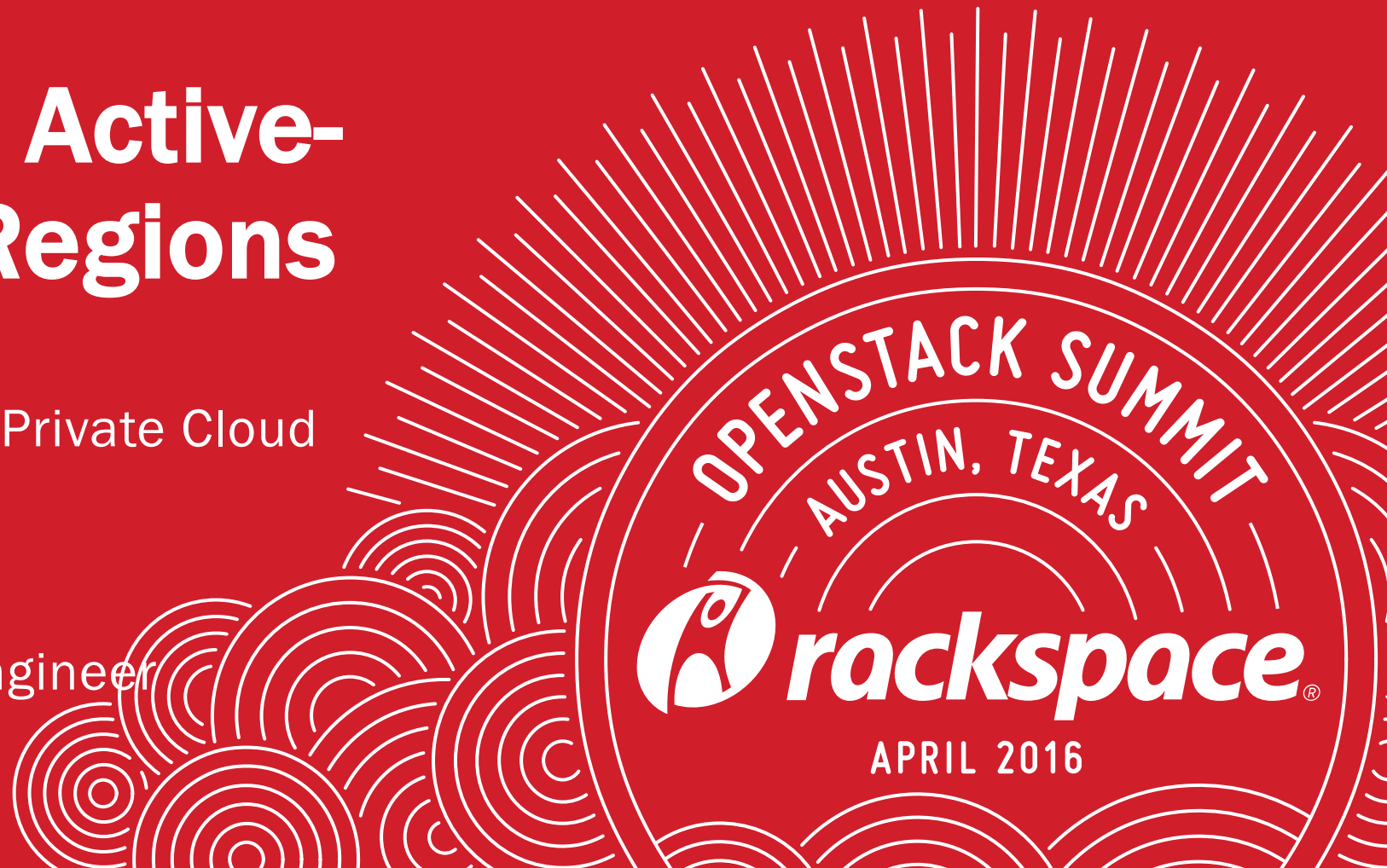


How to: Setup Active-Active Cloud Regions

Walter Bentley
Cloud Solutions Architect – Private Cloud

Melvin Hillsman
OpenStack Private Cloud Engineer





Walter Bentley

Cloud Solutions Architect,
RPC

Twitter: @djstayflypro

LinkedIn: <http://goo.gl/r2p21i>

GitHub: wbentley15

Blog: hitchnyc.com

- Over 17 years of IT experience
- New Yexan (New Yorker in Texas)
- Cloud Advocate (hybrid is my favorite)
- Knowledge sharer/author
- OpenStack believer
- Motorcyclist and DJ (literally...no lie)
- Always about living life now!





Melvin Hillsman
OpenStack Private Cloud
Engineer

- Racker for 2 Years
- Loving OpenStack for 4 Years
- IT Professional for 7 Years
- Ops Team Lead for OSIC
- Afraid of heights but, enjoys sky diving!

