**Amazon Simple Storage Service (S3)**

**Agenda**

1. **Create S3 Bucket**
2. **Mounting S3 Bucket to Linux EC2 Instance**
3. **Uploading files**
4. **Checking from OS**
5. **Making file public and checking from browser**
6. **Mounting S3 Bucket on Windows Machine**
7. **Create S3 Bucket**

Use AWS Management console to create S3 bucket by following up the Screen

1. **Mount S3 to Linux EC2 Instance**

Amazon AWS **Simple Storage Service** (Amazon S3) is storage for the Internet. You can use Amazon S3 to store and retrieve any amount of data at any time, from anywhere on the web. You can accomplish these tasks using the simple and intuitive web interface of the AWS Management Console.

Amazon will store the data in buckets. Buckets are like containers for our files. You can name your buckets the way you like but it should be unique across the Amazon system.

Amazon AWS is letting us to mount the buckets as a file system in Linux using FUSE file system concept.

**IAM User Creation and AWS Keys:**

1. Go to IAM users and create one user
2. Get the keys, download the credentials
3. Go to Permissions and attach a policy called s3full access
4. Goto S3 and create one bucket

**Step 1: Remove Existing Packages**

First check if you have any existing s3fs or fuse package installed on your system. If installed it already remove it to avoid any file conflicts

CentOS/RHEL Users:

# yum remove fuse fuse-s3fs

**Step 2: Install Required Packages**

After removing above packages. First we will install all dependencies for fuse and s3cmd. Install the required packages to system use following command

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

#yum –y install wget

#yum –y install libfuse.so.2

#yum –y install fuse-libs.x86\_64 0:2.9.2-5.el7

**Step 3: Download and Compile Latest Fuse**

Download and compile latest version of fuse source code. For this article we are using fuse version 2.9.3. Following set of command will compile fuse and add fuse module in kernel

# cd /usr/src/

# wget http://downloads.sourceforge.net/project/fuse/fuse-2.X/2.9.3/fuse-2.9.3.tar.gz

# tar xzf fuse-2.9.3.tar.gz

# cd fuse-2.9.3

# ./configure --prefix=/usr/local

# make && make install

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

# ldconfig

# modprobe fuse

**Step 4: Download and Compile Latest S3FS**

Download and compile latest version of s3fs source code. For this article we are using s3fs version 1.74. After downloading extract the archive and compile source code in system

# cd /usr/src/

# wget https://s3fs.googlecode.com/files/s3fs-1.74.tar.gz

# tar xzf s3fs-1.74.tar.gz

# cd s3fs-1.74

# ./configure --prefix=/usr/local

# make && make install

(Optional)open bash profile and add path /usr/local/bin and run the bash profile

**Step 5: Setup Access Key**

Also In order to configure s3fs we would required Access Key and Secret Key of your S3 Amazon account

# echo AWS\_ACCESS\_KEY\_ID:AWS\_SECRET\_ACCESS\_KEY > ~/.passwd-s3fs

# echo AKIAJ23EOBZUAV264OQQ:hq26ttxaJyLntqgcQ83mgbqJopficXjcY5hOBNDm > ~/.passwd-s3fs

# chmod 600 ~/.passwd-s3fs

**Note:** Change AWS\_ACCESS\_KEY\_ID and AWS\_SECRET\_ACCESS\_KEY with your actual key values

**Step 6: Mount S3 Bucket**

Finally mount your s3 bucket using following set of commands. For this example, we are using s3 bucket name as mydbbackup and mount point as /s3mnt.

# mkdir /tmp/cache

# mkdir /s3mnt

# chmod 777 /tmp/cache /s3mnt

# cd /usr/local/bin

# ./s3fs -o use\_cache=/tmp/cache **buckettotest555** /s3mnt

Where **buckettotest555** is our s3 bucket