

# 10 Mais Importantes lições trabalhando com AWS

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

whoami 🤙



## Ibrahim Cesar



Diretor de Tecnologia @ Nexo Jornal  
Fã de literatura russa e ficção científica  
Entusiasta das relações sócio-tecnológicas

🐳 @ibrahimcesar

🤖 /ibrahimcesar

👔 /in/ibrahimcesar

[ibrahimcesar.cloud](https://ibrahimcesar.cloud) | [@ibrahimcesar](https://twitter.com/ibrahimcesar)

whoami 🤙



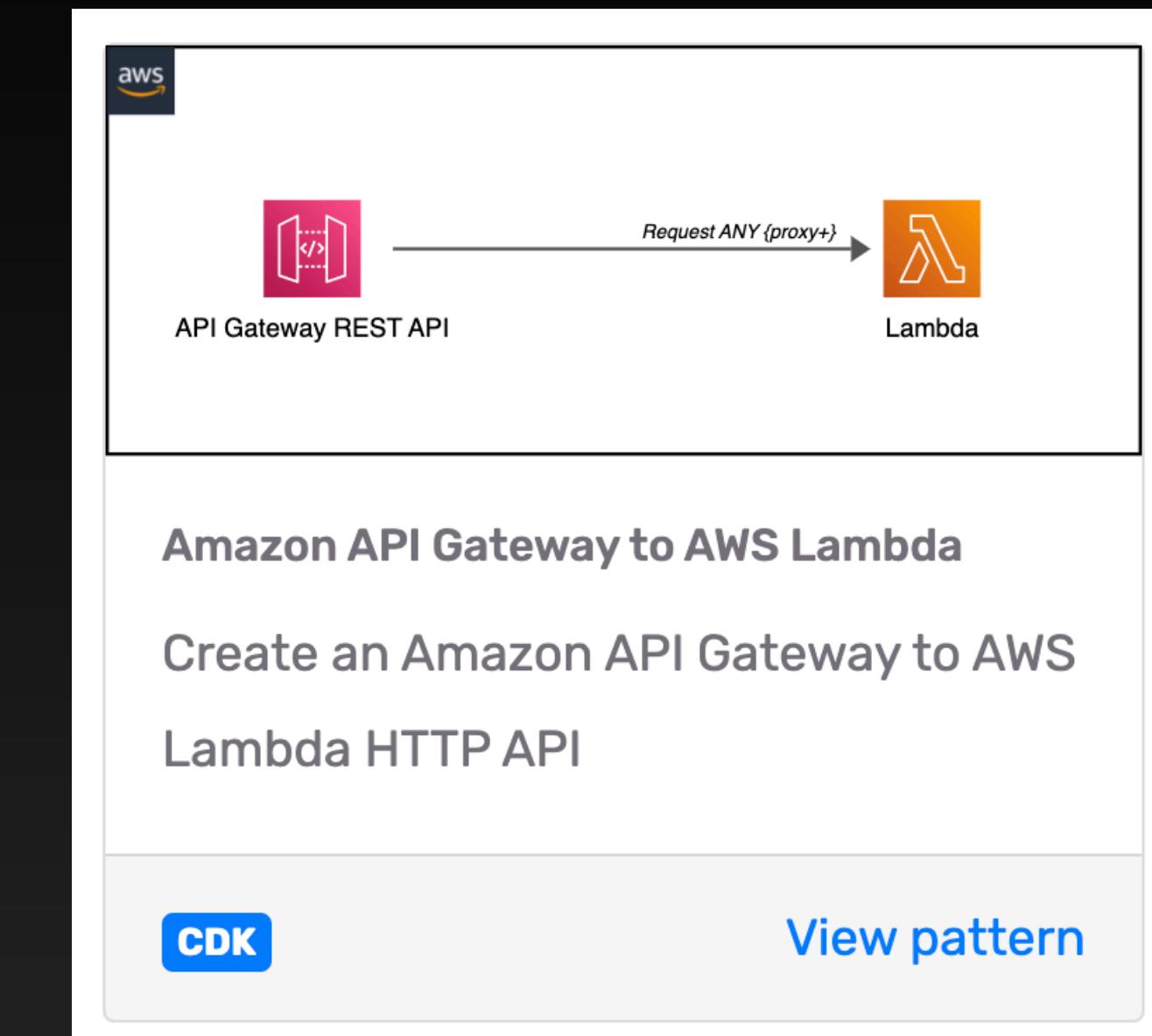
## Ibrahim Cesar



AWS  
community  
**builder**

Diretor de Tecnologia @ Nexo Jornal  
Fã de literatura russa e ficção científica  
Entusiasta das relações sócio-tecnológicas

🐳 @ibrahimcesar  
🐙 /ibrahimcesar  
👔 /in/ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | [@ibrahimcesar](https://twitter.com/ibrahimcesar)

whoami 🤝



Ibrahim  
Cesar



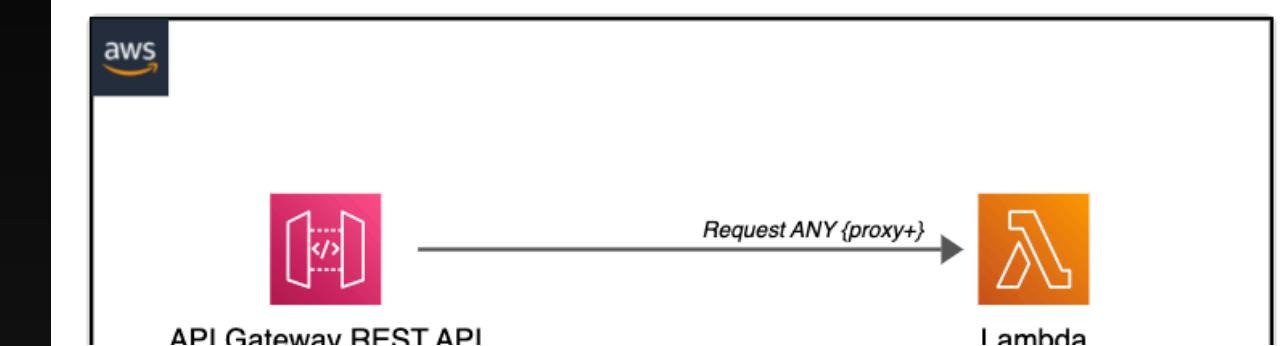
AWS  
community  
**builder**

Diretor de Tecnologia @ Nexo Jornal  
Fã de literatura russa e ficção científica  
Entusiasta das relações sócio-tecnológicas

 @ibrahimcesar

 /ibrahimcesar

 /in/ibrahimcesar



aws/aws-cdk

#17213 fix(redshift): tableNameSuffix evaluation

7 comments 4 reviews 6 files +9 -9

ibrahimcesar • October 28, 2021 17 commits

fix(redshift): tableNameSuffix evaluation by ibrahimcesar · Pull Request #17213 · aws/aws-cdk

Check if the generateSuffix is explicitly 'true'; Closes #17064 By submitting this pull request, I confirm that my contribution is made under the terms of the Apache-2.0 license

 GitHub

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | [@ibrahimcesar](https://twitter.com/ibrahimcesar)



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

# Overview of Amazon Web Services

Publication date: August 5, 2021 ([Document Details \(p. 77\)](#))

## Abstract

Amazon Web Services offers a broad set of global cloud-based products including compute, storage, databases, analytics, networking, mobile, developer tools, management tools, IoT, security, and enterprise applications: on-demand, available in seconds, with pay-as-you-go pricing. From data warehousing to deployment tools, directories to content delivery, over 200 AWS services are available. New services can be provisioned quickly, without the upfront capital expense. This allows enterprises, start-ups, small and medium-sized businesses, and customers in the public sector to access the building blocks they need to respond quickly to changing business requirements. This whitepaper provides you with an overview of the benefits of the AWS Cloud and introduces you to the services that make up the platform.

