

Load Balancing for Openstack

OpenStack Dashboard OpenStack Shared Services Standard Hardware

Solution Overview

OpenStack is an open and scalable set of tools for building and operating both public and private clouds. Originally developed by Rackspace and NASA and now managed by the OpenStack foundation, it now enjoys support from a community of over 6,000 individuals and over 190 companies including Rackspace, Dell, HP. IBM and Red Hat.

The toolset is comprehensive and includes components that address the core cloud requirements of compute, storage, networking and orchestration. As an open source project, the community is focused on enabling the use of best of breed solutions through open APIs. Neutron, the OpenStack networking component, provides a Load Balancer as a Service (LBaaS) interface that facilitates the use of commercial load balancing solutions in an OpenStack environment.

LoadMaster driver for LBaaS

To facilitate the use of LoadMaster load balancing and application acceleration, Kemp developed a LoadMaster driver for OpenStack LBaaS which allows a LoadMaster instance to replace the default HAProxy load balancer. The LoadMaster driver for LBaaS provide support for the following features:

- Persistence
- All Neutron load balancing methods
- Management of virtual IPs, members and pools
- Service health monitoring

The terminology used by OpenStack to describe LBaaS is similar to that used by LoadMaster with the only significant variance being the OpenStack term 'Member' being referred to as a 'Real Server' by LoadMaster. The LoadMaster may be deployed and managed via the OpenStack Horizon management interface with the capability to manage features not supported by OpenStack via the LoadMaster web interface. The LoadMaster may be a physical appliance or a Virtual LoadMaster (VLM) instance running.