AWS Fundamentals

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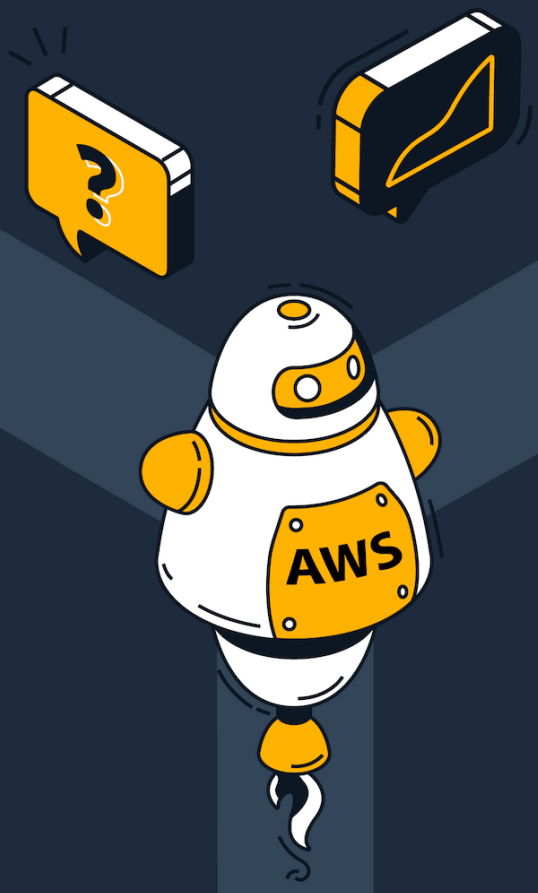

AWS for the Real World
Not Just for Certifications

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AWS for the Real World - Not Just for Certifications

Preview Edition - Lambda only

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Introduction

With this book, we hope to get you a deeper understanding of AWS, beyond just passing fundamental certifications. It covers a wide range of services, including EC2, S3, RDS, DynamoDB, Lambda, and many more, and provides practical examples and implicit use cases for each one. The book is designed to be a hands-on resource, with step-by-step instructions and detailed explanations to help you understand how to use AWS in real-world scenarios.

Whether you're a developer, system administrator, or even an engineering manager, this book will provide you with the fundamental knowledge you need to successfully build and deploy applications on AWS.

About the Scope of This Book

This book is all about the fundamentals of AWS. The goal is to get you started on how to use AWS in the real world.

First, we'll show you how to create your first AWS Account, how to set up your root users, and how to make sure you will receive billing alerts.

The next part covers the most important AWS services. AWS consists of more than 255 services. We picked out the services that you will use in almost any cloud application. Example services are Elastic Container Service (ECS), Lambda, Simple Queue Service (SQS), Simple Notification Service (SNS), EventBridge, and many more. We dive deep into these services and give you recommendations for the best configuration options, jump into use cases and provide you a list of tips and tricks and things to remember.

In the last part, we give you an introduction to Infrastructure as Code. We want you to understand the differences between various frameworks. For that, we've created a brief introduction and history lesson on IaC. CloudFormation, Serverless, and the Cloud Development Kit (CDK) are three frameworks that are used a lot. We show you examples of how to create infrastructure with all three of them.

Why Did We Bother to Write This?

Why did we bother writing another book about AWS?

Working with AWS both felt like using superpowers. On the one side, you can build applications that are globally available without caring about infrastructure. On the other side having the skill of using AWS is globally in demand.

We want to pass on the knowledge of both points as well. By knowing how to build on AWS you can boost your career. But you can also finally work on your SaaS idea.

We're both lucky in the way we learned AWS. During our studies, we worked in companies where experienced employees could teach us the basics directly but we've also had the freedom to learn ourselves and make mistakes. Through the years, we could harden our skills and gain a lot of insights into different areas. We've seen how AWS progressed, but the fundamentals still remained the same.

We saw colleagues and friends struggling a lot with learning the core services of AWS service and its underlying principles and how to apply them in the day-to-day work. The typical learning path is to get started with certifications. While this is not inherently a bad way it is often not enough. Certificates can be really hard to master. But they often don't bring enough value if you don't put the learnings into immediate practice. People are often still overwhelmed by which services they should use in which situation and how to configure them accordingly. This is the main motivation of this book.

Learning AWS doesn't need to be hard. It is important to focus on the basics and to understand them well. Once this is done all new services or features can be understood really well.

Each cloud application consists of the same set of services and principles.

We both never thought about writing a book. But during our time working, and especially once we started to create content we saw the need. There were so many questions and misconceptions that we wanted to create a resource on how to learn AWS for the real world**.**

Who Is This Book For

This book is for everybody who wants to learn about the fundamentals of AWS. We cover the core building blocks of AWS and Infrastructure as Code.

We will show you example use cases and configuration options for each service. With that, you are ready to understand how to apply it in the real world.

Programming experience doesn't matter for this book. While infrastructure is code nowadays you don't need to know any specific programming language. Programming is a tool you will use to build on the cloud, but it is not a prerequisite as it can be acquired along the path.

This book is also for everybody who did some certifications like the Cloud Practitioner or Solutions Architect Associate but is still overwhelmed with how to apply the learnings in real-world projects.

If you're an entrepreneur who wants to start building on AWS this is also a great resource for you on how to get started.

Or if you are the technical manager of a team and somehow lost contact with AWS and its configuration options you can brush up your knowledge fast and reduce the knowledge gap in your engineering team.

If you are working with AWS for quite some time but still are not sure about some configuration basics (like when to use long & when to use short polling), this is also for you.

Who Is This Book Not For

Honesty is important. We only want people to buy this book if they can profit immensely from reading it.

Firstly, if you're really proficient with AWS and you've worked in the area for many years, likely this book is not for you. We don't require previous knowledge about basically anything, and that's also where we start. By exploring every core service as deeply as possible, we want to give aspiring cloud engineers a fundamental tool to start building their own applications or simply to get hired in this area.

This book is also not for people that don't want to or simply won't directly or indirectly work with AWS. If your future or current focus is Azure or Google Cloud Platform, there's more value in purchasing another book. It can make sense to understand how AWS is handling things, but if you aim to work with another cloud provider, learning their specifics is key.

Furthermore, this book doesn't focus on passing certifications. You'll learn the principles that are required to know how to build applications from scratch and how to apply that knowledge, but passing certifications often require very deep knowledge that goes way beyond. This book is a good tool to set yourself up for a good baseline for fundamental certifications like the Cloud Practitioner or the Solutions Architect Associate. But if you focus on passing certifications, doing practice exams, or courses that strictly focus on exam questions, will do a much better job.