Twitter: @mrhillsman



Ground Rules

- **Not going to ask you to turn off mobile phones but, if it rings its mine :D**
- **Ask questions (*requirement*)**
- **Take any side conversations outside (*mainly because I like hearing myself talk only*)**
- **This workshop is hands on, please group yourself into groups no larger than 2-3. Please take turns doing stuff!**
- **Materials for the workshop are available here (case matters):**

<https://goo.gl/Bhf5ru>

Before we get started...

- **Please form teams of 3 or more**
- **Each group will be given a StudentID and instructions to connect to the OpenStack regions**
- **Each team will operate 3 OpenStack Liberty release cloud regions (two of the three regions (alpha and beta) will be running all the core services; the third region (admin) will be running only the identity and dashboard service)**
- **Each member of team should be responsible for one region**

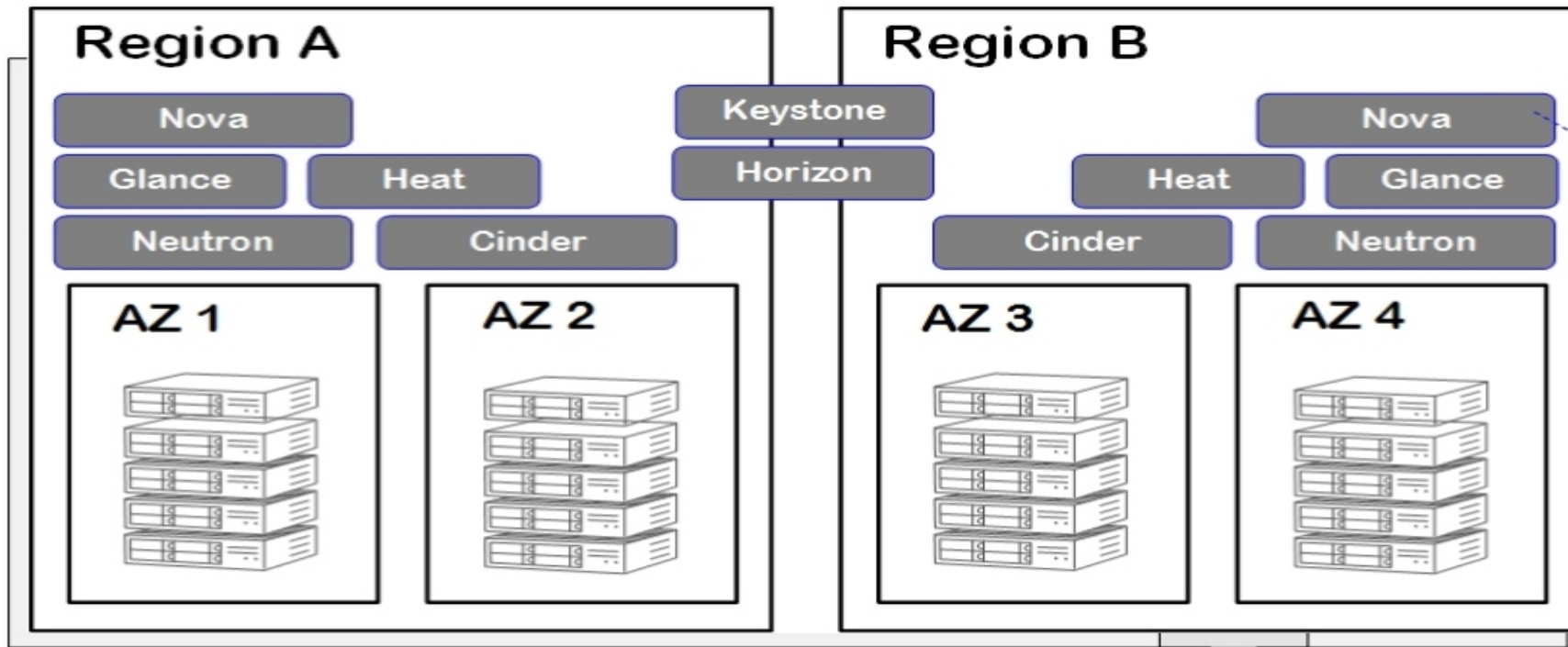


SECTION 1

Active-Active Cloud Approach

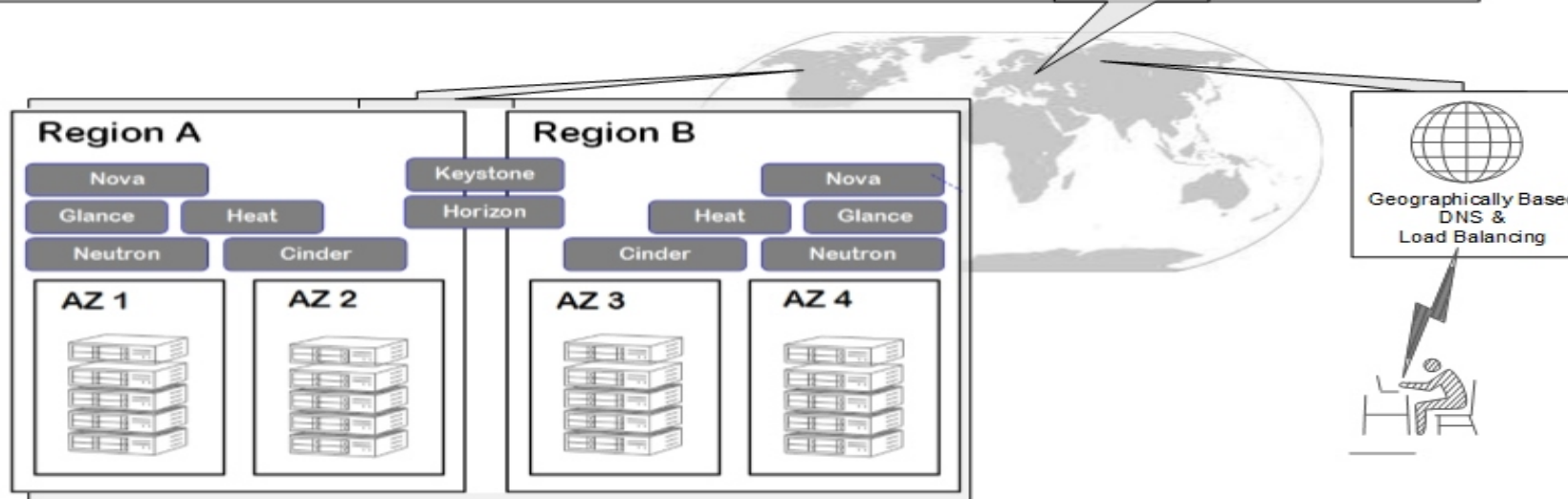
Using native OpenStack services



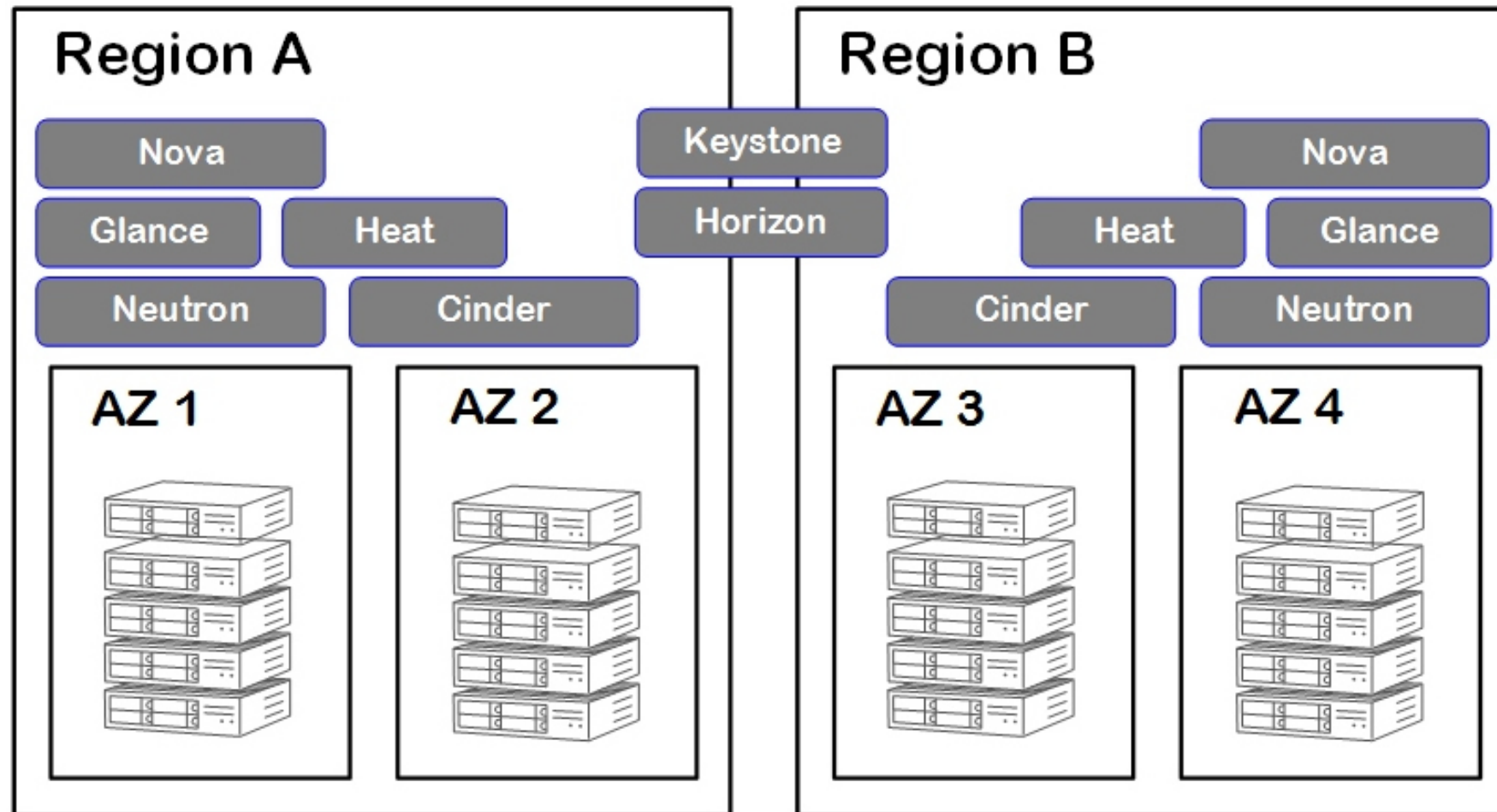


Built to fit numerous High Availability requirements:

- Multiple datacenters
- Across single datacenter Regions and/or Availability Zones



Active-Active OpenStack Cloud Regions - Architecture



Lab Overview

1. Inventory each regions endpoints and take note of the URLs
