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What The Heck Is OoO

Owls All The Way Down

K Rain Leander
Developer Evangelist
17 November 2016

@rainleander
@RDOcommunity
#TripleO
redhat.

WHO AM I?

What The Heck Is OoO

RDO TripleO Developer Evangelist
@Red Hat

- OpenStack ATC since 2015
- @leanderthal on Freenode IRC channels #rdo and #tripleo
- rain at redhat dot com

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AGENDA

OpenStack Summit BCN

What is OpenStack?

The Good, The Bad, The Ugly

What is RDO?

Rain's Dynamic OpenStack, obviously

TripleO QuickStart

Everything You Need To Know

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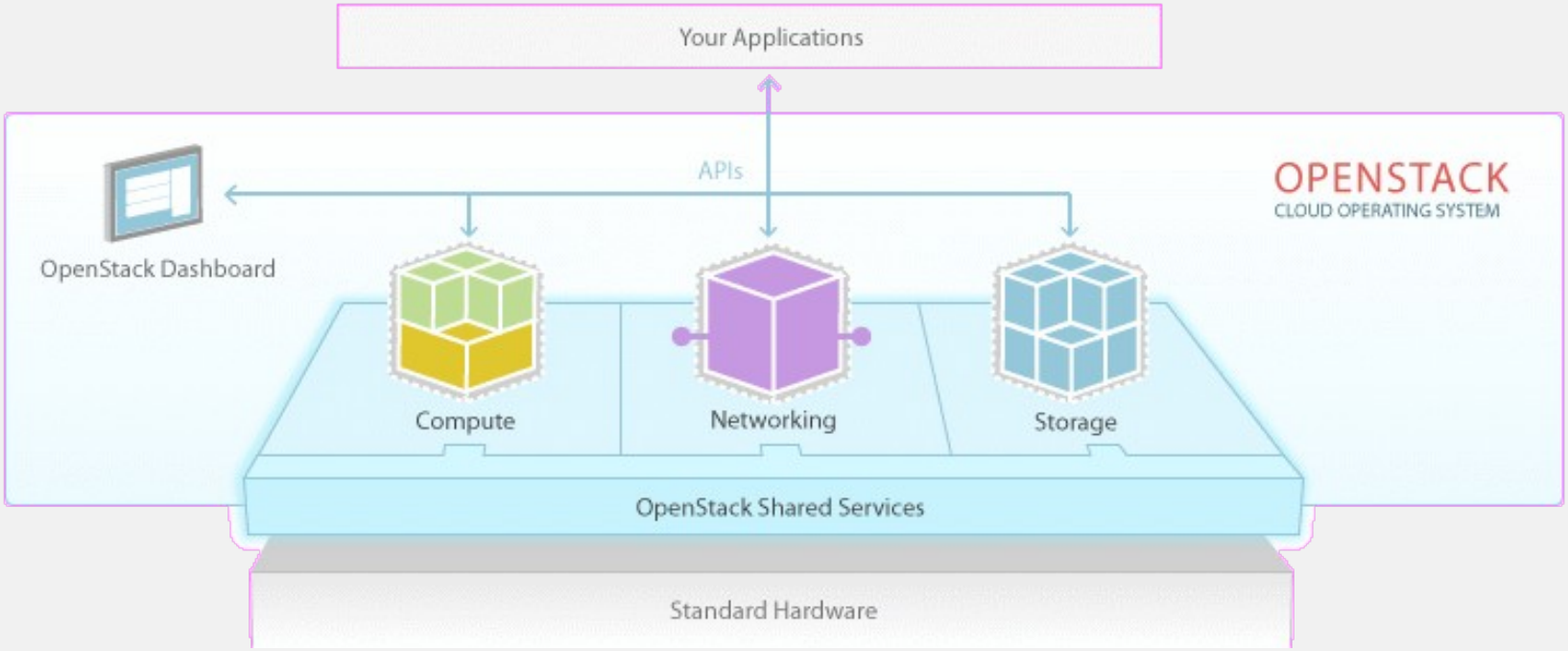
WHAT IS OPENSTACK?

