

A

APIs

API stands for Application Programming Interface. An API, an acronym for Application Programming Interface, is a set of definitions and protocols that allow technology products and services to communicate with each other via the internet.



Agile

Agile is an iterative approach to project management and software development that helps teams deliver value to their customers faster and with fewer headaches. An agile team delivers work in small, but consumable, increments. Requirements, plans, and results are evaluated continuously so teams have a natural mechanism for responding to change quickly.

Agro CD

Argo CD is a declarative, GitOps continuous delivery tool for Kubernetes. It makes application deployment and lifecycle management should be automated, auditable, and easy to understand.

Affinity/ Anti-Affinity

An affinity rule places a group of Nodes/VMs on a specific host so that you can easily audit the usage of those Nodes/VMs. An anti-affinity rule places a group of Nodes/VMs across different hosts, which prevents all Nodes/VMs from failing at once in the event that a single host fails.





Build is the process by which source code is converted into a stand-alone form that can be run on a computer or to the form itself. One of the most important steps of a software build is the compilation process, where source code files are converted into executable code. The process of building software is usually managed by a build tool.

Big Data is a collection of data that is huge in volume, yet growing exponentially with time. It is data with so large size and complexity that none of the traditional data management tools can store it or process it efficiently.

Blue Ocean is 100% free and open-source software and it is a new user experience for Jenkins based on a personalizable, modern design that allows users to graphically create, visualize and diagnose Continuous Delivery (CD) Pipelines.

Backup refers to the copying of physical or virtual files or databases to a secondary location for preservation in case of equipment failure or catastrophe. The process of backing up data is pivotal to a successful disaster recovery plan.

C

Containers are a form of operating system virtualization. Containers are an abstraction that packages code and dependencies together. Multiple containers can run on the same machine and share the OS kernel with other containers, each running as isolated processes in userspace.

CNI (Container Network Interface)

Cloud Native Computing Foundation project, consists of a specification and libraries for writing plugins to configure network interfaces in Linux containers, along with a number of plugins. CNI concerns itself only with network connectivity of containers and removing allocated resources when the container is deleted.

CI/CD is the combined practice of continuous integration and continuous delivery/deployment. These practices involve continuous development, testing, integration, deployment, and monitoring of software applications throughout their development life cycle.

CRI-O is an implementation of the Kubernetes CRI (Container Runtime Interface) to enable using OCI (Open Container Initiative) compatible runtimes. It is a lightweight alternative to using Docker as the runtime for Kubernetes.

CoreDNS is a DNS server/forwarder, written in Go, that chains plugins. Each plugin performs a (DNS) function. It can be used in a variety of environments because of its flexibility. CoreDNS integrates with Kubernetes via the Kubernetes plugin, or with etcd with the help of etcd plugin.

D

Docker

Docker enables developers to package applications into containers —standardized executable components that combine application source code with all the operating system (OS) libraries and dependencies required to run the code in any environment.



DevOps

DevOps (Development Operations) is a methodology meant to improve work throughout the software development lifecycle.

It is an infinite loop, comprising these steps: plan, code, build, test, release, deploy, operate, monitor and -- through feedback -- plan, which resets the loop.



Data Plane

Data plane are the functions and processes that forward packets/frames from one interface to another based on control plane logic. In a cloud native system, the data plane are the container runtimes, that leverage compute, network and storage from the underlying infrastructure.

Data Warehouse

A data warehouse is constructed by integrating data from multiple heterogeneous sources that support analytical reporting, structured and/or ad hoc queries, and decision making. The process is known as data warehousing.

Deployment

Deployment of a software includes all of the steps, processes, and activities that are required to make a software system or update available to its intended users.



E

Elasticity

Elasticity is the ability to rapidly and dynamically allocate resources, including compute, storage, and memory resources, in response to changing demands. The goal of elasticity is to avoid either overprovisioning or underprovisioning a particular service or application.



Extensibility

Extensibility is a measure of the ability to extend a system and the level of effort required to implement the extension. Extensions can be through the addition of new functionality or through modification of existing functionality. The principle provides for enhancements without impairing existing system functions.



