Amazon OpenSearch Service (formerly known as Amazon Elasticsearch Service) is a managed service that simplifies the setup, operation, and scaling of OpenSearch and Elasticsearch clusters in the cloud.

E-Commerce Search: Enhancing the search functionality on e-commerce platforms to provide relevant product recommendations and search results.

Log Analytics: Analysing and visualizing log data to monitor application performance, detect anomalies, and troubleshoot issues.

Real-Time Data Processing: Processing and analysing streaming data in real-time for applications such as social media monitoring and clickstream analysis.

- Successor to ElasticSearch (renamed due to some licensing issues)

- Used in combination with a database to perform **enhanced search operations on the database** (can search on any field, even supports **partial matches)**

- **Need to provision a cluster of instances** (pay for provisioned instances) (**not serverless**)

- Comes with **OpenSearch Dashboard** for visualization

- **Does not support SQL** (has its own query language)

- Supports **multi-AZ**

- Used in Big Data

- Security through IAM, Cognito, KMS and TLS
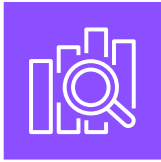
OpenSearch on DynamoDB

Amazon DynamoDB is a NoSQL database service that provides fast and predictable performance at scale. Amazon OpenSearch Service is a search and analytics engine based on OpenSearch (and formerly Elasticsearch), which allows you to perform complex search and analytics queries. By integrating DynamoDB with OpenSearch, you can enhance your DynamoDB data with full-text search, complex querying, and real-time analytics capabilities.
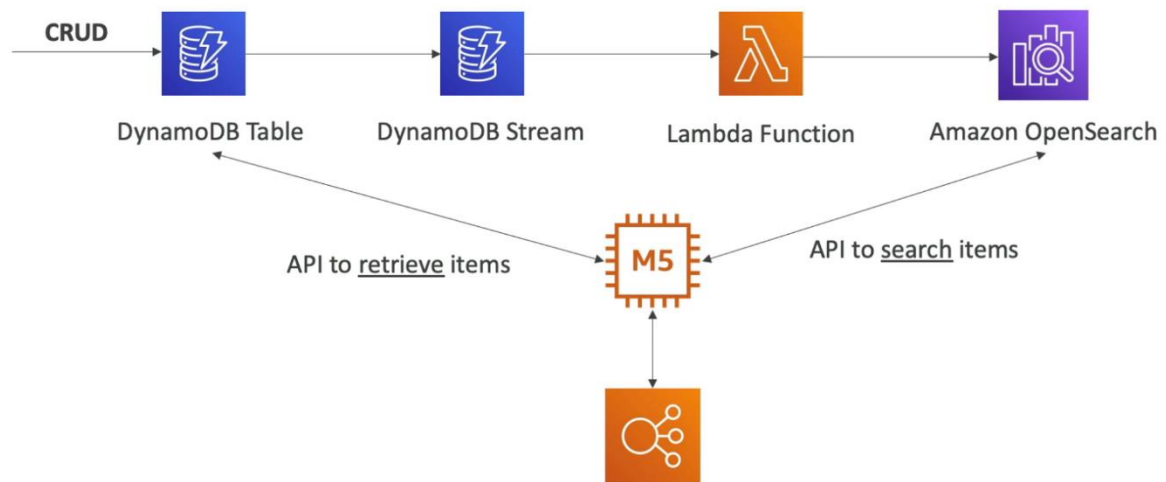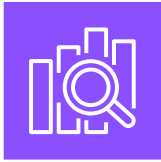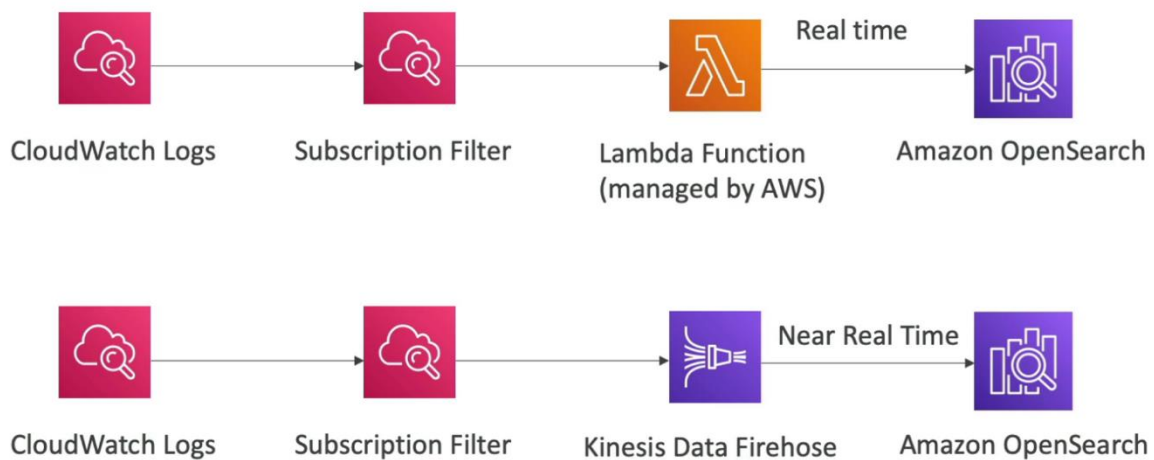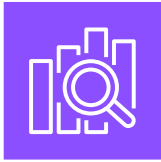
OpenSearch on CloudWatch Logs

