# Virtual Machine Setup Guide

Step-by-Step Guide to Provisioning a Virtual Machine  
  
1. Choose a Cloud Provider:  
 - AWS EC2, Azure VM, Google Compute Engine  
  
2. Select the Operating System:  
 - Ubuntu 22.04 LTS or CentOS 8  
  
3. Define VM Specifications:  
 - vCPU: 2  
 - RAM: 8 GB  
 - Disk: 50 GB SSD  
  
4. Configure Security Group:  
 - Allow SSH (port 22)  
 - Allow HTTP/HTTPS (ports 80/443) if required  
  
5. Launch VM and Connect:  
 - Use SSH Key or Password Authentication  
 - ssh ubuntu@<public-ip>  
  
6. Post-Launch Configurations:  
 - Install Docker: sudo apt install docker.io  
 - Set up monitoring agent  
 - Update system: sudo apt update && sudo apt upgrade

# IT Onboarding Checklist

Employee IT Onboarding Checklist  
  
1. Email and Communication  
 - Create corporate email (Gmail/Outlook)  
 - Add to company Slack/Teams  
  
2. Development Tools  
 - Install Python, VSCode, Git  
 - Access to internal GitHub  
  
3. Access Provisioning  
 - VPN setup  
 - Jira and Confluence accounts  
  
4. Security Requirements  
 - Enroll in 2FA/MFA for all services  
 - Company-issued laptop encryption verification  
  
5. Orientation Session  
 - Schedule IT walkthrough  
 - Walkthrough of internal systems

# VPN Troubleshooting Guide

Troubleshooting VPN Connectivity  
  
1. Common Connection Issues:  
 - Authentication Failure  
 - DNS not resolving  
 - Slow or intermittent connection  
  
2. Fixes:  
 - Restart VPN client  
 - Verify username/password  
 - Try alternate DNS: 8.8.8.8  
  
3. Log Review:  
 - Check /var/log/syslog for Linux  
 - Windows Event Viewer > Application logs  
  
4. Escalation:  
 - Collect logs and contact IT at support@example.com

# Access Control Policy

Access Control Guidelines  
  
1. Role-Based Access Control (RBAC)  
 - Access granted based on department/function  
 - Regular audits of access logs  
  
2. Authentication Protocols  
 - 2FA mandatory for all production systems  
 - SSO used across internal platforms  
  
3. Device Policy  
 - Only company-issued laptops allowed for VPN access  
 - Remote wipe enabled for all mobile devices  
  
4. Review Frequency  
 - Quarterly access reviews by IT compliance team

# CI/CD Pipeline Deployment

Standard CI/CD Setup  
  
1. GitHub Repository Integration  
 - Feature branches, Pull Requests, PR reviews  
  
2. Jenkins Pipeline  
 - Triggered on merge to `main`  
 - Runs test suite, builds Docker image  
  
3. Docker Deployment  
 - Dockerfile in root directory  
 - docker build -t myapp:latest .  
  
4. Kubernetes (Optional)  
 - kubectl apply -f deployment.yaml  
 - Monitored via Prometheus and Grafana