

(e)gain



# AWS DATABASE SPECIALTY | PRODUCTION READY COURSE

REVOLUTIONIZE YOUR CAREER WITH  
TECHNOLOGY TRAINING

**Our Vision: Education is our MAIN Priority, NOT Business.**

TOTAL COURSE: 45 HOURS



9 years of  
Excellence

Govt. Of India  
Accredited (INYC)

# About Us



SUPPORTING ENTERPRISES



e-gain is a **student obsessed institute** and an endeavor which had been in mind for nine long years. Only in the recent past, it has been moulded to give it a new structure.

e-gain is a platform nurtured by highly qualified professionals who have been linked with the industry for years, gaining vast experience.

Our teaching staff mainly comprises of expert professionals like IT Infrastructure Architect, Application Project Managers, Senior Analysts, Senior Business Intelligence consultant, Senior Big Data consultants rather than mere faculties. They are attached with the production environment rendering their expertise and skills.

Our primary vision is to impart real education and build professionals who can shine with excellence. With this vision e-gain is winning the hearts of many students who have begun to consider the e-gain teachers as their private tutors. To facilitate this and keep the passion going we have introduced Reach My Teacher tab where students can get access to their respective teachers to solve problem and queries even after post training.

"Education is the most powerful weapon which you can use to change the world." ~Nelson Mandela,"

# OUR ACCREDITATIONS





**INDIAN NATIONAL YOUTH COMPUTER**

**RECOGNIZED BY GOVT. OF INDIA**

**Indian National Youth Computer**™  
(An ISO 9001:2018 Certified Organization)

1) An ISO 9001:2018 Certified autonomous Body (Regd No-230422080743QRA), 2) Registered Under Department of labour, Govt. of NCT(Delhi) (Regd.No:-2019006235), 3) Regd. Under MSME Govt. of India, (WB15D0004104), 4) Trust Regd No.:(IV-130100309), 5) Certificate of Admissibility, (Rule 43, WB.Registration Rules 1962), 6) Registered Under Trade Mark Registry Act, 1999, Govt of India (Regd. No-4858852)



Confidential

## Certificate



Confidential

*This is to certify that*

Mr / Mrs / Ms **ANANDAKI** Confidential  
S.O / D.O / W.O **A VE** Confidential

*has successfully completed the course*

**AWS SOLUTIONS ARCHITECT-ASSOCIATE**

*from our Authorized Study Centre*

**E-GAIN TECHNOLOGIES**

*with grade **A+** in the year **2023**.*

*His / Her enrollment no is **009318**.*

Certificate No: INYC-CRT-009318  
Issue Date : 14-08-2023  
Admission Date : 10-05-2023  
Exam Date : 10-08-2023





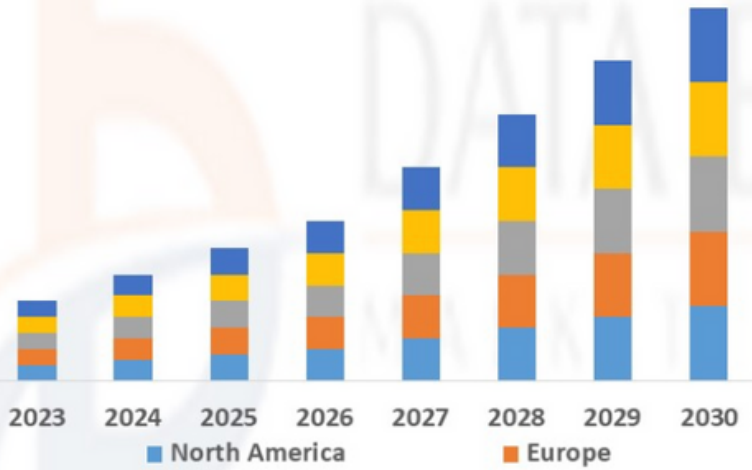
Signature of Chairman

[www.inyc.in](http://www.inyc.in)