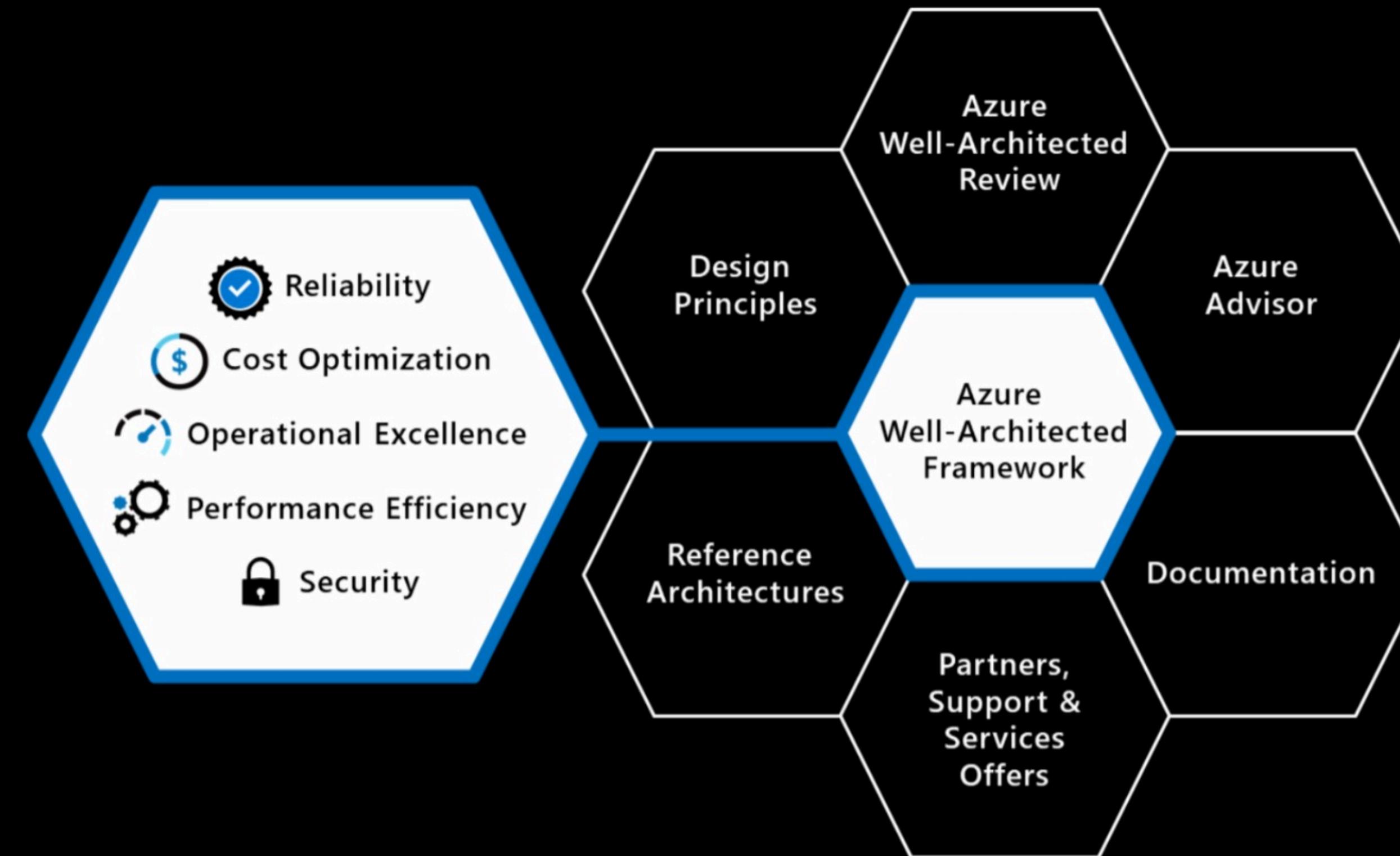
01

# Well-Architected Framework

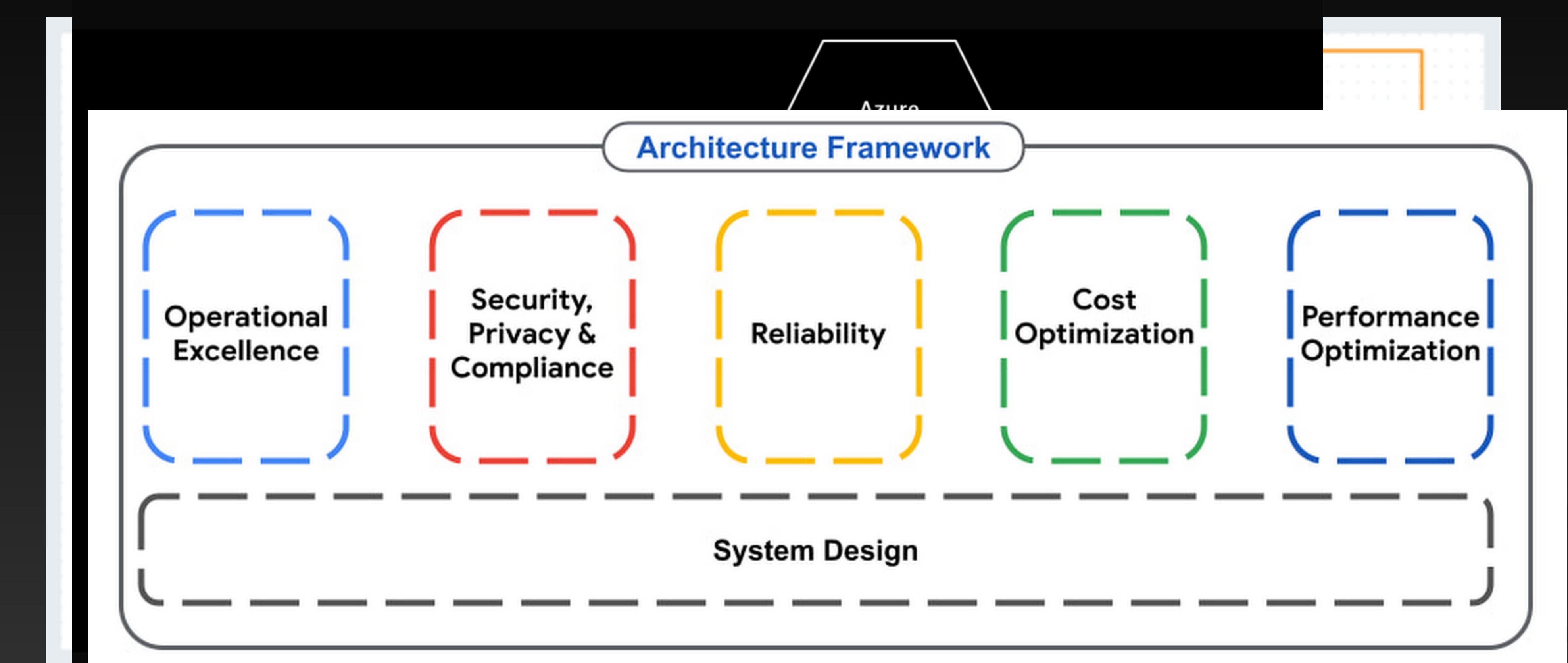
[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](https://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar





## Alibaba Cloud's Well-Architected Framework

Learn the three pillars of architecture on Alibaba Cloud to review, evaluate, and improve the quality of your workload.



### Reliability

The reliability pillar focuses on Alibaba Cloud's capabilities of ensuring business continuity from failures. This whitepaper mainly talks about reliability design for core Alibaba Cloud products and solutions from service scalability, O&M, costs, and security perspectives.

[Click to Download](#)



### Security

The security pillar focuses on information security. This whitepaper mainly talks about shared security responsibilities, security compliance and privacy, Alibaba Cloud infrastructure and security architecture, security capabilities provided by Alibaba Cloud products, security services provided by Alibaba Cloud security, and Alibaba Cloud data security system.

[Click to Download](#)



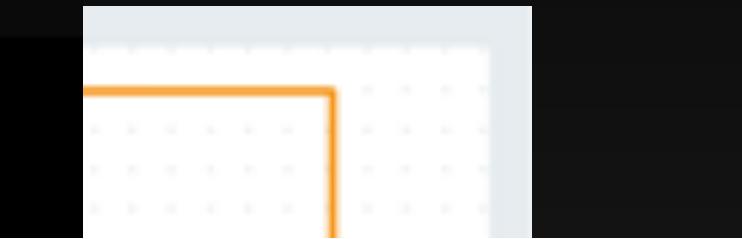
### Performance

The performance efficiency pillar focuses on the efficient use of computing resources to meet various requirements and to maintain efficiency as requirements change and technologies evolve. This whitepaper provides in-depth, best practice guidance for you to design performance-efficient architectures on Alibaba Cloud.

[Click to Download](#)

[ibrahimcesar.cloud | @ibrahimcesar](#)

Business Goal	Key Focus Areas
<b>Security and compliance</b>	<ul style="list-style-type: none"><li>• User authentication</li><li>• Resource isolation and access control</li><li>• Compute security</li><li>• Database security</li><li>• Data protection</li><li>• Network security</li></ul>
<b>Reliability and resilience</b>	<ul style="list-style-type: none"><li>• Fault-tolerant network architecture</li><li>• Service limits and quotas</li><li>• Data backup</li><li>• Scaling</li></ul>
<b>Performance and cost optimization</b>	<ul style="list-style-type: none"><li>• Compute sizing</li><li>• Storage strategy</li><li>• Network monitoring and tuning</li><li>• Cost tracking and management</li></ul>
<b>Operational efficiency</b>	<ul style="list-style-type: none"><li>• Deployment strategy</li><li>• Workload monitoring</li><li>• OS management</li><li>• Support</li></ul>



erformance

This pillar focuses on the efficient use of resources to meet various requirements and to maintain system performance as technologies evolve. This pillar provides best practice guidance for you to design and build highly performant architectures on Alibaba Cloud.

