

# Bali OpenSDS Technical Meeting Notes/Agenda

This meeting is for OpenSDS design reviews and technical discussions and is open to everyone interested in OpenSDS. This document captures the agenda and notes from each meeting. If there is anything you want to discuss at this meeting, please add an item in the agenda.

## Schedule

OpenSDS Technical Meeting runs weekly. There are two bi-weekly meeting times:

It is held bi-weekly at 4:00pm-5:00pm UTC (9:00am-10:00am PT and 12:00pm-1:00pm ET) on Tuesdays.

Zoom Link: <https://zoom.us/j/777978108>

It is also held bi-weekly at 1:00am-2:00am UTC (6:00pm-7:00pm PT and 9:00pm-10:00pm ET) on Thursdays. Zoom Link: <https://zoom.us/j/229373941>

Contact [xingyang105@gmail.com](mailto:xingyang105@gmail.com) to be added to the calendar invite.

## OpenSDS Links

- Mailing list: [opensds-tech-discuss@lists.opensds.io](mailto:opensds-tech-discuss@lists.opensds.io)
  - Contact Xing Yang <[xingyang105@gmail.com](mailto:xingyang105@gmail.com)> to be added to the mailing list
  - Or Subscribe at <https://lists.opensds.io/mailman/listinfo/opensds-tech-discuss>
- Slack:
  - Get invite to join here:
- Github: <https://github.com/opensds>

## Organizers

- Xing Yang <[xingyang105@gmail.com](mailto:xingyang105@gmail.com)>

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**Next meeting is on January 10th, 2019**

**Meetings on December 27th and January 1st will be canceled due to holidays.**

**January 10, 2019**

Meeting will be on Jan 10, 2018 Thursday 5:00pm-6:00pm PT or 8:00pm-9:00pm ET (or Jan 11, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 1:00am-2:00am UTC on Fridays (5:00pm-6:00pm PT or 8:00pm-9:00pm ET on Thursdays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews
- Bali status tracking:  
[https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

**January 15, 2018**

It is held bi-weekly on Tuesdays at 4:00pm-5:00pm UTC (8:00am-9:00am PT or 11:00am-12:00pm ET). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews
- PRs need attention
- Open discussions

## Previous Meetings

December 18, 2018

It is held bi-weekly on Tuesdays at 4:00pm-5:00pm UTC (8:00am-9:00am PT or 11:00am-12:00pm ET). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- OpenSDS Bali is released! Thanks everyone for the hard work!
  - <https://blog.opensds.io/release/bali-release/>
- Ceph object store backend developed by Click2Cloud is in the Bali release. Discussed with Click2Cloud on unit tests and Ansible work for Ceph.
- Discussed about on-going Multi-region Keystone work that may be used together with multi-OpenStack.
  - <https://www.lbragstad.com/blog/openstack-summit-berlin-recap> (Edge Computing & Multi-Region Support)
  - <https://review.openstack.org/#/c/611201/5/specs/keystone/stein/explicit-domains-ids.rst>
- PRs need attention:
  - <https://github.com/opensds/opensds-installer/pull/13>
  - Noel will address remaining issues in the PR. Leon will help with reviews.
- Open discussions

**Meeting on December 13th will be canceled because of KubeCon happening in that week.**

December 04, 2018

It is held bi-weekly on Tuesdays at 4:00pm-5:00pm UTC (8:00am-9:00am PT or 11:00am-12:00pm ET). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- PRs need attention:
  - <https://github.com/opensds/opensds-dashboard/pull/19>
    - Need to fix the logo and get it merged tomorrow so Click2Cloud can test Ceph object store with dashboard
  - <https://github.com/opensds/opensds/pull/525>
    - We should pass in the volume type when creating a volume in Cinder driver and should not always rely on default volume type. This needs rework and we may not have enough time to fix it before GA.
    - Jay said work is ongoing in Cinder for DB migration to create a default volume type in the Stein release. Without this fix, a volume with no type will be create if a user creates a volume without providing a volume type and if there is no default volume type generated by the Cinder installer (i.e., devstack).
    - Get\_pools filtering by volume\_type only works for Cinder microversion 3.35 and higher. If the version is lower, the volume\_type filtering will be ignored.
- Reviewed Bali release status:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
  - Team is working on fixing Keystone bug with multi-cloud, installing OpenSDS with multi-cloud using ansible-playbook, and Ceph backend dashboard integration.
  - Click2Cloud has implemented Ceph object store backend and Data Mover for Ceph and tested migration between Ceph, AWS, and Azure. Also tested keystone integration. Now is working on adding unit tests. Also need to test with Dashboard when that is available.
- Open discussions

