**Kubernetes Ingress Controllers (Google Nginx vs Nginx Plus)**

After working half an year on kubernetes, implementing and running it on production from scratch, I wanted to share one of the action item that helped us in exposing and managing our services which is ingress controller. Ingress gives you a way to route requests to services based on the request host or path, centralizing a number of services into a single entrypoint. Ingress Controllers can technically be any system capable of reverse proxying, but the most common is Nginx. Ingress controller reads the ingress file and act accordingly

While doing POC, I was exploring ingress controller and came to know that kubernetes provides an nginx controller. But there was also an ingress controller provided by Nginx Inc. which is Nginx Plus. Nginx Plus is the paid software and also provides free trial for one month. Nginx Plus have some additional feature like dynamic reconfiguration, JWT authentication, NGINX Plus extended status dashboard. K8S provided nginx ingress controller has almost all the feature that Nginx Plus has. K8S Nginx has been built with some paid features of nginx plus. Below are some detailed comparison.

* *Deployment of Ingress Controller*: You can easily deploy K8S nginx ingress controller (refer this link https://github.com/kubernetes/ingress-nginx/blob/master/deploy/README.md), where as to use NginxPlus you have to build the image first with license provided by Nginx Inc (refer this link <https://github.com/nginxinc/kubernetes-ingress/tree/master/nginx-controller> ).
* *Template file for nginx config*: The template which generates nginx config file, Its different in K8S nginx and NginxPlus ingress controller. K8S Nginx template have more feature and by default it have some parameter for nginx optimization, whereas in NginxPlus the default nginx config have very basic parameters.
* *Support for annotations and extensions:* Both Ingress controllers use ConfigMap and annotations to provide extensions for Ingress. The Google NGINX controller provides more [extensions](https://github.com/kubernetes/ingress/blob/master/controllers/nginx/configuration.md), in comparison with NginxPlus. Extensions available in NginxPlus <https://github.com/nginxinc/kubernetes-ingress/tree/master/examples/customization>.
* *Third-party modules:* The NginxPlus uses NGINX from DockerHub as base image while building the image, as you can see in the Dockerfile. The K8S ingress controller uses custom NGINX with additional modules.
* *Dashboard Support:* Nginx Plus comes with the ingress and traffic monitoring feature by default, where as in K8S nginx you have to use third party module VTS

So above are the main differences between ingress controllers provided by different vendors. Now it’s time to checkout how to deploy an ingress controller