

04.29.2019



Searchlight

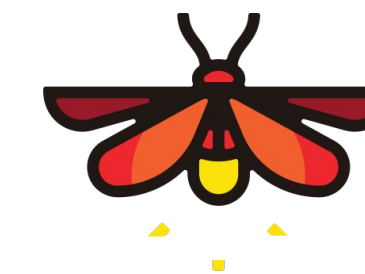
Project onboarding

THUY DANG | thuydang
TRINH NGUYEN | dangtrinhnt
SA PHAM | sapd

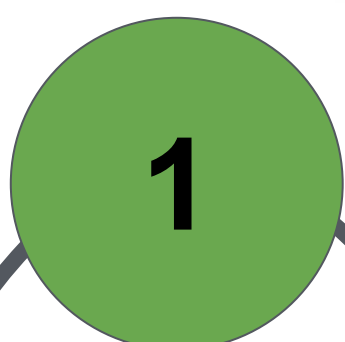
@VIETOpenInfra Usergroup

Agenda

- **History**
- **Current Functionalities**
- **Future SearchLight**
 - New Features & Focus
- **Architecture**
- **Meet The Team**

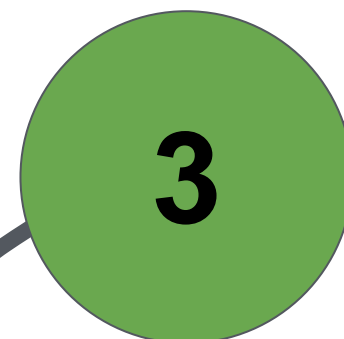
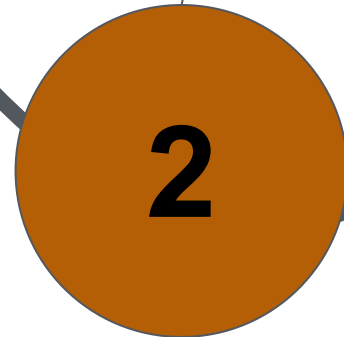


History

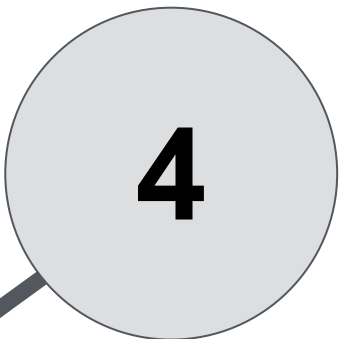


Broadened scope to advanced indexing and search across multi-tenant cloud resources.

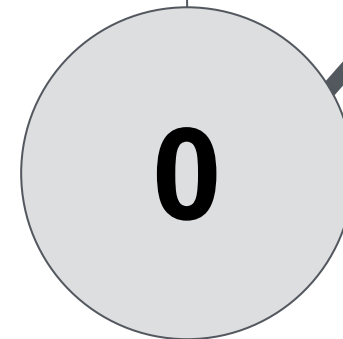
Project team left. Missed several milestones, no Rocky release, no new patches

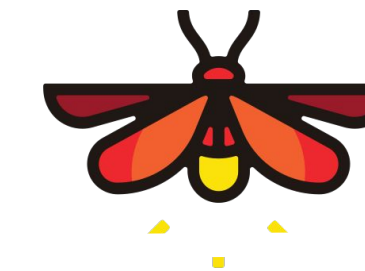


New project team took over. Upgrade ES version, fix bugs, test coverage and docs. New focus on future VIM requirements



