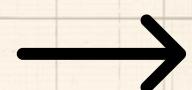


# **“Ports Every SRE / DevOps Should Know”**



**Quick reference guide for Networking, CI/CD &  
Kubernetes**





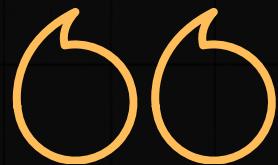
## Why Ports Matter ⚡ 🔒

⚡ Ports are like doors — if they're closed, nothing gets in or out.

As SRE/DevOps engineers, we deal with them daily while:

- Debugging outages
- Configuring firewalls
- Setting up clusters and pipelines





# System Basics



These are the foundation — without them, nothing moves.  
💡 Always check these when starting network troubleshoot



## Core Ports

- 22 → SSH (remote login, Git, Ansible)
- 80 → HTTP (web traffic)
- 443 → HTTPS (secure web traffic, APIs)
- 25 / 587 → SMTP (emails, alerts)
- 53 → DNS (name resolution)
- 123 → NTP (time sync)





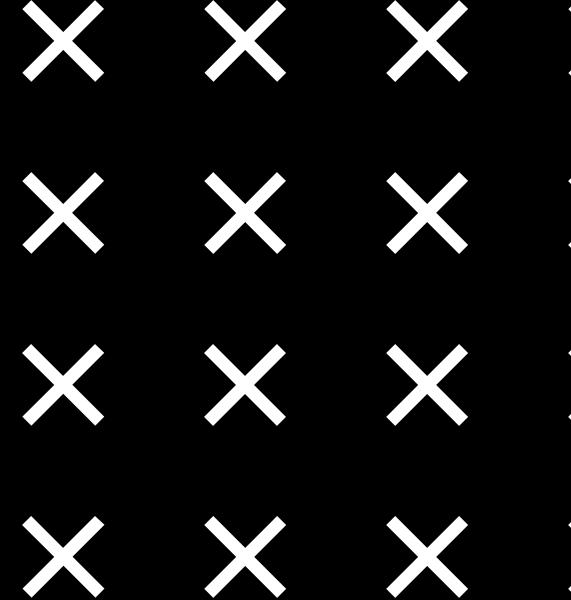
## DevOps & CI/CD Tools



Your pipelines, monitoring, and logging rely on these.  
💡 If dashboards or agents fail to connect

### ⚙️ Key Ports

- 8080 → Jenkins UI
- 50000 → Jenkins agent comms
- 3000 → Grafana dashboards
- 9090 → Prometheus server
- 9093 → Alertmanager
- 5601 → Kibana (ELK)
- 9200 / 9300 → Elasticsearch (API & cluster comms)
- 9092 → Kafka brokers
- 9100 → Node Exporter



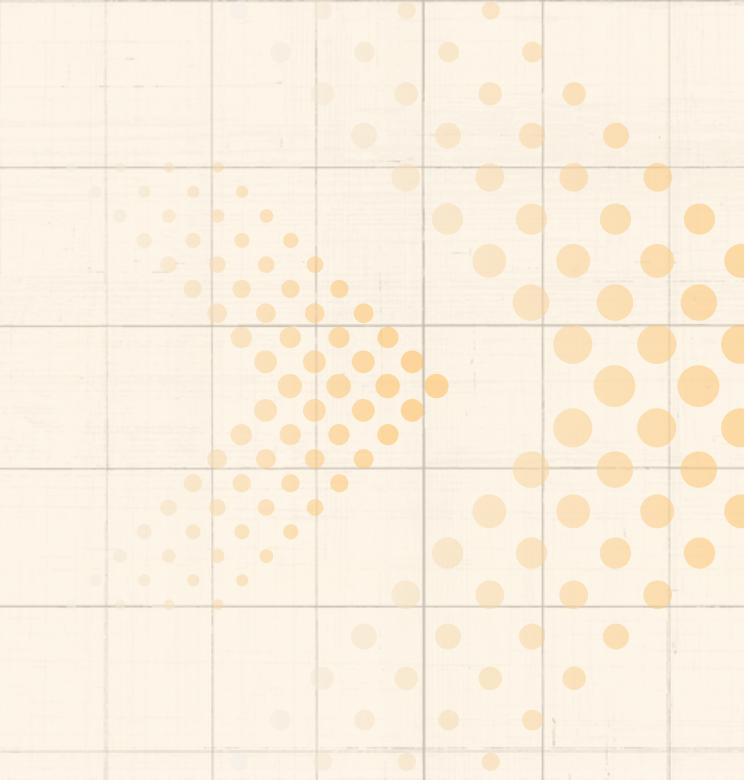
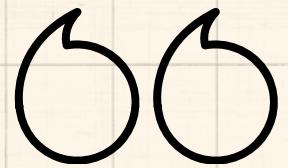
## Containers & Orchestration

Docker & Kubernetes rely on specific ports for APIs and node communication.

- 💡 Many cluster errors happen due to blocked K8s/Docker ports.

### Important Ports

- **2375 / 2376** → Docker API (unsecured / secured TLS)
- **10250** → Kubelet API (worker node communication)
- **6443** → Kubernetes API Server (control plane)
- **10257 / 10259** → Controller Manager / Scheduler
- **30000–32767** → NodePort Services



 **Knowing ports = ⚡ Faster fixes + 🔒 Stronger security**

- ✓ Debugging → Quicker fixes
- ✓ Security → Tighter firewalls
- ✓ Deployments → Smoother rollouts

👉 Which port-related failure have you faced that taught you a lesson? Share below 

