

# Pragmatic Site Reliability Engineering for Kubernetes in the Cloud

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**CONF42** Site Reliability Engineering 2021



— aws —  
machine learning  
**HERO**



- **Chief Technology Officer** of NuWorks Interactive Labs
- AWS Machine Learning Hero
- Author of 📖 **Machine Learning with Amazon SageMaker Cookbook**



# Machine Learning with Amazon SageMaker Cookbook

80 proven recipes for data scientists and developers to perform machine learning experiments and deployments

Joshua Arvin Lat

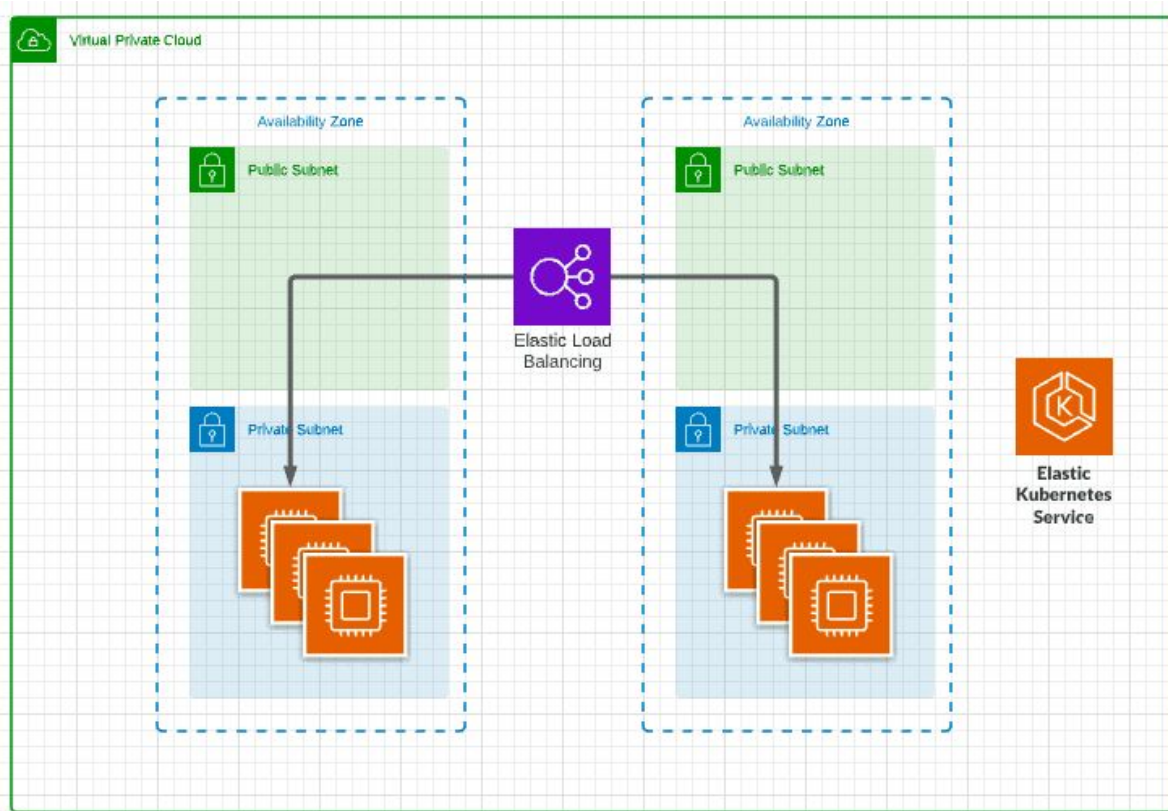


Author of 

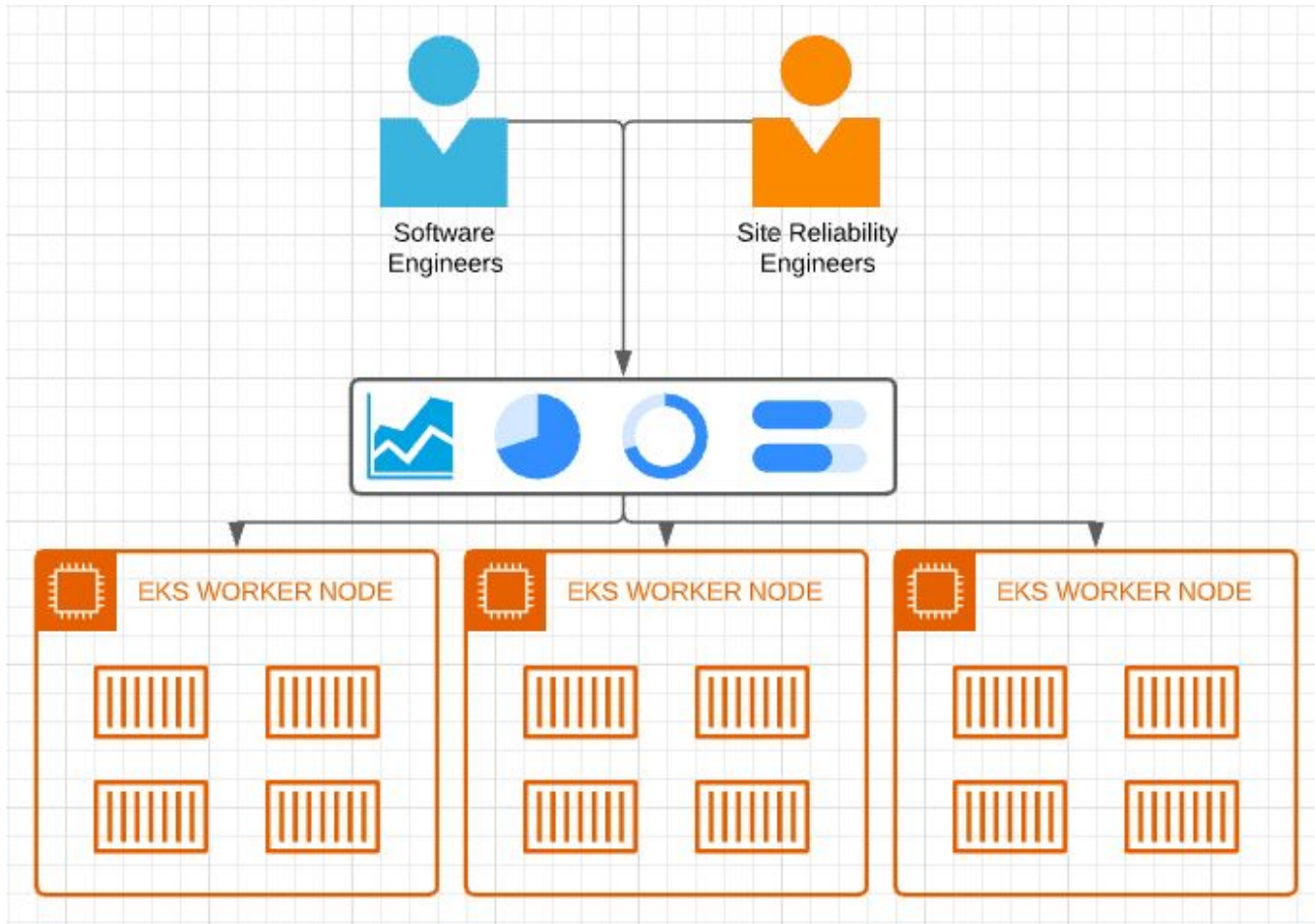
## Machine Learning with Amazon SageMaker Cookbook

