

# Advanced Architecting on AWS with JAM – Intensive Training («AWSA2J»)

This course prepares you to become a AWS Certified Solutions Architect (Professional Level). You will learn how to build complex solutions that incorporate data services, governance, and security on AWS.

### Duration: 4 days Price: 3'600.– Course documents: Digital original AWS course books Vendor code: AWSA02

## Content

### Day 4: AWS Jam Day

- Solve real-world challenges together as a team in a safe AWS environment, guided by your instructor
- Compete against other teams to win the challenge with your colleagues and put your AWS skills into action
- All challenges are based on the scope of the course and will support your learning curve in a very effective way

### Day 1

- Review of Architecting for the Cloud Best Practices and the AWS Well-Architected Framework
- AWS Account Strategies
- Advanced Networking Architectures
- Deployment Management on AWS

### Day 2

- Designing Large Datastores
- Moving Large Datastores into AWS
- Big Data Architectures
- Designing for Large Scale Applications

### Day 3

- Building Resilience into Your Architecture
- Data Encryption and Key Management in AWS
- Securing Data on AWS
- Designing for Performance

# Key Learnings

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- Apply the AWS Well-Architected Framework
- Manage multiple AWS accounts for your organization
- Connect on-premises data centers to the AWS Cloud
- Understand billing implications of connecting multi-region VPCs
- Move large data from on-premises data centers to the AWS Cloud
- Design large datastores for the AWS Cloud
- Understand different architectural designs for scaling a large website
- Protect your infrastructure from DDoS attacks
- Secure your data on AWS with encryption
- Design protection of data at rest as well as data in flight
- Enhance the performance of your solutions
- Select the most appropriate AWS deployment mechanism

AWS JAM Day will be featured on the final 4th day of this course, as a gamified event where you will be split into teams to compete in a series of best practice challenges based on concepts covered in the course. In addition to the hands-on labs of the ILT courses, an additional day of curated and instructor-facilitated challenges allows learners to use AWS Jam to address real-world scenarios, representing common operational and troubleshooting tasks relevant for your job role. You will be able to apply your knowledge in a safe and real AWS environment and score points if you solve the challenge correctly. The aim of an AWS Jam is to develop, improve, and validate your skills in the AWS cloud and get ready to use your practical skills when you are back on your daily job.

# Methodology & didactics

This course comes in 4 instructor-led full day sessions with the instructor supervising the participants live. Each course consits of theory parts with live demos and practical lab exercises. The course can be attended either on-site at a physical Digicomp location or virtually via Zoom. Please also refer to each course's description for specific details regarding the prerequisites and the covered topics.

The last day of the course is an *AWSJAM*: Transform your theoretical skills into practical doing by solving real-word problems in a sandbox environment.

### Target audience

This course is intended for the following job roles:

• Solution Architect

Why should you attend this specific course? What are my benefits from taking this course? The Voice of the Instructor answers these questions. We have asked our instructor team to write a short text about WHY this course is very relevant for the respective job roles and what you can expect from attending the course. You can find this section in the course description under the *«Additional Information»* section.

### Requirements

We recommend that attendees of this course have attended the following course (or equivalent knowlege):

- Architecting on AWS with JAM Intensive Training («AWSA1J»)
- AWS Security Best Practices Intensive Training («AWSB09»)

### Additional information

This course is currently only supported by the Chrome and Firefox browsers. Please make sure that yo**digicomp** device has one of these browsers installed or that you can install them on it.

#### Voice of the Instructor

Participating in the "Advanced Architecting on AWS" course offers several compelling reasons for individuals who want to deepen their skills and knowledge in architecting complex solutions on the Amazon Web Services (AWS) platform. Here are some key benefits:

- 1. Advanced Architectural Concepts: The course goes beyond the fundamentals of AWS architecture and dives into advanced concepts and techniques. You'll gain a deeper understanding of designing highly available, scalable, and fault-tolerant systems using advanced AWS services and features.
- 2. Optimizing Performance and Cost: The course focuses on advanced strategies for optimizing the performance and cost efficiency of AWS deployments. You'll learn about advanced scaling techniques, caching strategies, and leveraging AWS services to enhance application performance and reduce costs.
- 3. Multi-region and Global Architectures: Building architectures that span multiple AWS regions or cater to a global user base requires specialized knowledge. The course covers best practices for designing and implementing multi-region architectures, including disaster recovery, data replication, and global content delivery.
- 4. Serverless Architectures: Serverless computing has gained significant popularity for its scalability and cost-effectiveness. The course explores advanced serverless architecture patterns using AWS Lambda, Amazon API Gateway, AWS Step Functions, and other related services. You'll learn how to design serverless applications that scale automatically and handle complex workflows.
- 5. Data Lakes and Analytics: As data volumes grow, organizations require robust data storage, processing, and analytics capabilities. The course delves into advanced data lake architectures using multiple advanced AWS services like Amazon S3, AWS Glue, Amazon Athena, and Lake Formation. You'll learn how to design data lakes that enable efficient data ingestion, transformation, and analysis.
- 6. Security and Compliance: The course covers advanced security topics, including identity and access management, encryption, advanced network security, and compliance considerations. You'll gain expertise in architecting secure and compliant solutions, ensuring the protection of sensitive data and meeting regulatory requirements.
- 7. DevOps and Continuous Delivery: The course explores advanced techniques for implementing DevOps practices and continuous delivery on AWS. You'll learn about infrastructure as code using AWS CloudFormation, containerization with Amazon Elastic Container Service (ECS) and Amazon Elastic Kubernetes Service (EKS), and leveraging AWS CodePipeline and AWS CodeDeploy for automated deployments.
- 8. Real-world Use Cases and Scenarios: The course includes real-world use cases and scenarios that simulate complex architectural challenges. By working through these practical exercises, you'll develop problem-solving skills and gain hands-on experience in architecting advanced solutions on AWS.
- 9. AWS Certification Preparation: The course serves as excellent preparation for advanced AWS certifications such as the AWS Certified Solutions Architect Professional exam. It covers the topics and concepts required to demonstrate your expertise in architecting complex solutions on AWS.

By participating in the "Advanced Architecting on AWS" course, you'll expand your architectural knowledge and skills, enabling you to tackle complex challenges and design sophisticated solutions on the AWS platform. This course caters to experienced architects and professionals looking to take their AWS architectural skills to the next level and stay at the forefront of cloud computing.

# Any questions?

We are happy to advise you on +41 44 447 21 21 or info@digicomp.ch. You can find detailed information about dates on www.digicomp.ch/courses-itprovider/amazon-web-services-aws/aws-solutions-architect/courseadvanced-architecting-on-aws-with-jam-intensive-training

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