



Advanced Architecting on AWS with AWS Jam

PowerPackage

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With this PowerPackage you book the three-day Advanced Architecting on AWS course together with an AWS Jam Day.

In this course, each module presents a scenario with an architectural challenge to be solved. You will examine available AWS services and features as solutions to the problem. You will gain insights by participating in problem-based discussions and learning about the AWS services that you could apply to meet the challenges. Over 3 days, the course goes beyond the basics of a cloud infrastructure and covers topics to meet a variety of needs for AWS customers. Course modules focus on managing multiple AWS accounts, hybrid connectivity and devices, networking with a focus on AWS Transit Gateway connectivity, container services, automation tools for continuous integration/continuous delivery (CI/CD), security and distributed denial of service (DDoS) protection, data lakes and data stores, edge services, migration options, and managing costs. The course concludes by presenting you with scenarios and challenging you to identify the best solutions.

The final day is an AWS Jam, a gamified event, with teams competing to score points by completing a series of challenges according to established best practices based on concepts covered in the course. You get to experience a wide range of AWS services in a series of real-world scenarios that represent common operational and troubleshooting tasks. The end result is developing, enhancing, and validating your skillsets in the AWS Cloud through real-world problem solving, exploring new services, features, and understanding how they interoperate.

This course includes presentations, group discussions, use cases, videos, assessments, hands-on labs, and team-based gamified challenge.

Course Contents

- Module 1: Reviewing Architecting Concepts
- Module 2: Single to Multiple Accounts
- Module 3: Hybrid Connectivity
- Module 4: Specialized Infrastructure
- Module 5: Connecting Networks
- Module 6: Containers
- Module 7: Continuous Integration/Continuous Delivery (CI/CD)
- Module 8: High Availability and DDoS Protection
- Module 9: Securing Data
- Module 10: Large-Scale Data Stores
- Module 11: Large-Scale Applications
- Module 12: Optimizing Cost
- Module 13: Migrating Workloads
- Module 14: Review Projects
- AWS Jam

You have access to the labs for another 14 days after the course. This way you can repeat exercises or deepen them individually.

AWS Jam

- Participate in team based challenges in a real AWS environment
- Compete with your colleagues in a gamified, hands-on learning experience
- Apply your learning from the course on various AWS services

E-Book You will receive the original course documentation by Amazon Web Services as an e-book.

Target Group

This course is intended for cloud architects, solutions architects, and anyone who designs solutions for cloud infrastructures.

Prerequisites

We recommend that attendees of this course have:

- Knowledge and experience with core AWS services from the Compute, Storage, Networking, and AWS Identity and Access Management (IAM) categories
- Attended the Architecting on AWS classroom training OR
- Achieved the AWS Certified Solutions Architect – Associate certification OR
- Have at least 1 year of experience operating AWS workloads

Practical lab exercises with the AWS environment are part of the training. In order to be able to carry out these successfully, an internet-capable notebook (Windows, Linux, MacOS) is a prerequisite.

Important: Therefore, please bring your notebook to the course! If this is not possible, please contact us in advance.

This Course in the Web



You can find the up-to-date information and options for ordering under the following link:

www.expertech-training.com/go/JMAA

Reservation

On our Website, you can reserve a course seat for 7 days free of charge and in a non-committal manner. This can also be done by phone under +49 6074/4868-0.

Guaranteed Course Dates

To ensure reliable planning, we are continuously offering a wide range of guaranteed course dates.

Your Tailor-Made Course!

We can precisely customize this course to your project and the corresponding requirements.

Training	Prices, excl. of V.A.T.	
Classes in Germany	4 Days	€ 2,485
Online Training	4 Days	€ 2,485
Dates upon request		

Status 03/26/2024



Table of Contents

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Module 1: Reviewing Architecting Concepts

Group Exercise: Review Architecting on AWS core best practices

Lab 1: Securing Amazon S3 VPC Endpoint Communications

Module 2: Single to Multiple Accounts

AWS Organizations for multi-account access and permissions

AWS SSO to simplify access and authentication across AWS accounts and third-party services

AWS Control Tower

Permissions, access, and authentication

Module 3: Hybrid Connectivity

AWS Client VPN authentication and control

AWS Site-to-Site VPN

AWS Direct Connect for hybrid public and private connections

Increasing bandwidth and reducing cost

Basic, high, and maximum resiliency

Amazon Route 53 Resolver DNS resolution

Module 4: Specialized Infrastructure

AWS Storage Gateway solutions

On-demand VMware Cloud on AWS

Extending cloud infrastructure services with AWS Outposts

AWS Local Zones for latency-sensitive workloads

Your 5G network with and without AWS Wavelength

Module 5: Connecting Networks

Simplifying private subnet connections

VPC isolation with a shared services VPC

Transit Gateway Network Manager and VPC

Reachability Analyzer

AWS Resource Access Manager

AWS PrivateLink and endpoint services

Lab 2: Configuring Transit Gateways

Module 6: Containers

Container solutions compared to virtual machines

Docker benefits, components, solutions architecture, and versioning

Container hosting on AWS to reduce cost

Managed container services: Amazon Elastic

Container Service (Amazon ECS) and Amazon

Elastic Kubernetes Service (Amazon EKS)

AWS Fargate

Lab 3: Deploying an Application with Amazon ECS on

Fargate

Module 7: Continuous Integration/Continuous

Delivery (CI/CD)

CI/CD solutions and impact

CI/CD automation with AWS CodePipeline

Deployment models

AWS CloudFormation StackSets to improve deployment management

Module 8: High Availability and DDoS Protection

Common DDoS attacks layers

AWS WAF

AWS WAF web access control lists (ACLs), real-time metrics, logs, and security automation

AWS Shield Advanced services and AWS DDoS

Response Team (DRT) services

AWS Network Firewall and AWS Firewall Manager to protect accounts at scale

Module 9: Securing Data

What cryptography is, why you would use it, and how to use it

AWS KMS

AWS CloudHSM architecture

FIPS 140-2 Level 2 and Level 3 encryption

Secrets Manager

Module 10: Large-Scale Data Stores

Amazon S3 data storage management including storage class, inventory, metrics, and policies

Data lake vs. data warehouse: Differences, benefits, and examples

AWS Lake Formation solutions, security, and control

Lab 4: Setting Up a Data Lake with Lake Formation

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