

RDS Pricing:

Four drivers

Instance Hours

Based on Region, Instance Type,
Database Engine and License

Database Storage

EBS vs Aurora,
Storage Type (GP2/IO1/Magnetic),
Storage Allocation (GB)

Backup Storage

Size of backups stored in AWS,
No charge for backup storage up to
100% of total database storage

Data Transfer

Outgoing traffic only,
Regional Data Transfer Pricing,
Includes copying region to region

- **AWS Cost Explorer**
 - Great way to visualize billing
- **Tags help breakdowns**
 - Especially when working in companies with multiple systems or teams
- **Reserved Instances if you can**
 - Databases are rarely short lived

RDS Scaling:

Why would we want to?

- Scale compute or memory vertically
 - New host is attached to existing volumes
 - In Multi-AZ, Secondary resizes first
- Scale Amazon EBS storage
 - No downtime
- Scale with Read replicas (horizontal scaling)
 - Only some database engines
 - Helps scale read traffic only



Example:



Vertically scale your Database Instance

1. Modify the RDS Instance
2. Change the DB Instance Class

When to apply change?

- Immediately
- During maintenance window

Additional Notes

Licensing

Ensure correct licensing is in place

When

Determine when you want to apply the change

Storage / CPU are decoupled

Storage and Instance Type are decoupled

Multi-AZ

Minimal downtime when scaling Multi-AZ environment

Single-AZ

Single AZ will be unavailable during the scaling operation

Lets vertically scale our Database Instance up immediately

From t2.small to t2.medium (or anything else)

Keep an eye on:

1. The Database Instance Behaviour
2. The time it takes
3. Is there downtime?
4. Try the same in a Multi-AZ configuration