What The Heck Is OoO



The Marketing Version

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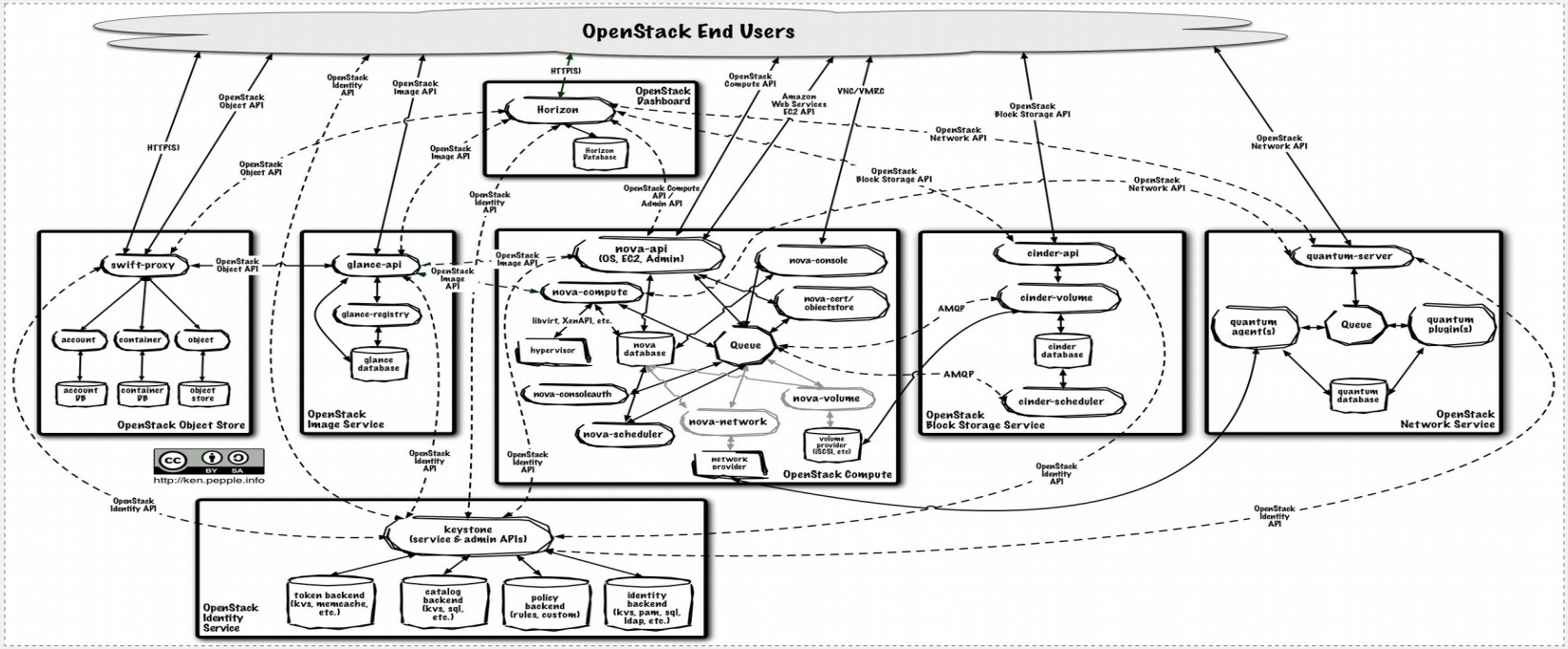
WHAT IS OPENSTACK?

What The Heck Is OoO



The Realistic Version

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WHAT IS RDO?

What The Heck Is OoO

Exactly the same as OpenStack, but using RPM packages.

- Exactly
- The
- Same
- (but with RPMs)

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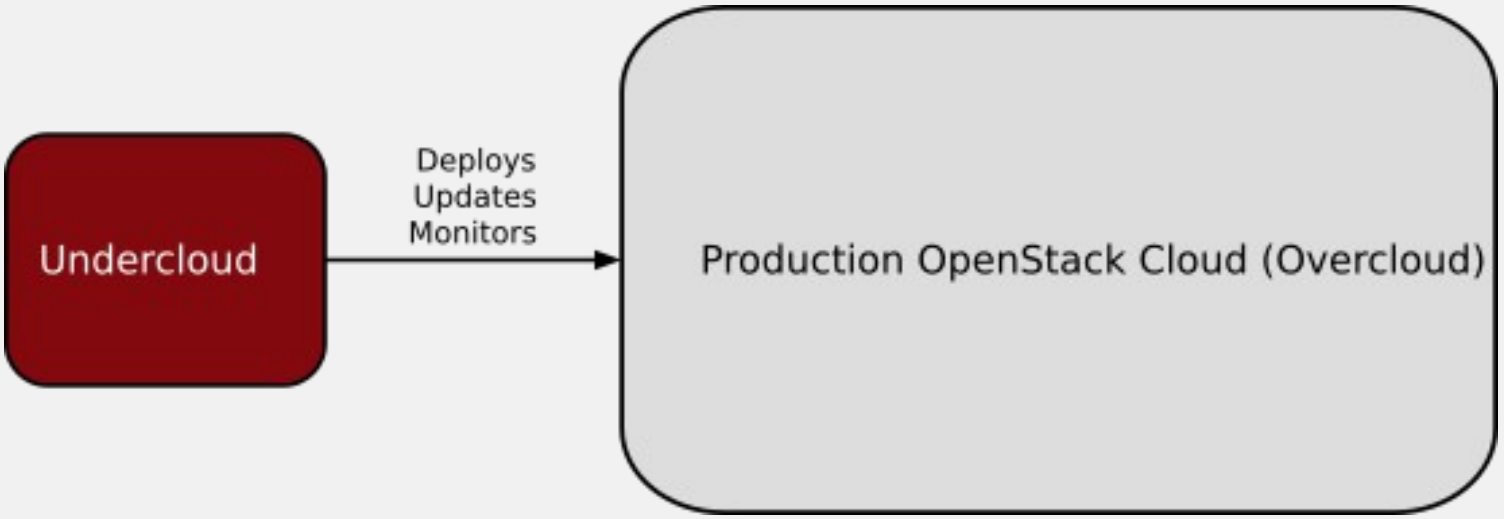
TRIPLEO