2. Create user service accounts on the Admin Region
3. Create service on the Admin Region
4. Register each regions endpoints to the Admin Region
5. Configure each of the regions services to authenticate against the Admin Region identity service, instead of the local regions identity service
6. Use your clouds, enjoy!

Let's get started...

Please go to the URL below in your browser (case matters):

<https://goo.gl/Bhf5ru>

**Next connect to the Lab environment,
connection details are on the handout**

“

GO!!!

Part 1 of the Lab will take 30-40 minutes

”

Configuring OpenStack Services

It can be done many ways but, no matter what...it is tedious and attention to detail is super critical!

The process of editing the services conf files does leave open the door of making edits by mistake, which leads to services that will not start.

For that reason, we will use Ansible commands to make the service configuration changes

Configuring OpenStack Services – with Ansible

It can be done many ways but, no matter what...it is tedious and attention to detail is super critical!

```
$ ansible <host> -m <module> -a <adhoc command>
```

```
host = glance_container
```

```
module = shell
```

```
adhoc command = sed -i 's+^auth_url = http://172.30.238.2:35357+auth_url = http://<alpha region IP>:  
35357+' /etc/glance/glance-api.conf
```

```
$ ansible glance_container -m shell -a "sed -i 's+^auth_url = http://172.30.238.2:35357+auth_url =  
