# **DevOps- Acronyms**



# Here are some common acronyms related to Amazon Web Services (AWS) and cloud computing in general:

- 1. AWS Amazon Web Services. This is a subsidiary of Amazon providing on-demand cloud computing platforms and APIs.
- 2. EC2 Elastic Compute Cloud. This is a web service that provides resizable compute capacity in the cloud. It is one of AWS's core services.
- 3. S3 Simple Storage Service. This is an object storage service offered by AWS for storing and retrieving data.
- 4. VPC Virtual Private Cloud. This is a virtual network dedicated to your AWS account. It enables you to launch AWS resources into a virtual network that you've defined.
- 5. IAM Identity and Access Management. This is a service that helps you securely control access to AWS resources.
- 6. RDS Relational Database Service. This is a managed database service that makes it easy to set up, operate, and scale a relational database in the cloud.
- 7. ELB Elastic Load Balancing. This automatically distributes incoming application traffic across multiple targets, such as EC2 instances, containers, and IP addresses.
- 8. EBS Elastic Block Store. This provides block-level storage volumes for use with EC2 instances.
- 9. Lambda AWS Lambda. This is a serverless computing service that lets you run code without provisioning or managing servers.
- 10. SQS Simple Queue Service. This is a fully managed message queuing service that enables you to decouple and scale microservices, distributed systems, and serverless applications.
- 11. SNS Simple Notification Service. This is a fully managed messaging service for both application-to-application and application-to-person communication.
- 12. KMS Key Management Service. This is a managed service that makes it easy for you to create and control encryption keys used to encrypt your data.
- 13. CFN CloudFormation. This is a service that provides a common language for you to describe and provision all the infrastructure resources in your cloud environment.
- 14. CLI Command Line Interface. This is a text-based interface used for interacting with AWS services through commands entered into a terminal or command prompt.
- 15. SDK Software Development Kit. This provides tools and libraries to interact with AWS services programmatically.
- 16. CDN Content Delivery Network. This is a distributed network of servers that delivers web content to users based on their geographic location.



- 17. DynamoDB Amazon DynamoDB. This is a fully managed NoSQL database service that provides fast and predictable performance with seamless scalability.
- 18. API Application Programming Interface. This defines interactions between multiple software applications.
- 19. DNS Domain Name System. This is a hierarchical decentralized naming system for computers, services, or other resources connected to the internet or a private network.
- 20. VPN Virtual Private Network. This extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.

# Here are some common acronyms related to Linux fundamentals:

- 1. GNU GNU's Not Unix. A Unix-like operating system.
- 2. GPL GNU General Public License. A widely used free software license, originally written by Richard Stallman for the GNU Project.
- 3. CLI Command Line Interface. A text-based interface for interacting with a computer program.
- 4. GUI Graphical User Interface. A visual way of interacting with a computer using graphical elements such as windows, icons, and menus.
- 5. POSIX Portable Operating System Interface. A family of standards specified by the IEEE for maintaining compatibility between operating systems, particularly Unix-like ones.
- 6. FSF Free Software Foundation. A non-profit organization founded by Richard Stallman to support the free software movement.
- 7. OS Operating System. The software that manages hardware resources and provides services to applications.
- 8. GPLv2 GNU General Public License version 2. An older version of the GPL, still widely used for many open-source projects.
- 9. GPLv3 GNU General Public License version 3. The latest version of the GPL, designed to address some perceived shortcomings of GPLv2.
- 10. UNIX A family of multitasking, multiuser computer operating systems that derive from the original AT&T Unix.
- 11. X11 A windowing system for bitmap displays, common on Unix-like operating systems.
- 12. DE Desktop Environment. A collection of software designed to provide a consistent user interface and set of applications for a graphical desktop environment.
- 13. WM Window Manager. A software component that manages the placement and appearance of windows in a graphical user interface.



- 14. Xorg A popular implementation of the X Window System.
- 15. TTY Teletypewriter. Historically, a device used for input and output of text, but also used to refer to virtual terminals on Unix-like operating systems.
- 16. FHS Filesystem Hierarchy Standard. A standard for organizing the contents of Unix-like operating systems.
- 17. LTS Long Term Support. A release model used by some Linux distributions, where certain versions receive updates and support for an extended period.
- 18. GPLv3 GNU General Public License version 3. The latest version of the GPL, designed to address some perceived shortcomings of GPLv2.
- 19. rpm Red Hat Package Manager. A package management system used by some Linux distributions, notably Red Hat and Fedora.
- 20. dpkg Debian Package. A package management system used by Debian and its derivatives like Ubuntu.