[Click to Download](#)

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



## Operational Excellence

Run, manage and monitor production workload to deliver business value and continuous improve on supporting process and events



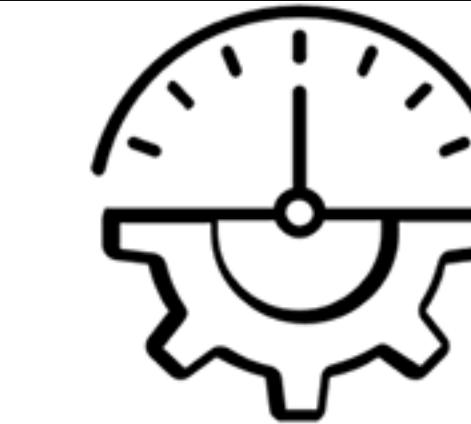
## Security

Protecting information, systems, and assets along from outside world with risk assessment, unplanned failures, and mitigation strategies



## Reliability

Auto recover workload from infrastructure, power or system failures with dynamic resource management to meet operational threshold.



## Performance Efficiency

Use computing resources efficiently to support on demand changes for delivering workload with maximum performance to meet the SLA



## Cost Optimization

Avoiding & eliminate un-needed cost or replace resources with cost-effective resources without impacting the best practices and business need

02

# Heurística padrão

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

## THE GOOD PARTS OF AWS



## The Default Heuristic

Chasing the best tool for the job is a particularly insidious trap when it comes to making progress—especially at the beginning of a project. We consider the relentless search for the best tool to be an optimization fallacy—in the same category as any other premature optimization.

Searching for the optimal option is almost always expensive. Any belief that we can easily discover the best option by exhaustively testing each one is delusional. To make matters worse, we developers tend to enjoy tinkering with new technology and figuring out how things work, and this only amplifies the vicious cycle of

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

Figure 1: Magic Quadrant for Cloud Infrastructure and Platform Services



Source: Gartner (July 2021)

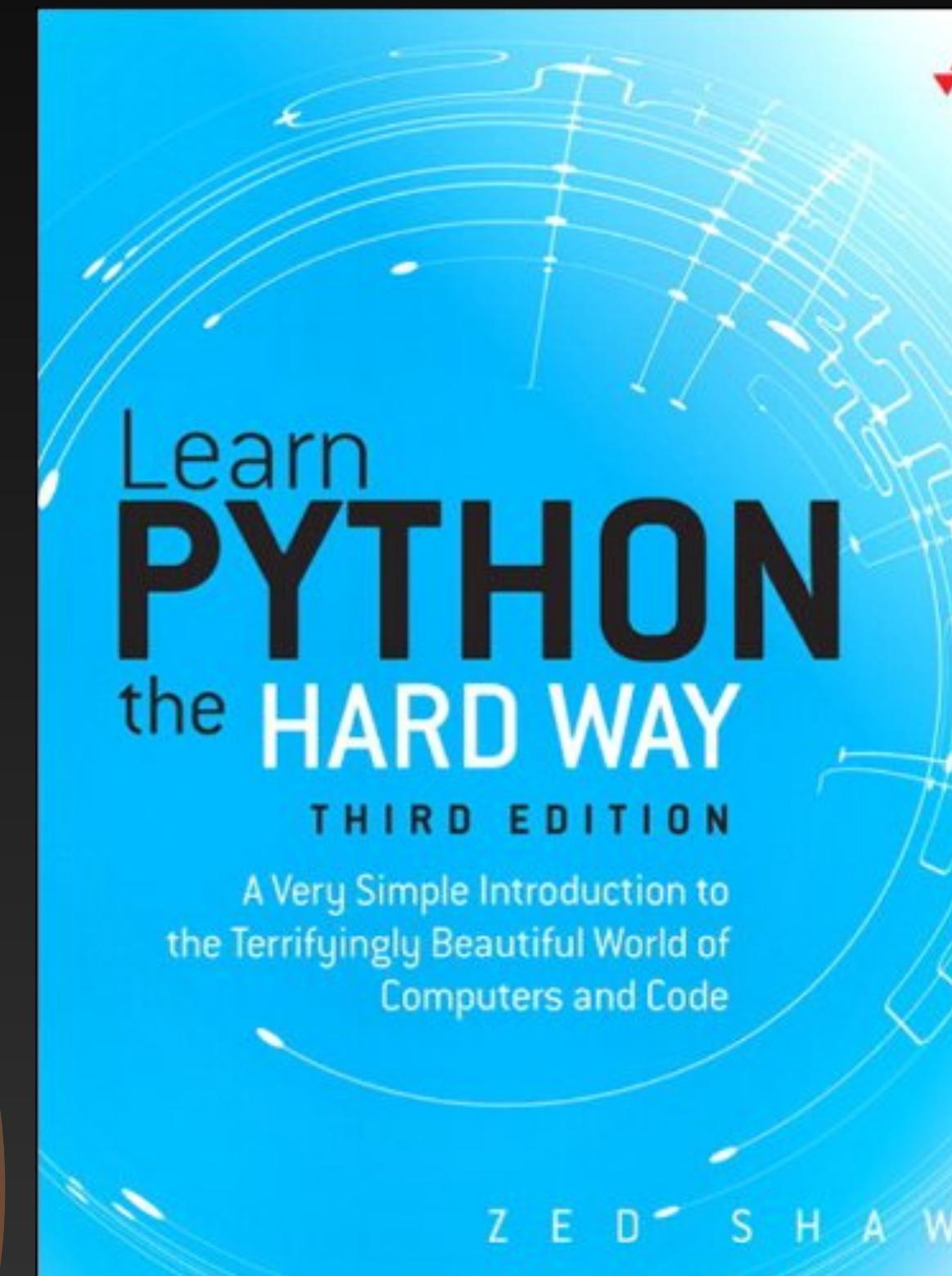
03

# AWS: The Hard Way

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



“There is no  
compression  
algorithm for  
experience.”

Andy Jassy, CEO, AWS

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | [@ibrahimcesar](https://twitter.com/ibrahimcesar)

The screenshot shows the AWS Management Console homepage. On the left, there's a sidebar titled "AWS services" with sections for "Recently visited services" and "All services". Below this is a "Build a solution" section with six options: "Launch a virtual machine" (With EC2, 2-3 minutes), "Build a web app" (With Elastic Beanstalk, 6 minutes), "Build using virtual servers" (With Lightsail, 1-2 minutes), "Register a domain" (With Route 53, 3 minutes), "Connect an IoT device" (With AWS IoT, 5 minutes), and "Start migrating to AWS" (With AWS MGN, 1-2 minutes). To the right, there are two columns: one for "Stay connected to your AWS resources on-the-go" featuring the AWS Console Mobile App, and another for "Explore AWS" with sections for "Free AWS Training", "AWS Certification", "AWS Certification Resources", "Calling All Java and Python Developers", and "Have feedback?".

ibrahimcesar.cloud | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



04

# Infraestura como Código (IaC)

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

**Construct Hub**

Getting Started Documentation Contribute

## Simplify cloud development with constructs

Find and use open-source Cloud Development Kit (CDK) libraries

Search 700+ construct libraries Find Constructs

**One home for all CDKs**  
Find libraries for AWS Cloud Development Kit (AWS CDK), which generates AWS CloudFormation templates, CDK for Terraform (CDKtf), which generates HashiCorp Terraform configuration files, and CDK for Kubernetes (CDK8s), which generates Kubernetes manifests.

 AWS CDK  CDK8s  CDKtf

**Support across languages**  
Define, test, and deploy cloud infrastructure using high level programming languages such as TypeScript, Python, Java, and .NET. Find documentation, API references and code samples to quickly build your application.

 TS TypeScript  Python  Java  .NET

**Provision a range of cloud resources**  
Find construct libraries published by the community and cloud service providers such as Datadog, Amazon Web Services (AWS), MongoDB, Aqua Security, and more.