80% & Above A+, 70% & Above A, 60% & Above B+, 50% & Above B, 40% & Above C

# DATA POINTS ON MARKET TRENDS

Global Database Security Market is Expected to Account for USD 25.97 Billion by 2030



Global Database Security Market, By Regions, 2023 to 2030



DATA BRIDGE MARKET RESEARCH

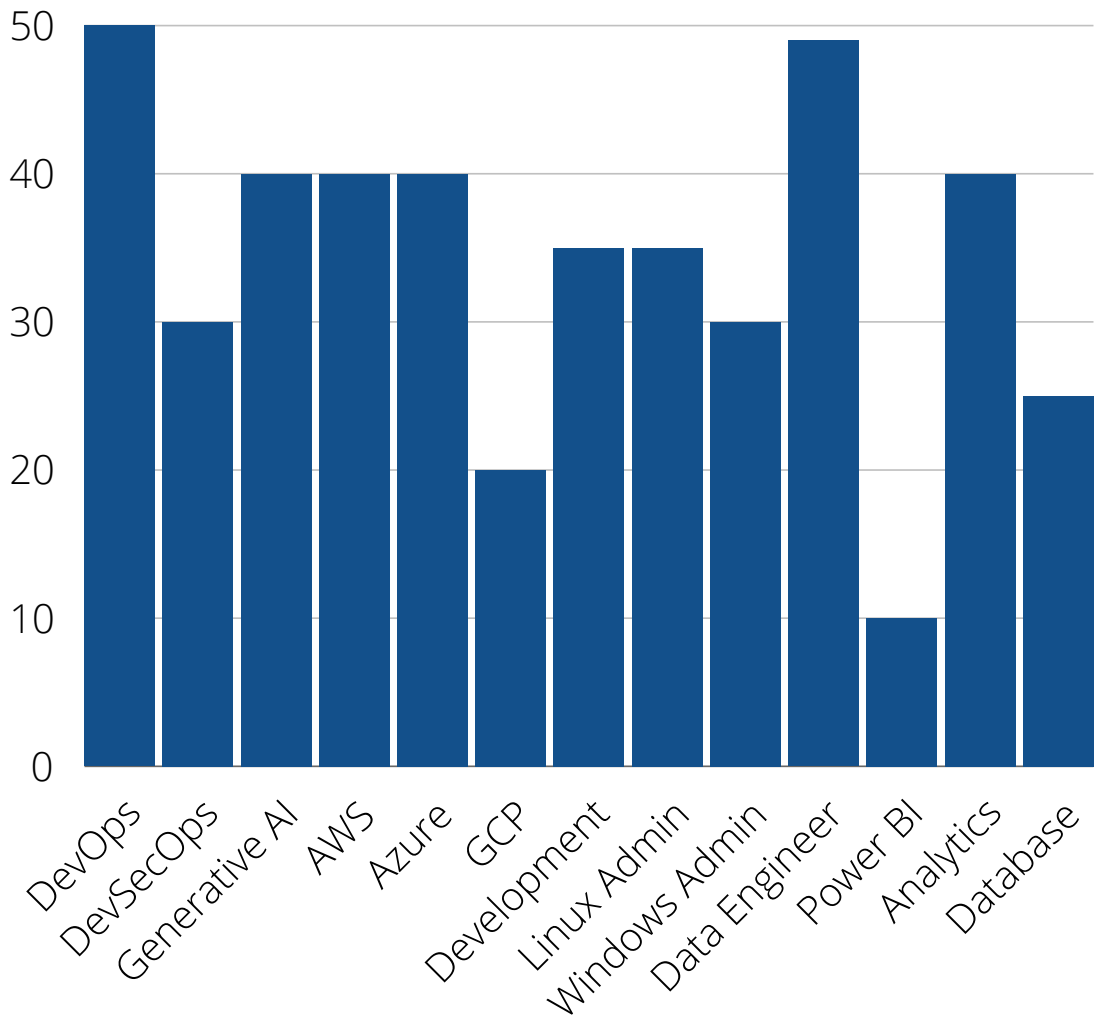
DMCA Protected © Data Bridge Market Research- All Rights Reserved.