## November 29, 2018

Meeting will be on Nov 29, 2018 Thursday 5:00pm-6:00pm PT or 8:00pm-9:00pm ET (or Nov 30, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 1:00am-2:00am UTC on Fridays (5:00pm-6:00pm PT or 8:00pm-9:00pm ET on Thursdays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Click2Cloud's PR to add Ceph object store backend is submitted and merged.
  - <https://github.com/opensds/multi-cloud/pull/76>
  - Need to add unit tests.
  - Also add keystone integration.
  - Data Mover will be delayed to post-Bali.
  - Showed Click2Cloud developers multipart download code for AWS.
  - Action Item (Shufang): Find out how to test multicloud with Keystone and send instructions to Click2Cloud.
- PR need attention: <https://github.com/opensds/opensds/pull/525>
  - Discussed about this PR. Concern is that filtering get\_pools by volume\_type only works for Cinder microversion 3.35 and higher. Suggest break this into two parts. Keep this PR for further evaluation, but submit a new one just passing volume\_type as advanced properties in profile and remove all other properties that are not really used.
  - Action Item: Leon will work with Lijun on this.
- Bali RC is already cut for hotpot and nbp. Will cut RC for multicloud tomorrow (waiting for some code cleanup).  
[https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)

Due to the ending of DaylightSavings Time in the U.S., meeting will happen one hour earlier than before in the U.S.

## November 20, 2018

It is held bi-weekly on Tuesdays at 4:00pm-5:00pm UTC (8:00am-9:00am PT or 11:00am-12:00pm ET). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Recent updates from various conferences/meetups
  - Open Source Summit in Edinburgh
    - Presentation on data mobility using OpenSDS multi-cloud feature
    - <https://github.com/opensds/presentations/blob/master/oss-europe-2018>
  - F2F Meeting with Swordfish team
    - Discussed about further collaboration between the OpenSDS team and the Swordfish team
  - OpenStack Summit in Berlin

- Jay said Cinder Lib was discussed further. Some folks had concerns while others are interested in the idea and want to pursue further
- KubeCon in Shanghai
  - Presentations on K8S snapshot feature and CNCF Storage WG landscape white paper: <https://github.com/opensds/presentations/blob/master/kubecon-shanghai-2018>
  - Lots of interest in Cloud Native storage
- First OpenSDS Meetup in China
  - Speakers from Intel, Mesosphere, IBM, ChinaMobile, ChinaTelecom, and Huawei
  - <https://github.com/opensds/presentations/tree/master/meetup-shanghai-2018>
- PRs need attention
  - <https://github.com/opensds/opensds-installer/pull/13>
    - Noel will finish testing and try to get it merged next week before RC
- Bali project tracking:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

Meeting on November 6th, 2018 is canceled due to F2F meeting with Swordfish team.

Meeting on November 15th, 2018 will be canceled due to KubeCon in Shanghai and OpenStack Summit in Berlin.

## November 1, 2018

Meeting will be on Nov 1, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Nov 2, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews:

- CSI plugin refactor and NVMeoF driver:
  - <https://docs.google.com/document/d/1QiUJDAvu0HV85t5ofNMkvPaEw5oxSSkni g3GNbqHuOk/edit?usp=sharing>
  - Discussed with Reddy on CSI plugin refactoring. Merging of connector lib in nbp and hotpot is done. Other refactoring work is still pending. Reddy needs NodeId to be changed to something like {protocol: Rdma, address:xxx, port:xxx, nqn:xxx} for the NVMeoF driver to work. He will make a temporary change to work around this for now so he can work on target and initiator driver.
  - <https://github.com/opensds/opensds/tree/master/contrib/drivers>
  - <https://github.com/opensds/opensds/tree/master/contrib/connector>
  - <https://github.com/openstack/cinder/blob/master/cinder/volume/targets/nvmeof.py>
  - [https://github.com/openstack/os-brick/blob/master/os\\_brick/initiator/connectors/nvme.py](https://github.com/openstack/os-brick/blob/master/os_brick/initiator/connectors/nvme.py)
  - Use Kubernetes v1.12 and the latest files in development branch of nbp to deploy OpenSDS CSI plugin:  
<https://github.com/opensds/nbp/tree/development/csi/server/deploy/kubernetes>
- Multi-OpenStack update:
  - <https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUFgXMaBQ0xZfQsl/edit?usp=sharing>
  - Added info on how to attach OpenSDS volume to Nova VM and the on-going multi-region keystone work in OpenStack.
- Multi-Cloud spec checked in the spec repo:
  - [https://github.com/opensds/design-specs/blob/master/specs/bali/MultiCloud\\_Design.md](https://github.com/opensds/design-specs/blob/master/specs/bali/MultiCloud_Design.md)
- Bali project tracking:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

Meeting on October 23, 2018 is canceled due to Open Source Summit in Europe.

