10-ingress

Ingress What it is `Ingress` defines HTTP/HTTPS routing rules to Services, managed by an Ingress Controller. When to use Host/path-based routing TLS termination at edge Consolidating external HTTP entry points Key fields `spec.ingressClassName`: controller class `spec.rules[]`: host + paths + backend services `spec.tls[]`: TLS secrets and hostnames Common commands `bash kubectl get ingress kubectl describe ingress web-ing kubectl apply -f ingress.yaml kubectl delete ingress web-ing` YAML example `yaml apiVersion: networking.k8s.io/v1 kind: Ingress metadata: name: web-ing annotations: nginx.ingress.kubernetes.io/rewrite-target: / spec: ingressClassName: nginx tls: - hosts: - app.example.com secretName: app-example-tls rules: - host: app.example.com http: paths: - path: / pathType: Prefix backend: service: name: web port: number: 80` Practical notes Ingress resource alone does nothing without a running controller. For advanced L4/L7, Gateway API is the newer extensible model.