http://<alpha region IP>:35357+' /etc/glance/glance-api.conf"
```

FREE OpenStack Books!

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FREE BOOK SIGNINGS

Quantities limited. First come, first served.

MONDAY, APRIL 25

3:00 p.m.	<i>OpenStack Cloud Computing Cookbook - 3rd Edition</i> Cody Bunch & Kevin Jackson (Egle Sigler not available)
3:30 p.m.	<i>Troubleshooting OpenStack</i> Tony Campbell
4:00 p.m.	<i>Learning OpenStack Networking (Neutron) - 2nd Edition</i> James Denton
4:30 p.m.	<i>OpenStack Administration with Ansible</i> Walter Bentley

LOCATION

Cantina
Cantina
Cantina
Cantina

TUESDAY, APRIL 26

10:45 a.m.	<i>Learning OpenStack Networking (Neutron) - 2nd Edition</i> James Denton
3:30 p.m.	<i>OpenStack Cloud Computing Cookbook - 3rd Edition</i> Cody Bunch & Kevin Jackson (Egle Sigler not available)
4:00 p.m.	<i>Troubleshooting OpenStack</i> Tony Campbell
4:30 p.m.	<i>OpenStack Administration with Ansible</i> Walter Bentley

LOCATION

Booth
Cantina
Cantina
Cantina

WEDNESDAY, APRIL 27

10:30 a.m.	<i>OpenStack Administration with Ansible</i> Walter Bentley
3:00 p.m.	<i>Learning OpenStack Networking (Neutron) - 2nd Edition</i> James Denton
3:30 p.m.	<i>OpenStack Cloud Computing Cookbook - 3rd Edition</i> Cody Bunch & Kevin Jackson (Egle Sigler not available)
4:00 p.m.	<i>Troubleshooting OpenStack</i> Tony Campbell

LOCATION

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