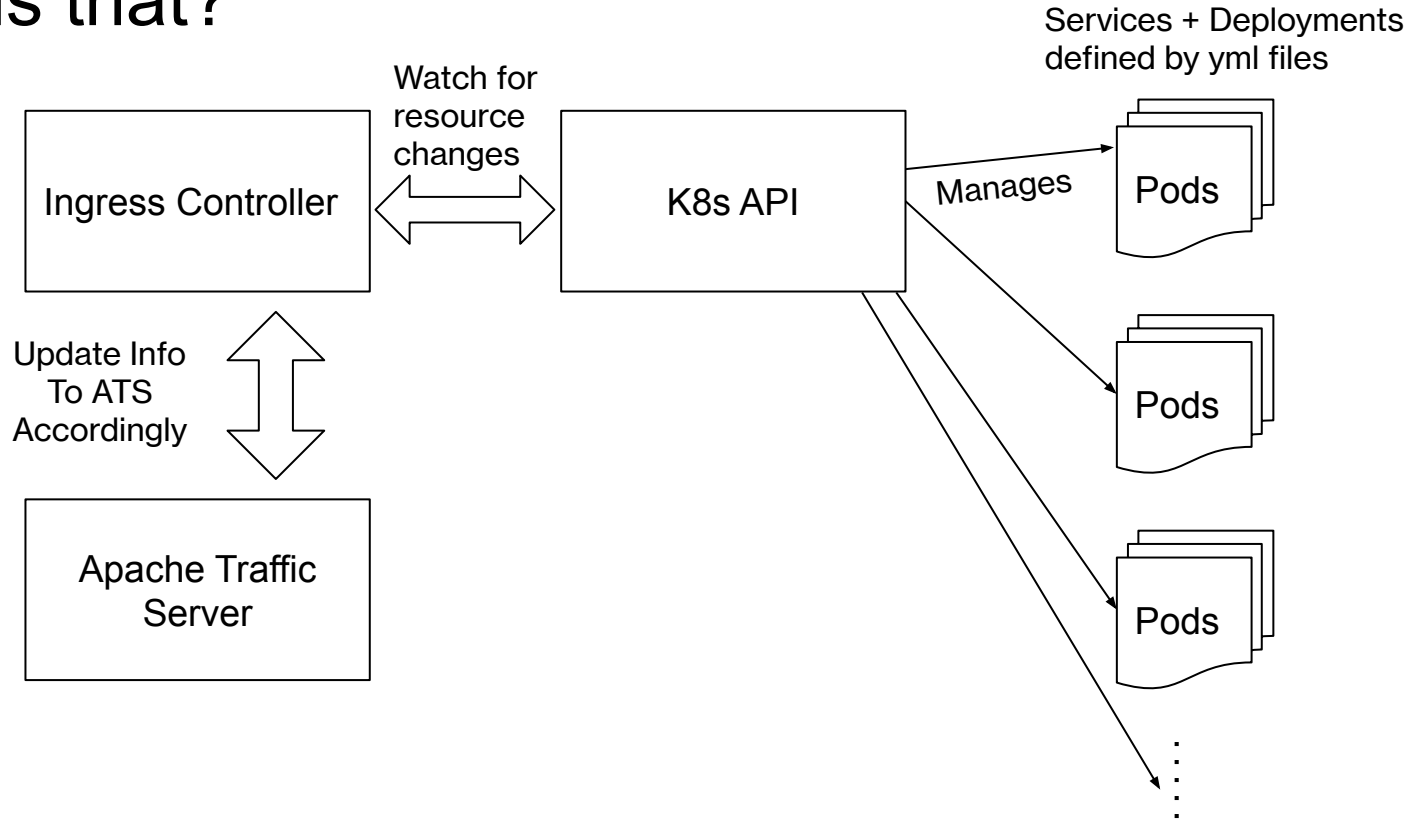


ATS Ingress Controller

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What is that?



