

AWS Certified Developer OFFICIAL STUDY GUIDE ASSOCIATE (DVA-C01) EXAM

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AWS® Certified Developer Official Study Guide Associate (DVA-C01) Exam







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Michael would like to thank his coworkers in the AWS Training and Certification organization—he is very proud to be a part of this amazing group of people. Finally, he would like to thank his spouse, Betsy, and son, Robert. Without their support and love, this book would not have been possible.

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Foreword

Software development is changing. In today's competitive market, customers demand lowlatency, highly scalable, responsive applications that work—all the time. Customers expect to receive the same level of performance and consistency of applications regardless of their device. Whether they are on a mobile device, desktop, laptop, or Amazon Fire tablet, they expect that applications will behave similarly across platforms.

The goal of building working applications that respond to increasing expectations means that building applications on highly available architecture is now more important than ever. As developers, you can use AWS Cloud computing to build highly available architectures and services on which to deploy and run your applications.

AWS provides you with a broad set of tools to build and develop your applications. We empower you by providing the best tools to achieve your goals. To that end, you'll learn about compute services, such as Amazon Elastic Compute Cloud (Amazon EC2), and file object storage services, such as Amazon Simple Storage Service (Amazon S3). You'll also learn about the many types of applications that you can build on top of these services.

Historically, developers have been responsible for designing, creating, and running their applications. In the AWS Cloud, you can create your compute resources with one click using AWS CloudFormation, or you can fully automate the running of your containers using AWS Fargate.

AWS continually listens to customer feedback to understand your workloads and changing needs better. AWS also monitors market trends, understanding that you want to build and run applications on the cloud, but you don't want to worry about managing the underlying infrastructure. You want infrastructure to scale automatically, you want services with a built-in high availability infrastructure, and you want to pay only for what you consume.

In response to these demands, AWS pioneered services such as AWS Lambda, which is based on serverless technology. It enables you to run compute programming logic in applications without having to worry about maintaining anything other than their code and core logic.

Today is the most exciting time to be a developer. With AWS services, you can focus on the core functionality of your application and allow the AWS Cloud to perform all of the administration of the resources, including server and operating system maintenance. This flexibility provides you with the unique ability to focus on what matters to you most—building, maintaining, and, most importantly, innovating your applications.

In this study guide, AWS experts coach you on how to develop and build applications that can run on and integrate with AWS services. This knowledge allows you, as a developer, to build your services and features quickly and get them running in the AWS Cloud for your customers to use. When you complete this guide and the test bank in the accompanying interactive online learning environment, you have gained the fundamental knowledge to succeed on the AWS Certified Developer – Associate certification exam.

So imagine, dream, and build, because on the AWS Cloud, the only limit is your imagination.

Werner Vogels Vice President and Corporate Technology Officer Amazon