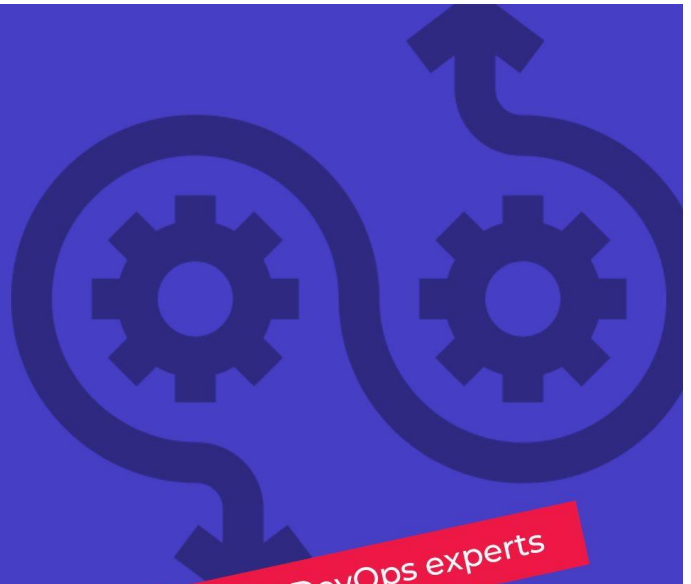




RESOURCES FOR LEARNING DevOps



approved by NIX DevOps experts

General resources:

- <https://stackoverflow.com/questions/>
- <https://askubuntu.com>
- <https://unix.stackexchange.com>
- <https://github.com/bregman-arie/devops-exercises>

Linux System Administration

Linux:

Web articles:

- Linux basics:
 - [Linux Tutorial for Beginners | Ryans Tutorials](#)
 - [Terminal | Linode](#)
 - [Linux How-to guide, Tutorial & Tips | LinuxOPsys](#)
 - [List of open source sysadmin resources | GitHub](#)
 - [Devops exercises - Linux | GitHub](#)
- Shell:
 - [Effective Shell | Effective Shell](#)
 - [Devops exercises - Shell | GitHub](#)
- Networking:
 - [7 Linux networking commands that every sysadmin should know | Red Hat](#) (ip, ifconfig, mtr, tcpdump, netstat, nslookup, ping)
 - [Network Configuration | Ubuntu](#)

- [How to Configure Network Settings on CentOS 7 Using the Terminal | phoenixNAP](#)
- Disk Management:
 - [Partitioning | Arch Linux Wiki](#)
 - [LVM | Arch Linux Wiki](#)
 - [File systems | Arch Linux Wiki](#)
- Directory structure:
 - [Linux Directory Structure Explained for Beginners | Linux Handbook](#)
- Permissions:
 - [Linux Users and Groups | Linode](#) (id, groups, usermod, useradd, passwd, adduser, userdel, visudo, newgrp, chmod, chown)
 - [Linux File Permissions and Ownership Explained with Examples | Linux Handbook](#) (chmod, chown)
 - [Sticky Bit, SUID and SGID in Linux with Examples | LinOxide](#) (chmod)
 - [Sudo Command in Linux | Baeldung](#) (sudo, su)
- Package management:
 - [Using APT to Manage Packages in Debian and Ubuntu | Linode](#) (apt)
 - [Using YUM to Manage Packages in CentOS/RHEL 7 and Earlier | Linode](#) (yum)
 - [How to Install Software from Source Code in Linux | it's FOSS](#)

Udemy courses:

- Linux:
 - [Complete Linux Training Course to Get Your Dream IT Job 2022](#)
★Recommended
 - [Linux Administration Bootcamp: Go from Beginner to Advanced](#)
 - [Complete Linux Troubleshooting Course \(Practical Examples\)](#)
 - [Linux Administration with Troubleshooting Skills: Hands-On](#)
- Bash:
 - [Linux Administration +Linux Command Line+Linux Server 3 in 1](#)
 - [Complete Linux Bash Shell Scripting with Real Life Examples](#)

YouTube channels/playlists/videos:

- [Linux Server Course - System Configuration and Operation](#)
- [DJ Ware - YouTube](#)
- [Linux Command Line Tutorial For Beginners](#)
- [Linux Full Course In 5 Hours | Linux Tutorial For Beginners | Linux Training | Edureka](#)
- [Linux Training for Beginners | Linux Tutorial For Beginners | Intellipaart](#)

Books:

- UNIX and Linux System Administration Handbook – Trent R. Hein, Evi Nemeth, Garth Snyder, Ben Whaley, Dan Mackin
- The Practice of System and Network Administration – Thomas A. Limoncelli, Christina J. Hogan, Strata R. Chalup
- How Linux Works – Brian Ward
- Linux Phrasebook – Scott Granneman
- The Linux Command Line: A Complete Introduction – William E. Shotts, Jr.
- Linux Pocket Guide – Daniel J. Barrett
- Wicked Cool Shell Scripts – Dave Taylor
- Bash Pocket Reference – Arnold Robbins

Firewall:

Official documentation/manuals:

- [iptables\(8\) - Linux man page | die.net](#)

Web articles:

- [What is iptables | Linode](#)
- [Iptables Essentials: Common Firewall Rules and Commands | DigitalOcean](#)
- [Iptables | Arch Linux Wiki](#)

Udemy courses:

- [Linux Administration with Troubleshooting Skills: Hands-On](#)
- [Linux Security: The Complete Iptables Firewall Guide](#)
- [Mastering Iptables Firewall](#)

YouTube channels/playlists/videos:

- [iptables Complete Guide | HackerSploit Linux Security | Linode](#)

DNS setup - BIND:

Official documentation/manuals:

- [BIND 9 Administrator Reference Manual](#)

Web articles:

- [DNS for Rocket Scientists | zytrax.com](#)

Udemy courses:

- [Mastering BIND DNS](#)

Domain registration and transfer, SSL certificate generation:

Official documentation/manuals:

- [Let's Encrypt Documentation](#)
- [Certbot Instructions](#)
- [Dehydrated](#)
- [An ACME Shell script: acme.sh](#)

Web articles:

- [OpenSSL Essentials: Working with SSL Certificates, Private Keys and CSRs | DigitalOcean](#)
- [Types of SSL Certificates | Namecheap](#)

Udemy courses:

- [The Complete SSL and TLS Guide 2022: HTTP to HTTPS](#)
- [NGINX, Apache, SSL Encryption - Certification Course](#)

Databases - MySQL and PostgreSQL:

Official documentation/manuals:

- [MySQL Replication](#)
- [PostgreSQL Streaming Replication](#)

Web articles:

- [How To Install MySQL on Ubuntu 20.04 | DigitalOcean](#)
- [How To Install MySQL on CentOS 7 | DigitalOcean](#)
- [How To Set Up Replication in MySQL | DigitalOcean](#)
- [How To Set Up Physical Streaming Replication with PostgreSQL 12 on Ubuntu 20.04 | DigitalOcean](#)
- [OmarElgabry's Blog | medium.com](#)
- [Databases Guides | Linode](#)

Udemy courses:

- [Complete MySQL DBA Training on Linux](#)
- [MySQL Database Admin -DBA for Beginners](#)
- [PostgreSQL v12 Database Administration on Windows and Linux](#)
- [PostgreSQL v12 Database Administration on Win/Linux- Part 2](#)

Web server setup - LAMP, LEMP; website deployment and migration:

Official documentation/manuals:

- [Nginx Documentation](#)
- [Apache Documentation](#)

Web articles:

- [How To Install WordPress on Ubuntu 22.04 with a LAMP Stack | DigitalOcean](#)
- [NGINXConfig | DigitalOcean](#)
- [How To Install Linux, Nginx, MySQL, PHP \(LEMP stack\) on Ubuntu 20.04 | DigitalOcean](#)
- [How to Configure PHP-FPM with NGINX | DigitalOcean](#)

Udemy courses:

- [NGINX, Apache, SSL Encryption - Certification Course](#)
- [Install NGINX, PHP, MySQL, SSL & WordPress on Ubuntu](#)
- [Hands-on Linux: Self-Hosted WordPress for Linux Beginners](#)

YouTube channels/playlists/videos:

- [What is a LAMP Stack?](#)
- [How to Install an Apache LAMP Server on Ubuntu 20.04 \(in 5 minutes\)](#)
- [How to Install a LEMP Server on Ubuntu 20.04 \(in 5 minutes\)](#)

Java application deployment:

Official documentation/manuals:

- [Apache Tomcat 7 Documentation](#)
- [Virtual Hosting and Tomcat Documentation](#)
- [NGINX Reverse Proxy Documentation](#)

Web articles:

- [A Complete Guide to Install Tomcat on Linux | DigitalOcean](#)
- [How to Use Virtual Hosts in Tomcat | CodeJava](#)