What The Heck Is OoO



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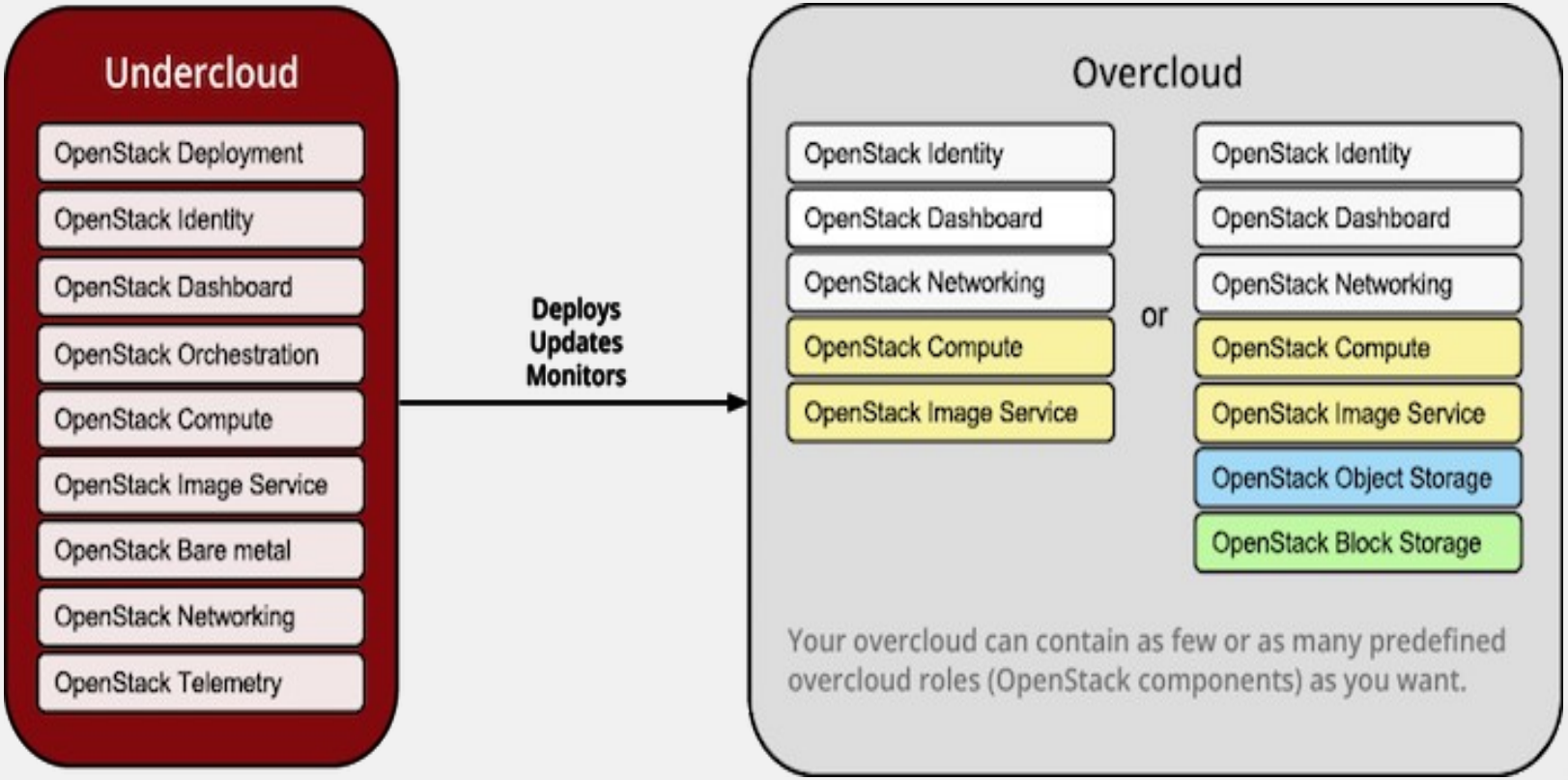
TRIPLEO

What The Heck Is OoO



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TRIPLEO QUICKSTART

What The Heck Is OoO

```
$ export VIRTHOST='my_test_machine.example.com'
$ curl -O https://raw.githubusercontent.com/openstack/tripleo-
quickstart/master/quickstart.sh
$ bash quickstart.sh $VIRTHOST
```


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MORE INFORMATION

What The Heck Is OoO

In Case It Doesn't Run Perfectly

- TripleO Installation Video :: https://www.youtube.com/watch?v=4O8KvC66eeU
- RDO Project :: https://www.rdoproject.org
- Upstream TripleO Docs :: http://docs.openstack.org/developer/tripleo-docs
- TripleO HA Setup :: https://remote-lab.net/rdo-manager-ha-openstack-deployment

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THANK YOU

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facebook.com/rainleander

linkedin.com/in/rainleander

twitter.com/rainleander

youtube.com/c/KRainLeander

TripleO is a project aimed at installing, upgrading and operating OpenStack clouds using OpenStack's own cloud facilities as the foundation - building on Nova, Ironic, Neutron and Heat to automate cloud management at datacenter scale.

