

配置NFS存储后端

« (blockstorage-boot-from-volume.html) » (blockstorage-multi-backend.html) 🐛 (https://bugs.launchpad.net/cinder/+filebug?field.title=Configure%20an%20NFS%20storage%20back%20end%20in%20Cinder&field.comment=%0A%0A%0AThis bug tracker is for errors with the documentation, use the following as a template and remove or add fields as you see fit. Convert [] into [x] to check boxes:%0A%0A- [] This doc is inaccurate in this way: ____%0A- [] This is a doc addition request.%0A- [] I have a fix to the document that I can paste below including example: input and output. %0A%0AIf you have a troubleshooting or support issue, use the following resources:%0A%0A - Ask OpenStack: http://ask.openstack.org%0A - The mailing list: http://lists.openstack.org%0A - IRC: 'openstack' channel on Freenode%0A%0A-----%0ARelease:%2012.0.1.dev9%20on%202018-03-08%2015:24%0ASHA:%20ca6e2fb1fb74150680bff605a241947fc88ddd51%0ASource:%20https://git.openstack.org/cgit/openstack/cinder/tree/doc/source/admin/blockstorage-nfs-backend.rst%0AURL: https://docs.openstack.org/cinder/queens/admin/blockstorage-nfs-backend.html&field.tags=doc)

更新日期：2018-03-08 15:24

本节介绍如何配置OpenStack Block Storage以使用NFS存储。您必须能够从承载cinder卷服务的服务器访问NFS共享。

注意

该cinder卷服务被命名为openstack-cinder-volume 以下分布：

- CentOS的
- Fedora的
- openSUSE的
- 红帽企业Linux
- SUSE Linux Enterprise

在Ubuntu和Debian发行版中，cinder卷服务被命名cinder-volume。

配置块存储以使用NFS存储后端

1. 登录root到托管cinder卷服务的系统。
2. 创建一个nfsshares在该/etc/cinder/目录中命名的文本文件。
3. /etc/cinder/nfsshares为cinder卷服务应用于后端存储的每个NFS共享添加一个条目。每个条目应该是一个单独的行，并应使用以下格式：

```
主持人: SHARE
```

哪里：

- HOST是NFS服务器的IP地址或主机名。
- SHARE是现有的可访问NFS共享的绝对路径。

4. 设置/etc/cinder/nfsshares为由root用户和cinder组拥有：

```
# CHOWN根: 煤渣的 / etc /煤渣/ nfsshares
```

5. 设置/etc/cinder/nfsshares为可由Cinder组的成员读取：

```
# 搭配chmod 0640的 / etc /煤渣/ nfsshares
```

6. 配置cinder卷服务以使用/etc/cinder/nfsshares先前创建的文件。为此，请打开/etc/cinder/cinder.conf配置文件并将nfs_shares_config配置键设置为/etc/cinder/nfsshares。

在包含的分发版上openstack-config，您可以通过运行以下命令来配置它：

```
# openstack-config --set /etc/cinder/cinder.conf \
  DEFAULT nfs_shares_config / etc / cinder / nfsshares
```

以下分布包括openstack-config：

- CentOS的
 - Fedora的
 - openSUSE的
 - 红帽企业Linux
 - SUSE Linux Enterprise
7. (可选) 在nfs_mount_options配置密钥中提供环境中所需的任何其他NFS安装选项/etc/cinder/cinder.conf。如果您的NFS共享不需要任何额外的挂载选项（或者如果您不确定），请跳过此步骤。

在包含的分发版上openstack-config，您可以通过运行以下命令来配置它：

```
# openstack-config --set /etc/cinder/cinder.conf \
  DEFAULT nfs_mount_options选项
```

Replace `OPTIONS` with the mount options to be used when accessing NFS shares. See the manual page for NFS for more information on available mount options (`man nfs`).