Oct 18, 2018

Meeting will be on Oct 18, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Oct 19, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews:
  - Reviewed OpenSDS CSI Plugin Refactoring spec:  
<https://docs.google.com/document/d/1QiUJDAvu0HV85t5ofNMkvPaEw5oxSSkni-g3GNbqHuOk/edit?usp=sharing>
    - Change NodeGetInfo/NodeGetId to return different NodeId for different protocols. One problem is that when NodeGetInfo is called, the CSI plugin does not really know what protocol will be used. So we'll need to check the host for both initiator name for iSCSI and WWPN/WWNN for FC and include both in NodeId if they are present. Have not found a better way so far.
    - NVMeoF probably only needs to set NodeId as hostName (the Kubernetes node name).
    - iSCSI commands used in the plugin should only be called for iSCSI protocol.
    - Connector lib in NBP and Hotpot will be merged into one lib.
  - Multi-OpenStack review:  
<https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUFgXMaBQ0xZfQsl/edit?usp=sharing>
    - For user case #2, OpenStack consumes OpenSDS native volumes, separated keystone was already tested and it worked. Need documentation. We will continue to work on Shared Keystone for Cinder Compatible API Adapter and then look at how to configure Federated Keystone. Will discuss with Yahoo! Japan on how these different Keystone configurations work.
  - Reviewed updated Multi-Cloud spec:  
[https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
  - External volumes: Need to look at how to expose iSCSI target info, etc thru an API. NTT can use it for POC work if available in Bali.
- Reviewed Bali project status:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions



## October 9, 2018

It is held bi-weekly on Tuesdays at 9:00am-10:00am PT or 12:00pm-1:00pm ET (4:00pm-5:00pm UTC). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Sean gave us an update on SNIA SDC and Swordfish
  - Swordfish emulator: <https://github.com/SNIA/Swordfish-API-Emulator>
  - Swordfish basic web UI: <https://github.com/SNIA/Swordfish-basic-web-client>
  - Links to spec:  
[https://www.snia.org/tech\\_activities/standards/curr\\_standards/swordfish](https://www.snia.org/tech_activities/standards/curr_standards/swordfish)
  - Collaborate with Swordfish team on object storage support.
    - Our multi-cloud data control supports S3 API:  
[https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
- Design reviews
  - Monitoring:  
[https://docs.google.com/document/d/1cEXyjbIW6uGrYD60GYCL-\\_feGVUsgPobXR0oGchalWQ/edit?usp=sharing](https://docs.google.com/document/d/1cEXyjbIW6uGrYD60GYCL-_feGVUsgPobXR0oGchalWQ/edit?usp=sharing)
    - Jay added comments to the doc. One comment is to add predictive analytics.
    - Noel suggested that we should have two specs, one focusing on Instrumentation/Performance Management (monitoring), and the other one focusing on Fault Management.
  - Multi-OpenStack.
    - <https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUFgXMaBQ0xZfQsl/edit?usp=sharing>
    - Small number of cases where Cinder will try to communicate with Nova:  
<https://github.com/openstack/cinder/blob/master/cinder/compute/nova.py>
    - Volume attach APIs:  
<https://developer.openstack.org/api-ref/block-storage/v3/index.html#attachments>
    - Need to test use case #2 - a native OpenSDS volume is consumed by a Nova instance where there are two independent OpenStack deployments. Test it using Nova CLI and Horizon.
    - Cinder compatible API adapter needs to be integrated with Keystone.
- Bali project tracking:

- [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

## Oct 4, 2018

Meeting will be on Oct 4, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Oct 5, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews:
  - Updated Multi-cloud doc with metadata, interfaces, and diagrams for backend service, S3 service, and dataflow service.
    - [https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
    - S3 data lifecycle management
    - Swordfish for object
    - Manage an account like AWS account instead of just manage a backend bucket?
    - Should be able to cancel or stop a job
    - Support IBM cloud in multi-cloud data control.
  - Updated Multi-OpenStack to include commands for a native OpenSDS volume to be consumed by a Nova instance.
    - <https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUEgXMaBQ0xZfQsl/edit?usp=sharing>
    - Need to support keystone when using Cinder compatible API. Probably still need Federated Keystone or Shared Keystone.
  - Upload snapshot as part of creating snapshot and restore by creating volume from snapshot:
 <https://docs.google.com/document/d/1YoxqZuprbL2C79HoNvYuTh8Yonz9JE42xluTGPdwl3U/edit#>
- Bali project tracking:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