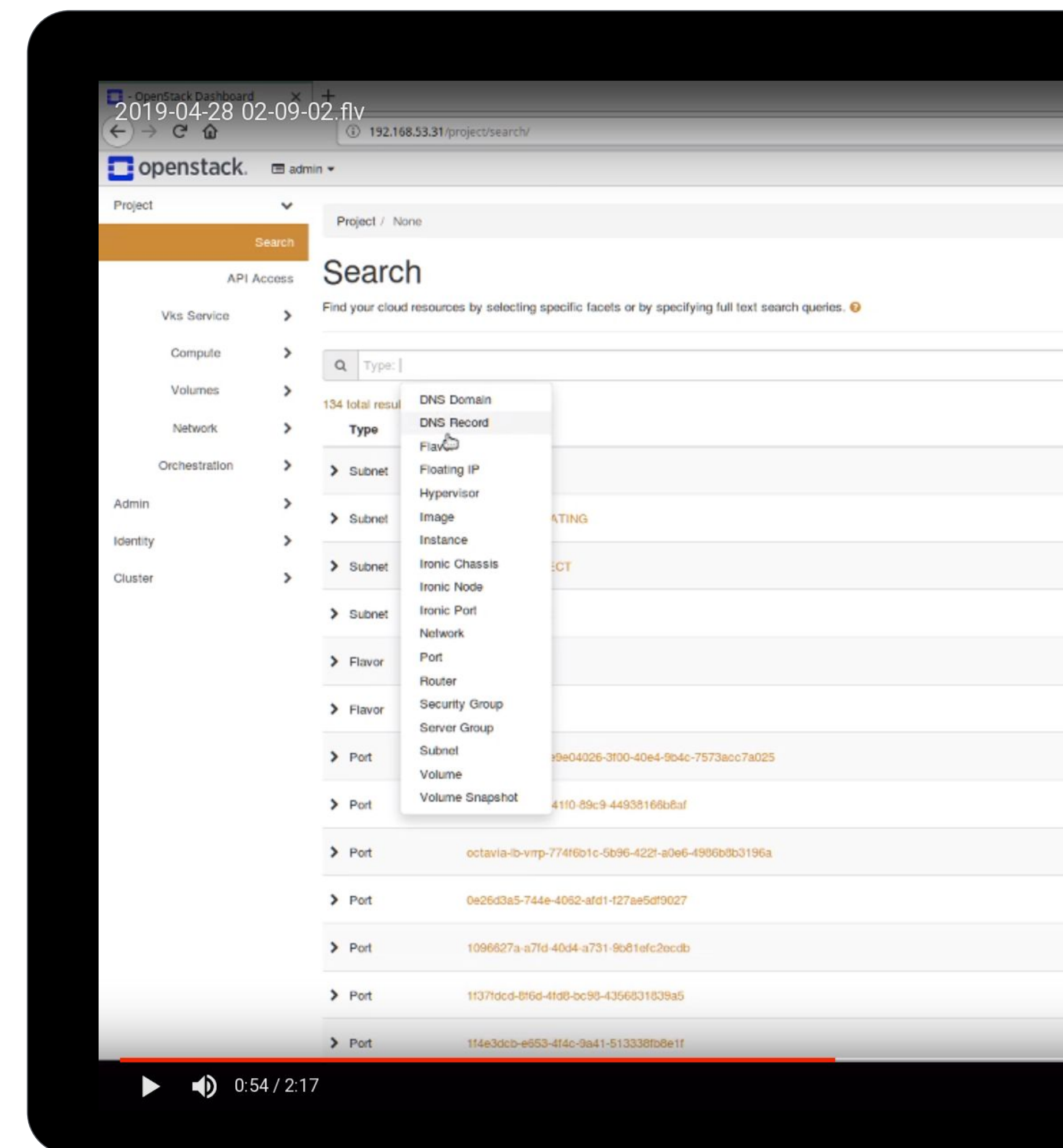
Started as the Glance Catalog Index



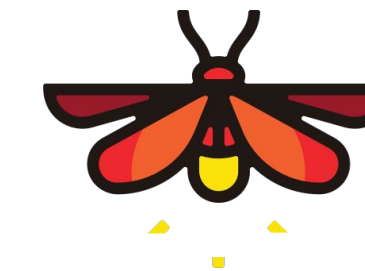


What SearchLight does

- An indexing and search service for the cloud resources
- Provides a tools for users to quickly find and operate on their VM, network, images resources.
- Its goal is to achieve high performance and flexible querying combined with near real-time indexing of cloud resources.

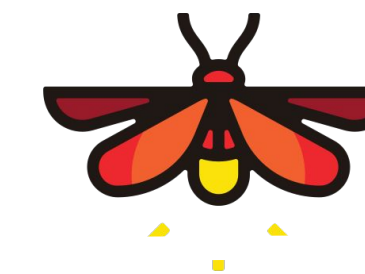


[Demo Video](#)



