

# AWS Modern Architecture – One to Two Day Course Agenda

## Overview

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Organisations are faced with managing multiple data types today, coming from a wide variety of sources containing large volumes and heterogeneous types of data. To deliver insights, organisations are finding they need to implement a data storage and analytics solution that offers more agility and flexibility than traditional data management systems, allowing for timely action.

This course will provide participants with an overview and walk through of Modern Data Architecture using Amazon Web Services, learning everything from navigating the AWS Console to build an end-to-end solution of a modern data warehouse using popular technologies such as S3, Athena, Glue, Kinesis, EMR, Lambda and Sagemaker.

### Target Audience

This course is aimed at participants establishing AWS Modern Architecture or looking to improve their current solution.

## Learning Outcomes

At the end of this course delegates will:

- Effectively navigate the AWS Console, and leverage alerting and monitoring features.
  - Understand the suite of data products available on AWS as well as their interactions and based on use cases.
  - Be able to identify best practice AWS architecture variations to suit a range of requirements.
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#	Topic
1.	<b>Introduction to AWS</b> <ul style="list-style-type: none"><li>• Main services presentation</li><li>• Navigating AWS Console</li><li>• Console Security and Access</li></ul>
2.	<b>Anatomy of an AWS Modern Data Platform</b> <ul style="list-style-type: none"><li>• AWS Data Services</li><li>• Data platform architecture topology</li></ul>
3.	<b>Low maintenance</b> <ul style="list-style-type: none"><li>• serverless</li><li>• monitoring &amp; alerting</li><li>• log centralisation</li><li>• roster integration</li><li>• data replay/fix</li></ul>
4.	<b>Low cost</b> <ul style="list-style-type: none"><li>• storage types</li><li>• compute types</li><li>• approaches to third party / AWS marketplace e.g. Matillion</li><li>• regions</li><li>• hybrid in cloud/on premises</li></ul>
5.	<b>Continuous integration &amp; agility</b> <ul style="list-style-type: none"><li>• build automation e.g. cloud formation</li><li>• containers e.g. docker, Kubernetes</li><li>• git flow/integration</li><li>• environments</li></ul>
6.	<b>Governance</b> <ul style="list-style-type: none"><li>• privacy, sovereignty, legislative/statutory compliance</li><li>• quality</li><li>• data dictionary, lineage, catalogue</li></ul>
7.	<b>Security</b> <ul style="list-style-type: none"><li>• IAM best practice</li><li>• Encryption at rest, in transit</li><li>• Bucket strategy</li><li>• Single-Sign-On</li></ul>

#	Topic
8.	<b>Usability</b> <ul style="list-style-type: none"><li>• user accounts</li><li>• billing</li><li>• Virtualisation, Business Intelligence/Analytics Integration</li></ul>
9.	<b>Summary and close</b>