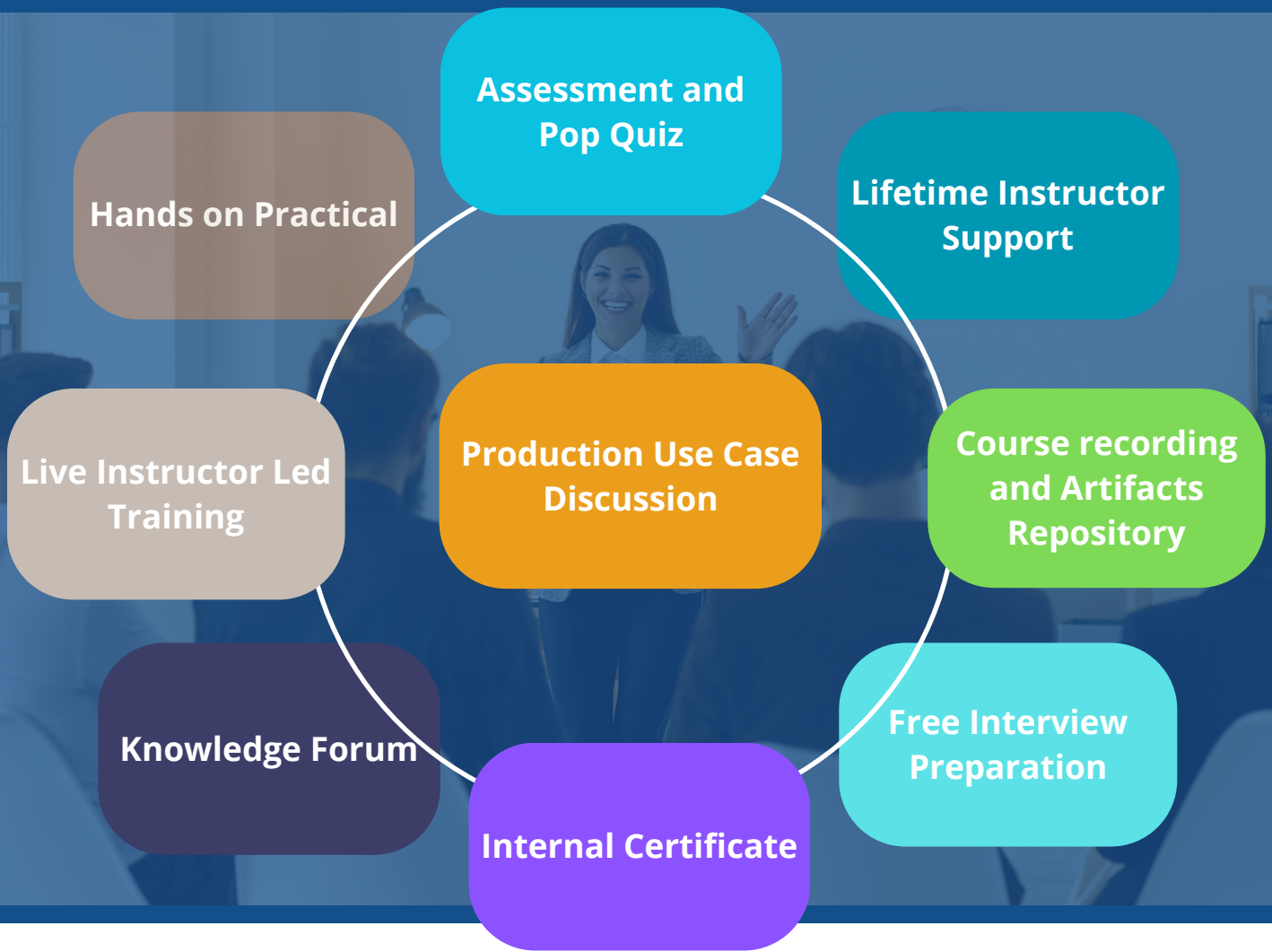
Source: Data Bridge Market Research Market Analysis Study 2023