Comments / questions / snide remarks on twitter

I do solemnly swear to respond to each and every one.

This also introduces an element of interactivity that psychologists assure me means you'll find this talk more interesting.

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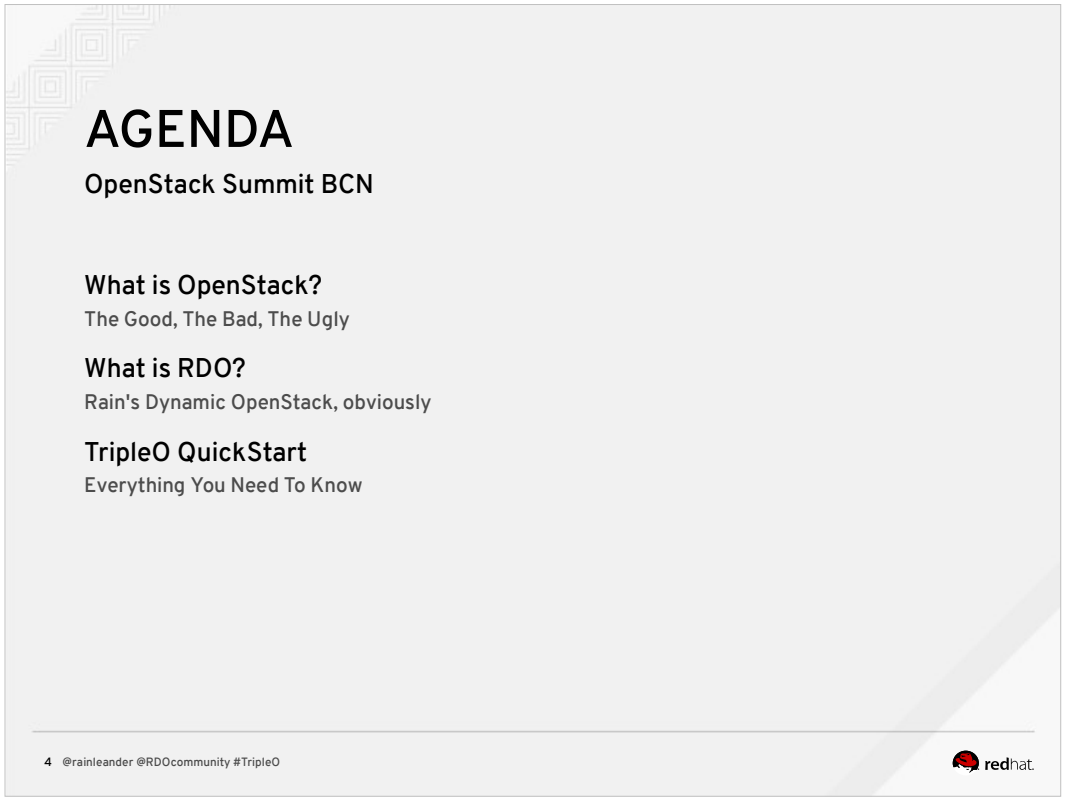
But first, let's talk about ME! I'm Rain, I am a developer evangelist with Red Hat. I have been an OpenStack active technical contributor since July 2016.

I am leanderthal on Freenode IRC, on channels #rdo and #tripleo, if you have any questions when you're becoming an ATC, come find me on Freenode and we can have a chat.

If you can't find me, email me. I want to help YOU join the OpenStack RDO and TripleO projects because the more people within the community, the better.