### Here are some common acronyms related to Python:

- 1. PEP Python Enhancement Proposal. These are design documents providing information to the Python community, or describing a new feature for Python or its processes or environment.
- 2. IDE Integrated Development Environment. This is a software application that provides comprehensive facilities to computer programmers for software development.
- 3. OOP Object-Oriented Programming. This is a programming paradigm based on the concept of "objects", which can contain data and code.
- 4. API Application Programming Interface. This is a set of rules and protocols that allows different software applications to communicate with each other.
- 5. GUI Graphical User Interface. This refers to the visual elements of a program that users interact with.
- 6. CLI Command Line Interface. This is a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text.
- 7. JSON JavaScript Object Notation. This is a lightweight data interchange format inspired by JavaScript object literal syntax.
- 8. CSV Comma-Separated Values. This is a simple file format used to store tabular data, such as a spreadsheet or database.
- 9. XML Extensible Markup Language. This is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
- 10. HTTP Hypertext Transfer Protocol. This is an application protocol for distributed, collaborative, hypermedia information systems.
- 11. HTTPS Hypertext Transfer Protocol Secure. This is an extension of HTTP used for secure communication over a computer network, especially the internet.



- 12. ORM Object-Relational Mapping. This is a programming technique for converting data between incompatible type systems using object-oriented programming languages.
- 13. PIL Python Imaging Library. This is a library for the Python programming language that adds image processing capabilities to your Python interpreter.
- 14. CLI Command Line Interface. This is a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text.
- 15. GIL Global Interpreter Lock. This is a mutex that protects access to Python objects, preventing multiple threads from executing Python bytecodes at once.
- 16. PyPI Python Package Index. This is a repository of software packages for the Python programming language.
- 17. VM Virtual Machine. This is an emulation of a computer system, implemented in software, that executes programs like a physical machine.
- 18. CPython This is the reference implementation of the Python programming language. It is written in C and is the most widely used Python interpreter.
- 19. JIT Just-In-Time Compilation. This is a technique for improving the runtime performance of computer programs.
- 20. CLI Command Line Interface. This is a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text.

### Here are some common acronyms related to DevOps practices and cloud computing:

- 1. CI/CD Continuous Integration/Continuous Deployment. These are practices in software development where code changes are automatically tested and deployed frequently.
- 2. IaC Infrastructure as Code. This is the practice of managing and provisioning computer data centers through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools.
- 3. AWS Amazon Web Services. This is a comprehensive, evolving cloud computing platform provided by Amazon.com.
- 4. GCP Google Cloud Platform. This is a suite of cloud computing services offered by Google.
- 5. Azure Microsoft Azure. This is a cloud computing service created by Microsoft for building, testing, deploying, and managing applications and services through Microsoft-managed data centers.
- 6. SaaS Software as a Service. This is a software licensing and delivery model where software is centrally hosted and licensed on a subscription basis.
- 7. PaaS Platform as a Service. This provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app.



- 8. DaaS Database as a Service. This is a cloud computing service model that provides users with some form of database access without the need for setting up physical hardware, installing software, or configuring for performance.
- 9. MLaaS Machine Learning as a Service. This is a range of services that offer machine learning tools as part of cloud computing services.
- 10. K8s Kubernetes. This is an open-source container orchestration platform that automates the deployment, scaling, and management of containerized applications.
- 11. CDN Content Delivery Network. This is a geographically distributed network of proxy servers and their data centers designed to distribute service spatially relative to end-users to provide high availability and high performance.
- 12. VPC Virtual Private Cloud. This is an on-demand configurable pool of shared computing resources allocated within a public cloud environment, providing a certain level of isolation between the different organizations using the resources.
- 13. VPN Virtual Private Network. This extends a private network across a public network and enables users to send and receive data across shared or public networks as if their computing devices were directly connected to the private network.
- 14. SLA Service Level Agreement. This is a commitment between a service provider and a client. Particular aspects of the service—quality, availability, responsibilities—are agreed upon in a legally binding contract.
- 15. RBAC Role-Based Access Control. This is an approach to restricting system access to authorized users. Users are assigned roles, and access is granted based on the role.
- 16. HIPAA Health Insurance Portability and Accountability Act. This is a US legislation that provides data privacy and security provisions for safeguarding medical information.
- 17. GDPR General Data Protection Regulation. This is a regulation in EU law on data protection and privacy concerning all individuals within the European Union and the European Economic Area.
- 18. PCI DSS Payment Card Industry Data Security Standard. This is an information security standard for organizations that handle branded credit cards from the major card schemes.
- 19. CICD Continuous Integration and Continuous Delivery. This is an approach to software development where teams produce software in short cycles, ensuring that the software can be reliably released at any time.
- 20. RBAC Role-Based Access Control. This is a policy-neutral access-control mechanism defined around roles and privileges.



