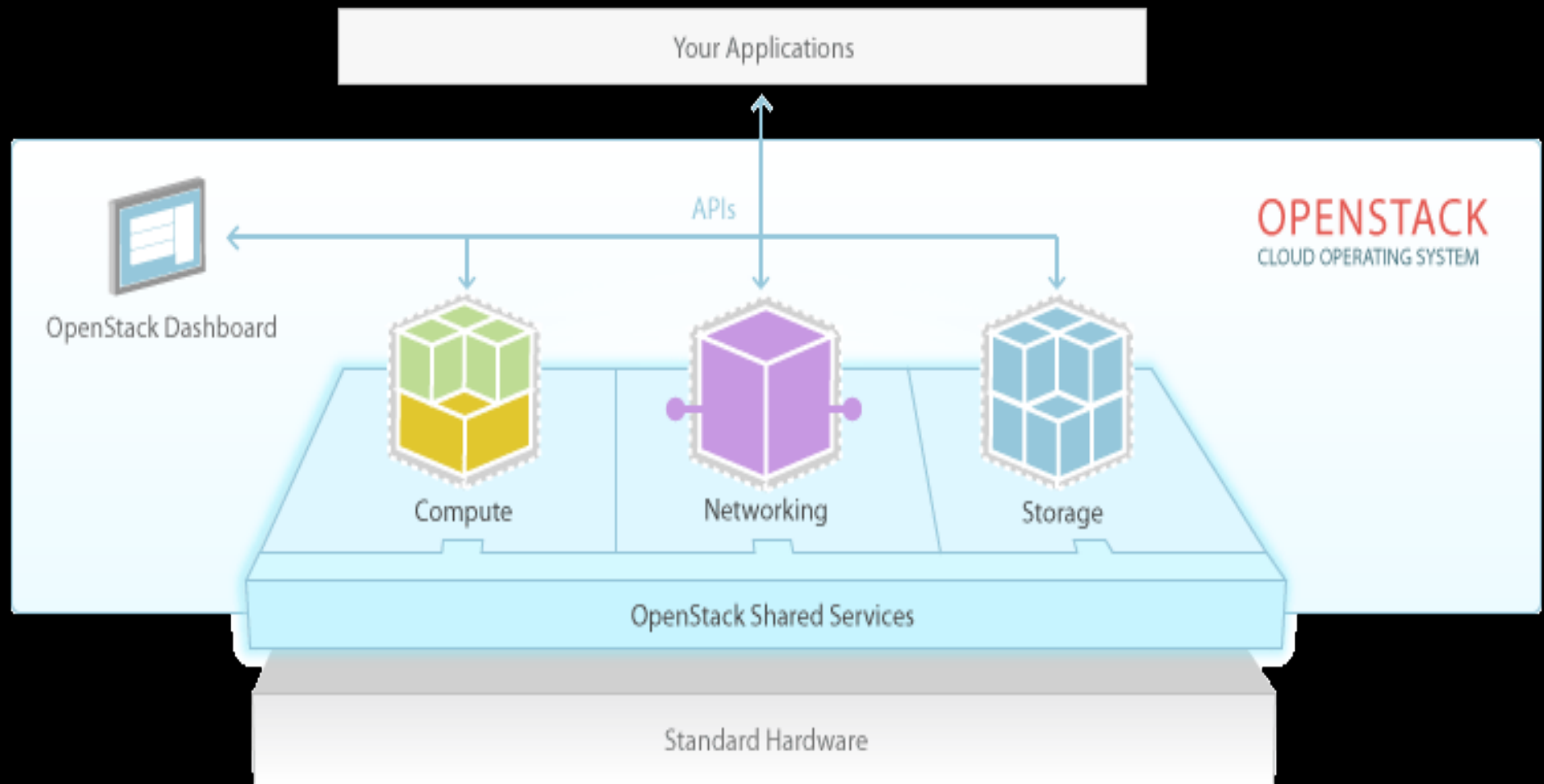


OpenStack Components

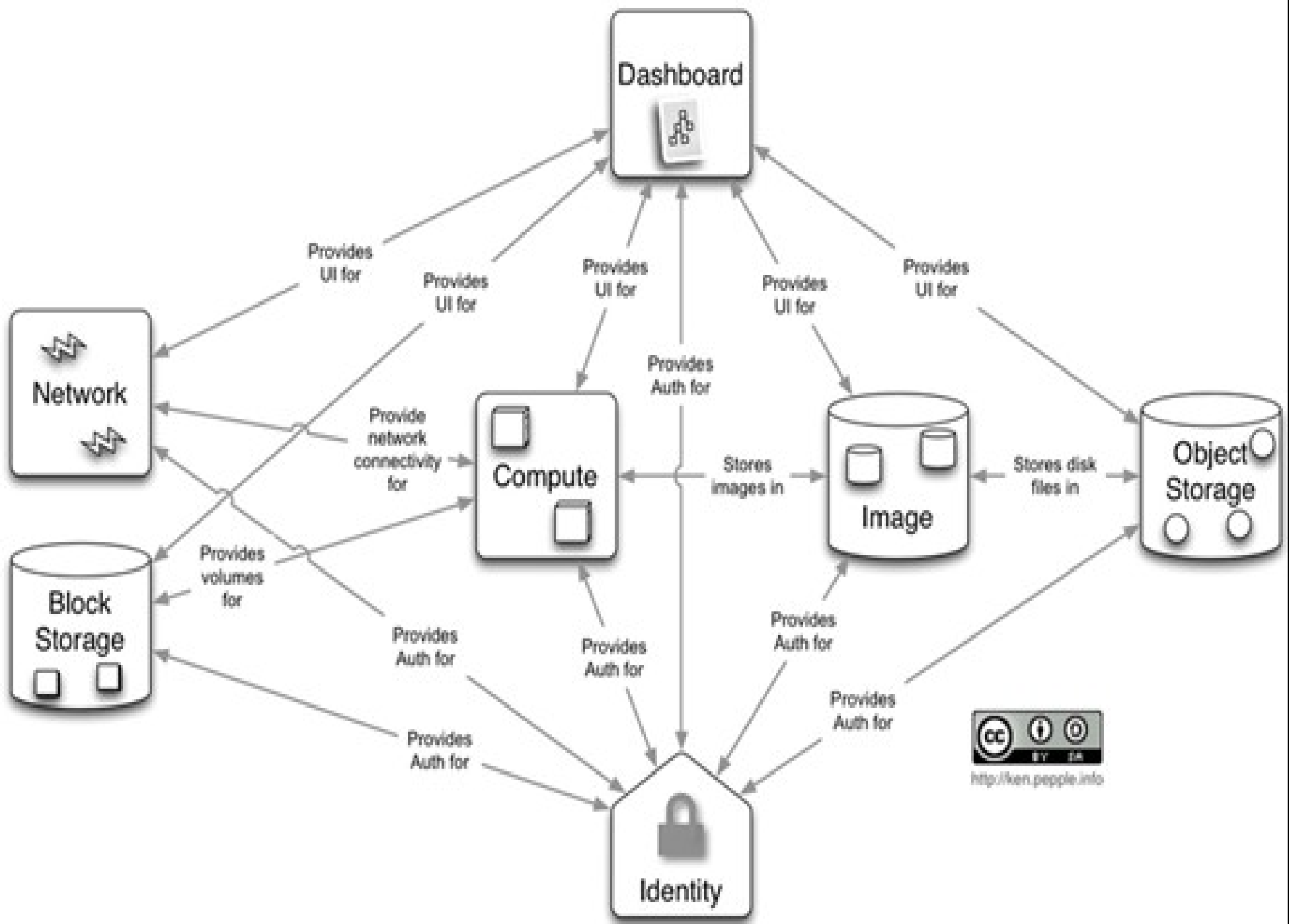
Few things about OpenStack

- Cloud Operating System
- 100% open source
- Python code

Few things about OpenStack



OpenStack is NOT a big Blob!



Central Identity Service

- Keystone
- maintain a database for user aaa
- service catalogue
- single entry point into openstack

Compute Service

- Nova
- provisioning of compute resources
- core of virtual machine management software, not a hypervisor
- AWS's EC2

Image Registry Service

- Glance
- Catalogue of virtual machine images

Object Storage Service

- Swift
- integrated into applications
- backup and archiving
- AWS's S3 service

Block Storage Service

- Cinder
- Persistent storage
- Create, attach, detach blocks to compute instances
- AWS's Elastic Block Storage (EBS) service

OpenStack Networking Service

- Neutron
- manages networking associated with openstack cloud
- Customize network, spin up-down variety of networks on demand

OpenStack Dashboard

- Horizon
- Web based GUI to manage your cloud
- Command line tools

OpenStack Orchestration Engine

- Heat
- automate the deployment of cloud

OpenStack Telemetry Service

- Ceilometer
- metering component
- monitoring and billing purposes

Database as a Service

- Trove
- provision relational and non-relational database engine
- AWS's Relational Database Service (RDS)

Elastic Map Reduce for OpenStack

- Sahara
- provision Hadoop clusters
- scale an already-provisioned cluster

Multiple tenant cloud Messaging Service

- Zaqar
- send and receive messages between various components of user applications
- Variety of communication patterns
- AWS's SQS and SNS

OpenStack bare metal provisioning

- Ironic
- provision bare metal machine
- bare metal hypervisor API
- forked from Nova bare metal driver

References

- <http://www.openstack.org>
- https://wiki.openstack.org/wiki/Main_Page
- <http://www.networkworld.com/article/2176963/cloud-computing/openstack-101--the-parts-that-make-up-the-project.html>
- <https://www.youtube.com/watch?v=DEI5oJzzdFw>

¹ Questions?

Thanks!...