Example

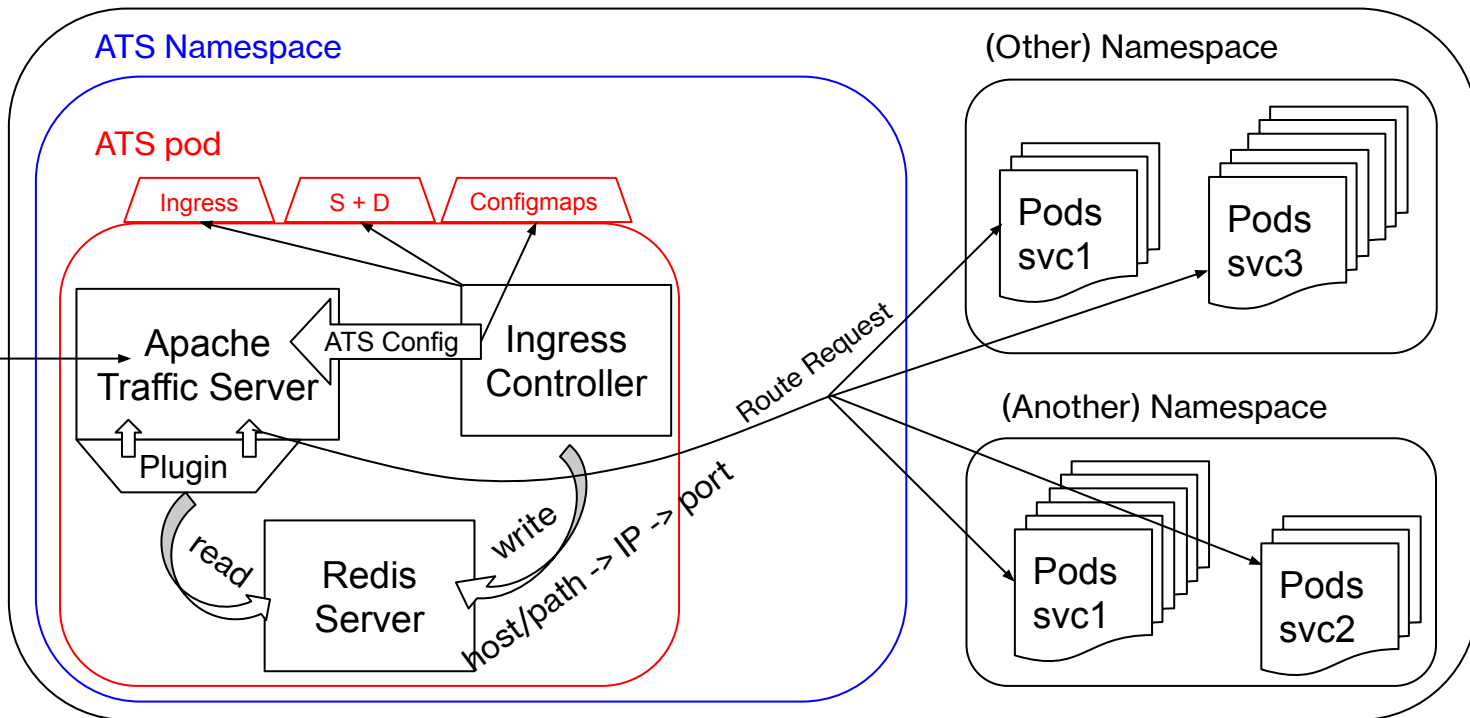
- Nginx
 - User Guide - <https://kubernetes.github.io/ingress-nginx/user-guide/tls/>
 - Git Repo - <https://github.com/kubernetes/ingress-nginx/releases>
 - Articles
 - <https://akomljen.com/kubernetes-nginx-ingress-controller/>
 - <https://www.slideshare.net/Nginx/whats-new-in-nginx-ingress-controller-for-kubernetes-release-150>
- Haproxy
 - Git Repo - <https://github.com/haproxytech/kubernetes-ingress>
 - Articles - <https://www.haproxy.com/blog/dissecting-the-haproxy-kubernetes-ingress-controller/>
- Many others
 - Kong, Ambassador (Envoy), Traefik, many others
 - <https://kubernetes.io/docs/concepts/services-networking/ingress-controllers/>
- ATS ???

How it works?

Kubernetes Cluster



HTTP request



Demo

- Application / Service
- Ingress
- “The Proxy”
- And its config

To-do

- CI/CD
 - Use latest ATS stable version
 - Add tests
 - Best securitypractices in building docker image
 - Publish docker image to public repo
- More Control for ATS
 - TLS/Certificate Management
 - Logging
 - Caching
- More Control for Routing
 - Load balancing options
 - Regex / rewrite / redirect
 - Custom response
 - Snippets
 - WAF
- Monitoring
 - Metrics - Integration with prometheus
 - Application Logging
 - Ingress controller logging

