Operational Guidelines
AWS RDS

Expected Learning Outcomes

AWS RDS

→ **Monitoring**

→ **Scaling**

→ **Performance**

→ **Security**

Memory

CPU

Storage

➔ **Monitoring gives the administrators continuous inside view of the health of the services being monitored**

➔ **Monitoring keeps track of the service performance and historic monitoring data**

Monitoring and Alerting on AWS

Amazon Web Services

- AWS CloudWatch is the defacto monitoring

  service on AWS which monitors key metrics

  of various AWS services like:

  - AWS EC2

  - AWS RDS

  - And many others

AWS RDS: Key Metrics

✔ **CPU Utilization**

✔ **Database Connections**

✔ **Freeable Memory**

✔ **Free Storage Space**

✔ **Read IOPS/Write IOPS**

✔ **Read Latency/Write Latency**

Monitoring

DEMO

⚙ Performance vs. Scalability
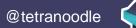
↪ **mySQL Metrics**

   ↪ Query Throughput

   ↪ Query Performance

   ↪ Connections

   ↪ Resource Utilization

↪ **DB Instance Class**

↪ **Storage Types**

   ↪ General Purpose SSD

   ↪ Provisioned IOPS

→ **CPU**

→ **Memory**

→ **Storage**

→ **Query Performance**

Database Sharding

Security

@tetranoodle

Network

Security

➡ **Firewalls / Ports**

➡ **Encryption**

   ➡ In Transit

   ➡ At Rest

Auditing

➡ **Auditing**

➡ AWS CloudTrail

Recap

AWS RDS

➡ **Monitoring**

➡ **Scaling**

➡ **Performance**

➡ **Security**