Udemy courses:

- [Apache tomcat for sys and web admins](#)

Backup system:

Official documentation/manuals:

- [Duplicity Documentation](#)
- [duplicity-backup.sh | GitHub](#)
- [mysqldump — A Database Backup Program](#)

Web articles:

- <https://crontab.guru/> (useful for setting cron jobs)

Udemy courses:

- [Linux Administration with Troubleshooting Skills: Hands-On](#)
- [ComputerCavalry: IT Backup Administrator](#)

YouTube videos:

- [Backup Strategies for Linux](#)
- [Easy rsync Backup with tar and cron \(daily, weekly, monthly\)](#)
- [Encrypted Backup with Duplicity](#)

Mail server and mail delivery optimization:

Official documentation/manuals:

- [Postfix Documentation](#)
- [Dovecot manual](#)

Web articles:

- [How Email Works | Runbox](#)
- [How to Configure Postfix with Webmail on Ubuntu 18.04 | LinOxide](#)

Udemy courses:

- [Linux Administration: Build 5 Hands-On Linux Projects 2022](#)

YouTube videos:

- [How to Setup Mail Server on Ubuntu with Postfix Dovecot and MariaDB/MySQL](#)
- [From Zero to a mail server with Postfix Dovecot and Roundcube installed in less than half an hour](#)
- [Roundcube Webmail with Postfix Mail server, OpenLDAP, DNS and Dovecot](#)

Ansible playbooks creation for LEMP stack setup:

Official documentation/manuals:

- [Ansible Installation Guide](#)
- [Ansible User Guide](#)

Web articles:

- [How to Use Ansible to Install and Set Up LAMP on Ubuntu 18.04 | DigitalOcean](#)
- [How To Use Ansible to Install and Set Up WordPress with LAMP on Ubuntu 18.04 | DigitalOcean](#)

Udemy courses:

- [Automation with Ansible Playbooks](#)
- [Mastering Ansible: Learn Configuration Management and Orchestration](#)
- [Ansible Advanced - Hands-On - DevOps](#)

YouTube videos:

- [you need to learn Ansible RIGHT NOW!! \(Linux Automation\)](#)
- [Ansible LAMP Stack Playbook Tutorial | How To Install LAMP Stack On Centos Using Ansible](#)

Cloud

AWS Basics:

Udemy courses:

- [AWS Cloud Practitioner \(CLF-C01\) | Complete AWS Introduction | Udemy](#)
- [Ultimate AWS Certified Solutions Architect Associate \(SAA\) | Udemy](#)

DevOps

General introduction to DevOps:

Official documentation/manuals:

- <https://aws.amazon.com/devops/what-is-devops/>
- <https://docs.gitlab.com/ee/ci/>
- <https://docs.docker.com/get-started/overview/>
- <https://kubernetes.io/docs/concepts/overview/>
- <https://www.terraform.io/intro/index.html>

- <https://www.ansible.com/overview/how-ansible-works>
- <https://www.atlassian.com/devops/what-is-devops/devops-engineer>

Web articles:

- <https://www.mindk.com/blog/devops-strategy/>
- <https://git-scm.com/book/en/v2/Getting-Started-What-is-Git%3F>
- <https://www.edureka.co/blog/what-is-jenkins/>
- <https://medium.com/devgurus/continuous-code-quality-and-automated-code-review-tools-aa911dd1b263>
- <https://www.bmc.com/blogs/kubernetes-helm-charts/>
- <https://www.simplilearn.com/tutorials/aws-tutorial/aws-cloudformation>
- https://en.wikipedia.org/wiki/Don%27t_repeat_yourself

Udemy courses:

- [Introduction to Devops - 90 Minute Crash Course | Udemy](#)
- [DevOps , CI/CD\(Continuous Integration/Delivery for Beginners | Udemy](#)
- [Introduction to Continuous Integration & Continuous Delivery | Udemy](#)
- [Gitlab CI Pipelines, CI/CD and DevOps for Beginners Tutorial | Udemy](#)
- [Learn DevOps: Docker, Kubernetes, Terraform and Azure DevOps | Udemy](#)
- [The DevOps Essentials - The Handbook | Udemy](#)

Git/GitFlow, CI/CD, Jenkins:

Official documentation/manuals:

- <https://www.jenkins.io/doc/book/installing/linux/>
- <https://www.jenkins.io/doc/book/glossary/>
- <https://www.jenkins.io/doc/book/managing/plugins/>
- <https://www.jenkins.io/doc/book/pipeline/getting-started/>
- <https://www.jenkins.io/doc/book/using/using-credentials/>
- <https://docs.cloudbees.com/docs/cloudbees-ci/latest/cloud-secure-guide/injecting-secrets>

Web articles:

- <https://medium.com/@navo.galagedara/what-is-git-in-short-and-sweet-ab68bfdb48b6>
- <https://guides.github.com/introduction/git-handbook/>
- <https://git-scm.com/docs/gittutorial>
- <https://linuxkamarada.com/en/2019/07/14/using-git-with-ssh-keys/#.Y6V3oadByo4>
- <https://www.atlassian.com/git/tutorials/comparing-workflows>
- <https://medium.com/@gustavo.guss/jenkins-starting-with-pipeline-doing-a-node-js-test-72c6057b67d4>

- <https://dzone.com/articles/jenkins-03-configure-master-and-slave>
- <https://java2blog.com/freestyle-projects-jenkins/>

Udemy courses:

- [Introduction to Version Control with Git and Github | Udemy](#)
- [Git & GitHub - The Practical Guide | Udemy](#)
- [The Git & Github Bootcamp | Udemy](#)
- [Jenkins: Beginner To Pro | Udemy](#)

CI/CD, GitLab, CI/CD as code. Containerization:

Official documentation/manuals:

- https://docs.gitlab.com/ee/user/project/working_with_projects.html
- <https://docs.gitlab.com/ee/user/project/settings/index.html>
- <https://docs.gitlab.com/runner/>
- <https://docs.gitlab.com/runner/install/linux-manually.html>
- https://docs.gitlab.com/runner/best_practice/index.html
- <https://docs.gitlab.com/ee/ci/> and sub-pages
- https://docs.gitlab.com/ee/ci/variables/predefined_variables.html
- <https://docs.gitlab.com/ee/ci/yaml/includes.html>

Web articles:

- <https://www.digitalocean.com/community/tutorials/how-to-install-and-configure-gitlab-on-ubuntu-18-04>
- <https://github.com/jenkinsci/pipeline-examples/blob/master/declarative-examples/jenkinsfile-examples/mavenDocker.groovy>
- <https://gist.github.com/merikan/228cdb1893fca91f0663bab7b095757c>
- <https://github.com/DataDog/documentation/blob/master/.gitlab-ci.yml>
- <https://www.baeldung.com/cs/virtualization-vs-containerization>
- <https://medium.com/@saschagrunert/demystifying-containers-part-i-kernel-space-2c53d6979504>
- <https://en.wikipedia.org/wiki/Cgroups>
- https://en.wikipedia.org/wiki/Linux_namespaces
- <https://en.wikipedia.org/wiki/Seccomp>

Udemy courses:

- [Gitlab CI Pipelines, CI/CD and DevOps for Beginners Tutorial | Udemy](#)
- [GitLab CI - A Complete Hands-On for CI/CD Pipelines & DevOps | Udemy](#)
- [Learn DevOps: CI/CD with Jenkins using Pipelines and Docker | Udemy](#)

Docker. Creating Environments: Linux Best Practice:

Official documentation/manuals:

- <https://docs.docker.com/engine/install/>
- <https://docs.docker.com/engine/install/ubuntu/>
- <https://docs.docker.com/engine/install/linux-postinstall/>
- <https://docs.docker.com/registry/insecure/>
- <https://docs.docker.com/storage/storagedriver/select-storage-driver/>
- <https://docs.docker.com/engine/reference/commandline/docker/> and subpages
- <https://docs.docker.com/engine/reference/commandline/pull/>
- <https://docs.docker.com/engine/reference/commandline/run/>
- <https://docs.docker.com/engine/reference/commandline/ps/>
- <https://docs.docker.com/engine/reference/commandline/top/>
- <https://docs.docker.com/engine/reference/commandline/logs/>
- <https://docs.docker.com/engine/reference/commandline/exec/>
- <https://docs.docker.com/engine/reference/commandline/inspect/>
- <https://docs.docker.com/engine/reference/commandline/rm/>
- <https://docs.docker.com/engine/reference/commandline/images/>
- <https://docs.docker.com/engine/reference/commandline/build/>
- <https://docs.docker.com/engine/reference/builder/>
- <https://docs.docker.com/develop/develop-images/multistage-build/>
- https://docs.docker.com/develop/develop-images/dockerfile_best-practices/
- <https://docs.fedoraproject.org/en-US/quick-docs/understanding-and-administering-systemd/>