Source: Data Bridge Market Research

## MARKET TRENDS



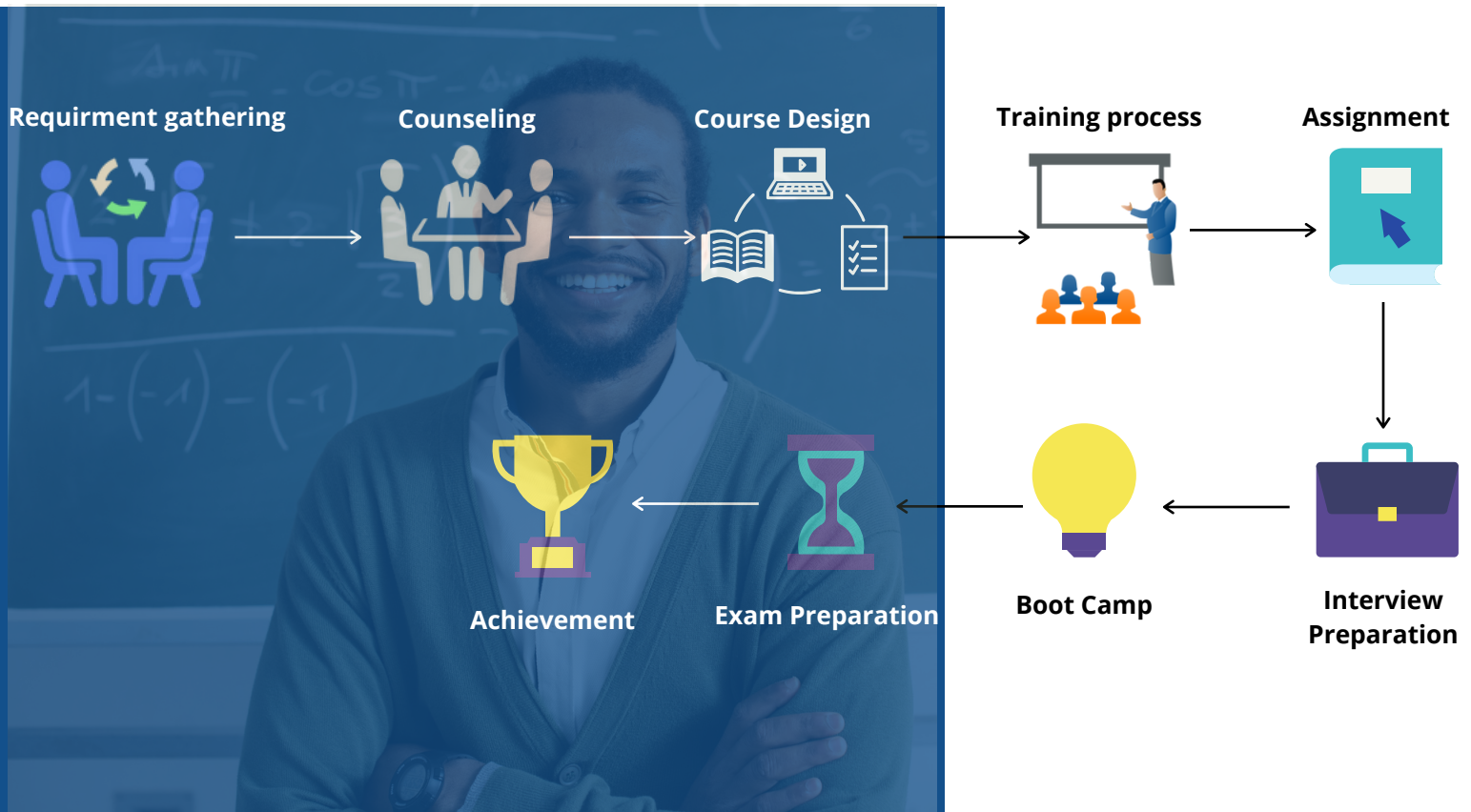


We believe in **Hands On practical**. All courses are designed as **90% practical**.