 Datadog  AWS  MongoDB  Aqua Security

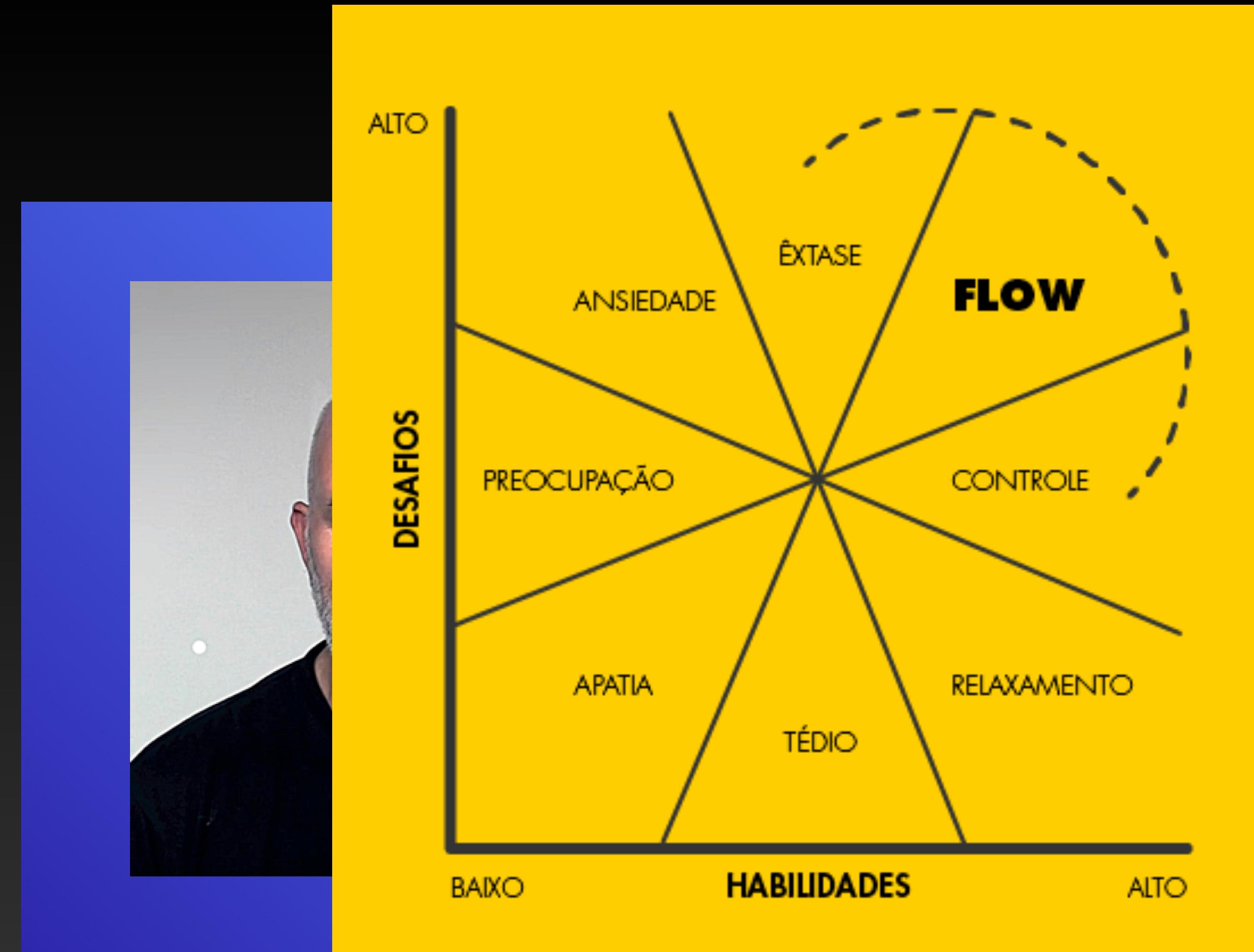
AWS Service Terms | Privacy | Construct Hub Site Terms | Legal



A portrait photograph of a man with a beard and mustache, wearing a black t-shirt, set against a light gray background. The portrait is framed by a blue border at the top and bottom.

The right side of the slide features a black rectangular area containing the AWS CDK logo (a white cloud icon with three cubes) and the text "AWS CDK". Below this, the slogan "Meeting developers where they are" is displayed. At the bottom, there are two rows of icons: the top row includes TS, JS, Python, Java, Go, and .NET; the bottom row includes six pink checkmark icons.

[ibrahimcesar.cloud](https://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

05

# Serverless é uma mudança cultural

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

# Serverless is Ready, Developers Are Not |

{ 2021-03-28 }

🌐 written in English

~ 13m 1s 🎧

ibrahimcesar.cloud | @ibrahimcesar

## Serverless Reads 😎

Ibrahim Cesar wrote a very interesting piece that argues that **serverless is ready, but developers are not**. He might just be spot on.

~ 13m 1s 🔍

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

## Final Thoughts 🤔

I spent some time this past week **refactoring code** for one of my open source projects and realized again just how much boilerplate goes into our serverless applications. Not only that, but as Ibrahim Cesar **points out**, it can take a *long* time to onboard new developers and get them to be productive with serverless. It pains me to see something so amazing fail so miserably because of a steep learning curve.

I'm going to keep working on the solution.



Until next week,  
*Jeremy*

interesting  
**serverless is ready,**  
might just be

3m 1s



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

## 'Serverless is Ready, Developers Are

**Not'** — You're reading a serverless newsletter so you're at least *sympathetic* to the serverless approach, but every day I encounter developers who dismiss it out of hand or can't rationalize the idea of all the moving parts involved. This opinion piece ponders the perceived 'cognitive overload' of the serverless ecosystem and how there's still a knowledge gap to bridge.

IBRAHIM CESAR

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

## 4. Serverless is Ready, Developers Are Not

Meanwhile: Ibrahim

Cesar [shares his thoughts](#) on the non-technical aspects of adapting to a Serverless world – ranging from the steep learning curve, to the need to be ‘cost-aware’ of every decision we make.



S

**Level:** Starter

[dev.to](#) • Share

[ibrahimcesar.cloud](#) | @ibrahimcesar



 **Sheen Brisals**  
@sheenbrisals 

Nice read  [@ibrahimcesar](#) 

My take is, "[#Serverless](#) is ready. Developers are ready. Organisations are not."

Often organisations are cast with the 'evil spell of fear' by traditional thinkers. Lock-in, agnostic, etc., spins them and slows their progress.

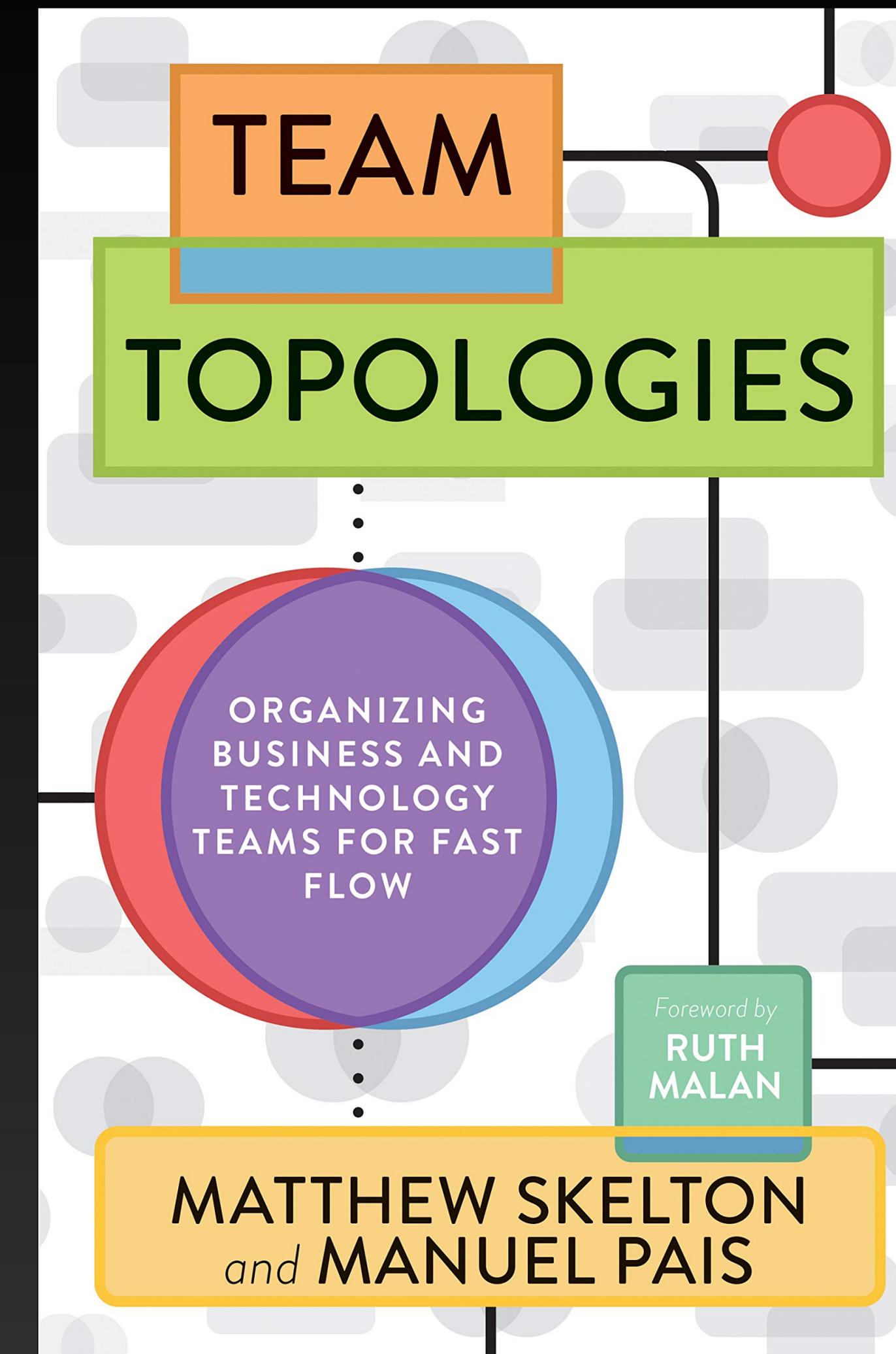
 **Ibrahim Cesar**  no [#TDCFUTURE](#) — 30/11 e 02/12 @ibrahimcesar  
Inspired by @andrewbrown I started to think a lot about his phrase "Serverless is Ready, Developers Are Not", so I wrote this post on [@ThePracticalDev](#) [#serverless](#) [#serverlessforeveryone](#) [#awscommunity](#) [dev.to/aws-builders/s...](#)