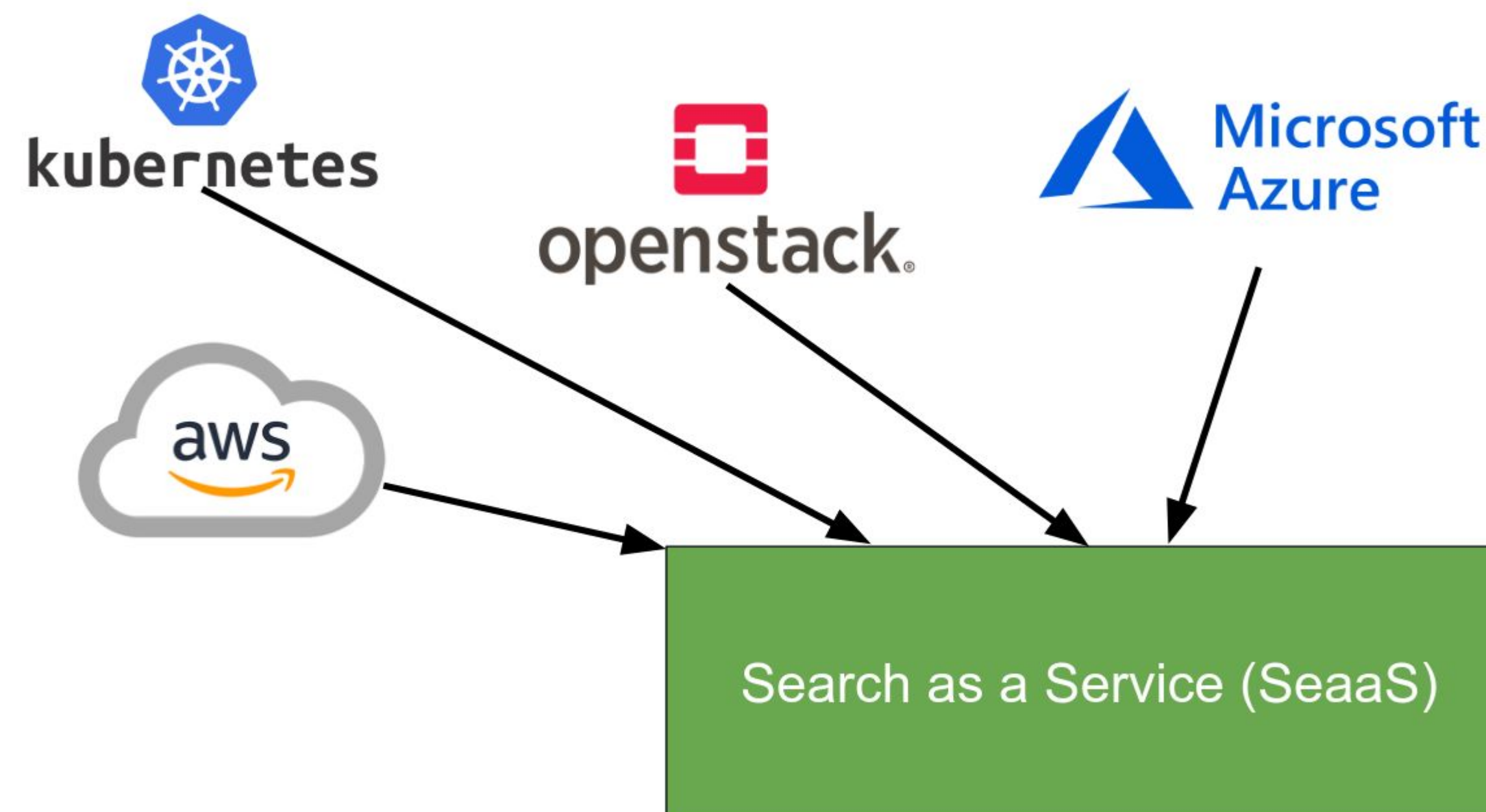
The Future SearchLight

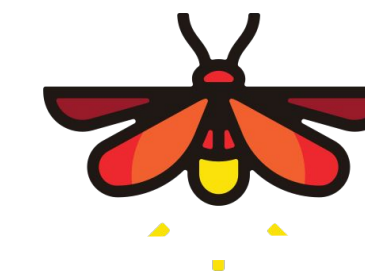
- Requirements from future telco & cloud service providers
- Multi-cloud support edge computing, hybrid cloud, and virtualization technologies
- Resource repository for OpenStack infrastructure management: orchestration and slicing



