

OpenStack Integration Overview

Cinder is a block storage service for OpenStack™ platforms that is designed to present storage resources to end users for consumption by the OpenStack Nova Compute Project. KumoScale™ storage resources are provisioned to OpenStack platforms through a Cinder driver plug-in and a connector to Nova compute instance.

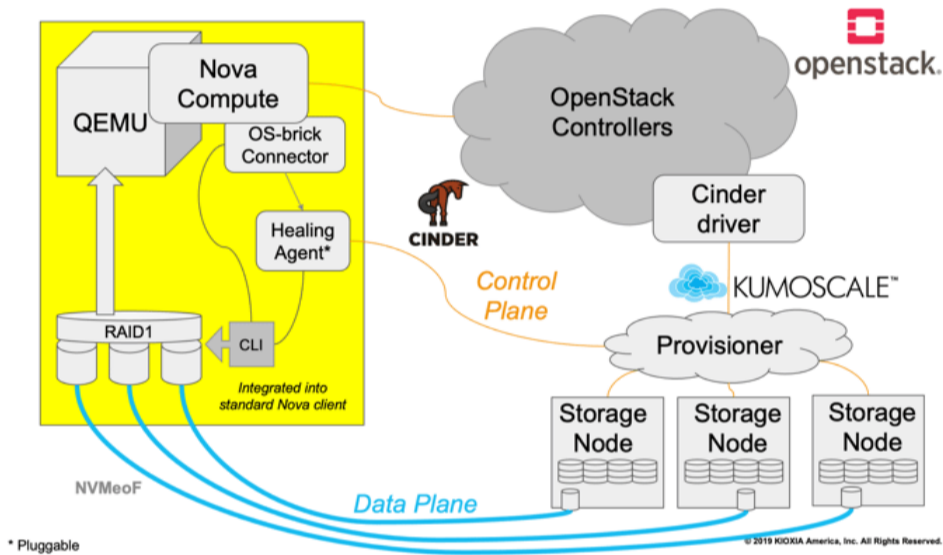
KumoScale software currently supports OpenStack version Yoga. KumoScale software can be integrated with other OpenStack versions by applying a patch. The KumoScale Cinder driver has been contributed to the OpenStack community and works with Linux™ operating system kernel versions that fulfill the following requirements:

- Support for the NVMe-oF™ protocol
- Deployed with client-side mdraid^[1] (MD)

This document describes the configuration steps required to integrate KumoScale software into an existing OpenStack deployment and how to provision KumoScale volumes to an OpenStack environment.

Setup

The following illustration depicts how KumoScale software integrates to an OpenStack environment:



KumoScale software integration with an OpenStack architecture

Intended Audience

The target audiences for this document are storage administrators and DevOps engineers. It is assumed that the intended reader has a working knowledge of storage and networking concepts. The reader should also be familiar with the OpenStack environment and its configuration.

Related Documents

To ensure KumoScale software is in a compatible environment, read the:

- [KumoScale Hardware Compatibility List \(HCL\)](#), to verify that the hardware platform and network comply with KumoScale software requirements.
- [KumoScale Installation Guide \(Managed or Appliance Mode\)](#) for requirements for installation and configuration.
- [KumoScale User Guide](#) for details on all the features and procedures for provisioning and support.

A complete list of KumoScale software documentation is available at <https://kumoscale.kioxia.com/en/documents/>.

See Next: [OpenStack Integration Installation and Configuration](#)

^[1] 'mdraid' is a Linux OS component that controls storage devices. It is referred to as Linux software RAID as it makes RAID use possible without a hardware RAID controller.