4:51 PM · 30 de mar de 2021 

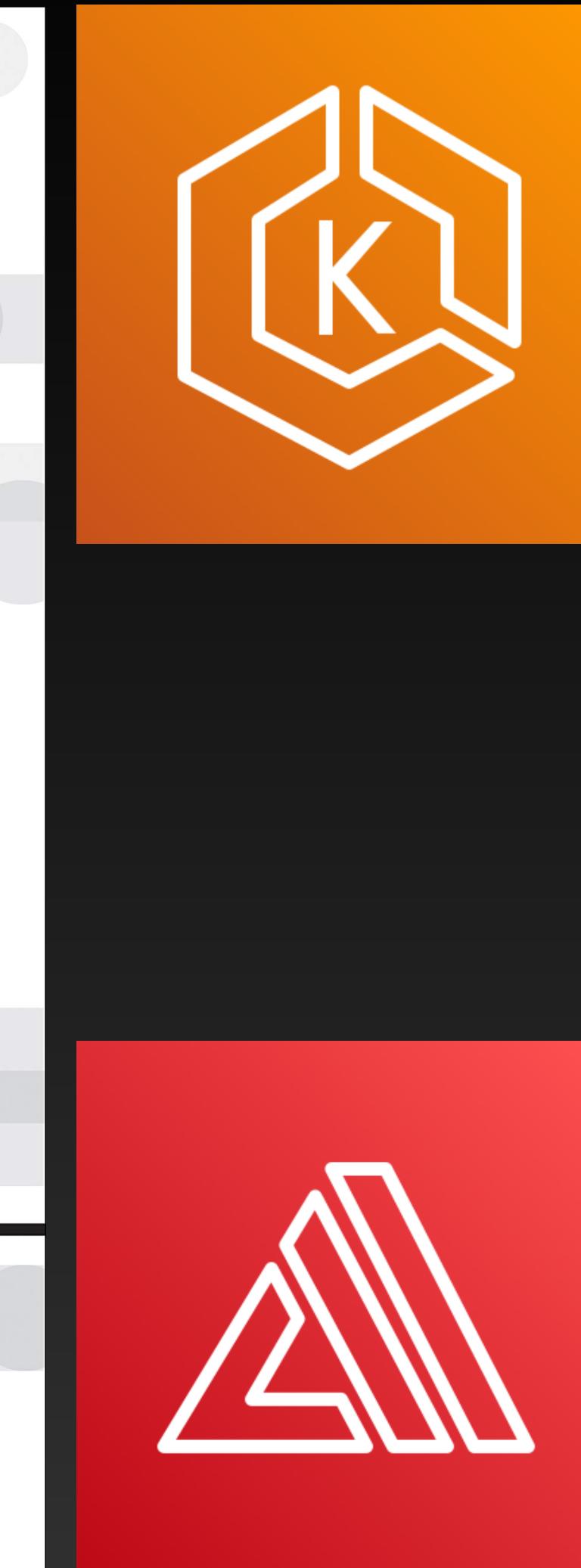
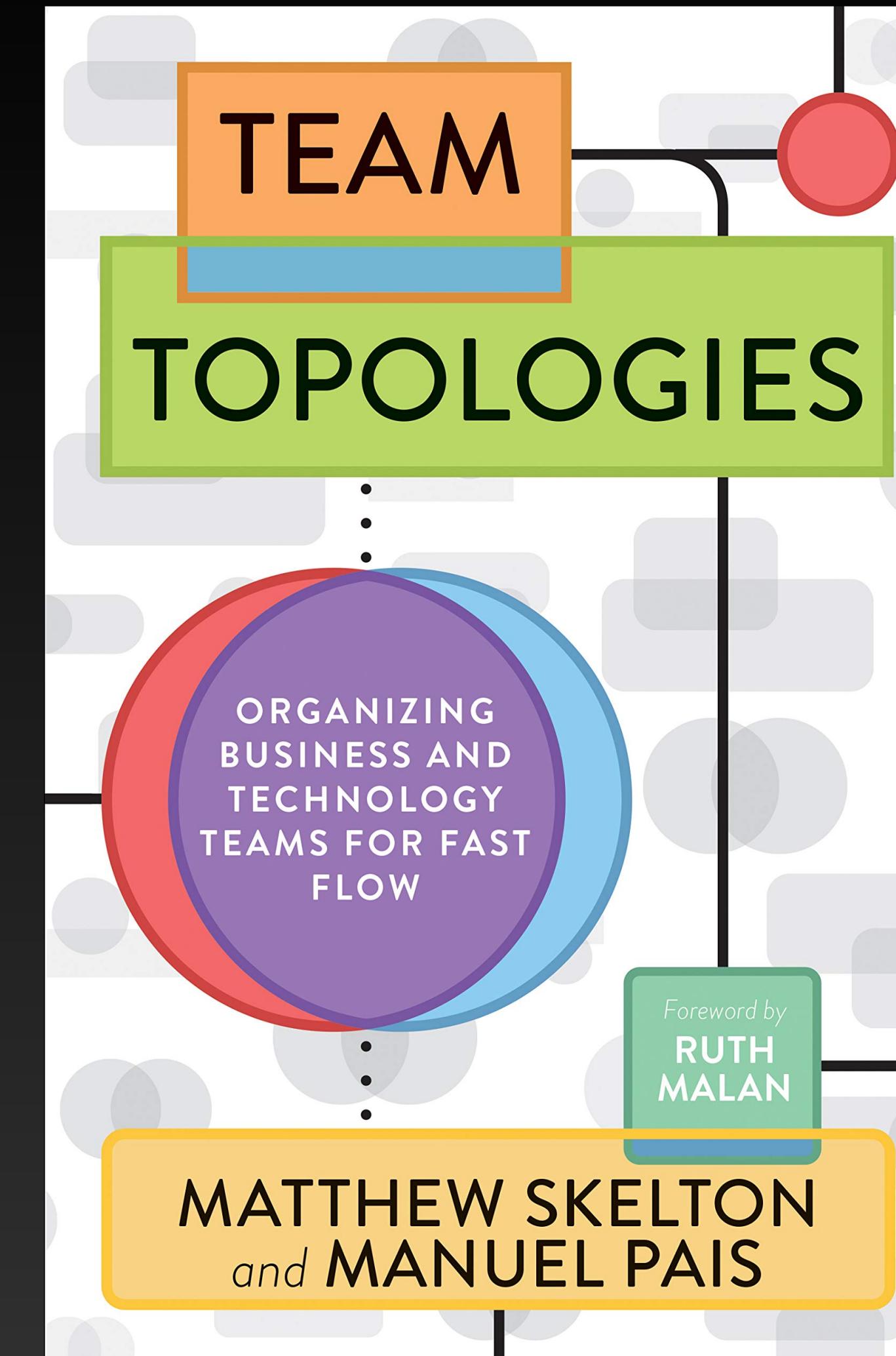
06

