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Glance PTL for Queens

What is Glance?

Glance is the OpenStack *Image Service.*

Glance provides services and associated libraries to *store*, *browse*, *share*, *distribute* and *manage* bootable disk images, other data closely associated with initializing compute resources … and metadata definitions.

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What is Glance?

Glance has been around since the Bexar release of OpenStack.

Latest survey results indicate that Glance is deployed in 95% of clouds in production or test phases.

What is Glance?

Glance is …

- A **project** (i.e., a community of contributors)
- A **service** (provides an implementation of the Image Service and associated software)
- An **API** (defines a means of interacting with the service)

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Wait … *An* API?

Yes, singular. In Rocky, the v2 API will be the only one.

- The glanceclient will continue to support connecting to v1, but support will be removed during the Stein development cycle

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The Glance Project

Queens

- Reviews
  - 101 contributors from 28 companies
- Commits
  - 59 contributors from 24 companies

Rocky (so far)

- Reviews
  - 46 contributors from 16 companies
- Commits
  - 35 contributors from 13 companies

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The Glance Service

The Glance project is responsible for the following code repositories:

- openstack/glance
  - The glance server
  - The glance registry (deprecated!)
  - Most of the Glance documentation
- openstack/glance_store
  - A library that facilitates access to the supported storage backends
- openstack/python-glanceclient
  - A python client library and CLI
- openstack/glance-specs
  - Design documents for Glance

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OpenStack Queens Features

The Queens release is Glance 16.0.1

Current API version is now **2.6**

➡ Interoperable image import enabled by default
➡ New 'web-download' import method
  • Operator can whitelist/blacklist on three levels
    • Protocol
    • Host
    • Port

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OpenStack Queens Features

Interoperable Image Import

➡ Configuration information is available in the Glance documentation

docs.openstack.org/glance/latest/admin/

(Look for "interoperable image import")

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OpenStack Queens Features

Interoperable Image Import

➡   Plugin framework
➡   Image property injection plugin

docs.openstack.org/glance/latest/admin/

(Look for "interoperable image import")

OpenStack Queens Features

Interoperable Image Import

➡ Glanceclient support in client version 2.10.0 or higher

Use the glanceclient from stable/queens or master

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OpenStack Queens Features

➡ glance-scrubber refactored to eliminate dependency on Glance Registry

➡ Registry Service deprecated and will be removed during the Stein development cycle

  • Registry v1 will be removed in Rocky

➡ *reminder:* Image Service API v1 will be removed in Rocky

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OpenStack Queens Features

See the release notes for some other features

docs.openstack.org/releasenotes/glance/

(Pick the Queens Series Release Notes)

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OpenStack Rocky

➡   Secure Hash Algorithm Support ("multihash")
➡   Fix OSSN-0075

… and more (though not *much* more)

Priorities list:
specs.openstack.org/openstack/glance-specs/

(Look for Rocky Priorities)

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Rocky and beyond

Rocky (Spring 2018)

➡ image lifecycle management part 1
  • "Hidden images", please provide feedback:
    • https://review.openstack.org/#/c/508133/
➡ Policy refactoring started
➡ multiple store support work started
➡ Interoperable image import testing fully covered
➡ Import plugin for automatic image conversion

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Beyond Rocky

S (Fall 2018)

➡ image lifecycle management part 2
➡ Finishing the work started in Rocky
➡ better metadefs integration (value enforcement)
➡ image export
➡ ceph store enhancements
➡ glance registry removal
➡ Cluster aware API nodes
➡ multi-region support part 1

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Beyond Rocky

T (Spring 2019)

➡ Task worker separation from glance-api

U (Fall 2019)

➡ multi-region support complete

openstack.

Contributors Needed

Glance is currently on the OpenStack "Top 5" list
➡ We need more contributors, particularly if the features people want are going to be implemented

Glance Project Onboarding session
Tomorrow (Tuesday, May 22)
11:50am - 12:30pm
Convention Centre West - Level Two - Room 223

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How to contribute

There are lots of opportunities depending on your interests.
➡ Coding, fixing bugs
➡ Reviewing code
➡ Documentation and docs publishing
➡ Topic driver
➡ Reviewing specs, developing specs

More info:
etherpad.openstack.org/p/YVR-forum-glance-onboarding

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How to give feedback

Glance Operators/Users Feedback session
Wednesday (May 23)
4:40pm - 5:20pm
Convention Centre West - Level Two - Room 220

It would be great to attend in person, but if you can't, you can leave feedback on the etherpad:

https://etherpad.openstack.org/p/YVR-forum-glance-feedback

How to give feedback

More ways to give feedback:

➡ Open discussion at the weekly Glance meeting (Thursdays at 14:00 UTC in #openstack-meeting-4)
➡ Discussion in the #openstack-glance channel
➡ Glance operator surveys (announced on the operators' list with [glance-survey] in the subject line)
➡ Openstack-dev mailing list, with [glance] in the subject

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Glance Project Sessions

Tuesday, 9:00am *Image handling in an edge cloud infrastructure*
Convention Centre West - Level Two - Room 221-222

Tuesday, 11:50am *Glance Project Onboarding session*
Convention Centre West - Level Two - Room 223

Wednesday, 2:30pm *Glance's power of Image Import Plugins*
Lightning Talk Theatre

Wednesday, 11:00am *Interoperable Image Import Feedback*
Convention Centre West - Level Two - Room 220

Wednesday, 4:40pm *Glance Operators/Users Feedback session*
Convention Centre West - Level Two - Room 220

Thursday, 11:50am *Image lifecycle management*
Convention Centre West - Level Two - Room 220