**Anybody** can join our community group. We do not blend Business motive in **Education**

All our instructors are **Subject Matter Experts**. Learn from SME. It **matters** these days

**Every student** comes up with own objective to learn...



**Free 1:1 Career RoadMap Counseling with Our Expert**

Career Road Map Counselling is FREE for everyone | This is our true intention to help people grow and have a good impact on society.

**Certification is Good but Gaining Real knowledge is more important otherwise your certificate will become a piece of paper....**

# WHAT OUR STUDENTS SAY

After a stint of 17 years in IT Infrastructure and Project Management, I was looking for new learning and exploring AWS, came in touch with many, but e-gain showed a different angle of exploring AWS, consistently e-gain kept on proving why they are different one. Not only theoretical approach, more focus on practical work and ready to accept new questions and came out with solutions each and every time. It's a class, where it gives a feeling of traditional Gurukul system, where not only one sided lecture are given (like most of the institute), here QA session is a regular phenomenon. Assignments are given and honest evaluation takes place. Wish all the best e-gain.

**SAMARESH CHATTOPADHYAY**  
RELIANCE JIO

Knowledge is power and learning the only way to acquire it. In modern times online training is the most efficient and convenient way of learning when it comes to any technical training especially in Information Technology. If you are in this industry, then you must enroll in e-gain. Because it is not an online training institute only. Apart from giving online training with hands-on it prepares a student to appear for certification examinations and interviews. e-gain also shares information on latest trends, best practices, new technologies - with all, on open forum basis. Once enrolled in e-gain, one will not only get training but a guidance throughout the journey in Information Technology. e-gain offers training on most popular and upcoming technologies, both. The trainers are from reputed organizations with deep knowledge and vast experience.

**SATYABRATA SUR**  
TECHMAHINDRA INDIA

A word of gratitude to e-gain's training team. I had an amazing experience training with e-gain, the trainers are highly skilled, professional, helpful and supportive. Thank you e-gain for helping me reach new heights. "A good coach can change a game, A great coach can change a life". You've changed my life e-gain, thank you.

**MMAPULA CHELOPO**  
INDEPENDENT ITSM CHANGE MANAGEMENT CONSULTANT,  
JOHANNESBURG



# WHAT OUR STUDENTS SAY

I can say this with utmost confidence that e-gain is one of the best training resources out there in today's online teaching world. e-gain is a thorough professional team and teaches you to connect the theory of Technology with the practical aspects. They are not only spark the interest about the topics but also encourages you to ask questions, these questions lead you to more questions and you really start to grasp the core of the subject that you are trying to Master. I have nothing but great things to say about e-gain, learning with e-gain is one of the great decisions I took in my online learning pursuits, hands down !!

**ATIF RATHER**  
CPP INVESTMENT | CANADA

Hey this Dipanjan today I am giving a big thanks to e-gain and team. Today whatever very little knowledge I have gained this all happened as because of e-gain team.

I have undergone very tough time where I was standing on the edge where I was left every piece of hope but one thing I have always in my mind I never learnt to bent down.I always ready to accept the adversities, this all things are possible just because of e-gain. T thanks for your support I always thankful to these people. long live e-gain.

**DIPANJAN CHAKRABORTY**  
ACCENTURE

Develops a culture of continuous performance improvement @e-gain can be a powerful trigger for change Awesome teachers with astounding knowledge.