# Topologia dos times

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

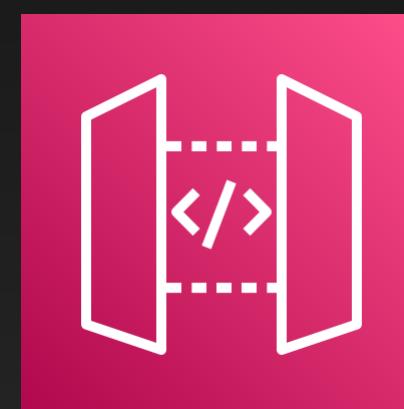
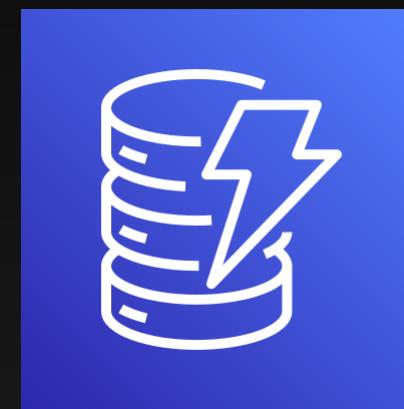
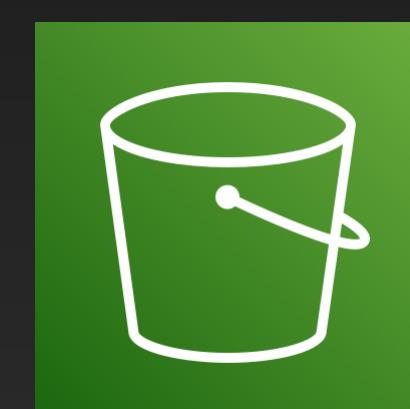
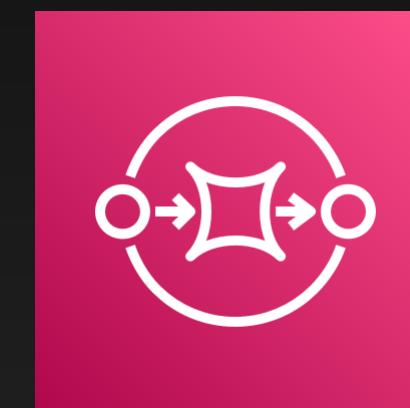
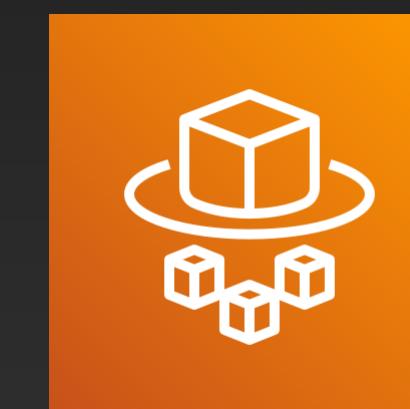
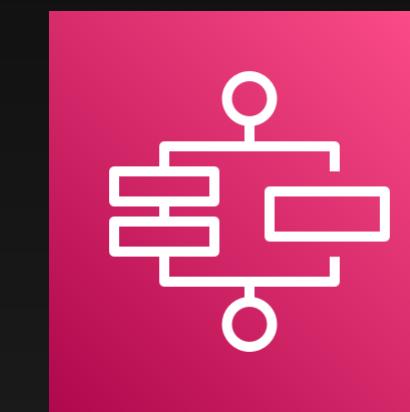


