CEPH GLOSSARY

Ceph is growing rapidly. As firms deploy Ceph, the technical terms such as "RADOS", "RBD," "RGW" and so forth require corresponding marketing terms that explain what each component does. The terms in this glossary are intended to complement the existing technical terminology.

Sometimes more than one term applies to a definition. Generally, the first term reflects a term consistent with Ceph's marketing, and secondary terms reflect either technical terms or legacy ways of referring to Ceph systems.

Ceph Project

The aggregate term for the people, software, mission and infrastructure of Ceph.

Ceph

Ceph Platform

All Ceph software, which includes any piece of code hosted at http://github.com/ceph.

Ceph System

Ceph Stack

A collection of two or more components of Ceph.

Ceph Node

Node

Host

Any single machine or server in a Ceph System.

Ceph Storage Cluster

Ceph Object Store

RADOS

RADOS Cluster

The core set of storage software which stores the user's data (MON+OSD).

Ceph Cluster Map

cluster map

The set of maps comprising the monitor map, OSD map, PG map, MDS map and CRUSH map. See Cluster Map for details.

Ceph Object Storage

The object storage "product", service or capabilities, which consists essentially of a Ceph Storage Cluster and a Ceph Object Gateway.

Ceph Object Gateway

RADOS Gateway

RGW

The S3/Swift gateway component of Ceph.

Ceph Block Device

RBD

The block storage component of Ceph.

Ceph Block Storage

The block storage "product," service or capabilities when used in conjunction with librbd, a hypervisor such as QEMU or Xen, and a hypervisor abstraction layer such as libvirt.

Ceph Filesystem

CephFS

Ceph FS

The POSIX filesystem components of Ceph.

Cloud Platforms

Cloud Stacks

Third party cloud provisioning platforms such as OpenStack, CloudStack, OpenNebula, ProxMox, etc.

Object Storage Device

OSD

A physical or logical storage unit (e.g., LUN). Ceph users often conflate the term OSD with "Ceph OSD Daemon."

Ceph OSD Daemon

OSD

Ceph OSD

The Ceph OSD software, which interacts with a logical disk (OSD). Ceph users often frequently conflate the term OSD with "Ceph OSD Daemon."

Ceph Monitor

MON

The Ceph monitor software.

Ceph Metadata Server

MDS

The Ceph metadata software.

Ceph Clients

Ceph Client

The collection of Ceph components which can access a Ceph Storage Cluster. These include the Ceph Object Gateway, the Ceph Black Device, the Ceph Filesystem, and their corresponding libraries, kernel modules, and FUSEs.

Ceph Kernel Modules

The collection of kernel modules which can be used to interact with the Ceph System (e.g,. ceph.ko, rbd.ko).

Ceph Client Libraries

The collection of libraries that can be used to interact with components of the Ceph System.

Ceph Release

Any distinct numbered version of Ceph.

Ceph Point Release

Any ad-hoc release that includes only bug or security fixes.

Ceph Interim Release

Versions of Ceph that have not yet been put through quality assurance testing, but may contain new features.

Ceph Release Candidate

A major version of Ceph that has undergone initial quality assurance testing and is ready for beta testers.

Ceph Stable Release

A major version of Ceph where all features from the preceding interim releases have been put through quality assurance testing successfully.

Ceph Test Framework

Teuthology

The collection of software that performs scripted tests on Ceph.

CRUSH

Controlled Replication Under Scalable Hashing. It is the algorithm Ceph uses to compute object storage locations.