

setup ingress nginx-controller

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*****  
***** Installing ingress-nginx controller on cluster *****  
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```

ingress controller is a component of k8s cluster for having load balancer in layer7 which means we can expose our application based on URLs and we can assign a specific URL for every service and application that we have within the cluster. for this purpose we need to define an ingress resource for our service and to expose it and make it work properly, we have to setup an ingress controller for managing all the ingress resources and the routings of URLs. to do this we can follow the steps below.

Steps : {

step2: find a compatible version of nginx-ingress controller for kubernetes cluster from "<https://github.com/nginxinc/kubernetes-ingress>"

step3:

```
cd /opt && git clone https://github.com/nginxinc/kubernetes-ingress.git
```

step4:

```
cd /opt/kubernetes-ingress, for kubernetes v1.18.10 checkout to branch "v1.9.0" && git checkout v1.9.0  
git switch -c v1.9.0
```

step5:

```
cd /opt/kubernetes-ingress/deployments/helm-chart && vim values.yml
```

step7: set kind of the nginx-ingress controller to daemonset for installing on every node on the cluster

```
controller:  
  kind: daemonset
```

step8: for setting external IP on nginx-ingress controller to route traffics to that ip address:

```
controller:  
  service:  
    externalIPs: ["<IP Addr>"]
```

step9: install nginx-ingress controller on default namespace.

```
cd /opt/kubernetes-ingress/deployments/helm-chart && helm install ingress-nginx .
```

step10: to make sure your controller is up and running.

```
kubect1 get all # should find ingress controller daemonsets
```

****** Important Point ******

with this installation we have nginx-ingress controller with kind daemonset and we can use master nodes of cluster to host our applications.

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