Acronyms and Terms in Cloud Advanced

Acronym	Full Name	Description
API	Application Programming Interface	An application programming interface is a particular set of rules and specifications that are used for communication between software programs.
AS	Auto Scaling	Auto Scaling (AS) is a service that automatically adjusts service resources based on your service requirements and configured AS policies.
CCE	Cloud Container Engine	Cloud Container Engine (CCE) is a platform for developers and partners to develop, deploy, and manage containerized applications. With CCE, you can roll out new containerized applications anytime, anywhere, and in a cost-efficient manner.The Docker technology is at the core of CCE.
CMP	Cloud Management Platform	A system used to uniformly manage data center services. A cloud platform is connected to the Controller through northbound interfaces to deliver services to the Controller for orchestration and deployment.
CIFS	Common Internet File System	A network file system access protocol primarily used by Windows clients to communicate file access requests to Windows servers.
CISC	Complex Instruction Set Computing	The implementation of complex instructions in a microprocessor design so that they can be invoked at the assembly language level. The instructions can be very powerful, allowing for complicated and flexible ways of calculating such elements as memory addresses. All this complexity, however, usually requires many clock cycles to execute each instruction.
CRM	Customer Relationship Management	An enterprise business strategy, which is used to organize enterprise resources effectively, cultivate customer-centric operational behaviors and implement customer-centric business processes, so as to raise profitability, revenue and customer satisfaction.
DC	Data Center	A data center is a facility used to house computer systems and associated components,

		such as telecommunications and storage systems. It generally includes redundant or backup power supplies, redundant data communications connections, environmental controls (e.g. air conditioning, fire suppression) and various security devices. It is used to store information and data. Enterprises and organizations can use the data center to store, manage, and spread information. For example, each bank has a data center for maintaining customer accounts and handling transactions.
DB	database	A collection of data that is stored together and can be accessed, managed, and updated. Data in a view in the database can be classified into the following types: numerals, full text, digits, and images.
DR	Disaster Recovery	Backs up important device data and application software in the production center remotely. When a disaster or fault occurs in the production center, the remote backup machine and data are used to process services instead of the faulty machine.
Dom 0	Domain 0	A modified Linux kernel and the only VM that operates on the Xen Hypervisor. Dom0 can access physical I/O resources and interwork with other VMs operating on the system. Dom0 must be started before other domains are started.
Dom U	Domain U	Paravirtualized VMs operating on the Xen Hypervisor are called Domain U PV Guests, which supports the operating system whose kernel has been modified, such as Linux, Solaris, FreeBSD, and other UNIX operating systems. Fully virtualized VMs are called Domain U HVM Guests, which supports the operating system whose kernel does not need to be modified, for example, Windows.
ECS	Elastic Cloud Server	An Elastic Cloud Server (ECS) is a computing server that consists of CPUs, memory, images, and Elastic Volume Service (EVS) disks and allows on-demand allocation and elastic scaling.
EVS	Elastic Volume Service	Elastic Volume Service (EVS) disks are a type of virtual block storage devices that use the

		distributed architecture and can be elastically expanded.
ERP	Enterprise Resource Planning	A company-wide computer software system that is used to manage and coordinate all the resources, information, and functions of a business from shared data stores.
FC	Fibre Channel	A high-speed transport technology used to build SANs. FC is primarily used for transporting SCSI traffic from servers to disk arrays, but it can also be used on networks carrying ATM and IP traffic.
FS	FusionSphere OpenStack	Virtualization software developed by Huawei to provide infrastructure for upper-layer applications. The FusionSphere virtualizes hardware resources to enable a physical server to take the role of multiple physical servers. Users can deploy and run upper-layer software, such as operating systems and applications.
GIV	Global Industry Vision	Global Industry Vision (GIV) 2025 report, launched by Huawei, offers a near to mid-term glimpse into the future of the telecommunications sector.
guest OS	guest Operating System	An operating system (OS) running on a VM.
HW	Hardware	The electronic, electrical and mechanical components of information systems.
HTTP	Hypertext Transfer Protocol	An application-layer protocol used for communications between web servers and browsers or other programs.
iSCSI	Internet Small Computer Systems Interface	In computing, iSCSI is an IP-based storage networking standard for linking data storage facilities. By carrying SCSI commands over IP networks, iSCSI is used to facilitate data transfers over intranets and to manage storage over long distances.
J2EE	Java 2 Platform Enterprise Edition	Java Platform, Enterprise Edition (Java EE) is the industry standard for developing portable, robust, scalable and secure server-side Java applications.
KVM	Kernel-based Virtual Machine	Kernel-based Virtual Machine (KVM) is a virtualization infrastructure for the Linux kernel. KVM requires a processor with hardware virtualization extension.
LXC	Linux Container	LXC (Linux Containers) is an operating-system-level virtualization method for running multiple

		isolated Linux systems (containers) on a control host using a single Linux kernel.
NFS	Network File System	A distributed file system protocol that allows a user on a client computer to access files over a network. Another remote file access protocol is Common Internet File System (CIFS).
OSD	Object Storage Device	A component of the FusionStorage Block for storing user data in distributed clusters.
OBS	Object Storage Service	An object-based cloud storage service. It provides data storage of easy extensibility, high security, proven reliability, and high cost efficiency. Users can manage and use objects through HTTP-based interfaces. The object storage service (OBS) is applicable to large-scale data storage services.
O&M	Operations and Maintenance	Operations and maintenance (O&M) is responsible for monitoring and managing the equipment in the communication network.
PV	Paravirtualization	In computing, paravirtualization is a virtualization technique that presents a software interface to virtual machines that is similar but not identical to that of the underlying hardware.
QEMU	Quick EMUlator	QEMU is a generic and open source machine emulator and virtualizer. One of the hypervisors supported by OpenStack, generally used for development purposes.
RAM	Random Access Memory	Semiconductor-based memory that can be read and written by the CPU or other hardware devices. The storage locations can be accessed in any order.
RHEL	Red Hat Enterprise Linux	It’s an open source Linux operating system.
RISC	Reduced Instruction Set Computing	A CPU design strategy based on the insight that simplified (as opposed to complex) instructions can provide higher performance if this simplicity enables much faster execution of each instruction.
RDS	Relational Database Service	Relational Database Service provides a relational database in the form of a service.
SATA	Serial Advanced Technology Attachment	SATA is the evolution of the ATA interface from a parallel bus to serial connection architecture.
SAS	Serial Attached SCSI	A SCSI interface standard that provides for attaching hosts to SCSI devices, including SAS

		and SATA disk and tape drives.
SOA	Service-Oriented Architecture	The SOA is used to develop applications that run in a distributed computing system. The SOA adopts open standards, interacts with software resources, and uses standard presentation mode.
SSD	Solid-State Drive	A solid-state drive, also incorrectly known as solid-state disk is a solid-state storage device that uses integrated circuit assemblies as memory to store data persistently.
UVP	Unified Virtualization Platform	HUAWEI UVP (Unified Virtualization Platform) is a general and open virtualization platform to establish enterprise-class data center. UVP is a high performance, high SLA, high reliability and secure virtualization solution that provides business-oriented optimization, elastic virtual resource management, and open business APIs. UVP not only reduces data center cost, but also provides business agility. UVP is based on KVM or Xen.
VM	Virtual Machine	In computer science, a virtual machine is a software implementation of a computer that can run programs like a real machine. A complete computer system that has complete hardware system functions and runs in an independent environment through software simulation.
VMM	Virtual Machine Manager	A VMM is a piece of computer software, firmware, or hardware that creates and runs virtual machines.
VBS	Volume Backup Service	Huawei Volume Backup Service (VBS) provides snapshot-based data protection for Elastic Volume Service (EVS) disks on Elastic Cloud Servers (ECSs) in the public cloud environment.

Term	Description
Bare-metal virtualization	In this architecture, a VMM (also called hypervisor) is installed and communicates directly with system hardware rather than relying on a host operating system.
Cache	In computer science, a cache is a collection of data duplicating original values stored elsewhere or computed earlier, where the

	original data are expensive (usually in terms of access time) to fetch or compute relative to reading the cache. Once the data are stored in the cache, future use can be made by accessing the cached copy rather than refetching or recomputing the original data, so that the average access time is lower.
Celiometer	Part of the OpenStack Telemetry service; gathers and stores metrics from other OpenStack services.
Cinder	Cinder is a component of OpenStack which provides block storage service.
Cloud Eye	Cloud Eye (CES) is an open monitoring platform, which monitors service resources in real time. CES provides multiple alarm reporting modes and quickly sends notifications so that you can ensure that services run smoothly.
Cluster	A computer technology that integrates a set of loosely connected servers to work together so that in many respects they can be viewed as a single system. A cluster is used to improve system stability, reliability, data processing capability, and service capability.
Full virtualization	Full-Virtualization simulates all hardware using software to construct virtual devices. This ensures that customer operating systems can run on virtual machines without being modified.
Glance	Provides VM image query, upload, and download services.
Heat	Heat is the main project in the OpenStack Orchestration program. It implements an orchestration engine to launch multiple composite cloud applications based on templates in the form of text files that can be treated like code.
host machine	A computing device where the Hypervisor virtualization software is deployed, providing physical resources for virtual machines (VMs). Usually, multiple VMs can be created on a host machine. The number of created VMs depends on host machine hardware configurations and the size of VM specifications to be created.
host OS	A host OS is the first OS installed on a machine to enable a machine to support multiple virtual operating systems.
Hosted virtualization	In this architecture, a base operating system (such as Windows) is first installed. A piece of software called a hypervisor or virtual machine monitor (VMM) is installed on top of the host OS, and allows users to run various guest operating systems within their own application windows. A host OS is the first OS installed on a machine to enable a machine to support multiple virtual operating systems. A host operating system (OS) is the main OS installed on a computer.

hypercall	A hypercall is to a syscall what a hypervisor is to an OS. Alternatively, a hypercall is to a hypervisor what a syscall is to a kernel. A hypercall is a software trap from a domain to the hypervisor, just as a syscall is a software trap from an application to the kernel. Domains will use hypercalls to request privileged operations like updating pagetables.
hypervisor	A hypervisor, also called virtual machine monitor (VMM), is a type of computer software/hardware platform virtualization software that allows multiple operating systems to run on a host computer concurrently.
Image	An image is an ECS template that contains OS software, application software, and proprietary software as well as required configurations. You can create an ECS using an image.
Keystone	A general authentication system in OpenStack. OpenStack Identity (Keystone) provides a central directory of users mapped to the OpenStack services they can access.
Linux	Linux is a Unix-like computer operating system assembled under the model of free and open-source software development and distribution.
Mainframe	Mainframe computers are computers used primarily by corporate and governmental organizations for critical applications, bulk data processing such as census, industry and consumer statistics, enterprise resource planning and transaction processing.The term originally referred to the large cabinets called "main frames" that housed the central processing unit and main memory of early computers. Later, the term was used to distinguish high-end commercial machines from less powerful units. Most large-scale computer system architectures were established in the 1960s, but continue to evolve.
Nova	OpenStack Nova is a specific component of the OpenStack open-source software used for building cloud services, provides computing services.
Object-based storage	Object storage, also called object-based storage, is an approach to addressing and manipulating data storage as discrete units, called objects. Objects are kept inside a single repository, and are not nested as files inside a folder inside other folders.
Privileged instruction	An instruction that cannot be directly run in user programs
REST	RESTful is a software architecture style rather than a standard. It provides a set of software design guidelines and constraints for designing software for interaction between clients and servers.
Sensitive instruction	The Guest OS cannot run on Ring0. Therefore, instructions that originally need to be executed at the highest level cannot be directly executed, but are processed and executed by the VMM.

	These instructions are called sensitive instructions. Theoretically, when these commands are executed, traps are generated and captured by the VMM.
Swift	Swift is a scalable redundant storage system.
Virtualization	Virtualization is a technology that virtualizes a computer into multiple logical computers. Multiple logical computers can run on a computer at the same time. Each logical computer can run different operating systems, and applications can run in independent space without affecting each other, thereby significantly improving work efficiency of the computer.
X86	The X86 architecture is a set of computer language instructions executed by microprocessors. It is a standard abbreviation of an Intel universal computer series and also identifies a universal set of computer instructions.
Xen	Xen is a hypervisor providing services that allow multiple computer operating systems to execute on the same computer hardware concurrently.