# September 25, 2018

It is held bi-weekly on Tuesdays at 9:00am-10:00am PT or 12:00pm-1:00pm ET (4:00pm-5:00pm UTC). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Milestone-2 release status:
  - <https://releases.opensds.io>
  - Bali project tracking sheet: [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
  - <https://github.com/opensds>
  - We'll be doing M-2 release later this week. There are a couple of PRs targeting M-2 that need to be merged.
  - There is a repo created for the multi-cloud work and development is on-going. It won't be in M-2 release. We are targeting M-3 for that.
- Design reviews
  - Monitoring: [https://docs.google.com/document/d/1cEXyjbIW6uGrYD60GYCL-\\_feGVUsgPobXR0oGchalWQ/edit?usp=sharing](https://docs.google.com/document/d/1cEXyjbIW6uGrYD60GYCL-_feGVUsgPobXR0oGchalWQ/edit?usp=sharing)
  - Jay will add input to the design doc, i.e., at the current rate of usage when will the storage be full, how to collect metrics from Cinder storage backends, etc.
  - Leon suggested that we should use node-exporter in addition to the OpenSDS exporter.
- Solution demo - OpenSDS-installer integration with Salt
  - INSTALL.md: <https://github.com/opensds/opensds-installer/blob/d759f5e18201726ab3d76d55d2b458c987763272/salt/INSTALL.md>
  - Upstream: <https://github.com/saltstack-formulas/opensds-formula>
  - Noel presented his work on installing OpenSDS with Salt formula. Currently PR is testable. Need a few more weeks to iron out bugs. <https://github.com/noelmcloughlin/shared/blob/master/opensds-installer-salt-sept2018.pdf>
  - The file <https://github.com/opensds/opensds-installer/blob/d759f5e18201726ab3d76d55d2b458c987763272/salt/srv/pillar/site.j2> has all config parameters that need to be modified so user does not have to modify multiple files. We should do something similar for the ansible-playbook.
  - Leon will review Noel's PR.
- Open discussions

## Sep 20, 2018

Meeting will be on Sep 20, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Sep 21, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews:
  - Multi-cloud update
    - [https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
    - Modified the goals: goal 1 is to develop a multi-cloud management mechanism, and goal 2 is to provide integration with Zenko (via OpenSDS dashboard). In addition to manage a S3 backend, we are investigating if other Zenko functionalities can be exposed through dashboard. Also try to make our metadata design compatible with Zenko's.
  - Multi-OpenStack update
    - <https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUEgXMaBQ0xZfQsl/edit?usp=sharing>
    - Native volumes created using native driver such as LVM or Ceph can be attached to a Nova VM using Cinder Compatible API adapter.
    - Action Item: Add command line instructions on how to do it. Update the diagram as Federated Keystone is not needed in this case.
  - Discussed about Upload Snapshot. It will be added as part of CreateSnapshot function, not a separate API.
- Bali project tracking:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Open discussions

## September 11, 2018

It is held bi-weekly on Tuesdays at 9:00am-10:00am PT or 12:00pm-1:00pm ET (4:00pm-5:00pm UTC). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Reviewed the following design proposals
  - Modularize OpenSDS:  
[https://docs.google.com/document/d/1q02NVogtnzauzVwxyyLxwbAv\\_RktnYKHHpFuVWM6lhs/edit#](https://docs.google.com/document/d/1q02NVogtnzauzVwxyyLxwbAv_RktnYKHHpFuVWM6lhs/edit#)
  - Thin OpenSDS:  
[https://docs.google.com/document/d/16zLCE1X8bNjkGoKvBpqDZaxEHZapWluQVgdvIxuR\\_tE/edit#](https://docs.google.com/document/d/16zLCE1X8bNjkGoKvBpqDZaxEHZapWluQVgdvIxuR_tE/edit#)
  - Multi-OpenStack:  
<https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUFgXMaBQ0xZfQsl/edit#>
    - Create a volume using OpenSDS native driver. Given correct volume uuid, we should be able attach it to Nova VM through Cinder Compatible API adapter. Will update doc with this info.
    - Should test with CLI and Horizon.
- Reviewed Bali project tracking sheet:
  - [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
  - Noel suggested that we should support importing pool (or LVM volume group), in addition to importing a volume.