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# FIND WAYS TO VISUALIZE AND KNOW WHAT'S HAPPENING INSIDE



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LET'S PLAY A

**GAME!**





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Joshua Arvin Lat



**LINK:** <https://packt.link/OTDiz>

**CODE:** 25Joshua

**VALIDITY:** OCT 22, 2021 - DEC 31, 2021

**25% OFF (EBOOK)**



**SERVICE-LEVEL INDICATOR**



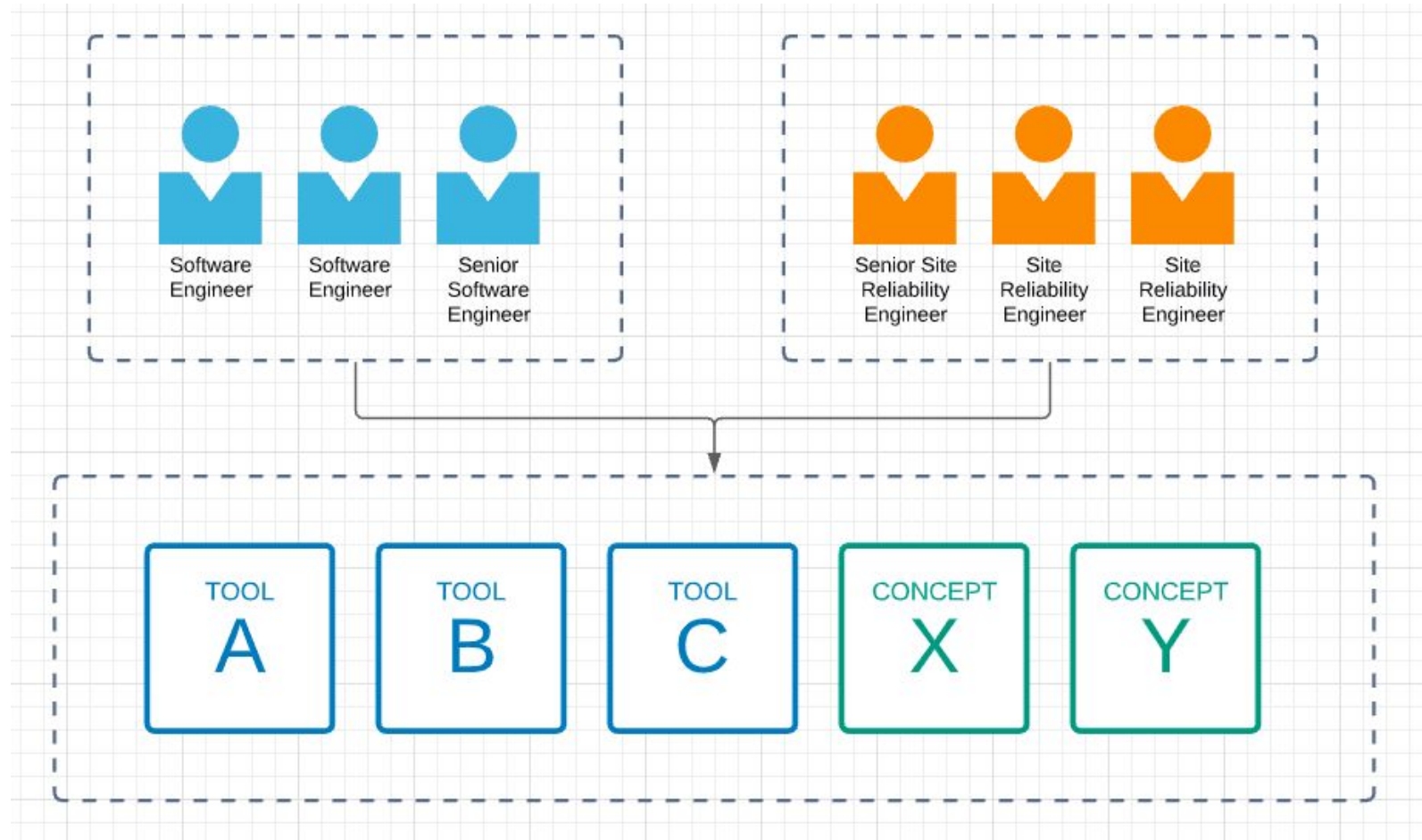
