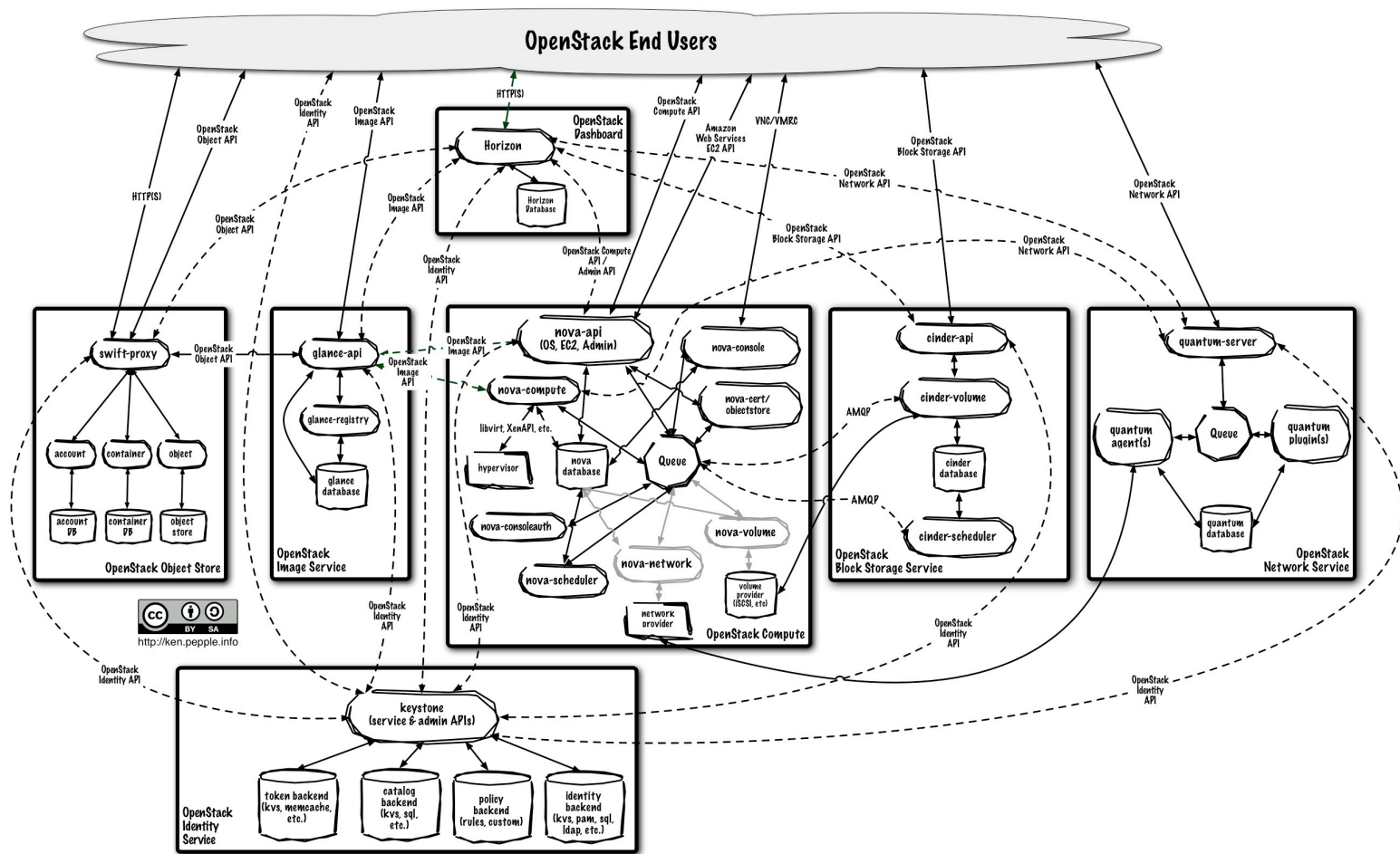# OpenStack APIs

Architecture

Glance (Image)

- Provides services for discovering, registering, and retrieving virtual machine images.

python-glanceclient

- Client for Glance API
  - Python API (glanceclient)
  - Command Line (glance)
- https://github.com/openstack/python-glanceclient
- pip install python-glanceclient

python-glanceclient

- List available virtual machine images.
- Upload virtual machine images.
- Download virtual machine images.

Swift (Object Storage)

- Highly available, distributed, and persistent object/blob storage.

python-swiftclient

- Client for Swift API
  - Python API (swiftclient)
  - Command Line (swift)
- https://github.com/openstack/python-swiftclient
- pip install python-swiftclient

python-swiftclient

- Create containers.

- Upload objects.

- Download objects.

Nova (Compute)

- Provision and manage pools of virtual machines.

python-novaclient

- Client for Nova API
  - Python API (novaclient)
  - Command Line (nova)
- https://github.com/openstack/python-novaclient
- pip install python-novaclient

python-novaclient

- Launch virtual machines.

- Snapshot virtual machines.

- Terminate virtual machines.

Cinder (Volume Service)

- Provides "block storage as a service".

python-cinderclient

- Client for Cinder API
  - Python API (cinderclient)
  - Command Line (cinder)
- https://github.com/openstack/python-cinderclient
- pip install python-cinderclient

python-cinderclient

- Create volumes.

- Snapshot volumes.

- Delete volumes.