## Sep 6, 2018

Meeting will be on Sep 6, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Sep 7, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Design reviews:
  - Modularize OpenSDS:  
[https://docs.google.com/document/d/1q02NVogtnzauzVwxyyLxwbAv\\_RktnYKHHpFuVWM6lhs/edit#](https://docs.google.com/document/d/1q02NVogtnzauzVwxyyLxwbAv_RktnYKHHpFuVWM6lhs/edit#)
    - Phase 1: Modularize API component first because Thin OpenSDS depends on this.
    - Related PR: [Update dock grpc server framework](#)
  - Thin OpenSDS:  
[https://docs.google.com/document/d/16zLCE1X8bNjkGoKvBpqDZaxEHZapWluQVgdvIxuR\\_tE/edit#](https://docs.google.com/document/d/16zLCE1X8bNjkGoKvBpqDZaxEHZapWluQVgdvIxuR_tE/edit#)

- A volume driver can be used in both Full OpenSDS and Thin OpenSDS environment.
  - Thin OpenSDS does not have controllers and scheduler components.
- Multi-OpenStack:
  - <https://docs.google.com/document/d/1fDMlePgsYi8blZt8MflX7xa2CrdwUFgXMaBQ0xZfQsl/edit#>
  - Sato-san said they did POC testing to create volumes using a native driver such as LVM. This volume is not part of Cinder. The question is how does Nova use this volume.
  - TODO: Add a diagram to explain how a native volume can be consumed by a Nova VM.

## August 28, 2018

It is held bi-weekly on Tuesdays at 9:00am-10:00am PT or 12:00pm-1:00pm ET (4:00pm-5:00pm UTC). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- (Noel) Please confirm what iSCSI Target solutions OpenSDS will support? De-facto standard is CTLD (FreeBSD) and LIO (Linux). lvm dock driver only supports TGT?
  - Yes, currently only TGT is supported, but we should add support for LIO.
- (Noel) Update on OpenSDS installer Salt formulas: OpenSDS, Devstack (for Auth).
  - Code should be ready in a couple of weeks.
  - Framework code will be in the opensds-installer repo.
  - salt-formula for OpenSDS can be upstream in saltstack. We could fork it to OpenSDS org or install by a commit. We can discuss more when the code is ready.
- Design reviews
  - Reviewed multi-cloud design doc as attendees in today's meeting have not reviewed it before:
    - [https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
  - Noel talked about on-demand backup/restore controller for storage using participant backup model (3rd party write agent to quiesce).
    - Backup will not be addressed in the first phase but will be considered in the future.
    - We have open source agent that can be leveraged in the future for backups:
      - <https://github.com/opensds/proposals/tree/master/intelligent-protector>
- Updated Bali project tracking sheet:

- [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)

## Aug 23, 2018

Meeting will be on Aug 23, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Aug 24, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Discussed about the design of the multi-cloud feature
  - [https://docs.google.com/document/d/1qd2p\\_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing](https://docs.google.com/document/d/1qd2p_-l7ryXxz9Owa1KaLH1Uoe-eH8kjtHxOWFFp1Rs/edit?usp=sharing)
  - Kei raised concerns about the overlapping functionalities between OpenSDS multi-cloud feature and Zenko. Need to be able to use OpenSDS with Zenko and explain how to use OpenSDS components with Zenko.
- CSI snapshot implementation: Reviewed CSI snapshot design in K8S; did a demo creating/deleting snapshot with snapshot class (with and without secrets), using hostpath plugin.
  - <https://github.com/kubernetes/community/pull/2335>

Meeting on August 14, 2018 was canceled.

