Resizing Root Partition on Linux in Amazon EC2

1. It starts by stopping the instance.
2. First, go to **volumes** on the left-hand EC2 navigation control panel. Once there, look under attachment information and identify the volume that is attached to the instance on which you want to change the root partition.
3. Right-click on the volume you want to resize and select **Create Snapshot**.
4. Fill out the details of the snapshot you’re creating. This will help to identify it in your snapshot inventory.
5. Select **Snapshots** on the left hand side of the EC2 control panel. From here we can see our snapshot being created. Make sure we remember what availability zone we are running instance/server is in; **what we do next will require that information**
6. Right hand click on the snapshot we just created and select **Create Volume from Snapshot**.
7. Enter the new size we would like the partition to be, **select the same availability zone of our running instance** then click on **yes, create**.
8. Head back over to **volumes** in the EC2 control panel. Once there, select the root volume we just created an image of, right click on it, and select **detach volume**. We are doing this because now that we created a new volume, we are going to attach that new volume in place of the old volume.
9. Now right click on the new volume we created and Attach the volume
10. It’s important to make sure the volume is attached as **/dev/sda1**, so change the volume name. If we do not do this, the instance will **NOT** be able to turn back on.
11. As soon as the volume is attached, go back to the instance and turn it instance back on.
12. Login to your instance and run **df -m** as sudo or root. We will notice that our partition size is still the same even though we created a larger volume. Now we need to resize the partition inside of Linux.
13. Make note of the partition name; suppose it’s /dev/xvda1. Then type resize2fs /dev/xvda1 at the command line
14. Now it starts to resize the root partition. Once complete, type df -m to view the new root partition size and verify that it worked.