

Tempest Stable Interfaces for OpenStack Integration Testing

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https://github.com/andreafrittoli/tempest_stable_interfaces

Neutron or Newton

/ˈnjuːt(r)ən/

What is OpenStack QA?

- ▶ Official Mission Statement:
Develop, maintain, and initiate tools and plans to ensure the upstream stability and quality of OpenStack, and its release readiness at any point during the release cycle.

Current QA Projects

- ▶ devstack-plugin-cookiecutter
- ▶ eslint-config-openstack
- ▶ bashate
- ▶ stackviz
- ▶ devstack-vagrant
- ▶ qa-specs
- ▶ tempest-lib (deprecated)
- ▶ tempest
- ▶ devstack
- ▶ devstack-plugin-ceph
- ▶ os-testr
- ▶ openstack-health dashboard
- ▶ tempest-plugin-cookiecutter
- ▶ os-performance-tools
- ▶ hacking
- ▶ grenade

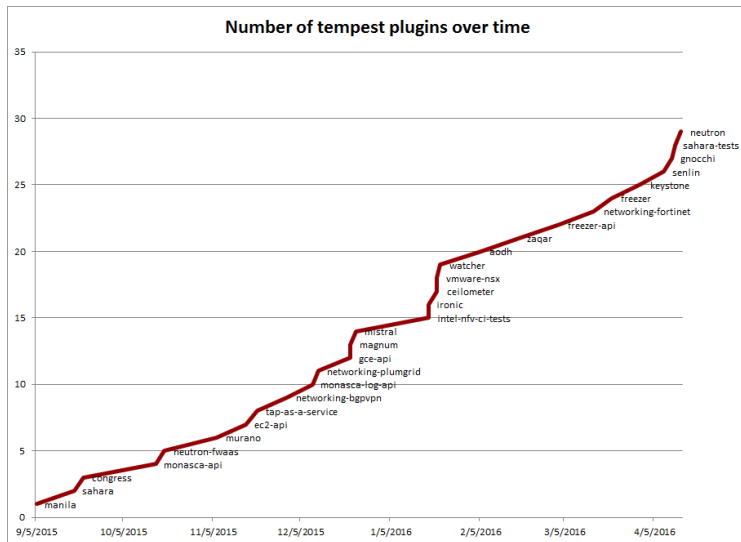
Integration Tests in Tempest

- ▶ Six core services
 - ▶ identity, compute, image, volume, network, object storage
- ▶ Other services to be moved out of tree
 - ▶ baremetal, data_processing, database, orchestration, telemetry

Integration tests outside of tempest tree

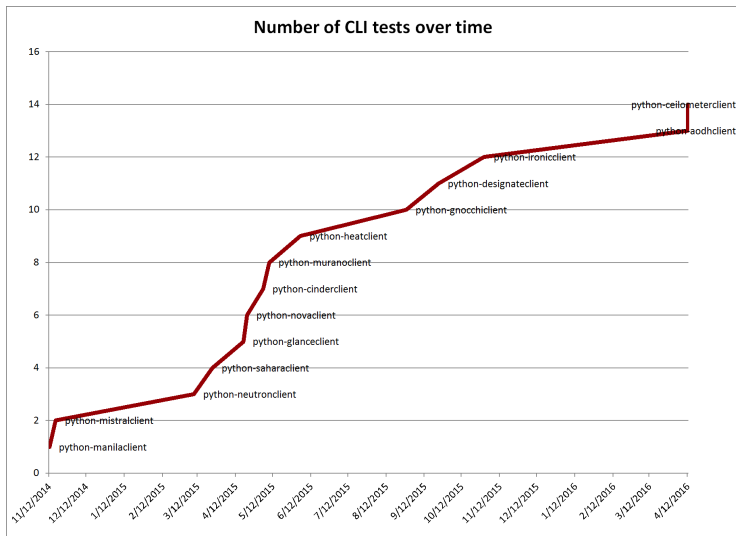
- ▶ Tempest Plugins (29)
- ▶ CLI tests for clients (16)
- ▶ Other functional/integration tests

Tempest plugins over time



Source: `git blame -L '/^tempest/,+1' setup.cfg | awk '{print $1}' | xargs git log -1 --format=%cd --date=short`

CLI tests over time



Source: `git blame -L 1 $(from import) tempest[_]+libcli/.,+1' *.py`

Other Tempest Tests

- ▶ Tempest Plugins (WIP)
 - ▶ kingbird
 - ▶ vitrage
- ▶ Tempest Tests (potential plugins)
 - ▶ blazar
 - ▶ designate
 - ▶ networking-l2gw
 - ▶ networking-vsphere
 - ▶ neutron-lbaas
 - ▶ neutron-vpnaas

