

OPENSTACK

WEB FRONTEND | **API PROXIES**

Horizon | EC2API

WORKLOAD PROVISIONING | **APPLICATION LIFECYCLE** | **ORCHESTRATION**

Magnum Trove Sahara | Murano Freezer Solum Masakari | **Heat** Mistral Aodh Senlin Zaqar Blazar

COMPUTE

VIRTUAL MACHINES | **CONTAINERS** | **FUNCTIONS**

Nova | Zun | Qinling

NETWORKING | **BARE METAL** | **STORAGE**

SDN | **LOAD BALANCING** | **DNS** | **SERVERS** | **GPUS** | **OBJECT** | **BLOCK** | **FILE**

Neutron | Octavia | Designate | **Ironic** | Cyborg | **Swift** | **Cinder** | Manila

SHARED SERVICES

Keystone | Glance | Barbican | Searchlight | Karbor

OPENSTACK-LIFECYCLEMANAGEMENT

DEPLOYMENT / LIFECYCLE TOOLS | **PACKAGING RECIPES FOR...**

Kolla-Ansible Kolla-K8s TripleO Bifrost | RPM Ansible Puppet Chef Charms Helm OCI containers

OPENSTACK-USER

SDK

OpenStackClient
Shade Python SDK

OPENSTACK-ADJACENTENABLERS

CONTAINER SERVICES

Kuryr Fuxi

NFV

Tacker

OPENSTACK-OPERATIONS

MONITORING TOOLS

Ceilometer
Monasca Panko

OPTIMIZATION / POLICY TOOLS

Watcher Vitrage
Congress Rally

BILLING / BUSINESS LOGIC

CloudKitty

MULTI-REGION TOOLS

Tricircle

Bold represents **Core Functionality**

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