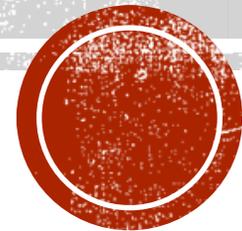


MAKE INGRESS-NGINX WORK FOR YOU, AND THE COMMUNITY

Fernando Diaz – IBM Container Service





WHAT IS INGRESS?

- **Ingress:** The action or fact of going in or entering
- **Ingress Resource:** An API object that manages external access to the services in a cluster, typically HTTP
- **Service:** Is an abstraction which defines a logical set of Pods and exposes them to the outside world
- **Ingress Controller:** Monitors Ingress resources via the Kubernetes API and updates the configuration of a load balancer in case of any changes
- **Nginx:** Open source software for web serving, reverse proxy, caching, load balancing, media streaming, and more
- **Ingress-Nginx:** Ingress controller for NGINX

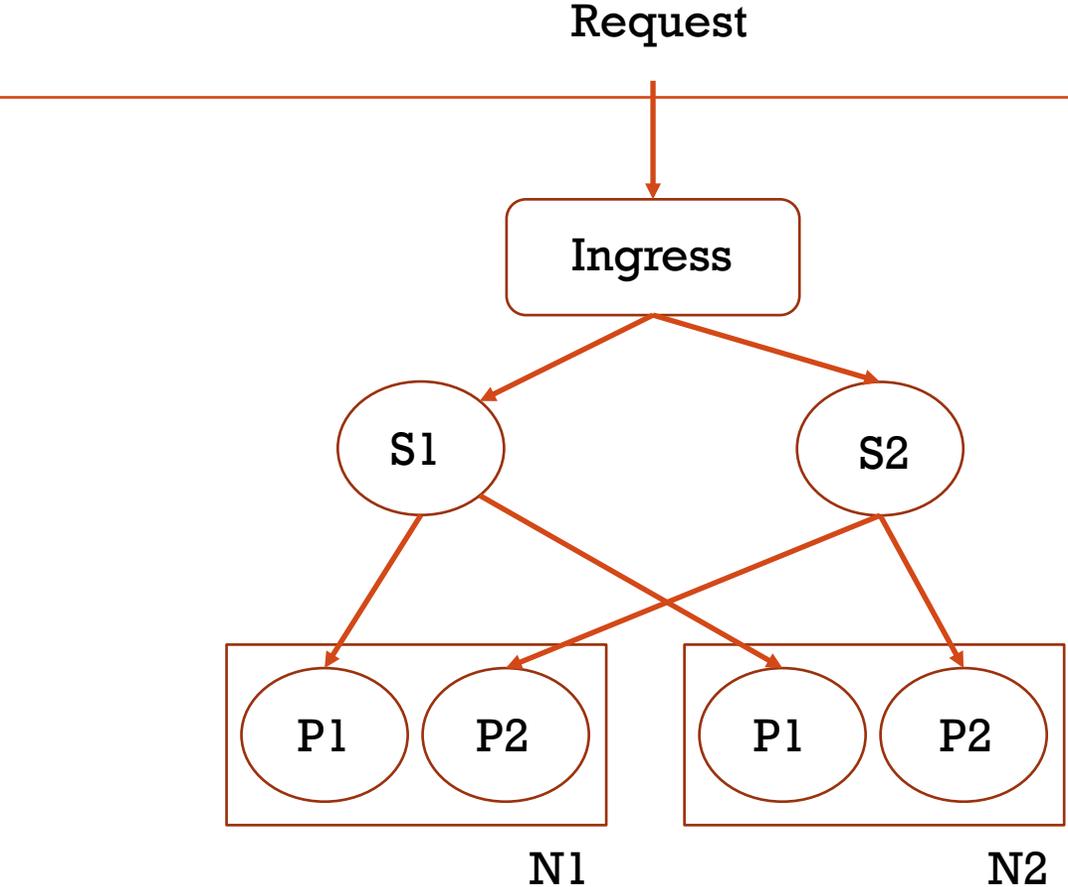


WHAT'S IT ALL LOOK LIKE?



Outside world

Cluster



* Services will be exposed via NodePort.



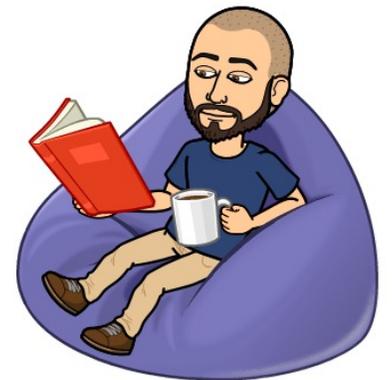
INGRESS-NGINX VS. KUBERNETES-INGRESS

Kubernetes/Ingress-Nginx	Nginxinc/Kubernetes-Ingress
Kubernetes Community	NGINX Inc. and Community
Custom NGINX build with several 3 rd party modules	Official NGINX build
One Configuration File generated from all Ingress Resources	One Configuration File per Ingress Resource
Some different annotations, Configuration Map Values, Templates, and Supported Configurations	Some different annotations, Configuration Map Values, Templates, and Supported Configurations



INGRESS-NGINX ORGANIZATION

- **Deploy:** Contains all the YAML files to create a deployment
- **Docs:** Contains documentation on usage
- **Internal:** Contains the bulk of the controller logic
- **RootFS:** Contains configuration and Template Files



CONFIGURING INGRESS-NGINX

- **Annotations:** Sets a specific configuration for a particular Ingress rule
- **Configuration Map:** Sets global configurations in NGINX



CREATING AN ANNOTATION/CONFIG-MAP

- Add Annotation/Config-map
- Add Unit Tests
- Add Documentation



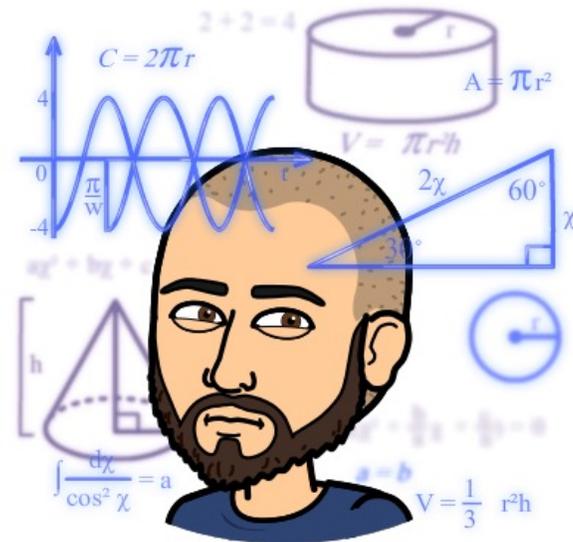
<https://bit.ly/2jfWvW8>



DEPLOYING WITH MINIKUBE

1. Start Minikube
2. Use the Docker daemon
3. Build the Image
4. Enable the Ingress Addon
5. Change the Ingress Controller Image
6. Verify Image was changed
7. Test the Annotation/ConfigMap Changes

<https://bit.ly/2HB7cRS>



* Looks like a lot, but its not that bad



THE END



<https://bit.ly/2jsv8sl>

