**What is an Amazon S3 bucket?**

Amazon S3 is a cloud based web service interface that you can used to store and retrieve any amount of data. To upload your data, first you need to create an S3 bucket in one of the Amazon regions.

**Creating a Bucket**

S3 provides an API for creating and managing buckets. You can create a maximum of 100 buckets from your AWS console. When you create a bucket, you need to provide a name and AWS region where you want to create the bucket. In each bucket, you can store any number of objects. You can use your AWS account root credentials to create a bucket, but it is not recommended. Instead  just create an IAM user and add full permission to that user on S3 bucket. You can access your S3 bucket from your Amazon S3 console.

Please follow the below steps to mount s3 bucket on your server.

**1) Remove Existing Packages**

Before installing any package, first you need to check if you have any existing fuse or S3FS on your server. If it is already existing, then remove it from your server to avoid further conflicts. Use the following command to check if you have any existing fuse or S3FS on your server

CentOS users:

$ yum remove fuse fuse-s3fs

Ubuntu Users:

$ apt-get remove fuse

**2) Install Packages**

Install all dependency packages for fuse and s3cmd using the below command.

CentOS users:

$ yum install gcc libstdc++-devel gcc-c++ curl-devel libxml2-devel openssl-devel mailcap

Ubuntu Users:

$ apt-get install build-essential libcurl4-openssl-dev libxml2-dev mime-support

**3) Download and Compile Fuse**

Move to /usr/src then download and compile fuse source code. After compiling, add fuse to kernel. In my case the latest version of fuse is fuse-3.0.0

$ cd /usr/src/

$ wget <https://github.com/libfuse/libfuse/releases/download/fuse-3.0.0/fuse-3.0.0.tar.gz>

$ tar xzf fuse-3.0.0.tar.gz

$ cd fuse-3.0.0

$ ./configure –prefix=/usr/local

$ make && make install

$ export PKG\_CONFIG\_PATH=/usr/local/lib/pkgconfig

$ ldconfig

$ modprobe fuse

**4) Download and compile S3FS**

Navigate to /usr/src, Download and compile s3fs source code.

$ git clone <https://github.com/s3fs-fuse/s3fs-fuse.git>

$ cd s3fs-fuse

$ ./autogen.sh

$ ./configure

$ make

$ make install

**5) Setup Access Key**

Both access key and secret key of your s3 AWS account is required for configuring S3FS. Replace the AWS\_ACCESS\_KEY\_ID and AWS\_SECRET\_ACCESS\_KEY with your actual key values.

$ vi /etc/passwd-s3fs

AWS\_ACCESS\_KEY\_ID:AWS\_SECRET\_ACCESS\_KEY

Make sure that the file has proper permission.

$ chmod 600 /etc/passwd-s3fs

**6) Mount S3 Bucket**

You can run the below command to mount s3fs.

$ s3fs mybucket /path/to/mountpoint -o passwd\_file=/etc/passwd-s3fs

You can also mount the s3 bucket on boot by following below commands.

$ mkdir /tmp/cache

$ mkdir /path/to/mountpoint

$ chmod 777 /tmp/cache /path/to/mountpoint

$ vi /etc/fstab

s3fs#<mybucket> /path/to/mountpoint fuse allow\_other,use\_cache=/tmp/cache,uid=userid,gid=groupid 0 0

$ mount -a