# Here are some common acronyms related to the DevOps (Development and Operations) topic:

- 1. CI/CD Continuous Integration/Continuous Deployment. These are practices in software development where code changes are automatically tested and deployed frequently.
- 2. VCS Version Control System. This is a system that records changes to a file or set of files over time so that you can recall specific versions later.
- 3. CI Continuous Integration. This is the practice of frequently integrating code changes into a shared repository, where automated builds and tests are run.
- 4. CD Continuous Deployment or Continuous Delivery. This is the practice of automatically deploying code changes to production or staging environments after passing automated tests.
- 5. DORA DevOps Research and Assessment. DORA is an organization that conducts research on DevOps practices and publishes reports such as the State of DevOps report.
- 6. SLA Service Level Agreement. This is a commitment between a service provider and a client. It defines the level of service expected from the service provider.
- 7. SLO Service Level Objective. This is a target value or range of values for a service level that is measured by an SLI (Service Level Indicator).
- 8. SLI Service Level Indicator. This is a measure of a specific aspect of the service level, such as latency or availability.
- 9. IaC Infrastructure as Code. This is the practice of managing and provisioning computing infrastructure through machine-readable definition files, rather than physical hardware configuration or interactive configuration tools.
- 10. API Application Programming Interface. This defines interactions between multiple software applications.
- 11. SDLC Software Development Life Cycle. This is a process used by software development teams to design, develop, test, and deploy software products.
- 12. AWS Amazon Web Services. This is a cloud computing platform provided by Amazon.
- 13. GCP Google Cloud Platform. This is a suite of cloud computing services provided by Google.
- 14. Azure Microsoft Azure. This is a cloud computing service provided by Microsoft.
- 15. PaaS Platform as a Service. This is a category of cloud computing services that provides a platform allowing customers to develop, run, and manage applications without the complexity of building and maintaining the infrastructure typically associated with developing and launching an app.
- 16. SaaS Software as a Service. This is a software distribution model in which applications are hosted by a third-party provider and made available to customers over the Internet.
- 17. BaaS Backend as a Service. This is a model for providing web and mobile app developers with a way to link their applications to cloud storage and cloud computing services.



- 18. KPI Key Performance Indicator. This is a measurable value that demonstrates how effectively a company is achieving key business objectives.
- 19. MTTR Mean Time to Recovery. This is the average time it takes to recover from a failure, such as a system outage or service disruption.
- 20. Docker This is a platform for developing, shipping, and running applications inside containers.

# Here are some common acronyms related to Git and GitHub:

- 1. VCS Version Control System: A system that records changes to files over time so that you can recall specific versions later.
- 2. SCM Source Code Management: Another term for Version Control System.
- 3. DVCS Distributed Version Control System: A type of VCS where clients don't just check out the latest snapshot of the files; they fully mirror the repository, including its full history.
- 4. SHA Secure Hash Algorithm: A unique identifier generated by Git for each commit.
- 5. HEAD A reference to the current commit in the repository.
- 6. PR Pull Request: A feature on GitHub that allows developers to propose changes to a repository and request that someone review and pull in those changes.
- 7. CI/CD Continuous Integration/Continuous Deployment: A practice in software development where code changes are automatically tested and deployed frequently.
- 8. CLI Command Line Interface: A way of interacting with a computer program where the user issues commands to the program in the form of successive lines of text.
- 9. GUI Graphical User Interface: A way of interacting with a computer program using graphical icons and visual indicators.
- 10. SSH Secure Shell: A cryptographic network protocol used for operating network services securely over an unsecured network.
- 11. HTTPS Hypertext Transfer Protocol Secure: An extension of HTTP that is used for secure communication over a computer network.
- 12. PRC Pull Request Comment: Comments made on a pull request to discuss changes proposed in the pull request.
- 13. FORK A copy of a repository on GitHub that allows you to freely experiment with changes without affecting the original project.
- 14. GPG GNU Privacy Guard: A free encryption software implementation used to sign Git commits and tags.
- 15. API Application Programming Interface: A set of rules that allows different software applications to communicate with each other.