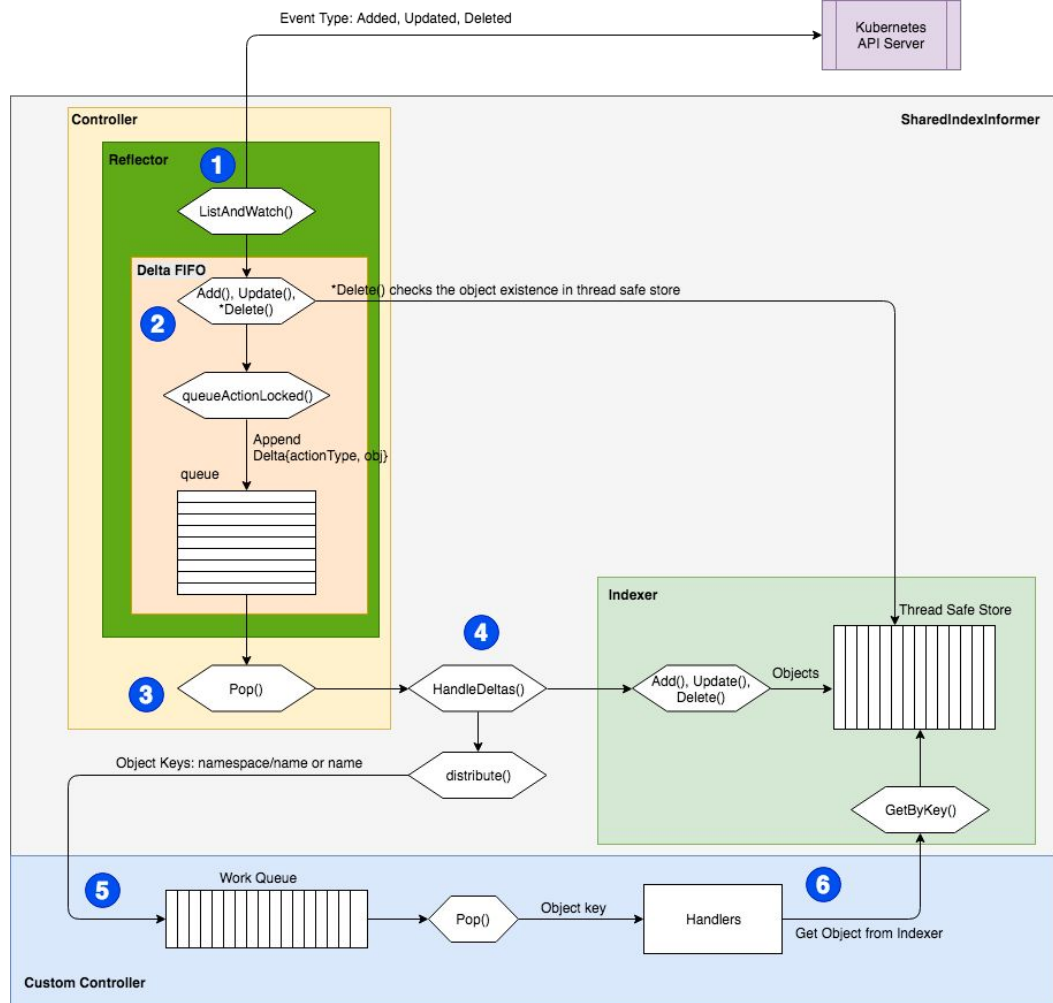
Discussions

- No remap.config
- Redis
- Options to open source this project

Extra Slides

Client-go library - Engine behind the controller

- Client-go
 - Future proof your controller
 - Git repo - <https://github.com/kubernetes/client-go/>
 - Reference to the k8s API - <https://godoc.org/k8s.io/api>
 - Conventions for the k8s API - <https://github.com/kubernetes/community/blob/master/contributors/devel/sig-architecture/api-conventions.md>
 - Article on writing your own ingress controller
 - <https://engineering.bitnami.com/articles/a-deep-dive-into-kubernetes-controllers.html>
 - <https://eyskens.me/building-a-kubernetes-ingress-controller/>
 - <https://itnext.io/how-to-create-a-kubernetes-custom-controller-using-client-go-f36a7a7536cc>



Source: <https://itnext.io/how-to-create-a-kubernetes-custom-controller-using-client-go-f36a7a7536cc>

Previous Attempts on ATS K8s Ingress Controller

- Torchbox
 - <https://github.com/torchbox/k8s-ts-ingress>
 - No updates for a couple years / Unmaintained
 - Not using the client-go. Use curl to access k8s API
 - Based on ATS 7.0.0
- ATS Ingress Controller mentioned in Kubecon 2017
 - https://www.youtube.com/watch?v=v_VMLkt4mTA
 - Controller is similar to what we are doing
 - The ATS plugin mentioned in the video is not suitable to open source without major rewrite