# Kubernetes Networking Troubleshooting - Netshoot Guide

## Kubernetes Netshoot Debugging Command

Command:
kubectl run tmp-shell --rm -i --tty --image=nicolaka/netshoot -- bash

Purpose:
Launch a temporary debugging pod with full networking toolset in your Kubernetes cluster.

Breakdown:
- kubectl run tmp-shell: Create a pod named tmp-shell
- --rm: Delete pod on exit
- -i: Keep STDIN open (interactive)
- --tty: Allocate a TTY (for shell access)
- --image=nicolaka/netshoot: Use a powerful debug image with ping, curl, dig, etc.
- -- bash: Start a bash shell inside the pod

Example Uses:
- ping google.com
- nslookup my-service.default.svc.cluster.local
- curl -v http://my-app:8080
- traceroute 8.8.8.8
- tcpdump -i eth0

Why Netshoot?
Unlike lightweight images, Netshoot contains full network debugging utilities, ideal for diagnosing issues in Kubernetes production environments.

Usage Tip:
Alias the command for quicker access:
alias kdebug='kubectl run tmp-shell --rm -i -t --image=nicolaka/netshoot -- bash'