

openstack™

CLOUD SOFTWARE



Muchas Gracias :)

- ...
- ...
- Gholt
- VishIshaya
- AnneGentle

Takeaways

- What?
- Why?
- Who?
- How?
- What Next?



Openstack History

- NASA
- OpenNebula
- Nova - compute
- Rackspace
- Cloud Files
- Swift - Storage

What the duck is that?

- It's cloud framework, duh !
- Written using Python !
- Apache Licensed, Yay :)
- Backed by biggies
- ...

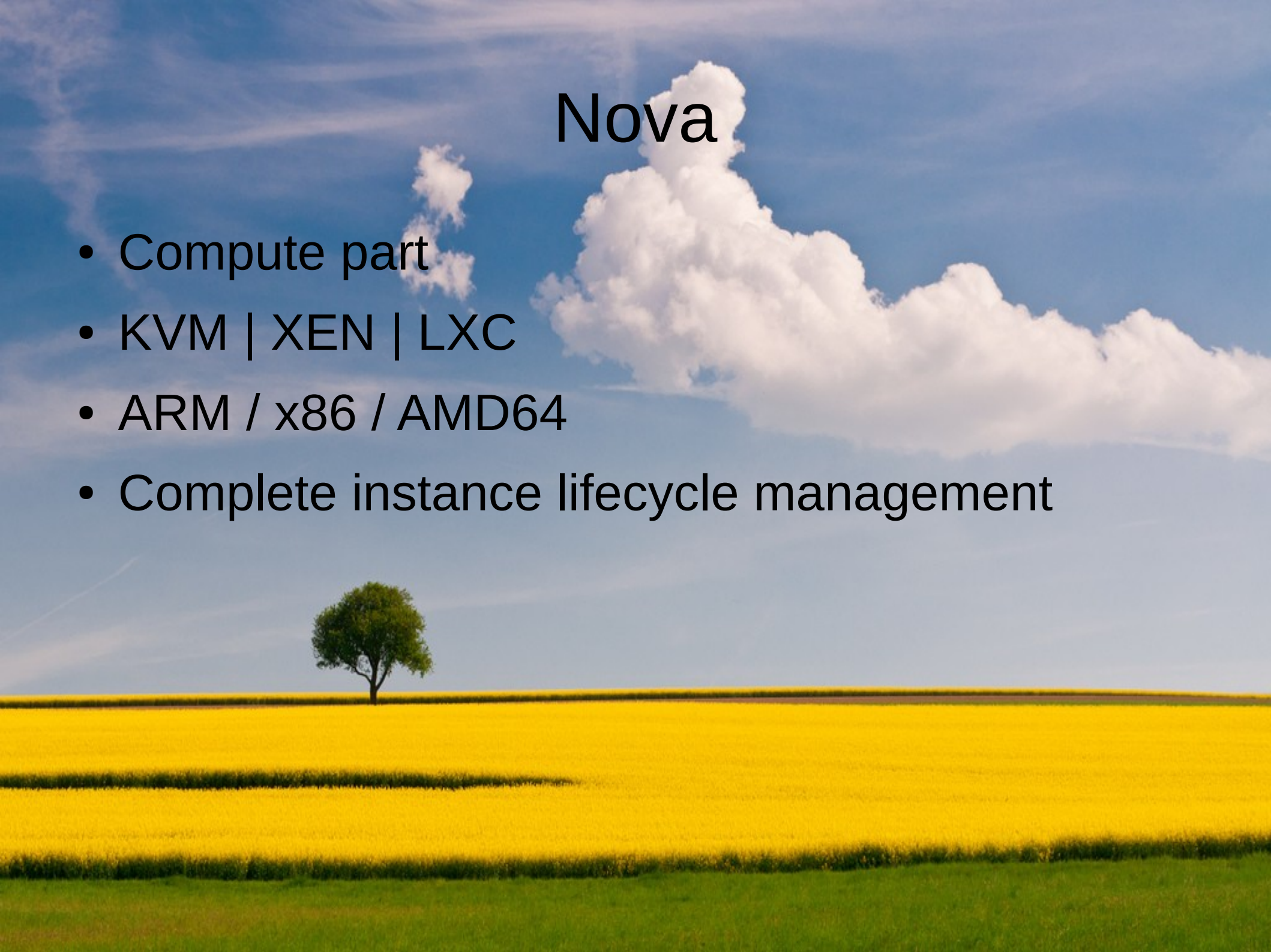
Components

- Nova
- Glance
- Cinder
- Quantum
- Keystone

- Swift
- Ceilometer
- Others:
 - Memcache
 - RabbitMQ

Nova

- Compute part
- KVM | XEN | LXC
- ARM / x86 / AMD64
- Complete instance lifecycle management



Features

- Commodity Server pool
- Flat / DHCP / VLAN / IPv6
- API access
- Distributed architecture
- Floating IPs
- Security groups and RBAC

Quantum

- Network connectivity as a service
- Pluggable / Scalable
- API driven
- Flat / Flat DHCP / VLAN DHCP
- Dynamic Floating IPs
- Extension framework
 - IDS / firewalls
 - - Load balancers / VPNs

Keystone

- Identity and access management
- Passwd, token, key based access
- LDAP? Oh, yes!
- Service lists
- RBAC
- Did I mention APIs??