ERP

ERP is an acronym that stands for enterprise resource planning (ERP). It's a business process management software that manages and integrates a company's financials, supply chain, operations, reporting, manufacturing, and human resource activities.

E

etcd

etcd is an open-source distributed key-value store used to hold and manage the critical information that distributed systems need to keep running. Most notably, it manages the configuration data, state data, and metadata for Kubernetes, the popular container orchestration platform.

Envoy

Envoy is a widely adopted, open-source network proxy, designed as a layer 7 edge and service proxy for cloud-native applications. Initially developed by engineers at Lyft and released on September 14, 2016, Envoy is now hosted by Cloud Native Computing Foundation (CNCF).

ELK stack

Elasticsearch, Logstash, and Kibana combine to form the ELK stack.

Elasticsearch is a distributed search and analytics engine that lets data engineers query unstructured, structured, and time-series data. Logstash lets you collect unstructured data, enrich it, and route it to another application, such as Elasticsearch. Kibana is a visualization engine to display data in dashboards as graphics and maps.

F

FAULT TOLERANCE

It is the ability of a system (computer, network, cloud cluster, etc.) to continue operating without interruption when one or more of its components fail. The objective of creating a fault-tolerant system is to prevent disruptions arising from a single point of failure, ensuring the high availability and business continuity of mission-critical applications or systems.

FLUENTD

It is a cross-platform open-source data collection software project originally developed at Treasure Data. It is written primarily in the Ruby programming language.

It is a tool that can be used to collect logs from several data sources such as application logs, network protocols, etc.

FLANNEL

It is an open-source virtual network project managed by CoreOS network designed for Kubernetes. Each host in a flannel cluster runs an agent called flannel. It assigns each host a subnet, which acts as the IP address pool for containers running on the host

FLASK

It is a web framework in Python. This means flask provides you with tools, libraries, and technologies that allow you to build a web application. This web application can be some web pages, a blog, a wiki, or go as big as a web-based calendar application or a commercial website.

GitOps is a way of implementing Continuous Deployment for cloud native applications. The core idea of GitOps is having a Git repository that always contains declarative descriptions of the infrastructure currently desired in the production environment and an automated process to make the production environment match the described state in the repository. If you want to deploy a new application or update an existing one, you only need to update the repository - the automated process handles everything else.

gRPC is a modern open source high performance Remote Procedure Call (RPC) framework that can run in any environment. It can efficiently connect services in and across data centers with pluggable support for load balancing, tracing, health checking and authentication. It is also applicable in last mile of distributed computing to connect devices, mobile applications and browsers to backend services.

A Guest Machine refers to a virtual machine that is installed, executed and hosted on the local physical machine. Guest machine is implemented on the local workstation or server, and is powered entirely by the machine hosting it. A guest virtual machine runs simultaneous to the host machine.

Git is software for tracking changes in any set of files, usually used for coordinating work among programmers collaboratively developing source code during software development. Its goals include speed, data integrity, and support for distributed, non-linear workflows (thousands of parallel branches running on different systems).

H

Hosting

Hosting service is a service that runs servers connected to the Internet, allowing organizations and individuals to serve content or host services connected to the Internet. Dedicated server hosts, provide a server, usually housed in a datacenter with good upstream bandwidth and reliable power sources.



Hypervisor

A hypervisor, also known as virtual machine monitor or VMM, is software that creates and runs virtual machines (VMs). It allows one host computer to support multiple guest VMs by virtually sharing its resources, such as memory and processing. Thus, VMs can be easily moved between different servers.

High Availability

High availability (HA) is a characteristic of a system which aims to ensure an agreed level of operational performance, usually uptime, for a higher than normal period. The basic principles of high availability includes elimination of single points of failure, reliable crossover, and detection of failures as they occur.

Hybrid Cloud

Hybrid cloud is a solution that combines a private cloud with one or more public cloud services, with proprietary software enabling communication between each distinct service. This provides businesses greater flexibility in terms of cost and control over data.

Helm

Helm is a tool to help you define, install, and upgrade applications running on Kubernetes. It allows describing the application structure through helm-charts and managing it with simple commands.