[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

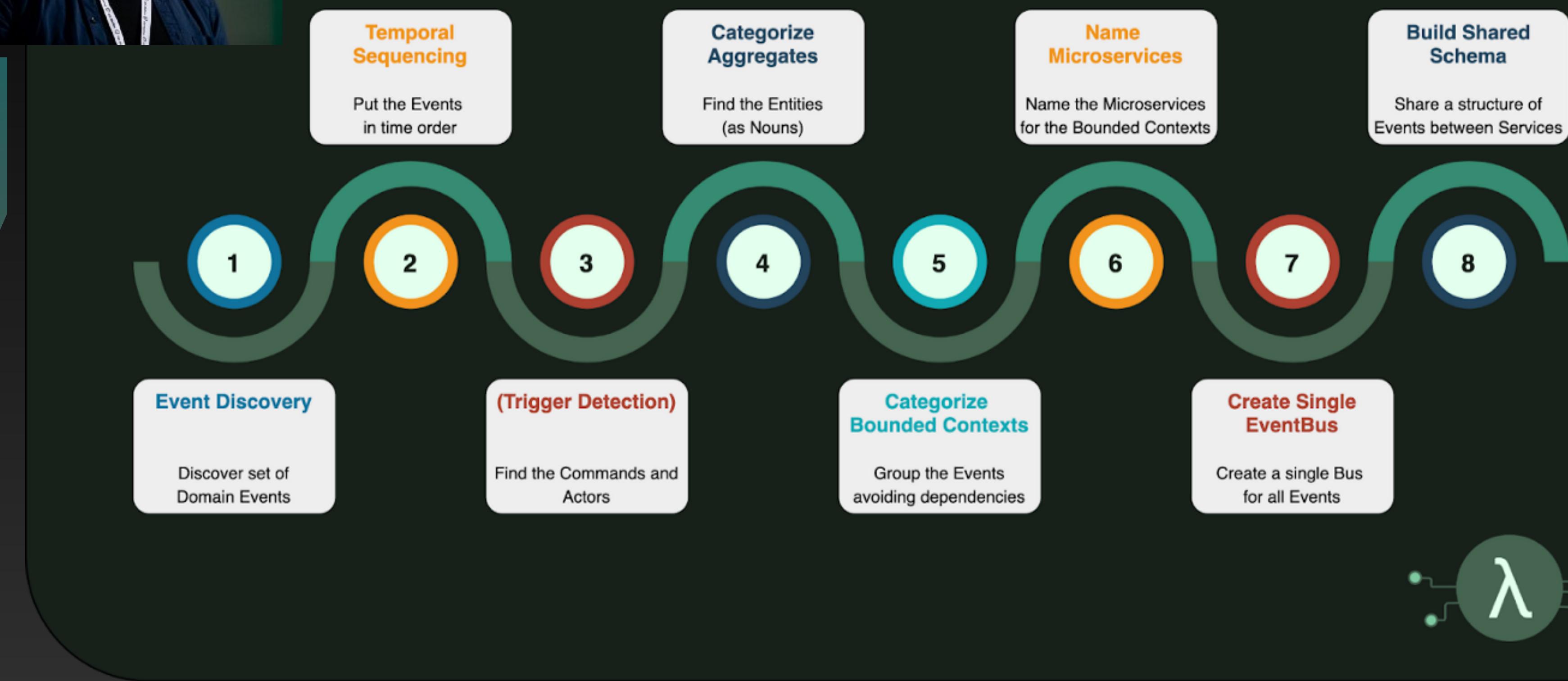
07

# Eventos, eventos, eventos

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



O'REILLY®

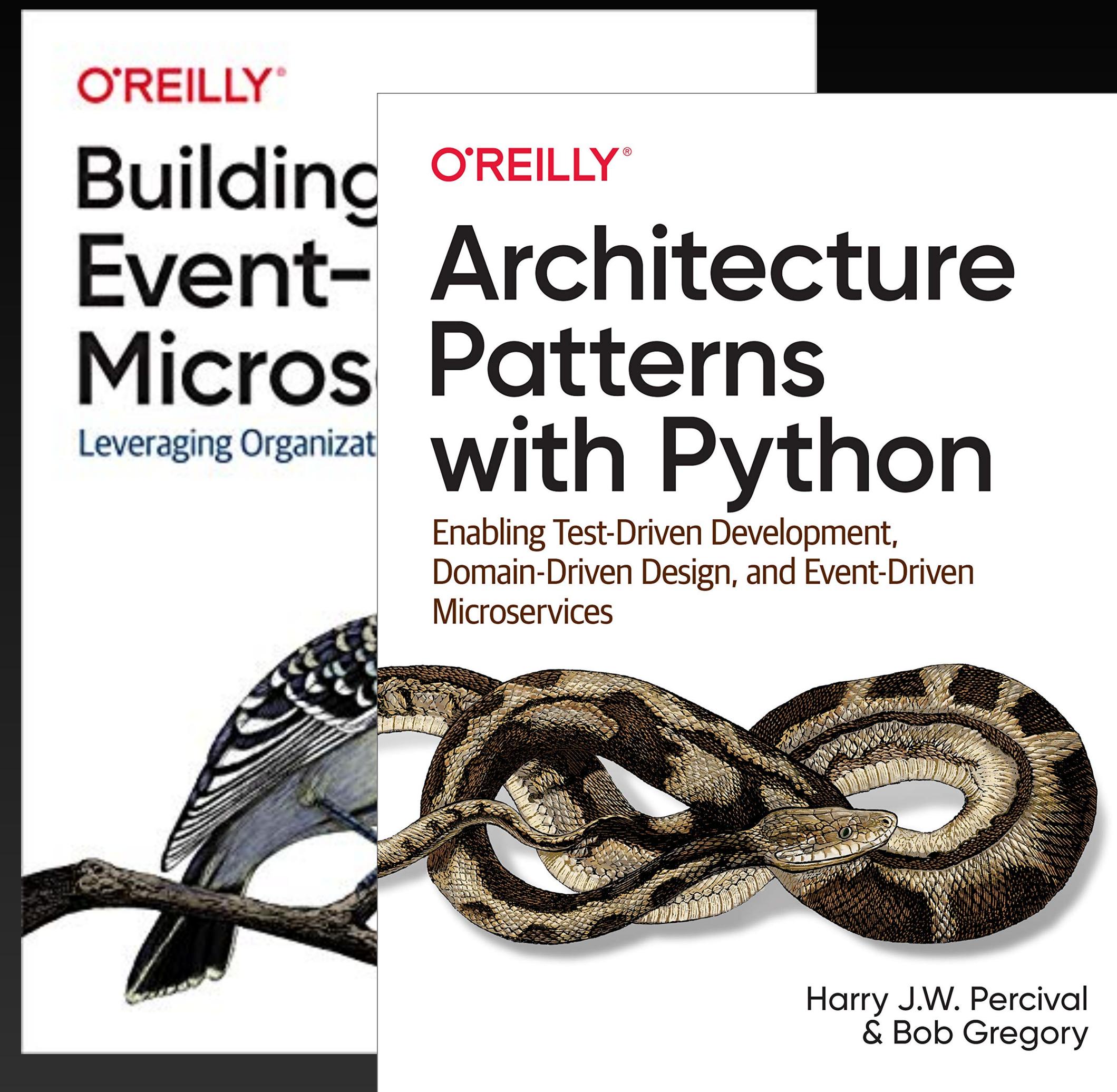
# Building Event-Driven Microservices

Leveraging Organizational Data at Scale



Adam Bellemare

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



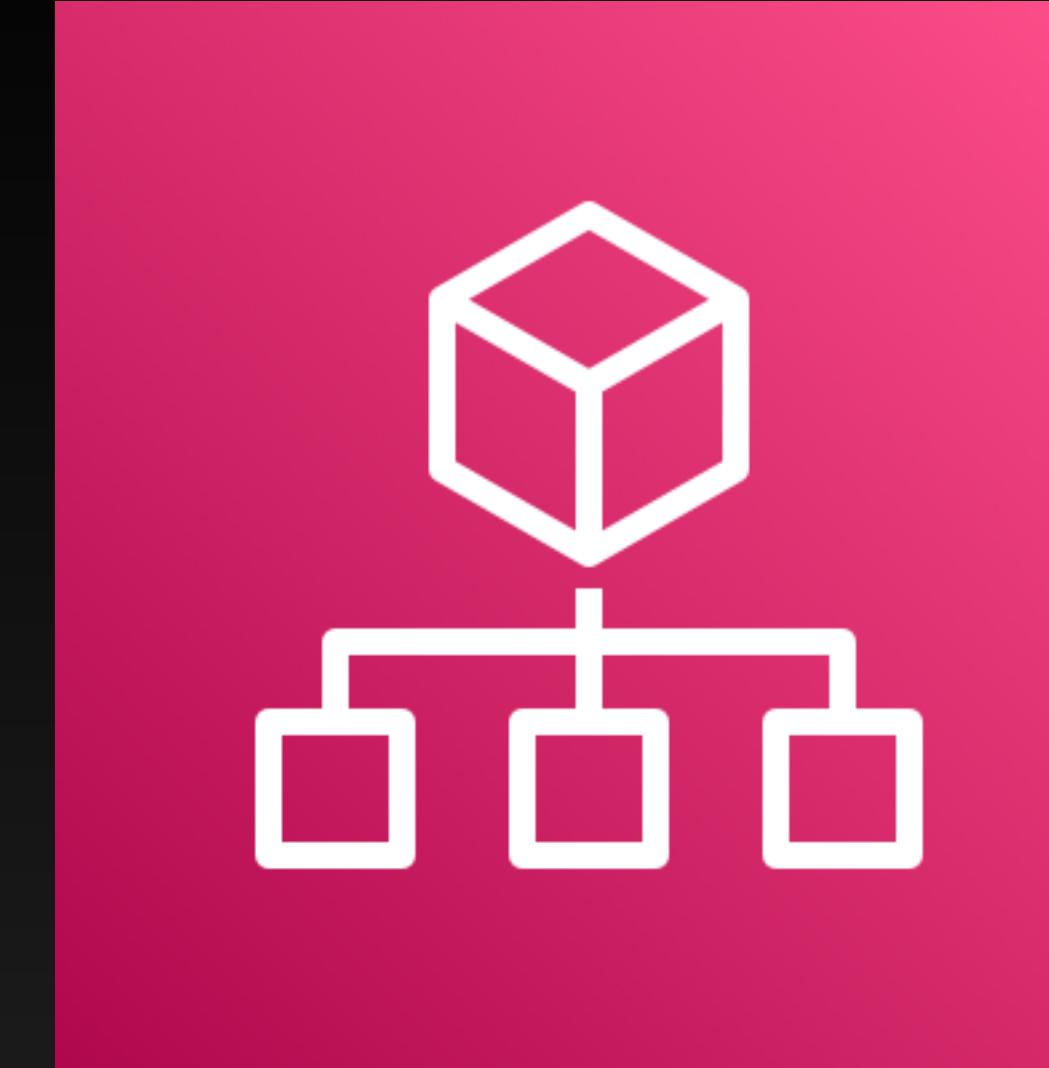
[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

08  
**Contas AWS**

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar



[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

09

# Documentação

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

AWS > Documentation > Amazon Redshift > Database Developer Guide

Feedback Preferences

**Amazon Redshift**

Database Developer Guide

System overview

- Are you a first-time Amazon Redshift user?
- Are you a database developer?
- Prerequisites

System and architecture overview

- Data warehouse system architecture**
- Performance
- Columnar storage
- Workload management
- Using Amazon Redshift with other services

Best practices

- Tutorials
- Working with automatic table optimization
- Loading data
- Unloading data
- Creating user-defined functions
- Creating stored procedures
- Creating materialized views
- Querying spatial data
- Querying data with federated queries

## Data warehouse system architecture

PDF | Kindle | RSS

This section introduces the elements of the Amazon Redshift data warehouse architecture as shown in the following figure.

**Client applications**

Amazon Redshift integrates with various data loading and ETL (extract, transform, and load) tools and business intelligence (BI) reporting, data mining, and analytics tools. Amazon Redshift is based on industry-standard PostgreSQL, so most existing SQL client applications will work with only minimal changes. For information about important differences between Amazon Redshift SQL and PostgreSQL, see [Amazon Redshift SQL vs PostgreSQL SQL](#).

AWS CDK [1.134.0](#)

- @aws-cdk/aws-emr<sup>1</sup>
- @aws-cdk/aws-emrcontainers<sup>1</sup>
- @aws-cdk/aws-events
- Overview
- Constructs
- Archive
- EventBus**
- Rule
- Classes
- EventField
- RuleTargetInput
- Schedule
- Structs
- ArchiveProps
- BaseArchiveProps
- CronOptions
- EventBusAttributes
- EventBusProps**
- EventPattern
- OnEventOptions
- RuleProps
- RuleTargetConfig
- RuleTargetInputProperties
- Interfaces
- IEventBus
- IRule
- IRuleTarget
- CloudFormation Resources
- CfnApiDestination
- CfnArchive
- CfnConnection

API Reference Python Java .NET Developer Guide Examples

## class EventBus (construct)

Language	Type name
.NET	Amazon.CDK.AWS.Events.EventBus
Java	software.amazon.awscdk.services.events.EventBus
Python	aws_cdk.aws_events.EventBus
TypeScript <a href="#">(source)</a>	@aws-cdk/aws-events » EventBus

Implements [IConstruct](#), [IConstruct](#), [IDependable](#), [IResource](#), [IEVENTBUS](#)

Define an EventBridge EventBus.

### Example

```
const bus = new events.EventBus(this, 'bus', {
  eventBusName: 'MyCustomEventBus'
});

bus.archive('MyArchive', {
  archiveName: 'MyCustomEventBusArchive',
  description: 'MyCustomerEventBus Archive',
  eventPattern: {
    account: [Stack.of(this).account],
  },
  retention: Duration.days(365),
});
```

### Initializer

```
new EventBus(scope: Construct, id: string, props?: EventBusProps)
```

**Example**

Initializer

Construct Props

eventBusName?  
eventSourceName?

Properties

env  
eventBusArn  
eventBusName  
eventBusPolicy  
node  
stack  
eventSourceName?