Multi-Cloud Vision

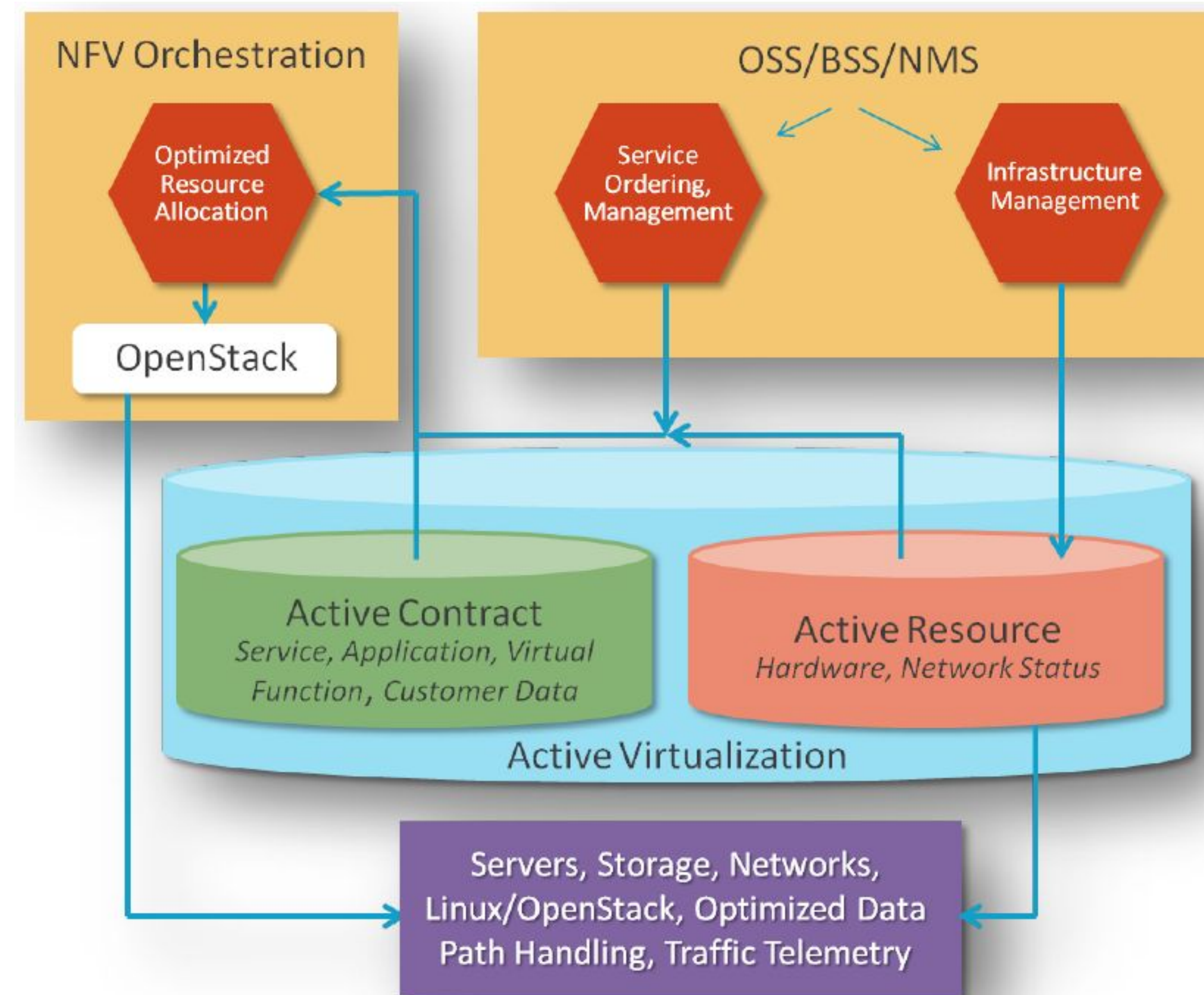
- Unified OpenStack resource management:
 - Edge computing powered by OpenStack
 - Containers cluster nodes provisioned by OpenStack
- Hybrid cloud resource management:
 - OpenStack and other cloud platforms
 - OpenStack and other virtualization technologies
- New types of resources:
 - GPU
 - IoT devices