I

IAM

IAM (Identity and Access Management) is a framework of policies, processes, and technologies that enable organizations to manage digital identities and control user access to critical corporate information. By assigning users with specific roles and ensuring they have the right level of access to corporate resources and networks, IAM improves security and user experience, enable better business outcomes, and increases the viability of mobile and remote working and cloud adoption.

IaaS

Infrastructure as a service (IaaS) is a type of cloud computing service that offers essential compute, storage, and networking resources on-demand, on a pay-as-you-go basis. IaaS solution helps you reduce maintenance of on-premises data centers, save money on hardware costs, and gain real-time business insights.

IaaC

Infrastructure as a Code (IaaC) is the management of infrastructure (networks, virtual machines, load balancers, and connection topology) in a descriptive model, using the same versioning as the DevOps team uses for source code. IaaC is a key DevOps practice and is used in conjunction with continuous delivery.

IKS

Intersight Kubernetes Service provides flexibility and choice of infrastructure (on-prem, multi-hypervisor, bare metal, public cloud) so that our customers can focus on running and monetizing business-critical applications in production, without having to worry about the challenges of open-source or figuring out the mechanics to manage, operate and correlate between each layer of the infrastructure stack.

Ingress

Ingress exposes HTTP and HTTPS routes from outside the cluster to services within the cluster. Traffic routing is controlled by rules defined on the Ingress resource. An Ingress controller is responsible for fulfilling the Ingress, usually with a load balancer, though it may also configure your edge router or additional frontends to help handle the traffic.

JAEGER

Jaeger is an open-source distributed tracing system released by Uber Technologies. It is used for monitoring and troubleshooting microservices-based distributed systems. Jaeger is an OpenTracing compatible data model and supports instrumentation libraries in Go, Java, Node, Python, and C#.

JSON

JSON (Javascript Object Notation) is a text-based, human-readable data interchange format used for representing simple data structures and objects in Web browser-based code. JSON is also sometimes used in desktop and server-side programming environments.

JSON was originally based on the Javascript programming language and was introduced as the page scripting language for the Netscape Navigator Web browser.

JDBC

JDBC stands for "Java Database Connectivity." JDBC is an API that allows Java applications to connect to and query a wide range of databases. Examples include Java DB, Oracle, MySQL, PostgreSQL, DB2, Sybase ASE, and Microsoft SQL Server.



J

JENKINS

Jenkins is an open-source continuous integration/continuous delivery and deployment (CI/CD) automation software in the DevOps tool which is written in the Java programming language. It is used to implement CI/CD workflows, called pipelines.

Apache **Kafka** is an open-source distributed event streaming platform used for high-performance data pipelines, streaming analytics, data integration, and mission-critical applications. Its core capabilities include high throughput, scalable, permanent storage, and high availability.

Kubespray is a composition of Ansible playbooks, inventory, provisioning tools, and domain knowledge for generic OS/Kubernetes clusters configuration management tasks. Kubespray provides:

- a highly available cluster
- composable attributes
- support for most popular Linux distributions
- continuous integration tests

K3s is a fully conformant production-ready Kubernetes distribution with the following changes:

- It is packaged as a single binary.
- It adds support for sqlite3 as the default storage backend. Etcd3, MySQL, and Postgres are also supported.
- It wraps Kubernetes and other components in a single, simple launcher.
- It is secure by default with reasonable defaults for lightweight environments.
- It has minimal to no OS dependencies.



The **Kube-proxy** or Kubernetes network proxy runs on each node. This reflects services as defined in the Kubernetes API on each node and can do simple TCP, UDP, and SCTP stream forwarding or round robin TCP, UDP, and SCTP forwarding across a set of backends.
`kube-proxy [flags]`

The **kernel** is a computer program at the core of a computer's operating system and has complete control over everything in the system. It is the "portion of the operating system code that is always resident in memory", and facilitates interactions between hardware and software components. On most systems, the kernel is one of the first programs loaded on startup (after the bootloader).

K

L

Load Balancer

Load balancer sits between client devices and backend servers, receiving and then distributing incoming requests to any available server capable of fulfilling them. It ensures that no single server becomes overworked and subsequently unreliable.

LDAP

LDAP stands for Lightweight Directory Access. It's a standards-based protocol that sits on top of TCP/IP and allows clients to perform a variety of operations in a directory server, including storing and retrieving data, searching for data matching a given set of criteria, authenticating clients, and more.

Linkerd

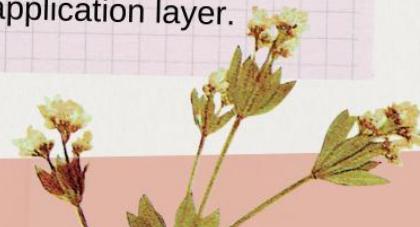
Linkerd is Ultra light, ultra simple, ultra powerful security-first service mesh for Kubernetes. It works by installing a set of ultralight, transparent proxies next to each service instance. These proxies automatically handle all traffic to and from the service.

Lightwave

Lightwave is an open source project by VMWare comprised of enterprise-grade, identity and access management services targeting critical security, governance, and compliance challenges for Cloud-Native Apps within the enterprise.

Layer7

Layer 7 is the communication layer that is closest to the user. In networking, communication between services happens at multiple layers, ranging from the physical/hardware layer all the way to the application layer.



M

Microservices

Microservices is a service-oriented architecture pattern wherein applications are built as a collection of various smallest independent service units. It is a software engineering approach that focuses on decomposing an application into single-function modules with well-defined interfaces. These modules can be independently deployed and operated by small teams that own the entire lifecycle of the service.

Monolith

Monolithic architecture is the traditional structure for software applications. It is an all-in-one architecture, wherein all aspects of the software operate as a single unit. In the microservices model, components are modular, functioning independently, and coupled together as needed for optimal functionality.

Multi-Tenancy

Multi-tenancy is a software architecture where a single software instance can serve multiple, distinct user groups. Software-as-a-service (SaaS) offerings are an example of multitenant architecture.

In cloud computing, multitenancy can also refer to shared hosting, in which server resources are divided among different customers.

Middleware

Middleware is software that bridges gaps between other applications, tools, and databases in order to provide unified services to users. It is commonly characterized as the glue that connects different software platforms and devices together. It is software that provides common services and capabilities to applications outside of what's offered by the operating system.

NodePort

A NodePort is a way to enable Kubernetes services to receive traffic from outside the cluster. In a NodePort, the Kubernetes API server allocates a specific port on each node in a cluster. Each node proxies any traffic received on the specific port to the Kubernetes service.

NAT

Network Address Translation (NAT) is a process in which one or more local IP address is translated into one or more Global IP address and vice versa in order to provide Internet access to the local hosts.

NoSQL

NoSQL, which stands for “not only SQL,” is an approach to database design that provides flexible schemas for the storage and retrieval of data beyond the traditional table structures found in relational databases.

Namespace

A Namespace is a declarative region that provides a scope to the identifiers (the names of types, functions, variables, etc) inside it. Namespaces are used to organize code into logical groups and to prevent name collisions that can occur especially when your codebase includes multiple libraries.

N

Open Policy Agent, or **OPA**, is an open source, general purpose policy engine. OPA decouples policy decisions from other responsibilities of an application, like those commonly referred to as business logic. OPA works equally well making decisions for Kubernetes, Microservices, functional application authorization.

Open-source software (OSS) is computer software that is released under a license in which the copyright holder grants users the rights to use, study, change, and distribute the software and its source code to anyone and for any purpose. Open-source software may be developed in a collaborative public manner. Open-source software is a prominent example of open collaboration.

OpenStack is a free, open standard cloud computing platform. It is mostly deployed as infrastructure-as-a-service (IaaS) in both public and private clouds where virtual servers and other resources are made available to users. The software platform consists of interrelated components that control diverse, multi-vendor hardware pools of processing, storage, and networking resources throughout a data center.

OpenTracing is a distributed tracing related topic. Distributed tracing is a mechanism you can use to profile and monitor applications. Unlike regular tracing, distributed tracing is more suited to applications built using a microservice architecture.

Orchestration is the automated configuration, management, and coordination of computer systems, applications, and services. Orchestration helps IT to more easily manage complex tasks and workflows. IT orchestration also helps you to streamline and optimize frequently occurring processes and workflows, which can support a DevOps approach and help your team deploy applications more quickly.

P

Pod

On Kubernetes, a pod is the smallest deployable unit in which one or more containers can be managed—in other words, you run a container image in a pod. Docker is usually the container runtime used in a pod.

PaaS

In the Platform-as-a-Service (PaaS) model, developers essentially rent everything they need to build an application, relying on a cloud provider for development tools, infrastructure, and operating systems.

Prometheus

Prometheus is used for event monitoring and alerting. It records real-time metrics in a time series database (allowing for high dimensionality) built using a HTTP pull model, with flexible queries and real-time alerting.

Proxy

A proxy is able to manage and observe all network traffic between the client and server. Proxies are used to provide a language-neutral way to introduce and enforce network-level policies such as timeouts, load balancing, and circuit breaking.

P2P

Peer-to-peer (P2P) computing or networking is a distributed application architecture that partitions tasks or workloads between peers. Peers are equally privileged, equipotent participants in the application.

Q

Quality of Service

Quality of Service refers to the ability of networks to attain maximum bandwidth and handle other network elements

like latency, error rate, and uptime. Quality of Service include the management of other networks resource by allocating priorities to a specific type of data.

Quantcast

Quantcast is a Web audience measurement tool that collects and organizes real-time data about the amount of traffic a website is getting, as well as the demographics, psychographics and other Web analytical data about that website's visitors.

Qt

Qt is a cross-platform application and graphical user interface (GUI) framework, a toolkit, that is used for developing software that can be run on different hardware platforms and operating systems. Qt makes it easy to develop software with native-looking GUIs using standard C++, which is why it is also classified as a widget toolkit.

Quantum Computing

Quantum computing is a new generation of computers based on quantum mechanics, a physics branch that studies atomic and subatomic particles. These supercomputers perform computations at speeds and levels an ordinary computer cannot handle. Unlike a standard computer, its quantum counterpart can perform multiple operations simultaneously. These machines also store more states per unit of data and operate on more efficient algorithms.



RANSOMWARE

Ransomware is a type of malware that prevents you from using your computer or accessing certain files unless you pay a ransom. It often encrypts your files so that they cannot be opened. Examples of ransomware include Locky, Reveton, CryptoLocker, and CryptoWall.

RUNC

runC, a lightweight universal container runtime, is a command-line tool for spawning and running containers according to the Open Container Initiative (OCI) specification.

RUNTIME ERROR

A runtime error in a program is an error that occurs while the program is running after being successfully compiled.

Runtime errors are commonly called referred to as “bugs” and are often found during the debugging process before the software is released.

RESILIENCY

Resiliency is the ability of a server, network, storage system, or entire data center, to recover quickly and continue operating even when there has been an equipment failure, power outage, or other disruption.

R

REGISTRY

The registry or Windows registry is a database of information, settings, options, and other values for software and hardware installed on all versions of Microsoft Windows operating systems. When a program is installed, a new subkey is created in the registry. This subkey contains settings specific to that program, such as its location, version, and primary executable.

S



Software as a service (or SaaS) is a way of delivering applications over the Internet—as a service. Instead of installing and maintaining software, you simply access it via the Internet, freeing yourself from complex software and hardware management. SaaS applications are sometimes called Web-based software, on-demand software, or hosted software.

Site reliability engineering (SRE) is a set of principles and practices that incorporates aspects of software engineering and applies them to infrastructure and operations problems. The main goals are to create scalable and highly reliable software systems. Site reliability engineering is closely related to DevOps.

Scalability is the property of a system to handle a growing amount of work by adding resources to the system. In computing, scalability is a characteristic of computers, networks, algorithms, networking protocols, programs and applications. An example is a search engine, which must support increasing numbers of users, and the number of topics it indexes.

A **service-level agreement (SLA)** is a commitment between a service provider and a client. Particular aspects of the service – quality, availability, responsibilities – are agreed between the service provider and the service user. The most common component of an SLA is that the services should be provided to the customer as agreed upon in the contract.

Sidecar pattern deploy components of an application into a separate process or container to provide isolation and encapsulation. This pattern can also enable applications to be composed of heterogeneous components and technologies. This pattern is named Sidecar because it resembles a sidecar attached to a motorcycle.

T

Taint and Toleration are core objects made of properties: key, value, and effect. Taints prevent the scheduling of Pods on nodes or node groups. Toleration enable the scheduling of pods on nodes or node groups that have matching taints. They work together to ensure that pods are not scheduled onto inappropriate nodes.

Tags are labels or identifiers that are attached to your instances. This is a way for you to provide custom metadata to accompany the existing metadata, such as instance family and size, region, VPC, IP information, and more. Tags are created as key/value pairs.

Transport Layer Security, or TLS, is a widely adopted security protocol designed to facilitate privacy and data security for communications over the Internet. TLS can also be used to encrypt such as email, messaging, and voice over IP (VoIP).

Terraform is an infrastructure as code (IaC) tool that allows you to build, change, and version infrastructure safely and efficiently. This includes low-level components such as compute instances, storage, and networking, as well as high-level components such as DNS entries, SaaS features, etc.

TCP or Transmission Control Protocol is a communications standard that enables devices to exchange messages over a network. It is designed to send packets across the internet and ensure the successful delivery of data and messages over networks.

U

Userspace CNI

Userspace CNI is a Container Network Interface (CNI) plugin designed to implement userspace networking (as opposed to kernel space networking). It enhances high-performance container Networking solutions and Data Plane Acceleration for containers.

UID

UID can stand for user identifier, user ID, or unique identifier, depending on the context or the system. With Kubernetes, for example, a UID is a string that uniquely identifies an object.

Underlay network

Underlay network connects machines, whether virtual or physical, by using either a traditional hardware-based approach to networking or a combination of hardware and software.

Uptime

Uptime describes how long or how reliably a system has been running. It may be defined as an absolute value (e.g., 64 days) or a percentage (e.g., 99.5%). Uptime percentage is a common metric used to determine the reliability of a web server. An uptime of 99.9% is a reasonable goal for a web server. This level of uptime can be achieved by using multiple servers for redundancy and load balancing.

VIRTUAL PRIVATE

A virtual private cloud (VPC) is a secure, isolated private cloud hosted within a public cloud. VPC customers can run code, store data, host websites, and do anything else they could do in an ordinary private cloud, but the private cloud is hosted remotely by a public cloud provider. (Not all private clouds are hosted in this fashion.) VPCs combines the scalability and convenience of public cloud computing with the data isolation of private cloud computing.

VITNESS

Vitess is a database solution for deploying, scaling and managing large clusters of open-source database instances. It currently supports MySQL and MariaDB. It's architected to run as effectively in a public or private cloud architecture as it does on dedicated hardware. It combines and extends many important SQL features with the scalability of a NoSQL database.

VDI

Virtual desktop infrastructure (VDI) is a technology that refers to the use of virtual machines to provide and manage virtual desktops. VDI hosts desktop environments on a centralized server and deploys them to end-users on request.



VAGRANT

Vagrant is an open-source software product for building and maintaining portable virtual software development environments. e.g., for VirtualBox, KVM, Hyper-V, Docker containers, VMware, and AWS. Vagrant is written in the Ruby language, but its ecosystem supports development in a few other languages.



WEAVE NET

Weave Net is a powerful cloud native networking toolkit. It creates a virtual network that connects Docker containers across multiple hosts and enables their automatic discovery. Set up subsystems and sub-projects that provide DNS, IPAM, a distributed virtual firewall and more.

WEB APPLICATION FIREWALL

A **web application firewall (WAF)** is an appliance, server plugin, or filter that applies a set of rules to HTTP conversations to protect the integrity, availability, and performance of web-based applications. WAFs are typically deployed to protect against common attack types such as Cross-site Scripting (XSS) and SQL Injection. Read more.

WATERFALL MODEL

The **waterfall model** is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialisation of tasks. It tends to be among the less iterative and flexible approaches, as progress flows in largely one direction ("downwards" like a waterfall) through the phases of conception, initiation, analysis, design, construction, testing, deployment and maintenance.

WSO2 APPLICATION SERVER

WSO2 Application Server is cloud native, providing a firm foundation for hosting shared, multi-tenant, elastically scaling SaaS applications. The WSO2 Application Server brings together best of breed open source technologies for Web Applications (i.e. Apache Tomcat), Web Services (i.e. Apache Axis2), RESTful services (i.e. JAX-RS) with WSO2's open source management, monitoring, clustering, and logging extensions.



XML

Extensible Markup Language is a flexible but verbose format for structuring and exchanging data. XML is often used in legacy applications, Java applications, and web applications for a variety of purposes, such as structuring configuration files or exchanging data. .

XaaS

"Anything as a service" or "Everything as a service" describes a general category of services related to cloud computing and remote access. It recognizes the vast number of products, tools, and technologies that are now delivered to users as a service over the internet.

X-Ray

AWS X-Ray helps developers analyze and debug production, distributed applications, such as those built using a microservices architecture. X-Ray can help you understand how your application and its underlying services are performing to identify and troubleshoot the root cause of performance issues and errors. X-Ray provides an end-to-end view of requests as they travel through your application, and shows a map of your application's underlying components.

XL Deploy

XL Deploy is an application release automation (ARA) tool that deploys applications to environments (for example, development, test, QA, and production) while managing configuration values that are specific to each environment. XL Deploy is designed to make the process of deploying applications faster, easier, and more reliable. You provide the components that make up your application, and XL Deploy does the rest.

YRCloudFile

YRCloudFile is a scale-out software-defined distributed file system. Run on pre-configured standard x86 hardware platforms. SmartTier and SmartSync, make your data tiering, backup, and synchronization between clouds easily. Native for a public cloud-like AWS /Ali Cloud/Tencent Cloud etc.

YugabyteDB

YugabyteDB is a free and open-source, distributed, relational, NewSQL database management system designed to handle large amounts of data spanning across multiple availability zones and geographic regions while providing single-digit latency, high availability, and no single point of failure.

YAML

YAML is a data serialization language that is often used for writing configuration files.

Depending on whom you ask, YAML stands for yet another markup language or YAML ain't markup language (a recursive acronym), which emphasizes that YAML is for data, not documents. It can also be used in conjunction with other programming languages.

Y

YARN

YARN is an Apache Hadoop technology and stands for Yet Another Resource Negotiator. YARN is a large-scale, distributed operating system for big data applications.

The technology is designed for cluster management and is one of the key features in the second generation of Hadoop, the Apache Software Foundation's open-source distributed processing framework.



Zenko

Zenko is Scality's open source multi-cloud data controller. It provides a unified namespace, access API, and search capabilities for data stored locally (using Docker volumes or Scality RING) or in public cloud storage services like Amazon S3, Microsoft Azure Blob storage, or Google Cloud Storage.

Zookeeper

ZooKeeper is a centralized service for maintaining configuration information, naming, providing distributed synchronization, and providing group services. These type of services are used in some form or another by distributed applications. Each time they are implemented there is a lot of work that goes into fixing the bugs and race conditions that are inevitable.

Zuul

Zuul Server is an API Gateway application. It handles all the requests and performs the dynamic routing of microservice applications. It works as a front door for all the requests. Zuul is built to enable dynamic routing, monitoring, resiliency, and security.

Zettaset

Zettaset's encryption for cloud-native environments is purpose-built to protect data in real-time across any architecture, providing transparent, high performance data protection so the benefits of DevOps initiatives aren't lost when security is implemented.

Zabbix

Zabbix is an open-source monitoring software tool for diverse IT components, including networks, servers, virtual machines and cloud services. Zabbix provides monitoring metrics, among others network utilization, CPU load and disk space consumption.