nginx Ingress Controller

After installing metallb we can move on to the ingress part of setup. My preferred choice is nginx. We will also get this ready for monitoring with Prometheus.

Create the namespace.

```
kubectl create namespace ingress-nginx
kubectl label namespace ingress-nginx pod-security.kubernetes.io/enforce=privileged
```

We will use helm to install nginx. This will help with upgrades in the future. Note the extra values for Prometheus.

```
helm upgrade --install ingress-nginx ingress-nginx --repo
https://kubernetes.github.io/ingress-nginx --namespace ingress-nginx --set
controller.metrics.enabled=true --set-string
controller.podAnnotations."prometheus\.io/scrape"="true" --set-string
controller.podAnnotations."prometheus\.io/port"="10254"
```

After a little bit of time, we can check the status of the namespace. The important part to note is the service/ingress-nginx-controller. It should have an External-IP provided by metallb.

```
kubectl get all -n ingress-nginx
```

> Example Output:

```
NAME                                        READY   STATUS              RESTARTS   AGE
pod/ingress-nginx-controller-8b8b9f598-jqxcr   1/1     Running             0          23m

NAME                                         TYPE           CLUSTER-IP      EXTERNAL-IP
PORT(S)                      AGE
service/ingress-nginx-controller             LoadBalancer   10.109.19.205   192.168.249.10
80:32588/TCP,443:30617/TCP   23m
service/ingress-nginx-controller-admission   ClusterIP      10.100.21.15    <none>
443/TCP                      23m
service/ingress-nginx-controller-metrics     ClusterIP      10.107.12.193   <none>
10254/TCP                    23m
```

```
service/prometheus-server                    NodePort       10.97.78.93     <none>
9090:32631/TCP               5s

NAME                                        READY   UP-TO-DATE   AVAILABLE   AGE
deployment.apps/ingress-nginx-controller    1/1     1            1           23m
```

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