



# PORT NUMBERS FOR EVERY DEVOPS ENGINEER



## Essential Port Numbers for DevOps Engineers

### Common Protocols and Services

1. **HTTP:**
  - **Port:** 80
  - **Purpose:** Unsecured web traffic.
2. **HTTPS:**
  - **Port:** 443
  - **Purpose:** Secure web traffic (TLS/SSL).
3. **SSH:**
  - **Port:** 22
  - **Purpose:** Secure shell access for remote administration.
4. **FTP:**
  - **Port:** 20 (data transfer), 21 (control)
  - **Purpose:** File Transfer Protocol.
5. **SFTP:**
  - **Port:** 22
  - **Purpose:** Secure FTP via SSH.
6. **Telnet:**

- **Port:** 23
  - **Purpose:** Unsecured remote administration (rarely used now).
7. **DNS:**
- **Port:** 53
  - **Purpose:** Domain Name System resolution.
8. **SMTP:**
- **Port:** 25, 587 (with encryption), 465 (deprecated)
  - **Purpose:** Email sending.
9. **IMAP:**
- **Port:** 143 (unencrypted), 993 (encrypted)
  - **Purpose:** Retrieve emails (modern email clients).
10. **POP3:**
- **Port:** 110 (unencrypted), 995 (encrypted)
  - **Purpose:** Retrieve emails (older protocol).

## **DevOps and Automation Tools**

1. **Jenkins:**
- **Port:** 8080 (default)
  - **Purpose:** Continuous Integration/Delivery.
2. **Docker:**
- **Port:** 2375 (unencrypted), 2376 (encrypted)
  - **Purpose:** Docker API.
3. **Kubernetes API Server:**
- **Port:** 6443
  - **Purpose:** Communication with Kubernetes API.
4. **Terraform Enterprise:**
- **Port:** 8800 (default)
  - **Purpose:** Backend services.

## **Databases**

1. **MySQL:**

- **Port:** 3306
  - **Purpose:** MySQL database.
2. **PostgreSQL:**
    - **Port:** 5432
    - **Purpose:** PostgreSQL database.
  3. **MongoDB:**
    - **Port:** 27017
    - **Purpose:** MongoDB NoSQL database.
  4. **Redis:**
    - **Port:** 6379
    - **Purpose:** In-memory data store.
  5. **Elasticsearch:**
    - **Port:** 9200 (HTTP), 9300 (Node communication)
    - **Purpose:** Search and analytics engine.

## **Cloud and Monitoring Tools**

1. **Prometheus:**
  - **Port:** 9090
  - **Purpose:** Monitoring and alerting.
2. **Grafana:**
  - **Port:** 3000
  - **Purpose:** Data visualization and dashboards.
3. **Consul:**
  - **Port:** 8500 (HTTP API), 8600 (DNS queries)
  - **Purpose:** Service discovery and configuration.
4. **Vault:**
  - **Port:** 8200
  - **Purpose:** Secrets management.
5. **Zabbix:**
  - **Port:** 10051 (server), 10050 (agent)

- **Purpose:** Monitoring.

### Version Control

#### 1. Git (SSH):

- **Port:** 22
- **Purpose:** Secure Git operations.

#### 2. Git (HTTPS):

- **Port:** 443
- **Purpose:** Secure Git operations via HTTPS.

### Messaging and Queueing Systems

#### 1. RabbitMQ:

- **Port:** 5672 (AMQP), 15672 (Management console)
- **Purpose:** Message broker.

#### 2. Kafka:

- **Port:** 9092
- **Purpose:** Distributed messaging system.

### Miscellaneous

#### 1. NTP:

- **Port:** 123
- **Purpose:** Network Time Protocol.

#### 2. LDAP:

- **Port:** 389 (unencrypted), 636 (encrypted)
- **Purpose:** Directory services.

#### 3. SNMP:

- **Port:** 161 (queries), 162 (traps)
- **Purpose:** Network monitoring.

#### 4. RDP:

- **Port:** 3389
- **Purpose:** Remote Desktop Protocol (Windows).