Web articles:

- <https://dzone.com/articles/docker-layers-explained>
- <https://www.freecodecamp.org/news/an-introduction-to-docker-tags-9b5395636c2a/>
- <https://snyk.io/blog/10-docker-image-security-best-practices/>
- <https://runnable.com/blog/9-common-dockerfile-mistakes>
- <https://www.ecloudcontrol.com/mistakes-to-avoid-in-docker-images-with-reason-and-solution/>
- <https://dzone.com/articles/how-to-reduce-docker-image-size>
- <https://ralph.blog.imixs.com/2020/10/23/how-to-set-timezone-and-locale-for-docker-image/>
- <https://www.aquasec.com/cloud-native-academy/docker-container/docker-registry/>
- <https://betterprogramming.pub/docker-tips-access-the-docker-daemon-via-ssh-97cd6b44a53>
- <https://geekflare.com/container-security-scanners/>
- <https://askubuntu.com/questions/18654/how-to-prevent-updating-of-a-specific-package>

- <https://www.thegeeksearch.com/how-to-rotate-systemd-journald-log-in-centos-rhel-7/>
- <https://www.shubhamdipt.com/blog/how-to-create-a-systemd-service-in-linux/>
- <https://avcourt.github.io/tiny-cluster/2019/08/01/systemd.html>
- <https://ma.ttias.be/auto-restart-crashed-service-systemd/>

Udemy courses:

- [Docker for the Absolute Beginner - Hands On - DevOps | Udemy](#)
- [Docker, From Zero To Hero: Become a DevOps Docker Master | Udemy](#)
- [Docker & Kubernetes: The Practical Guide \[2022 Edition\] | Udemy](#)
- [Docker Certified Associate 2020 - Certifications Course | Udemy](#)

Web applications:

Official documentation/manuals:

- https://nginx.org/en/docs/http/configuring_https_servers.html
- <https://docs.nginx.com/nginx/admin-guide/security-controls/terminating-ssl-tcp/>
- <https://docs.nginx.com/nginx/admin-guide/security-controls/configuring-http-basic-authentication/>
- <https://docs.nginx.com/nginx/admin-guide/security-controls/configuring-subrequest-authentication/>
- <https://www.nginx.com/blog/rate-limiting-nginx/>
- <https://docs.nginx.com/nginx/admin-guide/security-controls/controlling-access-proxied-tcp/>
- <https://docs.nginx.com/nginx/admin-guide/security-controls/securing-http-traffic-upstream/>
- https://www.nginx.com/resources/wiki/start/topics/tutorials/config_pitfalls/
- https://nginx.org/en/docs/http/nginx_http_realip_module.html
- <https://docs.nginx.com/nginx/admin-guide/load-balancer/using-proxy-protocol/>
- <https://docs.nginx.com/nginx/admin-guide/web-server/reverse-proxy/>

Web articles:

- <https://www.ssllabs.com/ssltest/index.html>
- <https://github.com/nginxinc/nginx-prometheus-exporter>
- <https://www.tecmint.com/configure-custom-access-and-error-log-formats-in-nginx/>
- <https://serverfault.com/questions/45353/nginx-access-logs-ignore-certain-requests>
- <https://webdock.io/en/docs/how-guides/security-guides/how-to-configure-security-headers-in-nginx-and-apache>
- <https://securityheaders.com/>
- <https://www.tecmint.com/limit-file-upload-size-in-nginx/>
- <https://ubiq.co/tech-blog/increase-request-timeout-nginx/>
- <https://www.nginx.com/blog/nginx-caching-guide/>

- <https://www.tecmint.com/cache-content-with-nginx/>

Udemy courses:

- [Apache Web Server - not just learn, Master it. | Udemy](#)
- [NGINX Fundamentals: High Performance Servers from Scratch | Udemy](#)

Terraform:

Official documentation/manuals:

- <https://www.terraform.io/docs/language/settings/backends/configuration.html>
- <https://www.terraform.io/docs/language/providers/configuration.html>
- <https://www.terraform.io/docs/language/settings/index.html>
- <https://www.terraform.io/docs/cli/commands/index.html>
- <https://registry.terraform.io/browse/providers>
- <https://www.terraform.io/docs/language/values/variables.html>
- <https://www.terraform.io/docs/language/values/outputs.html>
- <https://www.terraform.io/docs/language/data-sources/index.html>
- <https://www.terraform.io/docs/language/resources/syntax.html>
- <https://www.terraform.io/docs/language/resources/behavior.html>
- <https://www.terraform.io/docs/language/modules/develop/index.html>
- https://www.terraform.io/docs/language/meta-arguments/depends_on.html
- <https://www.terraform.io/docs/language/meta-arguments/lifecycle.html>
- https://www.terraform.io/docs/language/meta-arguments/for_each.html
- <https://www.terraform.io/docs/language/meta-arguments/count.html>
- <https://www.terraform.io/docs/language/meta-arguments/resource-provider.html>
- <https://www.terraform.io/docs/language/functions/index.html> and subpages
- <https://www.terraform.io/docs/extend/best-practices/index.html>
- <https://www.terraform.io/docs/language/state/remote-state-data.html>

Web articles:

- <https://dev.to/loujaybee/what-is-terraform-used-for-the-3-main-use-cases-462e>
- <https://k21academy.com/terraform-iac/terraform-beginners-guide/>
- <https://blog.gruntwork.io/terraform-tips-tricks-loops-if-statements-and-gotchas-f739bbae55f9>
- <https://www.hashicorp.com/blog/zero-downtime-updates-with-terraform>

Udemy courses:

- [Terraform for the Absolute Beginners with Labs | Udemy](#)
- [Terraform - From Zero to Certified Professional | Udemy](#)

Ansible:

Official documentation/manuals:

- <https://www.ansible.com/use-cases>
- https://docs.ansible.com/ansible/latest/user_guide/basic_concepts.html
- https://docs.ansible.com/ansible/latest/reference_appendices/glossary.html
- https://docs.ansible.com/ansible/latest/user_guide/intro_inventory.html
- https://docs.ansible.com/ansible/latest/user_guide/intro_dynamic_inventory.html
- https://docs.ansible.com/ansible/2.8/user_guide/playbooks_best_practices.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_variables.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_vars_facts.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_intro.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_delegation.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_loops.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_conditionals.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_templating.html
- https://docs.ansible.com/ansible/latest/reference_appendices/common_return_values.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_checkmode.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_blocks.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_reuse_roles.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_handlers.html
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_reuse.html#playbooks-reuse
- https://docs.ansible.com/ansible/latest/user_guide/playbooks_best_practices.html

Web articles:

- https://www.redhat.com/en/blog/system-administrators-guide-getting-started-ansible-fast?extldCarryOver=true&sc_cid=701f2000001OH7YAAW
- <https://blog.ippon.tech/ansible-tips-and-tricks/>
- <https://ansible-tips-and-tricks.readthedocs.io/en/latest/ansible/commands/>
- <https://www.quora.com/What-are-the-disadvantages-of-Ansible>
- <https://ansible-tips-and-tricks.readthedocs.io/en/latest/os-dependent-tasks/variables/>

Udemy courses:

- [Ansible for the Absolute Beginner - Hands-On - DevOps | Udemy](#)
- [Ansible Advanced - Hands-On - DevOps | Udemy](#)
- [20 Real Time DevOps Projects | Udemy](#)

Deployments: Methodologies. Pure linux deployments:

Web articles:

- <https://thenewstack.io/deployment-strategies/>
- <https://www.nginx.com/blog/nginx-unit-updating-apps-with-100-percent-uptime/>
- <https://softjourn.com/blog/article/8-best-practices-for-a-smooth-web-project-deployment>
- <https://www.linkedin.com/pulse/service-recovery-rolling-back-vs-forward-fixing-mohamed-el-geish/>
- <https://deploybot.com/blog/10-mistakes-developers-make>
- https://docs.rightscale.com/cm/designers_guide/cm-designing-and-deploying-high-availability-websites.html

Udemy courses:

- [Kubernetes Hands On | Udemy](#)
- [Kubernetes CKS 2022 Complete Course - Theory - Practice | Udemy](#)

Kubernetes:

Official documentation/manuals:

- <https://kubernetes.io/docs/concepts/overview/what-is-kubernetes/>
- <https://kubernetes.io/docs/concepts/overview/components/>
- <https://kubernetes.io/docs/reference/glossary/?fundamental=true>
- <https://kubernetes.io/docs/reference/access-authn-authz/authentication/>
- <https://kubernetes.io/docs/reference/access-authn-authz/authorization/>
- <https://kubernetes.io/docs/reference/access-authn-authz/rbac/>
- <https://kubernetes.io/docs/concepts/overview/working-with-objects/kubernetes-objects/>
- <https://kubernetes.io/docs/concepts/architecture/nodes/>
- <https://kubernetes.io/docs/concepts/overview/working-with-objects/namespaces/>
- <https://kubernetes.io/docs/concepts/policy/pod-security-policy/>
- <https://kubernetes.io/docs/concepts/configuration/pod-priority-preemption/>
- <https://kubernetes.io/docs/concepts/overview/working-with-objects/annotations/>
- <https://kubernetes.io/docs/tasks/tools/install-kubectl/>
- <https://kubernetes.io/docs/tutorials/kubernetes-basics/deploy-app/deploy-intro/> +
[interactive lesson](#)
- <https://kubernetes.io/docs/reference/generated/kubectl/kubectl-commands>
- <https://kubernetes.io/docs/reference/kubectl/cheatsheet/>
- <https://kubernetes.io/docs/concepts/policy/limit-range/>
- <https://kubernetes.io/docs/concepts/policy/resource-quotas/>
- <https://kubernetes.io/docs/concepts/configuration/configmap/>
- <https://kubernetes.io/docs/concepts/configuration/secret/>

- <https://kubernetes.io/docs/concepts/workloads/pods/>
- <https://kubernetes.io/docs/tasks/inject-data-application/define-environment-variable-container/>
- <https://kubernetes.io/docs/tasks/configure-pod-container/pull-image-private-registry/>
- <https://kubernetes.io/docs/concepts/scheduling-eviction/assign-pod-node/>
- <https://kubernetes.io/docs/tasks/configure-pod-container/configure-liveness-readiness-startup-probes/>
- <https://kubernetes.io/docs/concepts/configuration/manage-resources-containers/>
- <https://kubernetes.io/docs/concepts/services-networking/connect-applications-service/>
- <https://kubernetes.io/docs/tasks/access-application-cluster/port-forward-access-application-cluster/>
- <https://kubernetes.io/docs/tasks/configure-pod-container/security-context/>
- <https://kubernetes.io/docs/tasks/configure-pod-container/configure-pod-initialization/>
- <https://kubernetes.io/docs/tasks/debug-application-cluster/debug-running-pod/>
- <https://kubernetes.io/docs/concepts/services-networking/service/>
- <https://kubernetes.io/docs/tasks/debug-application-cluster/debug-application-introspection/>
- <https://kubernetes.io/docs/reference/glossary/?all=true>
- <https://kubernetes.io/docs/concepts/workloads/controllers/deployment/>
- <https://kubernetes.io/docs/concepts/workloads/controllers/replicationcontroller/>
- <https://kubernetes.io/docs/concepts/workloads/controllers/replicaset/>
- <https://kubernetes.io/docs/concepts/workloads/controllers/daemonset/>
- <https://kubernetes.io/docs/concepts/workloads/controllers/statefulset/>
- <https://kubernetes.io/docs/concepts/workloads/controllers/job/>
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- <https://kubernetes.io/docs/concepts/workloads/controllers/cron-jobs/>
- <https://kubernetes.io/docs/concepts/workloads/pods/disruptions/>
- <https://kubernetes.io/docs/tasks/run-application/configure-pdb/>
- <https://kubernetes.io/docs/concepts/extend-kubernetes/api-extension/custom-resources/>
- <https://kubernetes.io/docs/concepts/storage/volumes/>
- <https://kubernetes.io/docs/concepts/storage/persistent-volumes/>
- <https://kubernetes.io/docs/concepts/storage/volume-snapshots/>
- <https://kubernetes.io/docs/concepts/storage/storage-classes/>
- <https://kubernetes.io/docs/concepts/storage/dynamic-provisioning/>
- <https://kubernetes.io/docs/concepts/storage/ephemeral-volumes/>
- <https://kubernetes.io/docs/concepts/services-networking/ingress/>
- <https://kubernetes.io/docs/concepts/services-networking/ingress-controllers/>
- <https://kubernetes.github.io/ingress-nginx/how-it-works/>
- <https://istio.io/latest/docs/tasks/traffic-management/ingress/kubernetes-ingress/>

Web articles:

- <https://thenewstack.io/do-i-really-need-kubernetes/>
- <https://hackernoon.com/why-and-when-you-should-use-kubernetes-8b50915d97d8>
- <https://www.digitalocean.com/community/tutorials/architecting-applications-for-kubernetes>
- <https://platform9.com/blog/kubernetes-enterprise-chapter-2-kubernetes-architecture-concepts/>
- <https://blog.mayadata.io/openebs/the-story-of-the-pod-manifest-to-running>
- <https://github.com/jamiehannaford/what-happens-when-k8s>
- <https://starkandwayne.com/blog/kubernetes-deployments-statefulsets-and-daemonsets/>
- <https://operatorhub.io/>

Udemy courses:

- [Kubernetes for the Absolute Beginners - Hands-on | Udemy](#)
- [Docker & Kubernetes: The Practical Guide \[2022 Edition\] | Udemy](#)
- [Docker and Kubernetes: The Complete Guide | Udemy](#)

Helm:

Official documentation/manuals:

- <https://helm.sh/docs/glossary/>
- <https://helm.sh/docs/intro/quickstart/>
- <https://helm.sh/docs/intro/install/>
- <https://helm.sh/docs/topics/rbac/>
- https://helm.sh/docs/intro/using_helm/
- <https://helm.sh/docs/topics/architecture/>
- <https://helm.sh/docs/topics/plugins/>
- <https://helm.sh/docs/topics/charts/>
- https://helm.sh/docs/chart_best_practices/conventions/
- https://helm.sh/docs/chart_best_practices/values/
- https://helm.sh/docs/chart_best_practices/templates/
- https://helm.sh/docs/chart_best_practices/dependencies/
- https://helm.sh/docs/chart_best_practices/labels/
- https://helm.sh/docs/chart_best_practices/pods/
- https://helm.sh/docs/chart_best_practices/rbac/
- https://helm.sh/docs/topics/charts_hooks/
- https://helm.sh/docs/topics/library_charts/
- https://helm.sh/docs/chart_template_guide/getting_started/
- https://helm.sh/docs/chart_template_guide/builtin_objects/
- https://helm.sh/docs/chart_template_guide/values_files/

- https://helm.sh/docs/chart_template_guide/functions_and_pipelines/
- https://helm.sh/docs/chart_template_guide/function_list/
- https://helm.sh/docs/chart_template_guide/control_structures/
- https://helm.sh/docs/chart_template_guide/variables/
- https://helm.sh/docs/chart_template_guide/named_templates/
- https://helm.sh/docs/chart_template_guide/accessing_files/
- https://helm.sh/docs/chart_template_guide/notes_files/
- https://helm.sh/docs/chart_template_guide/subcharts_and_globals/
- https://helm.sh/docs/chart_template_guide/helm_ignore_file/
- https://helm.sh/docs/chart_template_guide/debugging/
- https://helm.sh/docs/chart_template_guide/yaml_techniques/
- <https://helm.sh/docs/topics/provenance/>
- https://helm.sh/docs/chart_best_practices/custom_resource_definitions/
- https://helm.sh/docs/howto/charts_tips_and_tricks/

Web articles:

- <https://www.freecodecamp.org/news/helm-charts-tutorial-the-kubernetes-package-manager-explained/>
- <https://github.com/databus23/helm-diff>
- <https://bitnami.com/stacks/helm>

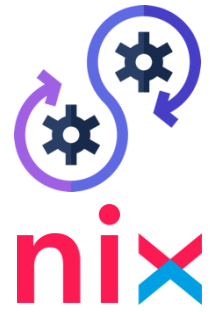
Udemy courses:

- [Helm Kubernetes Packaging Manager for Developers and DevOps | Udemy](#)

When preparing for the interview will be useful:

1. Understanding the structure and purpose of Linux directories, the general structure and components of the OS.
2. Understanding of user privileges, groups and access rights settings.
3. Skills of working with text, files, processes, service management, network configuration, time, working with disks, basics of Bash.
4. Skills of working with Centos/Ubuntu package managers, installing packages from source code.
5. Understanding of the principles of the web.
6. Practical skills in installing and configuring Nginx/Apache web servers.
7. Experience in installing popular CMS websites: Wordpress/Joomla/Drupal.
8. Understanding of the purpose, principles of operation and organisation of the DBMS MySQL/PostgreSQL, SQL queries, database backup/restore.
9. Understanding the principles of mail, the purpose of mail protocols.
10. Practical experience in setting up Postfix/Exim+Dovecot+Roundcube mail communication.
11. Knowledge of the principles of DNS, types of resource records and their functions.

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<https://nixstech.com/>