

In earlier OpenStack releases, a disk of a running VM appeared in the `/var/lib/nova/instances/<uuid>` directory of the hypervisor file system. Earlier Ceph versions could boot VMs only with the Block Storage services `boot-from-volume` function.

In recent versions, you can boot every VM inside Ceph directly without using the Block Storage service. This feature enables hypervisors to use the `live-migration` and `evacuate` operations to restore VMs in another hypervisor during a maintenance operation or on a hardware failure.



## References

### **Cinder Administration: Configure multiple-storage back ends**

<https://docs.openstack.org/cinder/latest/admin/blockstorage-multi-backend.html>

For more information, refer to the *Creating and Managing Instances Guide* at

[https://access.redhat.com/documentation/en-us/red\\_hat\\_openstack\\_platform/16.1/html-single/creating\\_and\\_managing\\_instances/index](https://access.redhat.com/documentation/en-us/red_hat_openstack_platform/16.1/html-single/creating_and_managing_instances/index)

For more information, refer to the *Distributed compute node and storage deployment* at

[https://access.redhat.com/documentation/en-us/red\\_hat\\_openstack\\_platform/16.1/html-single/distributed\\_compute\\_node\\_and\\_storage\\_deployment/index](https://access.redhat.com/documentation/en-us/red_hat_openstack_platform/16.1/html-single/distributed_compute_node_and_storage_deployment/index)

For more information, refer to the *CephFS Back End Guide for the Shared File System Service* at

[https://access.redhat.com/documentation/en-us/red\\_hat\\_openstack\\_platform/16.1/html-single/cephfs\\_back\\_end\\_guide\\_for\\_the\\_shared\\_file\\_system\\_service/index](https://access.redhat.com/documentation/en-us/red_hat_openstack_platform/16.1/html-single/cephfs_back_end_guide_for_the_shared_file_system_service/index)

For more information, refer to the *Deploying the Shared File Systems service with CephFS through NFS* at

[https://access.redhat.com/documentation/en-us/red\\_hat\\_openstack\\_platform/16.1/html-single/deploying\\_the\\_shared\\_file\\_systems\\_service\\_with\\_cephfs\\_through\\_nfs/index](https://access.redhat.com/documentation/en-us/red_hat_openstack_platform/16.1/html-single/deploying_the_shared_file_systems_service_with_cephfs_through_nfs/index)