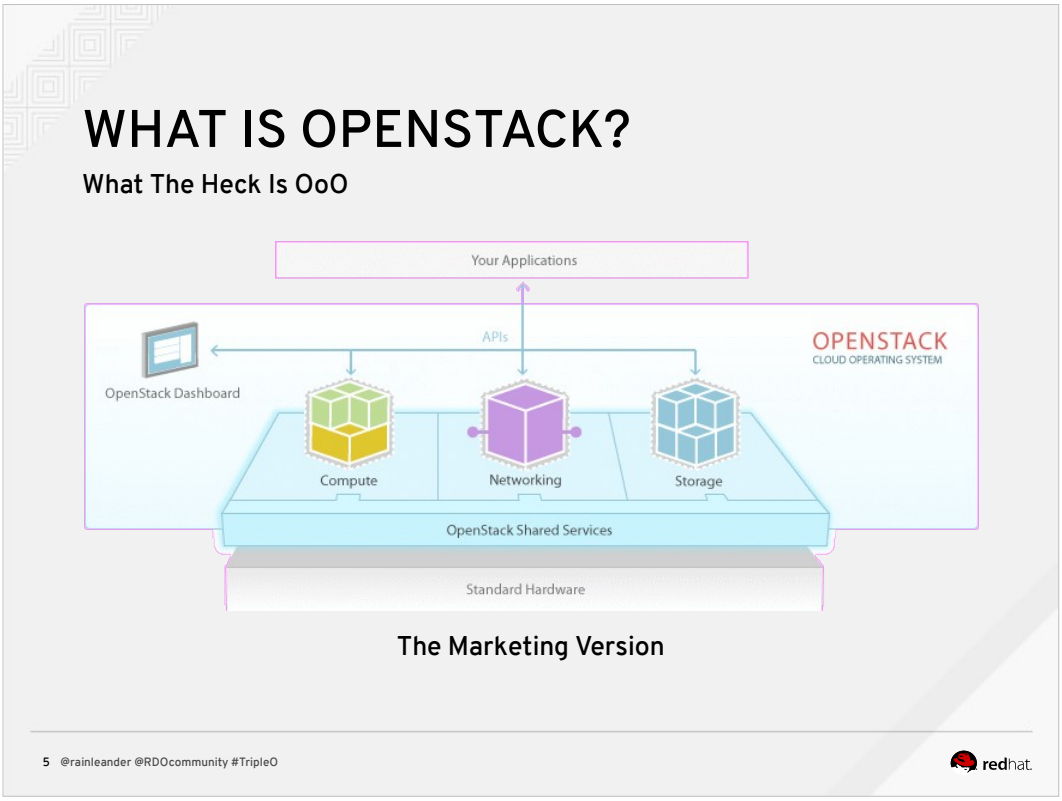


Who knows what cloud computing is?
Who knows what OpenStack is?
Who knows what RDO is?

1. What is OpenStack?

2. RDO is Rain's Dynamic OpenStack. Obviously.

3. What is TripleO?

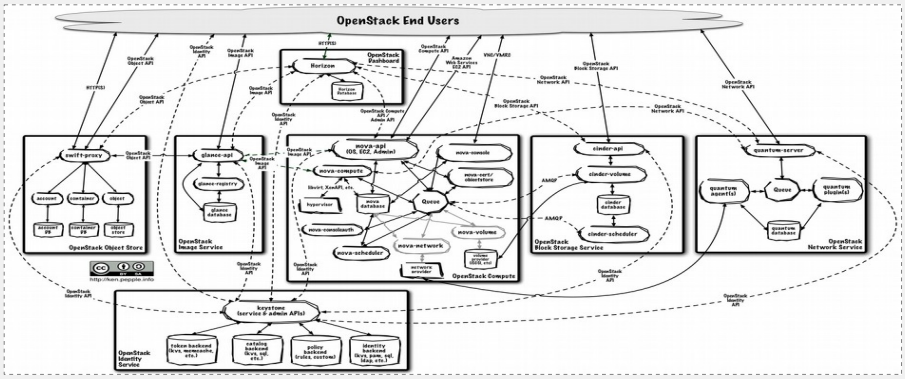


What is OpenStack? Here is the marketing version with the compute, networking, and storage (which is actually more than three projects) indicated. And the dashboard, Horizon, is over there. It's very pretty. Very simple.

Very soothing.

WHAT IS OPENSTACK?

What The Heck Is OoO



The Realistic Version

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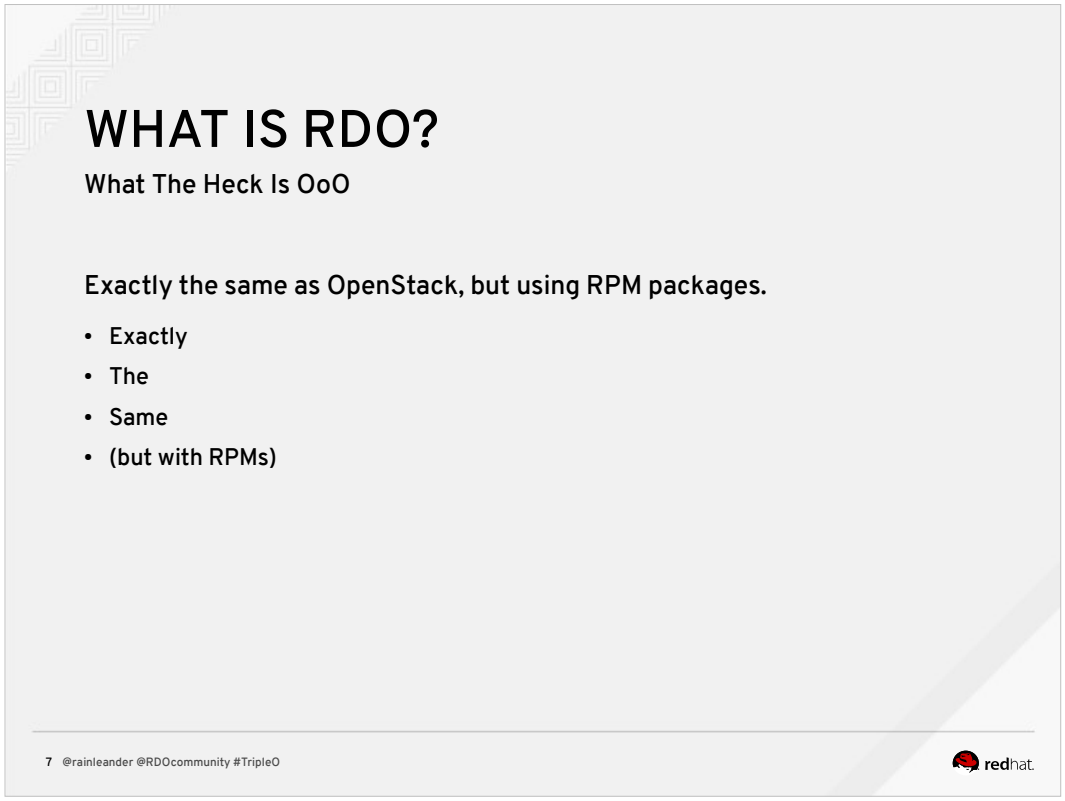
But this is the reality. There are tons of projects - keystone about identity and rabbitmq about communication between all the factors and resources. TripleO isn't even on here because it's an installer and deployment project, not one of the main projects and if we had a picture with absolutely every project and interaction, it would be utter chaos. Someone should really make that happen.

