CEPH STORAGE & OPENSTACK

Ceph is a massively scalable, open source, distributed storage system. It is comprised of an object store, block store, and a POSIX-compatible distributed file system. The platform is capable of auto-scaling to the exabyte level and beyond, it runs on commodity hardware, is self-healing and self-managing, and has no single point of failure. Ceph is in the Linux kernel, and is now integrated with OpenStack in the Folsom release and the Apache CloudStack 4.0. Ceph is ideal for creating flexible, easy to operate object and block cloud storage.

ABOUT INKTANK

Inktank is the company delivering Ceph -- the massively scalable, open source, distributed storage system. Launched by some of the leading developers of Ceph, Inktank's mission is to help organizations fully leverage the transformative power of Ceph to decrease storage costs, increase operational flexibility and help them free themselves from restrictive and expensive proprietary storage systems. Inktank provides best-in-class professional services and support offerings to enterprises, service providers, and cloud platforms. Please visit www.inktank.com for more information.

CEPH BLOCK STORAGE FOR OPENSTACK

In the latest Folsom release, Ceph is officially integrated into OpenStack. Ceph serves as a native Cinder block provider for images and volumes, and integrates with the virtualization infrastructure to connect the block devices to the VM's. The Ceph RBD block device enables instant thin provisioning and cloning of images and volumes used by OpenStack Nova. This makes booting new VM's with highly available, fault-tolerant disks fast, easy, and efficient. Volumes can also be cloned from volume snapshots. The distributed RADOS object store underneath Ceph RBD lets you decouple your compute and storage in OpenStack and allows mobility of virtual machines across your compute cluster.

CEPH AND DELL CROWBAR

Dell developed Crowbar, an open source cloud management framework. With Crowbar, you can install cloud software across clusters and scale out systems quickly and automatically. Crowbar includes the concept of 'barclamps', which are modular extensible packages for the deployment infrastructure. Inktank and Dell have created Ceph barclams that integrate with Crowbar and OpenStack. This also allows Ceph to integrate with Glance, Cinder, and Nova-Volume in OpenStack to simplify managing images, volumes and snapshots. With these capabilities, Ceph provides the best possible storage for virtual machines in an OpenStack environment: ease of management coupled with massive scalability on low-cost commodity hardware.

CEPH AND DELL OPENSTACK CLOUD SOLUTIONS

A new member of the Dell Technology Partnership Program, Inktank has completed Dell's thorough certification process, including testing on Dell PowerEdge and PowerEdge C servers. Dell is offering Inktank's Ceph software and professional services as part of the Dell OpenStack-Powered Cloud Solution. This includes a validated reference architecture and Dell Crowbar software to enable deployment and configuration, as well as services to help customers deploy clouds quickly.