8. Configure the `cinder` volume service to use the correct volume driver, namely `cinder.volume.drivers.nfs.NfsDriver`. To do so, open the `/etc/cinder/cinder.conf` configuration file and set the `volume_driver` configuration key to `cinder.volume.drivers.nfs.NfsDriver`.

On distributions that include `openstack-config`, you can configure this by running the following command instead:

```
# openstack-config --set /etc/cinder/cinder.conf \
    DEFAULT volume_driver cinder.volume.drivers.nfs.NfsDriver
```

9. You can now restart the service to apply the configuration.

✔ Note

The `nfs_sparsed_volumes` configuration key determines whether volumes are created as sparse files and grown as needed or fully allocated up front. The default and recommended value is `true`, which ensures volumes are initially created as sparse files.

Setting `nfs_sparsed_volumes` to `false` will result in volumes being fully allocated at the time of creation. This leads to increased delays in volume creation.

However, should you choose to set `nfs_sparsed_volumes` to `false`, you can do so directly in `/etc/cinder/cinder.conf`.

On distributions that include `openstack-config`, you can configure this by running the following command instead:

```
# openstack-config --set /etc/cinder/cinder.conf \
    DEFAULT nfs_sparsed_volumes false
```

⚠ Warning


如果客户端主机启用了SELinux，则`virt_use_nfs`如果主机需要访问实例上的NFS卷，则还应启用布尔值。要启用此布尔值，请以`root`用户身份运行以下命令：

```
# setsebool -P virt_use_nfs 1
```

此命令还使布尔值在重新启动时保持不变。在需要访问实例上的NFS卷的所有客户端主机上运行此命令。这包括所有计算节点。

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🐛 发现错误？报告错误 (<https://bugs.launchpad.net/cinder/+filebug>)

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- 升级过程 (../upgrade.html)
- 煤渣管理 (index.html)
 - 增加块存储API服务吞吐量 (blockstorage-api-throughput.html)
 - 管理卷 (blockstorage-manage-volumes.html)
 - 排查安装问题 (blockstorage-troubleshoot.html)
 - 通用过滤器 (generalized_filters.html)
 - 备份块存储服务磁盘 (blockstorage-backup-disks.html)
 - 从卷引导 (blockstorage-boot-from-volume.html)
 - 一致性组 (blockstorage-consistency-groups.html)
 - 为调度程序配置和使用驱动程序过滤器和称重 (blockstorage-driver-filter-weighing.html)
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 - 通用卷组 (blockstorage-groups.html)
 - 图像卷缓存 (blockstorage-image-volume-cache.html)
 - 使用LIO iSCSI支持 (blockstorage-lio-iscsi-support.html)
 - 配置多个存储后端 (blockstorage-multi-backend.html)
 - 配置NFS存储后端
 - 精简配置中的超额预订 (blockstorage-over-subscription.html)
 - 速率限制卷拷贝带宽 (blockstorage-ratelimit-volume-copy-bandwidth.html)
 - 音量支持的图像 (blockstorage-volume-backed-image.html)
 - 导出和导入备份元数据 (blockstorage-volume-backups-export-import.html)
 - 备份和恢复卷和快照 (blockstorage-volume-backups.html)
 - 迁移卷 (blockstorage-volume-migration.html)
 - 卷多重连接：启用将卷连接到多个服务器 (blockstorage-volume-multiattach.html)
 - 配置和使用体积号码秤 (blockstorage-volume-number-weigher.html)
 - 报告服务列表中的后端状态 (blockstorage-report-backend-state.html)
- Cinder服务配置 (../configuration/index.html)
- 示例配置文件 (../sample_config.html)
- 示例策略文件 (../sample_policy.html)
- 可用的驱动 (../drivers.html)
- 命令行界面参考 (../cli/index.html)
- cinder-manage用法 (../man/cinder-manage.html)
- 贡献者指南 (../contributor/index.html)
- 词汇表 (../common/glossary.html)

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