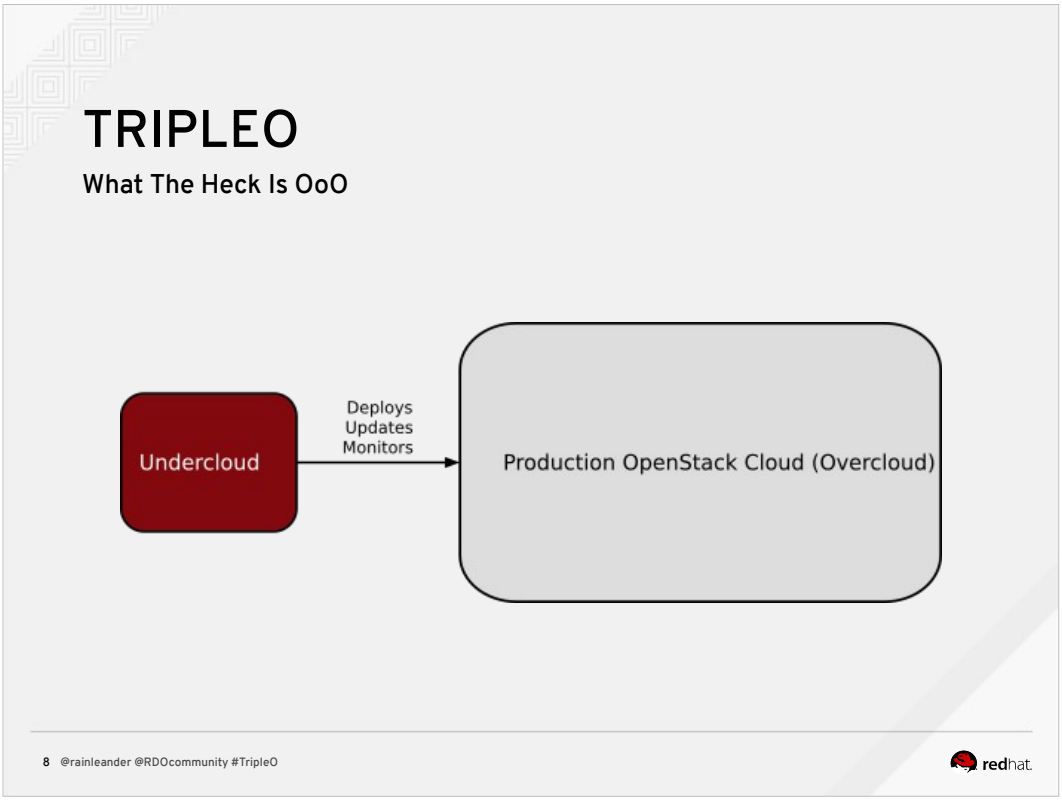
HINT HINT.

What you need to know about OpenStack is that it is an open source umbrella project over several smaller projects for creating private and public clouds.

And most of it is written in python.