**SERVICE-LEVEL OBJECTIVE**



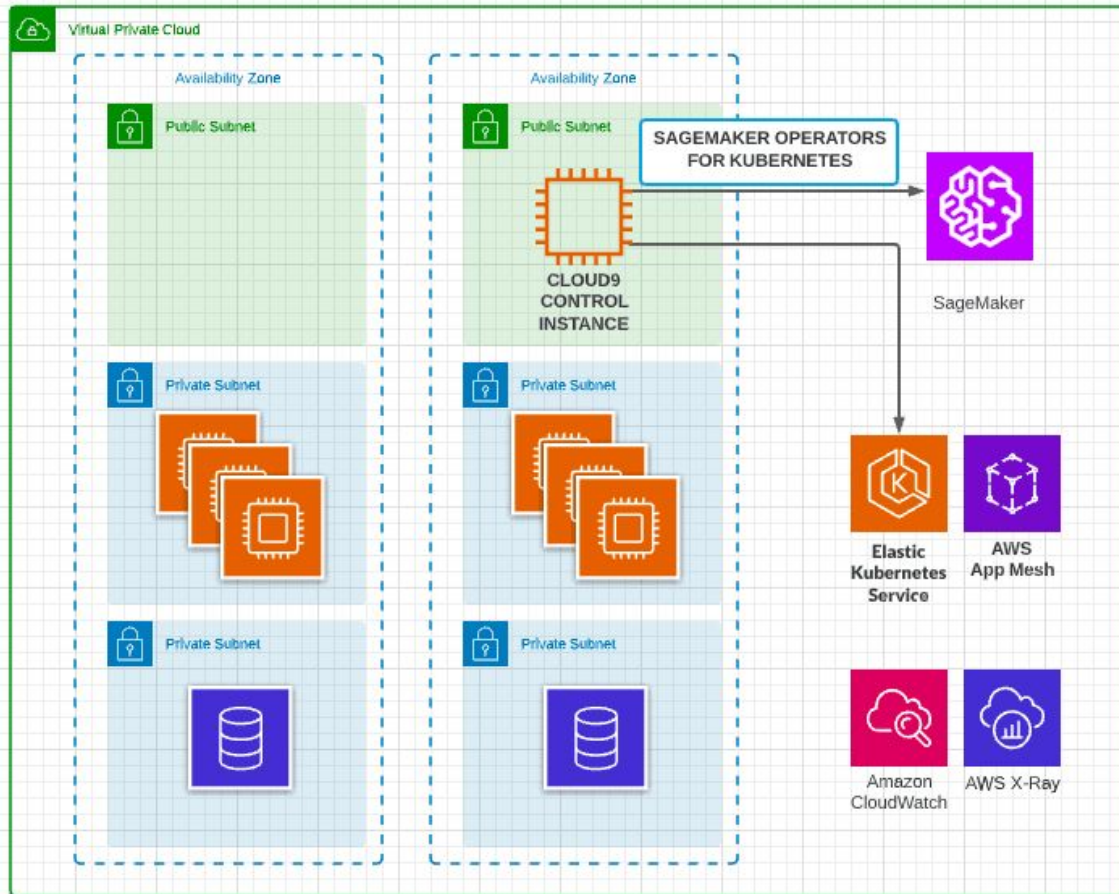
**SERVICE-LEVEL AGREEMENT**



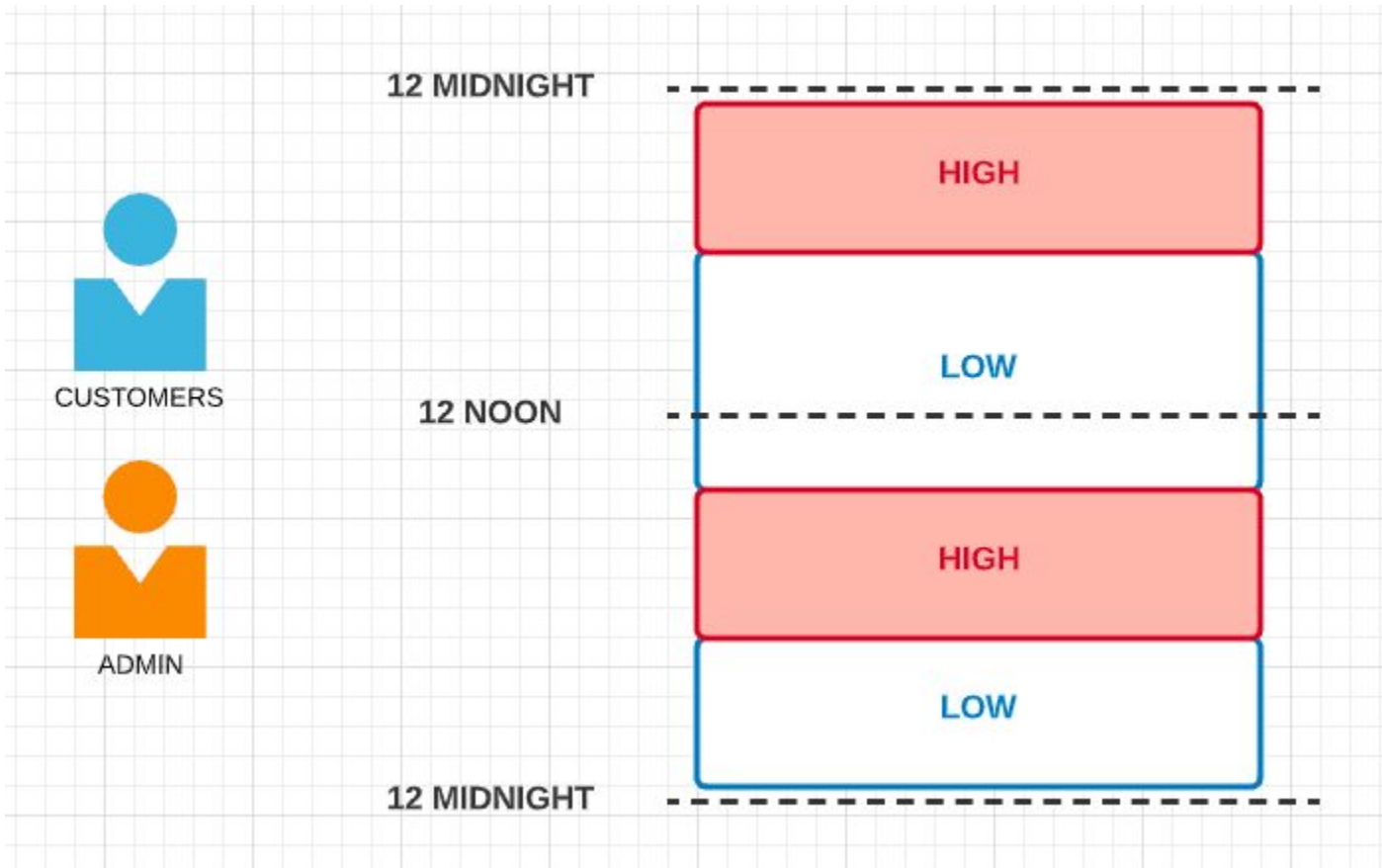
# USING TOOLS DO NOT AUTOMATICALLY SOLVE THE PROBLEM



