

Questions

- can istio handle the entirety of loadbalancer needs? probably not, for failover and high availability will need clusters across data centers, istio can only manage on cluster. spinnaker can handle load balancers in front of clusters. may be that it makes more sense for istio load balancers to handle load balancing at the cluster level
- divvying up responsibilities between spinnaker and istio regarding canaries and red/black. depends on who offers better primitives. if istio, may be able to rig up an alternative to spinnaker and let the "brains" of deployment orchestration be istio

Production Cluster

istio
production

- two clusters comprises entire product topology.
- production cluster is isolated from other runtimes, and only contains istio and the production runtime. pending other infrastructure required for running and managing production runtime.
- staging cluster runs behind company firewall, supports all other runtimes, and developer infrastructure that manages both staging cluster and production cluster, such as spinnaker.
- spinnaker manages deployments to all clusters. it deploys release candidates to the production namespace on the production cluster.
- istio then takes those raw deployments and manages http traffic rerouting, load balancer configuration, canary deployments, red/black deployments. (it may make more sense for spinnaker to handle canaries and red/black)

Staging Cluster

istio	various other namespaces: <ul style="list-style-type: none">- dev- staging (preprod)		
spinny	- dynamic namespaces created on per need basis such as capturing pull request changes, perf test, testing specific features, demos, etc		