

Stuff I've learned through sad and painful experience (you're welcome)

- “EBS” means the hard drive can survive shutting down the instance, they can also be resized-ish. Shutting down is not “Terminate”.
- If a volume isn't EBS and you shutdown the instance, it's toast. This includes the “Ephemeral” drive that's usually at /mnt. You can use it for temp storage/scratch just assume after a reboot it will be blank (setting /mnt/mysql as the mysql temp is a bad idea)

Painful stuff part 2

- Elastic IP is your friend. It's free, use it.
- Or use Elastic Load Balancer, either way use one of them or you'll be sorry.
- As of right now you can't resize a volume, resize an instance (add CPU, memory etc...) or change the security group or location an instance is living in.
- There's not much that you **can** change once an instance has been launched, other than associating a different static IP.

Part 3

- “Resizing” or moving an instance involves making a new instance the size or location you want it then reconnecting the volumes from the old server over to the new one. This often works without problems.
- “Terminating” an instance means “yank the cord and smash the drives with a hammer.” In theory you have a few minutes to contact AWS and *maybe* get stuff back but don’t count on it, and it won’t be free.

Part 4 (keeps going!)

- Security Groups are like IP Tables/Chains but moar better-er. They can be problematic though if you don't set them right.
- If you grant access to a port for a security group make sure you're using the internal IP for communication, not the external IP. External doesn't know about security groups. Example: DB server allows 3306 to the app server group so App servers need to use the 10.x.x.x Amazon IP
- Multiple Availability Zone Redundancy. "All your eggs in one basket."

Redundancy



Hot Swappable, little downtime

Has to be completely reconfigured, lots of downtime.
Practically not even worth the hassle to bring online.

Part 5 (almost done)

- RDS: make your own configuration group, if you use a default config you can't change **ANY** of the defaults, not even how much memory is in the query cache. You'll have to make a new instance.
- If you're launching a "large" instance planning to use the 4 ephemeral discs as a RAID 0 for MySQL temp tables and forget to enumerate all 4 when launching the instance... you get to start all over again and do it right this time

<http://db.tt/RU66Yu7C>