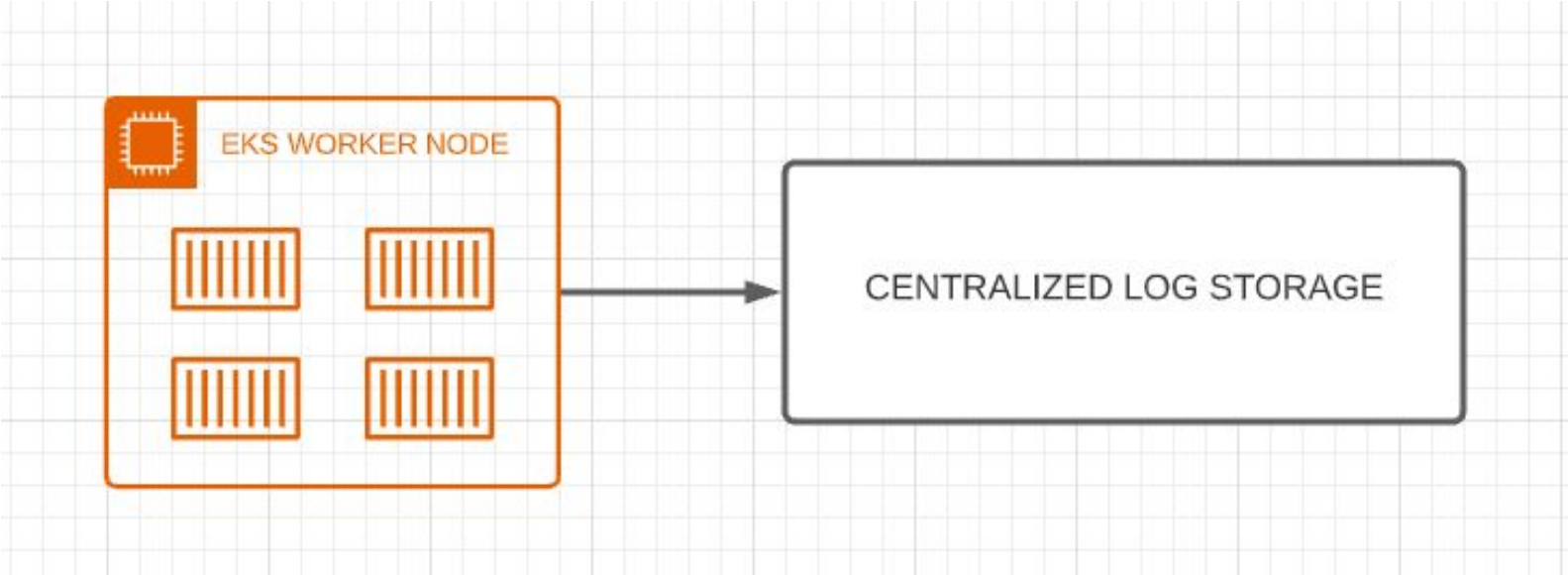
# NOT EVERYTHING NEEDS TO BE STORED INSIDE THE KUBERNETES CLUSTER



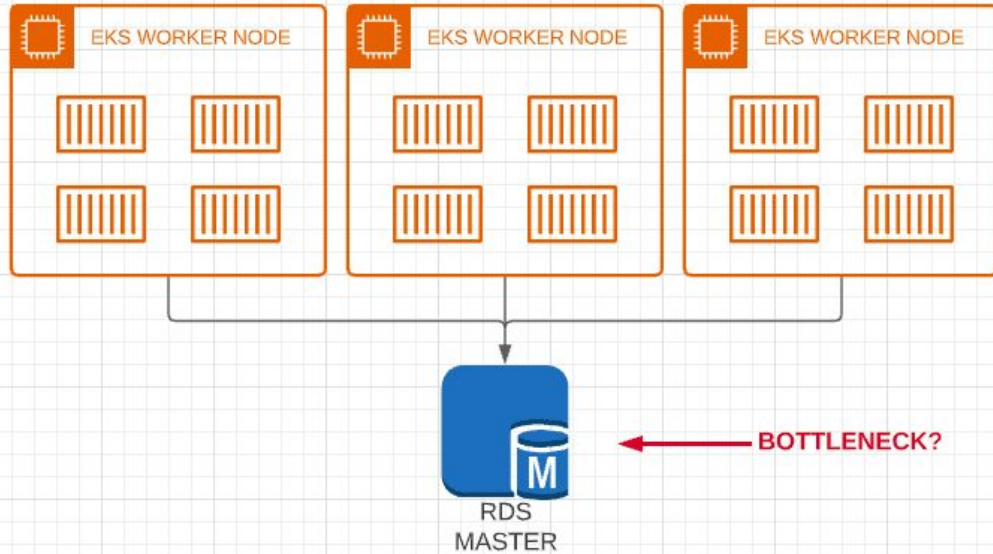
# KNOW WHO THE TARGET USERS ARE AND UNDERSTAND THEIR BEHAVIOR



# MANAGE THE OVERALL COST OF STORING, MANAGING, AND SEARCHING THE LOGS



# UNDERSTAND THE WEAKEST LINKS IN YOUR SYSTEM





PREPARE FOR FAILURE SO NOTHING FAILS

