**Building Streaming Data Analytics Solutions on AWS**

Good Morning/Evening**@Everyone**

Hope you all are keeping well and doing good.

**As a courtesy to those in the middle of joining, we'll start at 09:05 AM IST.**

**Prerequisites**

Well-Architected Framework [AWS Well-Architected - Build secure, efficient cloud applications](https://aws.amazon.com/architecture/well-architected/?ref=wellarchitected-wp&wa-lens-whitepapers.sort-by=item.additionalFields.sortDate&wa-lens-whitepapers.sort-order=desc&wa-guidance-whitepapers.sort-by=item.additionalFields.sortDate&wa-guidance-whitepapers.sort-order=desc)

Data Analytics Fundamentals

Part 01 <https://explore.skillbuilder.aws/learn/courses/18437/fundamentals-of-analytics-on-aws-part-1/lessons>

Part 02 <https://explore.skillbuilder.aws/learn/course/internal/view/elearning/18440/fundamentals-of-analytics-on-aws-part-2>

Architecting on AWS classroom training <https://www.aws.training/SessionSearch?pageNumber=1&courseId=10002&languageId=1>

**Module 01**

Streaming data in the data analytics pipeline <https://docs.aws.amazon.com/whitepapers/latest/build-modern-data-streaming-analytics-architectures/working-with-streaming-data-on-aws.html>

**Module 02: Introduction to AWS Streaming Services**

Amazon Kinesis <https://docs.aws.amazon.com/kinesis/>

Amazon MSK <https://docs.aws.amazon.com/msk/latest/developerguide/getting-started.html>

Kinesis Data Analytics <https://docs.aws.amazon.com/managed-flink/latest/java/how-it-works.html>

Apache Spark Streaming <https://aws.amazon.com/solutions/guidance/implementing-near-real-time-analytics-with-spark-streaming-on-aws/>

Amazon EMR with Spark <https://docs.aws.amazon.com/emr/latest/ReleaseGuide/emr-spark.html>

AWS Glue <https://docs.aws.amazon.com/glue/latest/dg/what-is-glue.html>

Amazon Kinesis Data Streams <https://docs.aws.amazon.com/streams/latest/dev/introduction.html>

Amazon EMR <https://docs.aws.amazon.com/emr/latest/ManagementGuide/emr-what-is-emr.html>

Kinesis producer library <https://docs.aws.amazon.com/streams/latest/dev/developing-producers-with-kpl.html#developing-producers-with-kpl-role>

Amazon Kinesis Agent <https://docs.aws.amazon.com/streams/latest/dev/writing-with-agents.html>

**Module 03:**

Amazon EC2 <https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html>

Kinesis Client Library <https://docs.aws.amazon.com/streams/latest/dev/kcl.html>

Kinesis SDK <https://docs.aws.amazon.com/AWSJavaSDK/latest/javadoc/com/amazonaws/services/kinesis/AmazonKinesis.html>

KCL consumers with shared throughput <https://docs.aws.amazon.com/streams/latest/dev/shared-throughput-kcl-consumers.html>

Kinesis record processor scaling <https://docs.aws.amazon.com/streams/latest/dev/kinesis-record-processor-scaling.html>

**Module 04:**

AWS IAM

<https://docs.aws.amazon.com/iam/>

AWS KMS

<https://docs.aws.amazon.com/kms/latest/developerguide/overview.html>

Amazon CloudWatch

<https://docs.aws.amazon.com/AmazonCloudWatch/latest/monitoring/WhatIsCloudWatch.html>

AWS CloudTrail

<https://docs.aws.amazon.com/awscloudtrail/latest/userguide/cloudtrail-user-guide.html>

**Module 05:**

Kafka cluster architecture

<https://docs.aws.amazon.com/whitepapers/latest/amazon-msk-migration-guide/amazon-managed-streaming-for-apache-kafka-amazon-msk.html>

Kafka Control plane <https://docs.aws.amazon.com/msk/latest/developerguide/what-is-msk.html>

Kafka Rolling version upgrades <https://docs.aws.amazon.com/msk/latest/developerguide/version-upgrades.html>

Kafka producer library <https://kafka.apache.org/10/javadoc/org/apache/kafka/clients/producer/KafkaProducer.html>

Amazon MSK Connect <https://docs.aws.amazon.com/msk/latest/developerguide/msk-connect.html>