Functional/Integration Tests

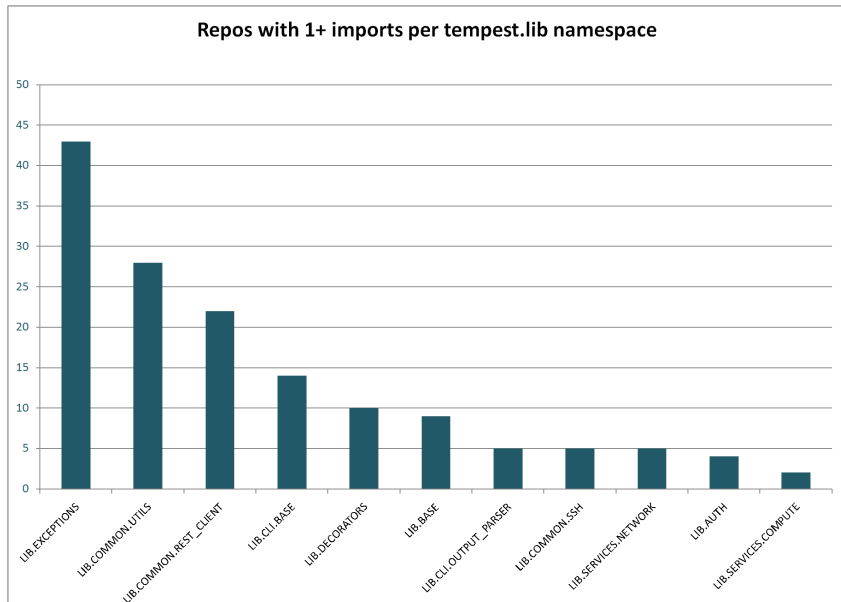
- ▶ cerberus (rest_client, auth, clients)
- ▶ cue (rest_client, test base class)
- ▶ solum (rest_client, auth)

- ▶ astara (utils)
- ▶ barbican (utils)
- ▶ python-keystoneclient (test base class)
- ▶ python-openstackclient (utils)
- ▶ tacker (test base class)

Tempest Stable APIs

- ▶ Common: rest client, microversion, ssh client, utils
- ▶ Service clients: identity, network, compute
- ▶ Base test class
- ▶ Authentication providers
- ▶ CLI test framework
- ▶ Decorators, exceptions
- ▶ Commands: check_uuid, skip tracker

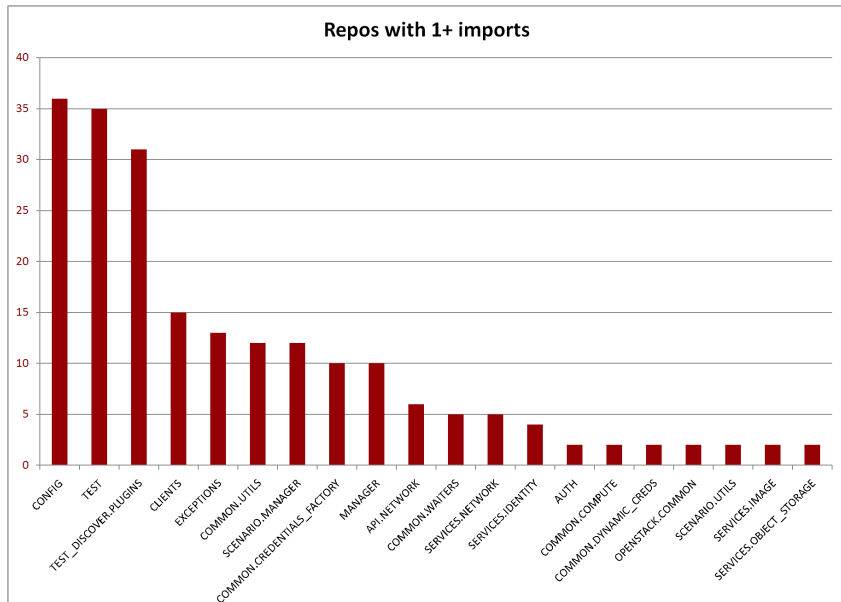
Tempest Stable APIs



Commonly Used Tempest Internal APIs

- ▶ TBD

Tempest Internal APIs



Questions?