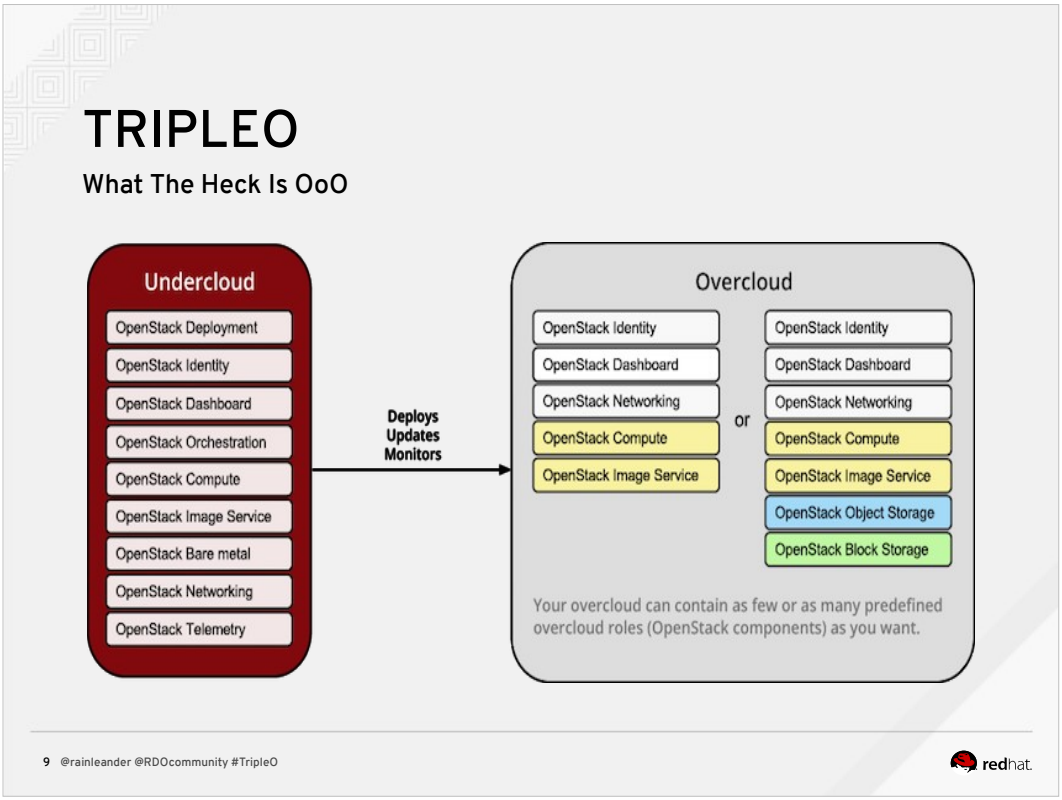
Then what is RDO? Think of it as the same as OpenStack, an open source umbrella project over several smaller projects for creating private and public clouds, except it's packaged for Red Hat Enterprise Linux and CentOS and Scientific Linux and any other distribution that uses RPM.



TripleO is OpenStack on OpenStack. This was done for a few reasons - to address cruft, to match resources, and for simplicity.

This could be for someone that wants to maintain several clouds, using a single cloud for any reason or for someone who wants to use a development cloud before pushing applications to a production cloud. Imagine that you are someone who wants to rent out clouds. Some people already do this, but they have written their own scripts and dedicated separate resources to the installation and deployment and maintenance of those separate private clouds. We wanted to make an installer that allowed you to do this without having to learn new skills, without having to dedicate additional resources and brain time to a separate console.

TripleO is for you.



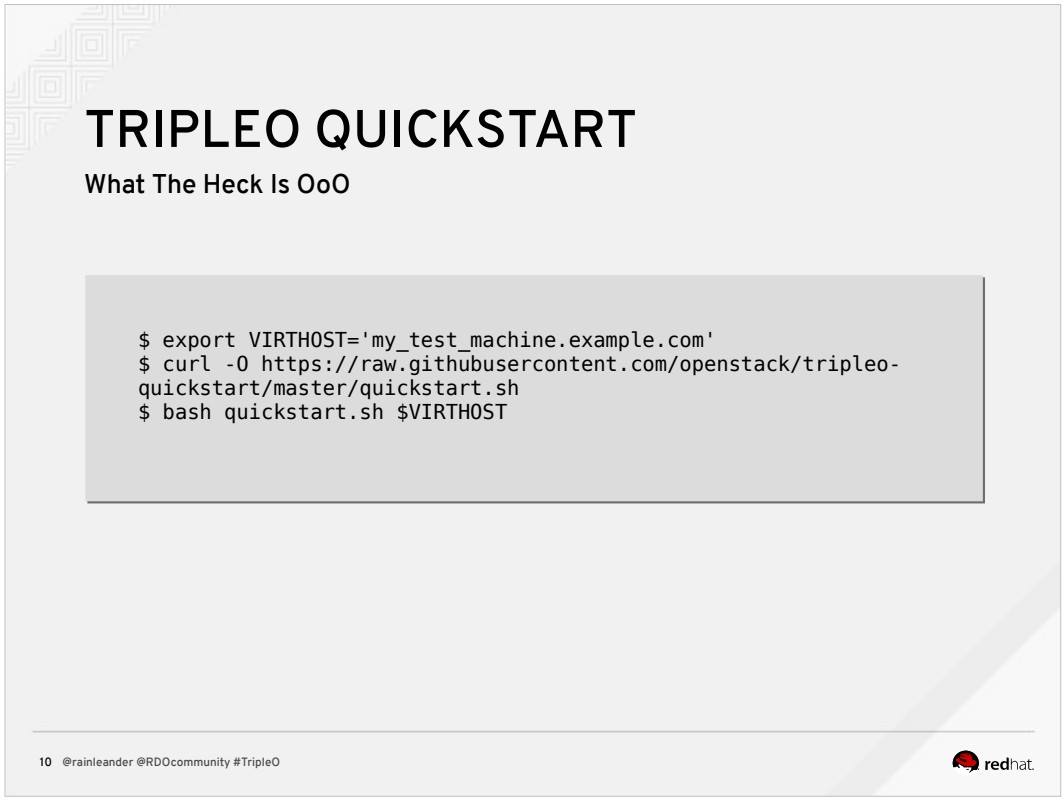
The TripleO UI is a GUI interface that an administrator uses on the main cloud, in the project we call it the undercloud, to deploy, maintain, and monitor other instances of OpenStack.

