



Linux Clusters Institute: OpenStack Cinder

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John Michael Lowe | Senior Cloud Engineer
Indiana University
jomlowe@iu.edu



Cinder

- Components
- Deployment Considerations
- Troubleshooting

Components

- Cinder API
- Cinder Scheduler
- Cinder Volume

Cinder API

- Services api and database requests
- Configuration files
 - `/etc/cinder/cinder.conf`
- Deployed on controller

Cinder Scheduler

- Determines most fit cinder volume to complete the request
- Configuration files
 - `/etc/cinder/cinder.conf`
- Deployed on controller

Cinder Volume

- Manipulates storage system to make volumes available to instances
- Configuration files
 - `/etc/cinder/cinder.conf`
- Runs on storage node or controller if ceph

Deployment considerations

- The API and scheduler components are HA aware, the volume service isn't
- Unlike glance low bandwidth usage
- Volumes inherit the attachment bus of the root disk of the instance they are attached to, relevant for TRIM/discard

Troubleshooting

- Check the XML definition of an instance ‘virsh dumpxml <instance-name>’
- Check the service versions ‘cinder-manage service list’

Resources

- Admin guide
<https://docs.openstack.org/cinder/latest/admin/index.html>
- Deployment guide
<https://docs.openstack.org/cinder/latest/install/index.html>

Questions