**INDRAKHEE BARUA**  
IBM

# AWS DATABASE SPECIALTY (e)gain

Duration: 45 hours

## Introduction

Let's get started with AWS Database solutions

- Why do we need database
- Different types of databases
- Basic understanding of virtualization
- Region & AZ
- Cloud computing advantages
- Shared responsibility model
- AWS Global Infrastructure
- Difference between IaaS, PaaS and SaaS
- AWS Account creation steps

## Amazon RDS and Aurora

- Amazon RDS overview
- RDS pricing model
- Instance type, storage type and storage auto scaling for RDS
- RDS parameter groups
- RDS option groups
- RDS security - Network
- RDS security - IAM
- Rotating RDS DB credentials
- Windows authentication in RDS for SQL Server
- RDS encryption in transit and at rest
- RDS backups
- Copying and sharing RDS snapshots
- How to encrypt an unencrypted RDS database
- DB restore options in RDS
- Exporting RDS DB snapshot to S3
- RDS Multi-AZ deployments and read replicas
- Read replica use cases
- Promoting a read replica to a standalone DB instance
- Enabling writes on a read replica
- RDS read replica capabilities
- Cross-region read replicas in RDS
- RDS replicas with an external database
- RDS disaster recovery strategies
- Troubleshooting replica issues in RDS
- Performance hit on new read replicas
- Scaling options in Aurora
- Aurora monitoring and advanced auditing
- Exporting Aurora logs
- Database activity streams in Aurora
- Troubleshooting storage issues in Aurora
- Aurora benchmarking

- Exporting data from Aurora into S3
- Aurora backups and backtracking
- Aurora backups vs snapshots vs backtrack
- Cloning databases in Aurora
- Aurora failovers
- Cluster Cache Management (CCM) in Aurora PostgreSQL
- Simulating fault tolerance or resiliency in Aurora
- Fast failover in Aurora PostgreSQL
- Cluster replication options for Aurora MySQL
- Aurora replicas vs RDS MySQL replicas
- Comparison of RDS deployments
- How to invoke Lambda functions from Aurora MySQL
- How to load data from S3 into Aurora MySQL

### Amazon Dynamo DB and DAX

- DynamoDB overview
- DynamoDB basics
- DynamoDB consistency
- DynamoDB pricing model
- DynamoDB throughput
- Calculating capacity units
- DynamoDB burst capacity and adaptive capacity
- DynamoDB local secondary index (LSI)
- DynamoDB global secondary index (GSI)
- Choosing between LSI and GSI
- Simple design patterns with DynamoDB
- Errors and exceptions in DynamoDB
- DynamoDB partitions
- DynamoDB partition behavior example
- Scaling options in DynamoDB
- DynamoDB scaling and partition behavior
- DynamoDB best practices
- DynamoDB best practices (contd.)
- Large object patterns and table operations
- DynamoDB accelerator (DAX)
- DAX architecture
- DAX operations
- DynamoDB backup and restore
- Continuous backup with PITR
- DynamoDB encryption
- DynamoDB streams
- DynamoDB TTL
- DynamoDB global tables

- **DynamoDB TTL**
- **DynamoDB global tables**
- **Fine-grained access control and Web-identity federation in DynamoDB**
- **CloudWatch contributor insights for DynamoDB**

## **Amazon Redshift**

- **Redshift overview**
- **Redshift architecture**
- **Loading data into Redshift**
- **More ways to load data into Redshift**
- **Redshift Spectrum**
- **Redshift federated query**
- **Star schema in data warehouses**
- **Redshift fundamentals**
- **Redshift Workload Management (WLM)**
- **Redshift concurrency scaling**
- **Redshift scaling**
- **Redshift backup, restore and cross-region snapshots**
- **Redshift Multi-AZ deployment alternative**
- **Redshift availability and durability**
- **Redshift security**
- **Enhanced VPC routing in Redshift**
- **Redshift monitoring**
- **Redshift pricing**
- **Redshift related services - Athena and Quicksight**
- **AQUA for Redshift**