Glance

- Delivery service
 - Disk and Server images
- REST in peace.. :)
- Snapshots
- Formats
- Raw, qcow2, OVF
- AMI, VHD, VDI, VMDK



Dashboard





Storage

Cinder

- Block storage service
- Persistent
- Mountable
- Analogous to EBS



Swift

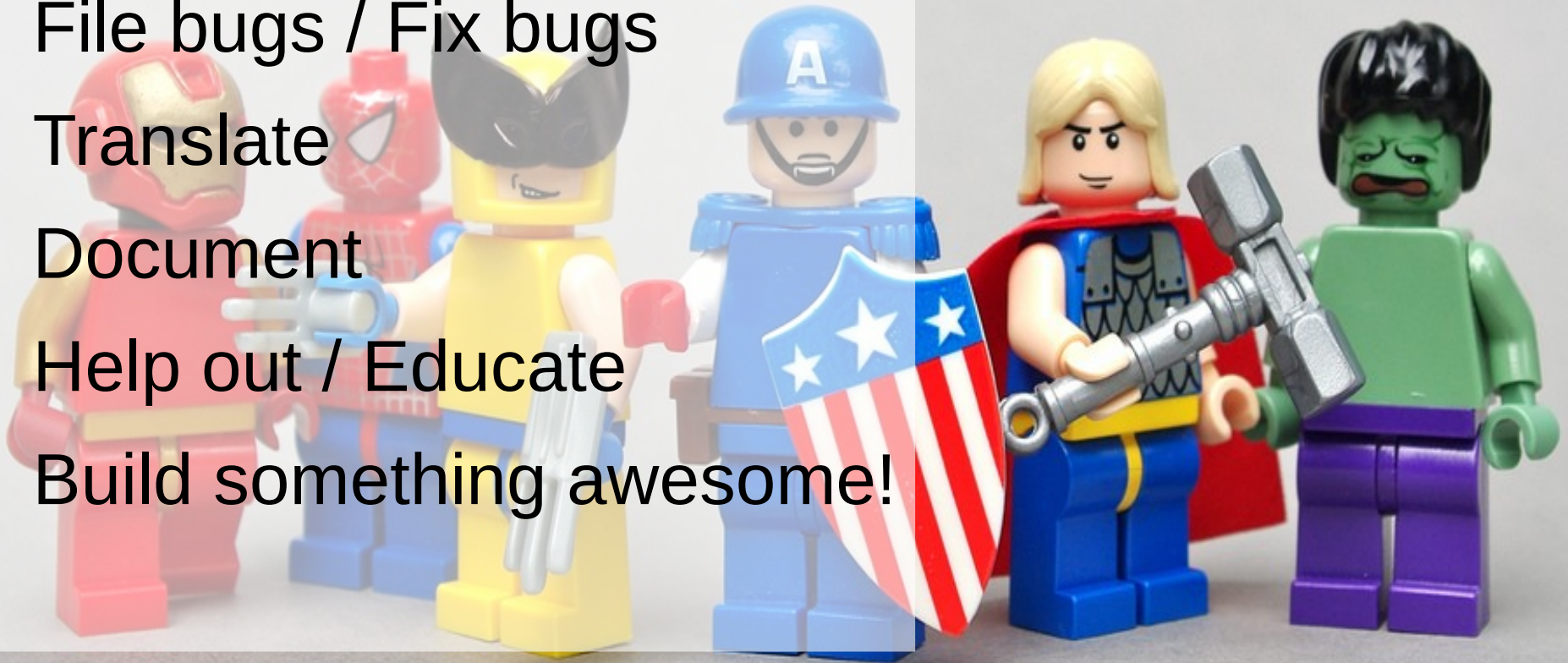
Swift

- Object Store
- Analogous to S3
- Infinite Storage
- REST based API
- Consistent Hash ring
- HEAD , PUT, GET, POST, DELETE



Heroes are awesome

- Code
- File bugs / Fix bugs
- Translate
- Document
- Help out / Educate
- Build something awesome!





Heeeelp!

Image Credits.

- Flickr Users:
 - nicholall
 - --sam--
 - Lrargerich
 - Zoomion
 - Pagedooley
 - risayv
- Simple Desktops
- Flickr users:
 - Scarygami
 - Dunechaser
 - create_joy
 - Phillykevflicks
 - marcp_dmoz
 - asphericlens

Questions??

