetes

- Open powershell command prompt, go to .kube folder
- Command: kubectl config get-contexts (this shows the environment to connect to: dev, qa, prod)

- switch to specific environment use: kubectl config use-context <context> , for example kubectl config use-context eks-admin-kube-system-dsm-mx-acc
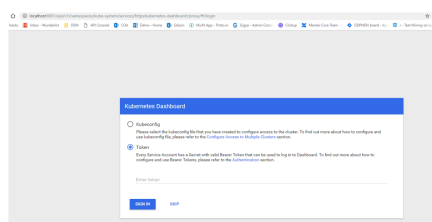

- Start the local proxy: kubectl proxy

```
PS C:\Users\680533\.kube> kubectl proxy
Starting to serve on 127.0.0.1:8001
```

- start new powershell command prompt and switch to the same context as set above

- kubectl -n kube-system get secret

```
PS C:\Users\680533> cd .\.kube\
PS C:\Users\680533\.kube> kubectl config use-context eks-admin-kube-system-dsm-mx-acc
Switched to context "eks-admin-kube-system-dsm-mx-acc".
PS C:\Users\680533\.kube> kubectl -n kube-system get secret
NAME                                TYPE                                  DATA   AGE
aws-node-token-2zbvp                kubernetes.io/service-account-token   3      24d
cluster-autoscaler-token-kvzhf      kubernetes.io/service-account-token   3      24d
default-token-twnxp                 kubernetes.io/service-account-token   3      24d
eks-admin-token-gk45f               kubernetes.io/service-account-token   3      24d
heapster-token-64ps8                kubernetes.io/service-account-token   3      6d
kube-dns-token-zdq64                kubernetes.io/service-account-token   3      24d
kube-proxy-token-247b6              kubernetes.io/service-account-token   3      24d
kubernetes-dashboard-certs          Opaque                                0      6d
kubernetes-dashboard-key-holder     Opaque                                2      6d
kubernetes-dashboard-token-12b67    kubernetes.io/service-account-token   3      6d
PS C:\Users\680533\.kube>
```

- kubectl -n kube-system describe secret eks-admin-token-gk45f (use the one that start with eks-admin)

- Start http://localhost:8001/api/v1/namespaces/kubernetes-dashboard/services/https:kubernetes-dashboard:/proxy/ and use the token from the previous command to login

Other Kubernetes points: