OpenStack Manila User Interface Enhancements

NDSU | COMPUTER SCIENCE

Capstone 2025

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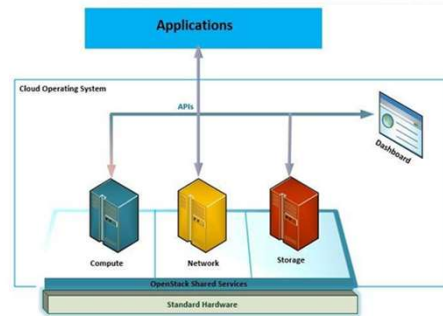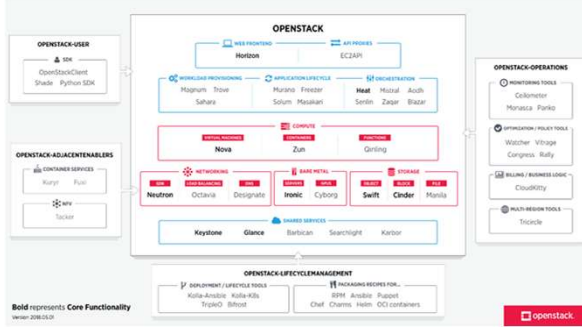
Sponsor: Red Hat Openstack

OpenStack Overview

- Open-source cloud computing platform offering many services to organizations globally:
  - Nova (compute)
  - Neutron (networking)
  - **Manila (shared file system)**
  - etc.

Tools

Project Overview

- Openstack Manila is a shared file system service provided by OpenStack
- Many of Manila's services are only available through the command-line interface. The goal of our project was to provide access to these services through OpenStack's Horizon dashboard.
- The implemented features provide OpenStack's clients a greater degree of administrative control over their shared file systems
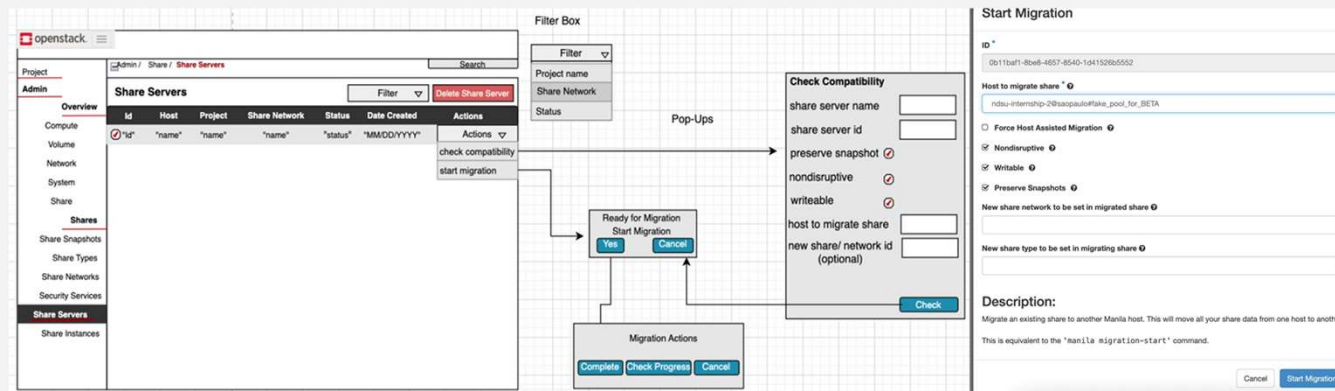

Project Features

- Manage/Unmanage share
- Add new API filters to user messages
- Share server Migration
- New Quotas to quota table
- Provided support for managing a share with DHSS=True mode