## Aug 9, 2018

Meeting will be on Aug 9, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or Aug 10, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Reddy showed us the issues he ran into while testing OpenSDS and working on the NVMeoF driver
  - Need to document more clearly. Missing documentation on OpenSDS IP address in configmap yaml and targetBindIP in the following wiki docs:
    - <https://github.com/opensds/opensds/wiki/OpenSDS-Integration-with-Kubernetes-CSI>
    - <https://github.com/opensds/opensds/wiki/OpenSDS-Local-Cluster-with-Multi-tenants-Installation>
  - Node plugin pod failed to start. Reddy will try k8S 1.10.0 instead of 1.11.1 because we tested NBP with 1.10.0. He tried bind mount workarounds but it didn't work for him. It could be network setting issue too.
  - Reddy suggested to rename Unset to Teardown or Cleanup
  - Combine provisioner and attacher CSI plugin pod
  - Move connector out of Hotpot repo into a separate repo. Maybe create a separate repo for both connectors and Hotpot drivers so it is easier for driver developers to find out where to contribute?
  - Reddy suggested to use secrets in StorageClass instead of using ConfigMap. Example:  
<https://github.com/ceph/ceph-csi/blob/master/examples/rbd/storageclass.yaml>
- Leon discussed How to contribute a driver in OpenSDS
  - [https://docs.google.com/presentation/d/1C--sGAOB2GLBKMUBGwkZSNnu2g4\\_yFtPF982HdMkz2M/edit?usp=sharing](https://docs.google.com/presentation/d/1C--sGAOB2GLBKMUBGwkZSNnu2g4_yFtPF982HdMkz2M/edit?usp=sharing)
  - Leon will add driver config file info to the slide deck.
- Discussed the need to refactor NBP
  - iSCSI code is everywhere. Needs to be cleaned up.
  - NBP needs to be refactored to use connector in Hotpot repo
  - Right now the easiest way is still to submit a connector in nbp/driver folder for driver contributors if adding a new protocol (until we refactor to use connector currently in Hotpot repo)
  - Don't use csi-common as it may go away
- Open discussions
  - Do we need to publish cindercompatibleapi release file in next minor release? How about put it in Hotpot release files? (Leon)
    - Next milestone is 9/24. We should follow the Bali release schedule:  
<https://releases.opensds.io/bali/index.html>
    - Move cindercompatible to NBP
- Uploaded slides from Reddy for the Flash Memory Summit:  
<https://github.com/opensds/presentations/tree/master/flash-memory-summit-2018>



## July 31, 2018

It is held bi-weekly on Tuesdays at 9:00am-10:00am PT or 12:00pm-1:00pm ET (4:00pm-5:00pm UTC). Zoom Link: <https://zoom.us/j/777978108>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- PR reviews - Noel gave a nice presentation of his work on the OpenSDS-installer Salt module:
  - <https://github.com/opensds/opensds-installer/pull/13> (noelmcloughlin)
  - <https://github.com/noelmcloughlin/shared/blob/master/opensds-installer-salt-status-july2018.pdf>
- OpenSDS-installer Issue - Discussed with Sean on the problem of the opensds-installer installing from source code by default. We will backport important bug fixes to stable/aruba. Installation can be either from stable/aruba if choosing source code or from a release tar ball after a Aruba stable release.
  - <https://github.com/opensds/opensds-installer/issues/51>
- Bali release:
  - Need to finalize the release schedule soon
  - The first milestone is coming next week 8/6

## July 26, 2018

Meeting will be on July 26, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or July 27, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Preview of Modularize OpenSDS: Talked about why we need to separate components of OpenSDS Controller into different modules. Will review the design next time.
- Reviewed Bali planning:

- [https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Briefly reviewed proposed Bali release schedule. It's not finalized yet.  
<https://github.com/opensds/opensds/releases/pull/1>

Meeting on July 17, 2018 was canceled due to OSCon in Portland on July 16-20.

## July 12, 2018

Meeting will be on July 12, 2018 Thursday 6:00pm-7:00pm PT or 9:00pm-10:00pm ET (or July 13, 2018 Friday 1:00am-2:00am UTC)

It is held bi-weekly at 6:00pm-7:00pm PT or 9:00pm-10:00pm ET on Thursdays (1:00am-2:00am UTC on Fridays). Zoom Link: <https://zoom.us/j/229373941>

Agenda/Notes: (Please add items you want to discuss in the agenda and add your name next to it)

- Reviewed updated Aruba POC Test Plan:  
[https://github.com/opensds/opensds/blob/development/docs/test-plans/OpenSDS\\_Aruba\\_POC\\_Plan.pdf](https://github.com/opensds/opensds/blob/development/docs/test-plans/OpenSDS_Aruba_POC_Plan.pdf)
- During the TST meeting today, we went over task list in the Bali Planning Sheet and prioritized them:  
[https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8\\_pfnceVvATGgeVI/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1OZat5p1Hz5Df7eCb30stPp112Wg8_pfnceVvATGgeVI/edit?usp=sharing)
- Jerry discussed the proposed fix for DRBD host-based replication issue  
(<https://github.com/opensds/opensds/issues/426>)

