**Amazon EC2: The foundation of elastic computing**

On page 2, the explanation provided does not really give the reader a more practical understanding of what EC2 really is. It’s very high level. Even the diagram in Figure 2.1, doesn’t help in understanding the concept of EC2. It includes CI/DC components which are not the focus of this specific section.

Modified to reflect feedback

To aid the reader to grasp the concept of EC2, it will be relevant to include conceptual architectural components of EC2 (compute, network, storage, memory) as presented in the page below: https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/concepts.html

Image changed using recommended source

**Auto-scaling: Dynamic resource management**

Figure 2.2 on page is not explicit enough to help the reader understand how auto-scaling works. Preferably, there should be a clearer diagram or a couple of paragraph to explain it.

The section was re-written in its entirety. Figure removed from the book.

**EC2 Spot Instances: Cost-efficient computing**

Figure 2.3 cannot easily be understood by a newbie. It would be relevant to add a paragraph explaining the diagram in plain English.

Detailed explanation added.

On page 8, the sentence “Moreover, EC2 Spot Instances can be integrated with tools like AWS Auto Scaling and EC2 Fleet to automate workload management, further enhancing efficiency and availability” is duplicated in 2 paragraphs, creating redundancy.

Section was re-written in its entirety

**Amazon ECS**

On page 10, the “ECS provides robust integration with Amazon Elastic Container Registry (ECR), simplifies container image storage and management, and supports application scaling using AWS Auto Scaling and Application Load Balancers for high availability” is duplicated in 2 paragraphs, creating redundancy.

Section was re-written in its entirety. I made the following changes:

1. **Removed the overpromising language**: I eliminated the sentence that promised deep dives into advanced configurations, best practices, and case studies from the current chapter. The text no longer makes claims that aren't fulfilled within the section itself.
2. **Added real-world examples**: I provided detailed real-world use cases and examples to enhance the practical understanding of EC2 Spot Instances, such as the mention of media and entertainment companies using Spot Instances for rendering high-definition videos and research institutions utilizing them for genomic analysis.
3. **Avoided surface-level explanations**: The revised section includes more detailed explanations of how Spot Instances work, their cost benefits, and their integrations with other AWS services like Auto Scaling and EC2 Fleet.
4. **Expanded on technical depth**: Instead of merely explaining that Spot Instances exist, the revised version now dives deeper into how they can be applied effectively in various industries, especially for cost-sensitive tasks. The use of academic research and specific examples added the necessary technical depth that the TR requested.

It is likely more aligned with the technical reviewer’s suggestions.

**Amazon EKS: Mastering container orchestration**

Figure 2.5 needs a little bit of explanation on page 11.

Detailed explanation added

**Amazon Lightsail**

Figure 2.6 is not coherent with the content of the section. More contexts need to be added to allow the reader to understand how it fits into the bigger picture.

Section re-written from scratch; figure removed.

**AWS Elastic Beanstalk: Streamlined application deployment**

On page 23, its said “Beanstalk…. supports various programming languages, including Java, .NET, PHP, Node.js, Python, Ruby, Go, and **Docker**”.

**Docker** is not a programming language. I would make more sense to remove it from the list.

This is foundationally wrong. Anyway, the call is valid for the scenario.

On page 24, besides the support for blue-green deployments, it would be also good to add “Canary Deployments” as one of the great features of Beanstalk.

Irrelevant, new chapter was built

**Realizing the potential of AWS Elastic Beanstalk**

In the Figure 2.14 on page 26, Tomcat should not be on top of Apache http server. Putting it on top means that Tomcat runs on top of Apache, which is not the case. You may consider placing them side by side to show that the Application can run on either Apache http server (web) or Tomcat (non-web).

Application

Tomcat

Apache

Linux

Well, this image was handmade originally by Jeff Barr, an AWS old-timer. Today he is only one of the AWS CxO (Chief Evangelist Officer). I suggest having this discussion with him, I am only using/referencing official, trustworthy source by one of the top authorities in the world about the subject.

**Unraveling the layers of AWS Fargate**

On page 29, the following sentence is redundant because it is also replicated in the paragraph before: “As we journey further into this chapter, we will explore AWS Fargate in greater depth,

unraveling advanced configurations, best practices, and real-world case studies”.

Chapter re-written.

**AWS Lambda**

On page 29, the Figure 2.17 seems to be off-topic because it has nothing to do with the introduction to Lambda in the paragraph above it.

New section entirely. No figure.

On page 30 it is said: “Lambda….support a myriad of **programming languages**, including Python, **Node.js**, Java, and more”.

Node.js is not a programming language. It’s a runtime.

Fundamentally wrong.

**Conclusion**

On page 41, it says: “….cloud simulation with AWS SimSpace Weaver were covered…”.

This may not be correct because in the whole chapter there is no section dedicated to SimSpace.

Adjusted to incorporate feedback. Like in chapter 1, it is important for the reviewers revisit current offerings and components of AWS. I used the actual AWS documentation as guide from the book outline to the last chapter. I am not – and will not – mention services or components that were deprecated, that are not supported anymore or phased out by AWS.

**GENERAL REMARKS**

At the end of nearly all the sections, the following promise was made:

“As we embark on this chapter's journey, our exploration of [service name] will extend beyond

surface-level insights, delving into advanced configurations, best practices, and real-world

case studies.

However, as the current chapter unfolded, I didn’t see any section where:

* The exploration of a respective service was extended beyond surce-level insights
* Delved into advanced configurations
* Delved into best practices
* Presented real-world case studies.

Thus, because these promises where not fulfilled in this chapter, it will make sense to remove that specific sentence form all the sections.

But if there is a plan to fulfil them in the upcoming chapters, then its to say “in the upcoming chapters” instead of “this chapter”.

The entire chapter was re-written, many parts from scratch.