Amazon CloudWatch Logs is a service that enables you to collect, monitor, and analyze log data from your AWS resources and applications. Amazon OpenSearch Service provides advanced search and analytics capabilities. By integrating CloudWatch Logs with OpenSearch, you can enhance your log analysis and visualization, gaining deeper insights into your application and infrastructure.
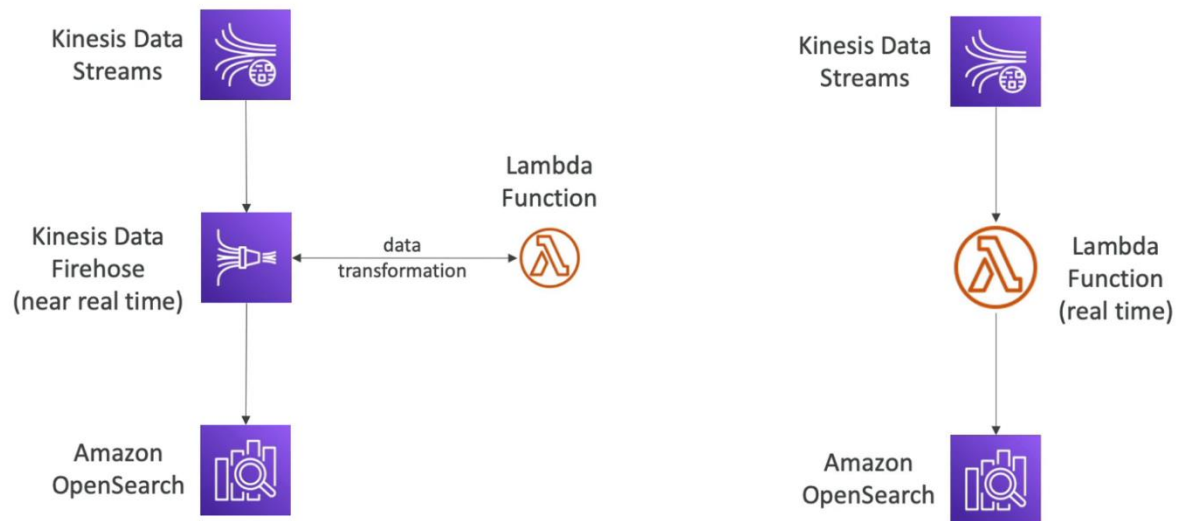
CloudWatch Logs → Subscription Filter → Lambda Function (managed by AWS) — Real time → Amazon OpenSearch

CloudWatch Logs → Subscription Filter → Kinesis Data Firehose — Near Real Time → Amazon OpenSearch

OpenSearch on Kinesis

Amazon Kinesis Data Streams is a service for collecting and processing real-time data streams. Amazon OpenSearch Service provides search and analytics capabilities. By integrating Kinesis Data Streams with OpenSearch, you can continuously index and analyze streaming data, gaining real-time insights and performing complex queries.

Scenario based Questions

https://lisireddy.medium.com/aws-opensearch-scenario-based-questions-7982626c908f

Wish you the best …! Happy Learning ..!

Yours' Love (@lisireddy across all the platforms)