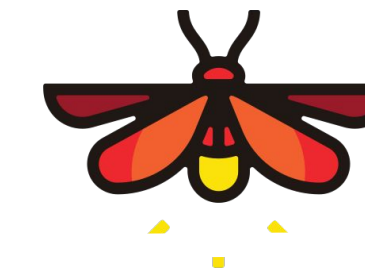




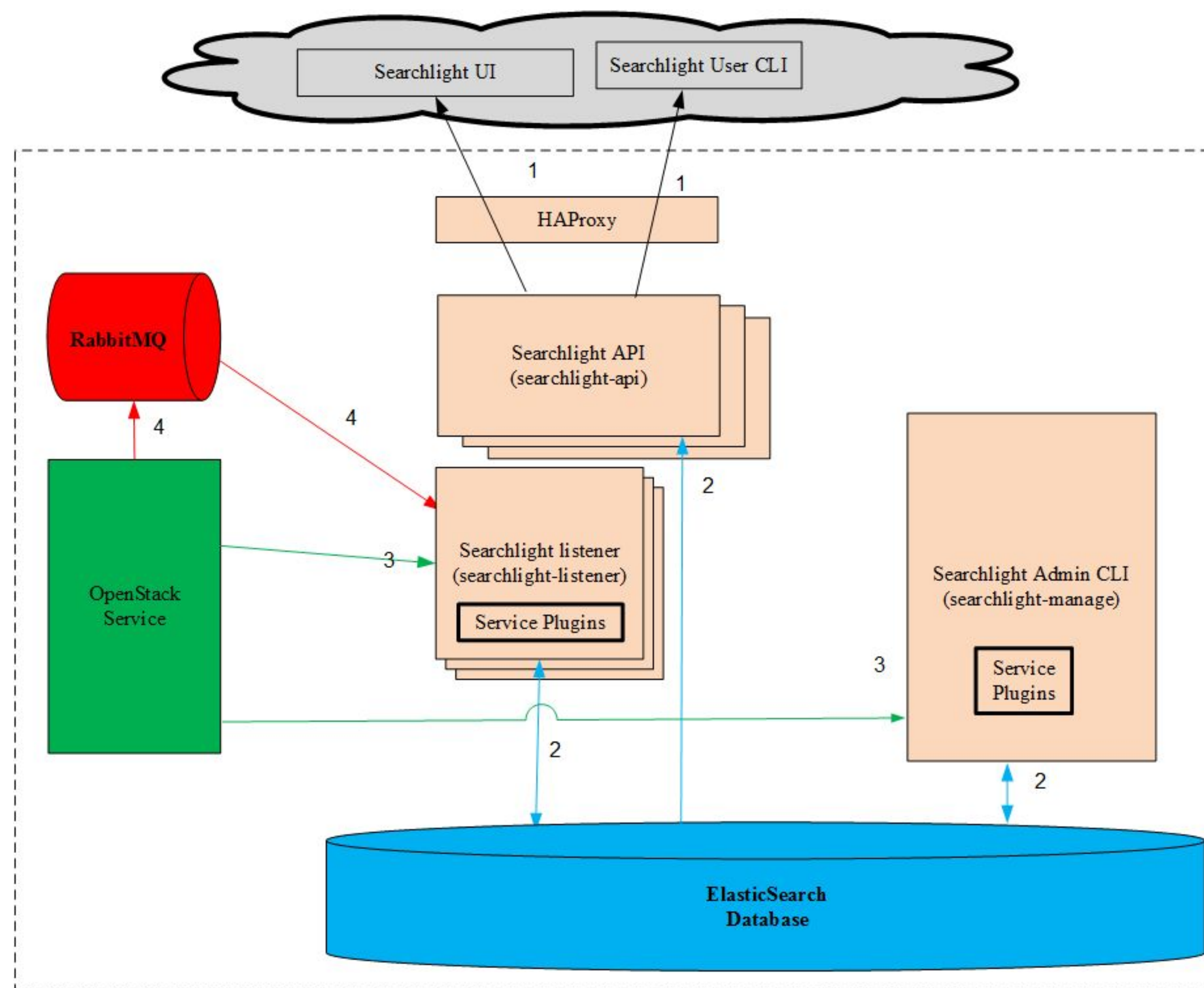
SearchLight as a Resource Repository

- CloudNFV active virtualization
 - VNFs chaining/service manifest sent to OpenStack
- Requirement for OpenStack as a VIM
 - Real-time resource management
 - Efficiency, auto scaling





Architecture



What have we done so far?

- Searchlight now works with Elasticsearch 5.x
- We have released a new vision to make Searchlight a multi-cloud application
- Functional test setup has been improved
- Searchlight now can work and be tested with Python 3.7

We released Searchlight for Stein!!!