SUDDEN INCREASE IN LATENCY

HIGH CPU

PACKET LOSS

NODE FAILURE

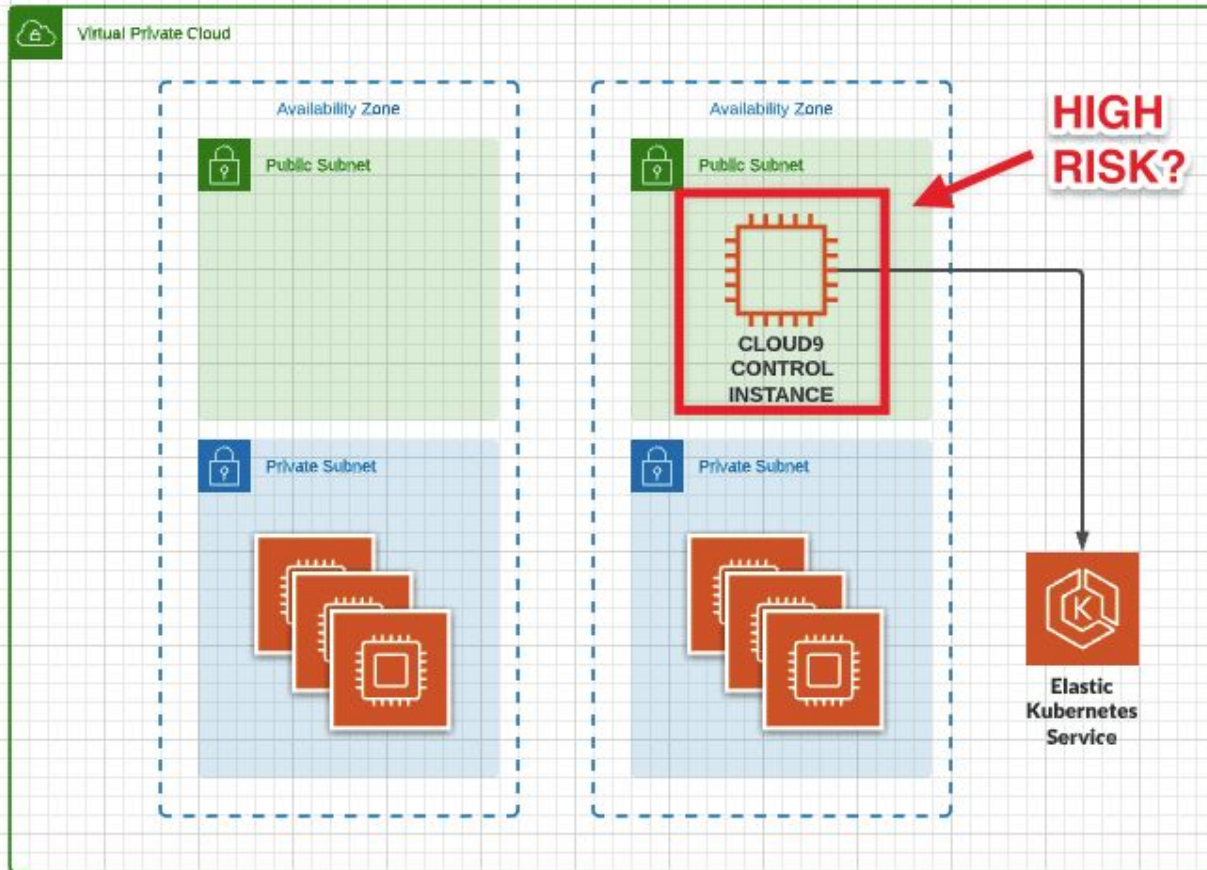
# COMMON FAILURE MODES?

UNAVAILABLE REGION

CPU THROTTLING

SERVICE FAILURE

# MANAGE THE SECURITY RISKS



**PLANNING WHEN  
THERE IS  
MINIMAL PRESSURE**

**PLANNING WHEN  
THERE IS  
AN EMERGENCY**

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