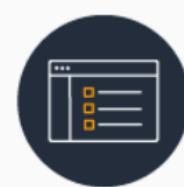
Methods

applyRemovalPolicy(policy)  
archive(id, props)  
grantPutEventsTo(grantee)  
toString()  
static fromEventBusArn(scope, id, eventBusArn)  
static fromEventBus Attributes(scope, id, attrs)  
static fromEventBusName(scope, id, eventBusName)  
static grantAllPutEvents(grantee)  
static grantPutEvents(grantee)△

The screenshot shows the AWS Whitepapers and Guides page. At the top, there are navigation links: Whitepapers e guias da AWS, Central de arquitetura da AWS, AWS Architecture Icons, Diagramas de arquitetura de referência da AWS, and AWS Well-Architected. Below the header, a large section title "Whitepapers e guias da AWS" is displayed. A descriptive paragraph follows, encouraging users to expand their knowledge of AWS cloud with technical content from AWS and the AWS community, including whitepapers, technical guides, reference material, and architecture diagrams. It also links to the "Visão geral da Amazon Web Services". On the left side, there are two filter sections: "Tipos de conteúdo" (checkboxes for Whitepaper, Guia técnico, Guia de conformidade, and Diagrama de arquitetura de referência) and "Categorias de tecnologia" (checkboxes for Análises e big data, Integração de aplicações, Gerenciamento financeiro na nuvem, Computação, Contêineres, Bancos de dados, Ferramentas de desenvolvedor, Computação de usuário final, and Front-end para plataformas móveis e Web). In the center, there's a "Feedback" button and a "Pesquisar whitepapers e guias da AWS" search bar. To the right, there are three cards: "Sistemas reativos na AWS" (whitepaper, NOVO), "AWS Content Analysis" (diagrama de arquitetura de referência, NOVO), and "Perspectiva de análise de dados – AWS..." (whitepaper, EM DESTAQUE).

# AWS Workshops

This website lists workshops created by the teams at Amazon Web Services (AWS). Workshops are hands-on events designed to teach or introduce practical skills, techniques, or concepts which you can use to solve business problems. You can filter by topic using the toolbar above.



## 100 workshops and growing

New workshops and content added all the time



## Created by experts

Created by specialists in the field from AWS and AWS Partners



## Available for access anywhere

Globally available without restriction and mobile friendly

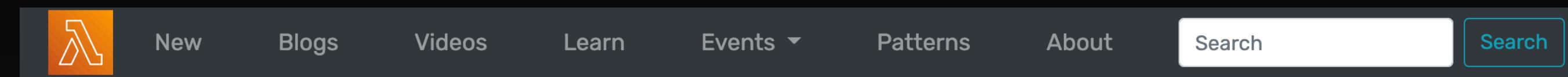
## Workshops

### Amazon Keyspaces Workshop (for Apache Cassandra)

- ⌚ Level: 300
- ✓ Categories: [Containers](#), [Compute](#)
- ✓ Tags: [nosql](#), [database](#), [serverless](#), [cassandra](#)
- ⌚ 2 hours



[ibrahimcesar.cloud](#) | [@ibrahimcesar](#)



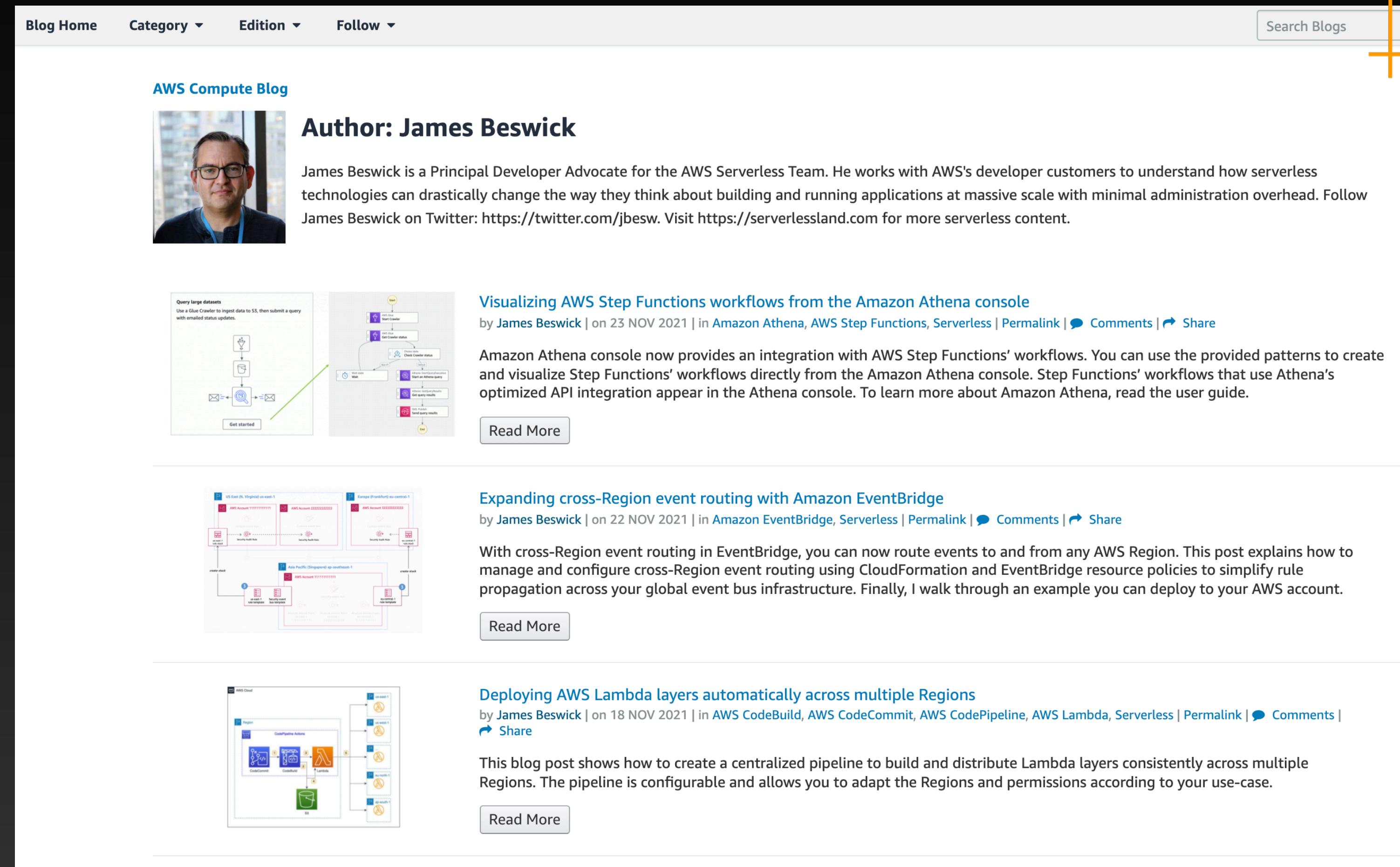
ibrahimcesar.cloud | @ibrahimcesar

Blog Home Category Edition Follow Search Blogs

**AWS Compute Blog**

**Author: James Beswick**

James Beswick is a Principal Developer Advocate for the AWS Serverless Team. He works with AWS's developer customers to understand how serverless technologies can drastically change the way they think about building and running applications at massive scale with minimal administration overhead. Follow James Beswick on Twitter: <https://twitter.com/jbesw>. Visit <https://serverlessland.com> for more serverless content.



**Visualizing AWS Step Functions workflows from the Amazon Athena console**  
by James Beswick | on 23 NOV 2021 | in Amazon Athena, AWS Step Functions, Serverless | Permalink | [Comments](#) | [Share](#)

Amazon Athena console now provides an integration with AWS Step Functions' workflows. You can use the provided patterns to create and visualize Step Functions' workflows directly from the Amazon Athena console. Step Functions' workflows that use Athena's optimized API integration appear in the Athena console. To learn more about Amazon Athena, read the user guide.

[Read More](#)

**Expanding cross-Region event routing with Amazon EventBridge**  
by James Beswick | on 22 NOV 2021 | in Amazon EventBridge, Serverless | Permalink | [Comments](#) | [Share](#)

With cross-Region event routing in EventBridge, you can now route events to and from any AWS Region. This post explains how to manage and configure cross-Region event routing using CloudFormation and EventBridge resource policies to simplify rule propagation across your global event bus infrastructure. Finally, I walk through an example you can deploy to your AWS account.

[Read More](#)

**Deploying AWS Lambda layers automatically across multiple Regions**  
by James Beswick | on 18 NOV 2021 | in AWS CodeBuild, AWS CodeCommit, AWS CodePipeline, AWS Lambda, Serverless | Permalink | [Comments](#) | [Share](#)

This blog post shows how to create a centralized pipeline to build and distribute Lambda layers consistently across multiple Regions. The pipeline is configurable and allows you to adapt the Regions and permissions according to your use-case.

[Read More](#)

ibrahimcesar.cloud | @ibrahimcesar

# 10

# Certificação

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar

## Professional

**Dois anos** de soluções experiência abrangente criando, operando e solucionando problemas usando a Nuvem AWS



## Associate

**Um ano** de experiência na solução de problemas e implementação de soluções usando a Nuvem AWS



## Foundational

**Seis meses** de Nuvem AWS fundamental e conhecimento do setor



## Specialty

Experiência técnica em Nuvem AWS no domínio Specialty conforme especificado no **guia de exame**





[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | [@ibrahimcesar](https://twitter.com/ibrahimcesar)



Obrigado!

[ibrahimcesar.cloud](http://ibrahimcesar.cloud) | @ibrahimcesar