Quick Brainstorming SearchLight Features

- **Use cases**

- For cloud providers: tbd, ...
- For users: cross provider resources, ...
- For telcos: edge, ...

- **Features wish list**

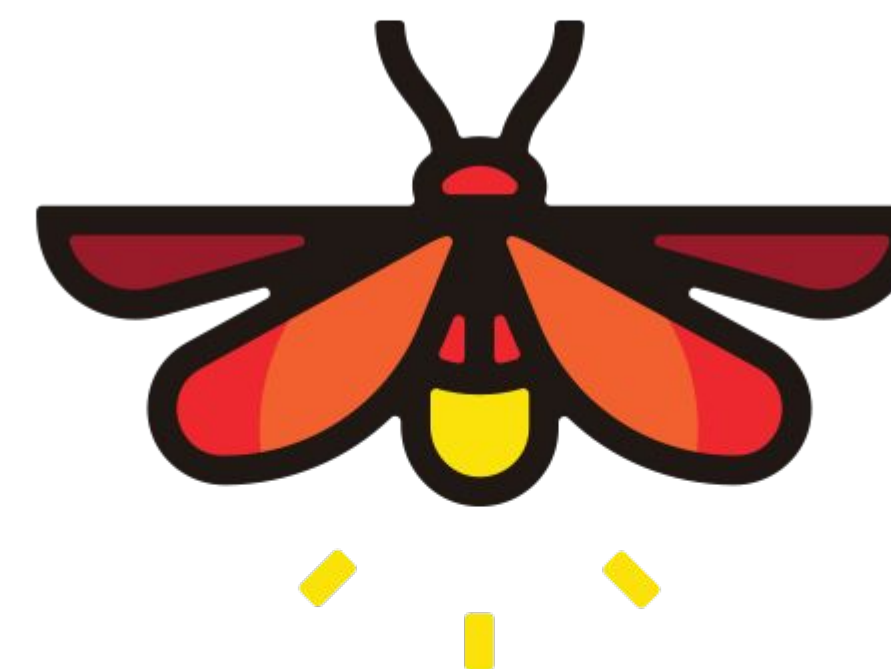
- Multi-cloud support
- Resource slicing
- Auto scaling

Create and discuss your story with us:

<https://storyboard.openstack.org/#!/project/openstack/searchlight>

We need your help!

- Please join with us to help move forward together as a community!
- Searchlight is an open project and we encourage contribution from everybody
- We support both developers and non-developers who want to provide input, requests for features, and bug fixes. We want to be able to move quickly without getting too bogged down in the process but still provide a rich mechanism for feature reviews as needed



SEARCHLIGHT

an OpenStack Community Project

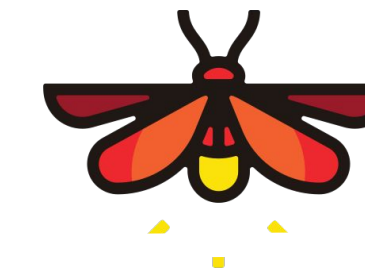
How to contribute?

- Review patches [1]
- Contribute your ideas with blueprints [2]
- Report or fix bugs [2]
- Discuss or help others on IRC **#openstack-searchlight**
- Team meeting: Bi-weekly, Monday 13:30 UTC, **#openstack-searchlight**

[1] <https://review.openstack.org/#/q/project:openstack/searchlight>

[2] https://storyboard.openstack.org/#!/project_group/searchlight





Meet The Team

- **Trinh Nguyen <dangtrinhnt@gmail.com> - PTL**
- **Thuy Dang <thuydang.de@gmail.com> - Core reviewer**
- **Sa Pham <saphi070@gmail.com> - Contributor**

Contact us

- IRC: #openstack-searchlight
- Mailing list: openstack-discuss@lists.openstack.org with [searchlight] prefix in the subject

THANKS.

Questions?



openstack



@openstack



openstack



OpenStackFoundation

A BRIEF HISTORY OF SEARCHLIGHT

Searchlight was originally developed and released in the Kilo release of Glance as the Catalog Index Service [1]. At the Liberty Summit, we decided to broaden the scope to provide advanced and scalable search across multi-tenant cloud resources.

[1] <http://specs.openstack.org/openstack/glance-specs/specs/kilo/catalog-index-service.html>

