# 18-networkpolicy

NetworkPolicy What it is `NetworkPolicy` controls Pod-level ingress and egress traffic based on labels, namespaces, and ports. When to use Zero-trust service-to-service communication Restrict east-west traffic inside cluster Compliance and environment isolation Key fields `podSelector:` target Pods the policy applies to `policyTypes: Ingress, Egress ingress[] / egress[]:` allowed traffic rules Common commands `bash kubectl get networkpolicy -A kubectl describe networkpolicy allow-web -n payments kubectl apply -f networkpolicy.yaml kubectl delete networkpolicy allow-web -n payments` YAML example `yaml apiVersion: networking.k8s.io/v1 kind: NetworkPolicy metadata: name: allow-web namespace: payments spec: podSelector: matchLabels: app: api policyTypes: - Ingress - Egress ingress: - from: - namespaceSelector: matchLabels: name: ingress-nginx ports: - protocol: TCP port: 8080 egress: - to: - podSelector: matchLabels: app: db ports: - protocol: TCP port: 5432` Practical notes Enforcement depends on CNI plugin capability. Once a Pod is selected by an Ingress policy, only allowed ingress is permitted.