- 16. CLI Command Line Interface: A text-based interface used to interact with software.
- 17. SSH Secure Shell: A cryptographic network protocol used for secure communication between a client and a server.
- 18. GUI Graphical User Interface: A visual way of interacting with a computer program using graphical elements such as windows, icons, and buttons.
- 19. GPG GNU Privacy Guard: A free and open-source software for secure communication and data encryption.
- 20. IDE Integrated Development Environment: A software application that provides comprehensive facilities to computer programmers for software development.

### Here are some common acronyms related to build tools:

- 1. CI/CD Continuous Integration/Continuous Deployment: Practices in software development where code changes are automatically tested and deployed frequently.
- 2. IDE Integrated Development Environment: Software suite that consolidates basic tools required for software development.
- 3. JDK Java Development Kit: A set of software tools for developing Java applications.
- 4. SDK Software Development Kit: A collection of software development tools in one installable package.
- 5. JRE Java Runtime Environment: Environment for executing Java programs.
- 6. MVC Model-View-Controller: An architectural pattern used in software engineering.
- 7. API Application Programming Interface: A set of protocols, routines, and tools for building software applications.
- 8. XML Extensible Markup Language: A markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable.
- 9. JSON JavaScript Object Notation: A lightweight data-interchange format.
- 10. REST Representational State Transfer: A software architectural style that defines a set of constraints to be used for creating web services.
- 11. SQL Structured Query Language: A domain-specific language used in programming and designed for managing data held in a relational database management system.
- 12. DAG Directed Acyclic Graph: A finite directed graph with no directed cycles.
- 13. DLL Dynamic Link Library: A file containing code and data that can be used by multiple programs at the same time.
- 14. CSV Comma-Separated Values: A file format used to store tabular data.



- 15. HTML Hypertext Markup Language: The standard markup language for documents designed to be displayed in a web browser.
- 16. CSS Cascading Style Sheets: A style sheet language used for describing the presentation of a document written in HTML.
- 17. JS JavaScript: A programming language that conforms to the ECMAScript specification.
- 18. TS TypeScript: A programming language developed and maintained by Microsoft.
- 19. YAML YAML Ain't Markup Language: A human-readable data serialization standard that can be used in conjunction with all programming languages and is often used to write configuration files.
- 20. XML-RPC XML Remote Procedure Call: A remote procedure call protocol that uses XML to encode its calls and HTTP as a transport mechanism.

# Here are common acronyms related to Jenkins, Containerization, Docker, Docker Hub, Kubernetes, Terraform, Prometheus, and Grafana:

#### 1. Jenkins:

- CI/CD Continuous Integration/Continuous Deployment.
- DSL Domain-Specific Language (e.g., Jenkins Pipeline DSL).
- SCM Source Code Management.
- CLI Command Line Interface.
- API Application Programming Interface.

#### 2. Containerization (Docker):

- CLI Command Line Interface.
- API Application Programming Interface.
- OS Operating System.
- VM Virtual Machine.
- CID Container ID.
- CIDR Classless Inter-Domain Routing.
- CNI Container Network Interface.

#### 3. Docker Hub:

- CI - Continuous Integration.



- CD Continuous Deployment.
- API Application Programming Interface.
- CLI Command Line Interface.
- LDAP Lightweight Directory Access Protocol.

### 4. Kubernetes:

- K8s Abbreviation of Kubernetes.
- API Application Programming Interface.
- CLI Command Line Interface.
- RBAC Role-Based Access Control.
- CIDR Classless Inter-Domain Routing.
- CNI Container Network Interface.

### 5. Terraform:

- IaC Infrastructure as Code.
- CLI Command Line Interface.
- API Application Programming Interface.
- HCL HashiCorp Configuration Language.
- AWS Amazon Web Services.
- GCP Google Cloud Platform.
- Azure Microsoft Azure.

### 6. Prometheus:

- TSDB Time Series Database.
- API Application Programming Interface.
- HTTP Hypertext Transfer Protocol.
- RPC Remote Procedure Call.
- SD Service Discovery.



# 7. Grafana:

- API Application Programming Interface.
- TSDB Time Series Database.
- HTTP Hypertext Transfer Protocol.
- SDK Software Development Kit.
- LDAP Lightweight Directory Access Protocol.

**Thank You**