## **Amazon ElastiCache**

- **ElastiCache overview**
- **Caching strategies**
- **Redis architecture and Multi-AZ auto-failover**
- **Redis backup and restore**
- **Redis scaling and replication**
- **Redis global datastore**
- **Redis best practices**
- **Memcached overview**
- **Memcached architecture**
- **Memcached auto discovery**
- **Memcached scaling**
- **Choosing between Redis and Memcached**
- **ElastiCache security**
- **ElastiCache logging and monitoring**
- **ElastiCache pricing**

### Amazon DocumentDB (with MongoDB compatibility)

- DocumentDB overview
- What and why about document databases
- DocumentDB architecture
- DocumentDB backup and restore
- DocumentDB scaling
- DocumentDB security
- DocumentDB pricing
- DocumentDB monitoring
- DocumentDB performance management

### Amazon Neptune

- Neptune architecture
- Bulk loading graph data into Neptune
- Neptune Workbench
- Neptune replication and high availability
- Neptune backup and restore
- Neptune scaling
- Database cloning in Neptune
- Neptune security
- Neptune monitoring
- Query queuing in Neptune
- Neptune service errors
- SPARQL federated query
- Neptune streams
- Neptune pricing

### Amazon OpenSearch

- Amazon OpenSearch Service overview
- OpenSearch Service patterns
- OpenSearch Service - Multi-AZ
- Logging options in OpenSearch Service
- OpenSearch Service pricing

### Amazon Timestream

- Timestream overview
- Timestream pricing

### Amazon QLDB

- QLDB overview
- QLDB architecture
- QLDB views
- Working with QLDB
- Data verification in QLDB

### QLDB backup and restore (an alternative)

- QLDB streams

- QLDB high availability, durability and an alternative to CRR
- QLDB security
- QLDB monitoring
- QLDB pricing

#### Amazon Keyspaces (For Apache Cassandra)

- Keyspaces overview
- Migrating from Cassandra to Keyspaces
- Read and write consistency in Keyspaces
- Keyspaces pricing

#### Database Migration, DMS and SCT

- Database migration overview
- DMS sources and targets
- DMS architecture and overview
- SCT overview
- Workload Qualification Framework (WQF)
- DMS tasks and task assessment reports
- DMS migration types
- Migrating large tables and LOBs with DMS
- DW migration with SCT
- Migration playbooks
- DMS monitoring
- DMS validation
- DMS statistics and control tables
- DMS security - IAM, encryption and networking
- DMS pricing
- DMS general best practices
- DMS migration architectures to minimize downtime
- Migrating large databases
- Migrating to RDS databases
- Migrating to Aurora
- Migrating Redis workloads to ElastiCache
- Migrating to DocumentDB
- Streaming use cases for DMS

#### Monitoring, Logging and Encryption

- Encryption and Snapshots
- Database Logging
- Secrets Manager
- Active Directory with RDS Microsoft SQL Server

## CloudFormation and Automation

- Section Structure
- CloudFormation Overview
- YAML Crash Course
- CloudFormation Resources
- CloudFormation Parameters
- CloudFormation Mappings
- CloudFormation Outputs
- CloudFormation Conditions
- CloudFormation Intrinsic Functions
- CloudFormation Rollbacks
- CloudFormation ChangeSets, Nested Stacks & StackSet
- CloudFormation with RDS
- CloudFormation - RDS DB Updates
- CloudFormation - RDS Protections
- CloudFormation - with Aurora
- CloudFormation - Parameters
- CloudFormation - SSM Parameter Store
- CloudFormation - Secrets Manager
- CloudFormation - Advanced Concepts and Cleanup

## Exam Preparation

## Production Ready Use Cases





We need number of **HAPPY** Students  
**NOT** just number of total students.

## Contact us



[www.e-gain.co.in](http://www.e-gain.co.in)



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