Have you heard the recursive joke about turtles?

And that's how I think of TripleO, an installer that uses OpenStack to spin up OpenStack.

It's OpenStack all the way down.

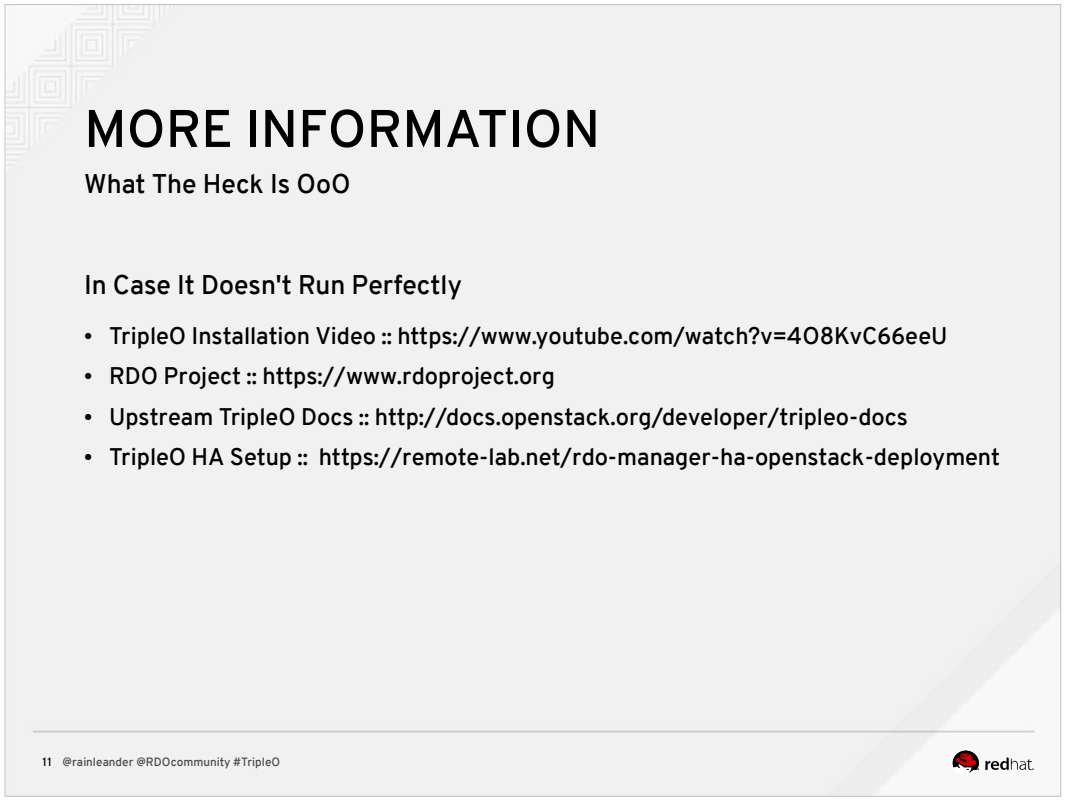
For TripleO, you will need a host machine (referred to as $VIRTHOST) with at least 16GB of RAM, preferably 32GB, and you must be able to ssh to the $VIRTHOST machine as root without a password from the machine running Ansible. The $VIRTHOST machine must be running a recent Red Hat-based Linux distribution (such as CentOS 7 or RHEL 7, but only CentOS 7 is currently tested).



Right now if you go to the documentation for TripleO, you can set it so that it's hardware specific, but it's still pages and pages of opportunities for typos within bash and this can be intimidating and frustrating for someone new to cloud computing, so we've made it simpler, only three lines of code instead of pages.

And we'd like feedback from people trying it out - someone would like it to be entirely GUI / clicky clicky so you only have to know one line of code in bash or even LESS, just download the package, double click and run the user interface, but we need contributors like you.

Now, if you'd like to send money, I'm happy to give you my bank details, but we really would like testers and writers, designers and DEVELOPERS to help make this project the best project it can be.



This is the boring informational slide, yes, because you MIGHT POSSIBLY run into issues. It MIGHT NOT RUN PERFECTLY.

Shocking, I know, but just in case, here are resources for you and, as I said in an earlier slide, you can find me on freenode or email me directly and I am here for you.

Thank you very much!