

OpenStack Poppy

<http://www.poppycdn.org>

#openstack-poppy on Freenode

Created by: Amit Gandhi

Modified Date: October 16, 2014



POPPY MISSION:

**PROVIDE A GENERIC VENDOR-NEUTRAL API
THAT WRAPS PROVISIONING INSTRUCTIONS
FOR CDN VENDORS THAT SUPPORT IT.**

Why are we building Poppy?

- There are many (hundreds) CDN providers in the market today.
- Each provider has their own custom API.
- Each provider offers the same “basic” set of functionality, and some unique differentiators.
- When a CDN customer wants to change provider, there is a high cost involved
 - CDN provider lock-in
 - Migrating applications to a new provider
- Poppy aims to build a vendor neutral API that wraps the provisioning instructions around participating CDN vendors, thus making it easier to migrate between providers, and breaking the provider lock in.



The Poppy Team (#openstack-poppy on Freenode).

- Rackspace
 - PTL - Amit Gandhi (amitgandhinz)
 - Dev - Tony Tan (tonytan4ever)
 - Dev - Obulpathi Challa (obulpathi)
 - QE - Malini Kamalambal (malini)
 - Product Mgr - Megan Wohlford (megan_w)
- Hewlett-Packard
 - Dev - Miguel Quintero (miqui)
- Add your name here =D

CDN Providers interested in Poppy (so far...)

fastly[®]

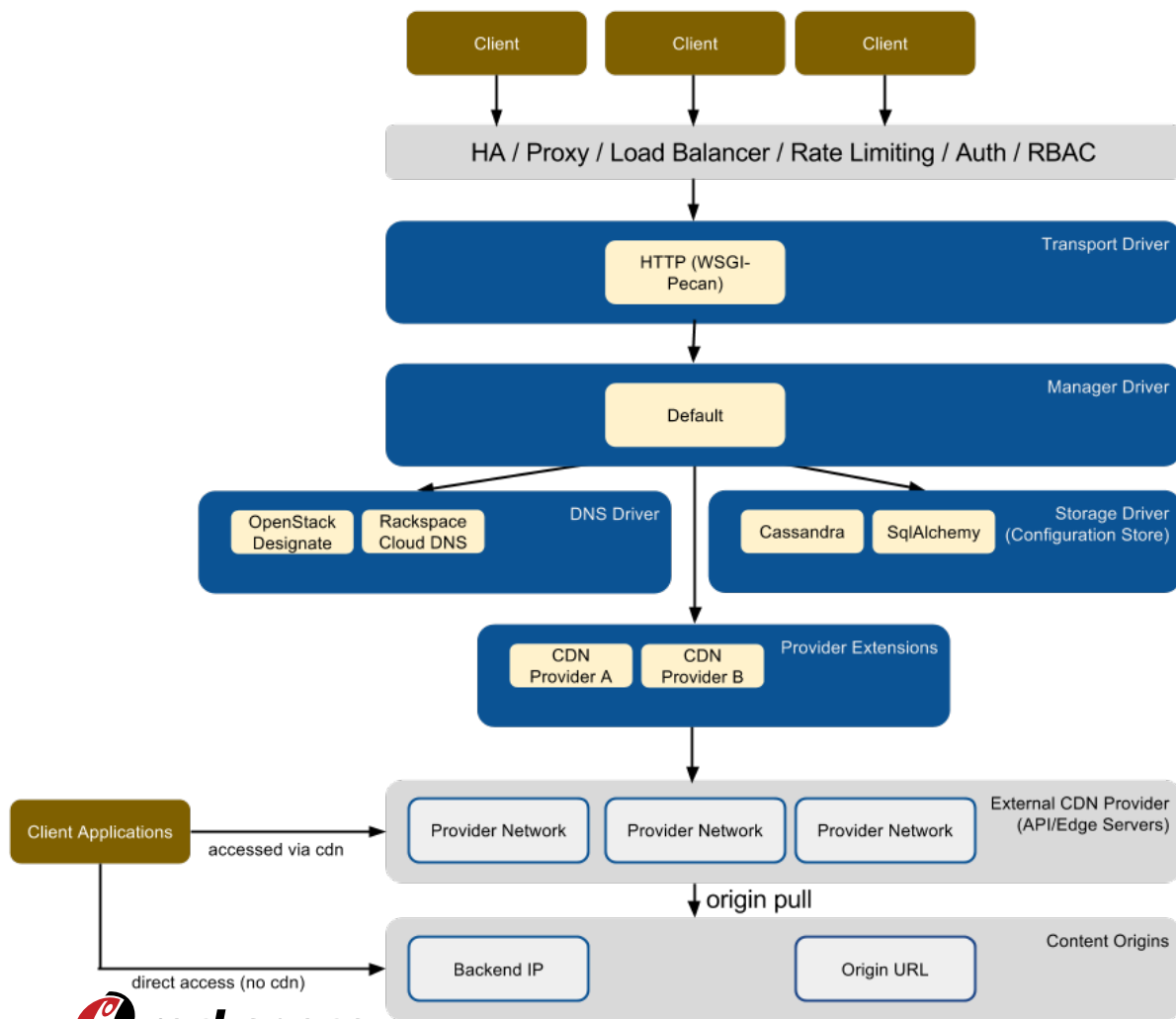
maxCDN

 **Akamai**

edgecast

 **HIBERNIA**
NETWORKS

Poppy Architecture



- Stevedore based Driver Model, allowing flexible drivers to be plug and play by operators.
- Keystone based Authentication/Authorization
- Pecan based WSGI Transport
- Cassandra Storage (sqlalchemy coming soon)
- Supports multiple CDN providers
- Interact with DNS providers for dynamic CNAMEing.
 - E.g Openstack Designate
- Provider Extensions map Poppy service configurations to the CDN Provider's API.
 - Currently building drivers for Fastly, MaxCDN, CloudFront
 - Held discussions with Akamai and Edgecast for participation

Poppy Features – Phase One

- Service Configurations

- Specify Domains
- Specify Origins
- Caching Rules (TTL sitewide, per path)
- Referrer Restrictions
- Shared SSL Support
- Purge Content

- Flavors

- Operator Defined
- Support one or more providers per flavor

- Potential Features

- Add more support for restriction rules (eg ClientIP, region, headers, etc)
- Video Streaming configuration
- Dedicated SSL support
- Load Balancing between CDN providers

- We will discuss some of this during the Paris OpenStack Design Summit.

How to contribute

We are looking for more Poppy contributors and CDN providers

- Join #openstack-poppy on Freenode
- Weekly Meetings: Thursday's @ 3pm EDT on #openstack-meeting-alt on Freenode
- Checkout the Poppy website:
<http://www.poppycdn.org/>
- Pick up Bugs or Blueprints:
<https://blueprints.launchpad.net/poppy>

QUESTIONS ?

THANK YOU



RACKSPACE[®] | 1 FANATICAL PLACE, CITY OF WINDCREST | SAN ANTONIO, TX 78218
US SALES: 1-800-961-2888 | **US SUPPORT:** 1-800-961-4454 | **WWW.RACKSPACE.COM**