#### CONTINO

# Lean Product Delivery Through SLOs

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# Lean Product Delivery Through SLOs

### Key Takeaways

- 1. Eliminating waste drives better outcomes
  - 2. Implicit expectations exist
- 3. SLOs convert expectations into concrete outcomes



AWS Practice Lead

Lean Junkie

AWS APN Ambassador

HashiCorp Ambassador



# AWS Landing Zones

**Account Vending** 

**Access Provisioning** 

Security Guardrails

CI/CD Pipelines

...

# AWS Landing Zones

### **Account Vending**

**Access Provisioning** 

Security Guardrails

CI/CD Pipelines

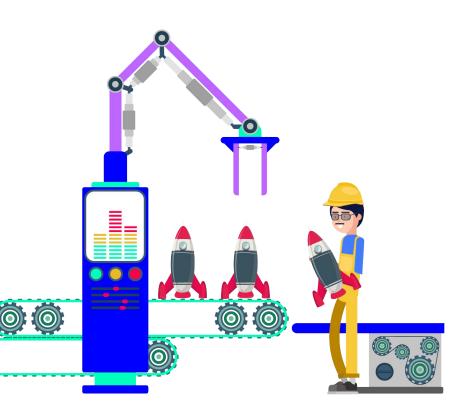
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As a development team

I want to be able to provision AWS accounts

So I can deploy my application

# The 8 Wastes Of Lean



Defects

Extra-Processing

Overproduction

Transportation

Waiting

Motion

Unused Talent

Inventory

CONTINO

Defects

Extra-Processing

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**Unused Talent** 

Inventory

**CONTINO** 

As a development team

I want to be able to provision AWS accounts

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# What is "Good Enough"



## Who Defines "Good Enough"



# **Product Tension**

# Management Management

## **Delivery Consumers**

### SLI

Define success and failure

**SLO** 

Define acceptable failure frequency

SLA

Define penalty for not exceeding failure goal



Define success and failure

Define acceptable failure frequency

Define penalty for not exceeding failure goal

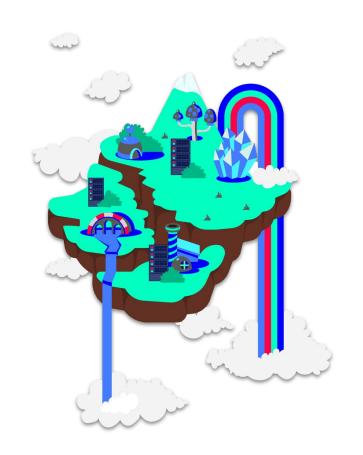
## Schrödinger's SLA

As a development team

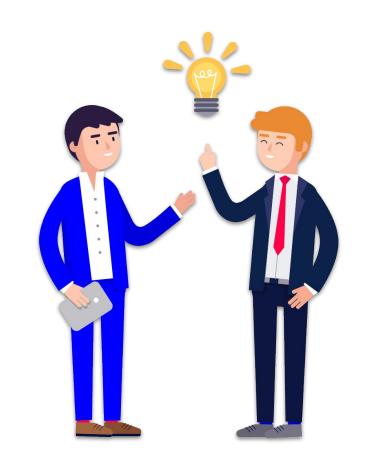
I want to be able to provision AWS accounts

So I can deploy my application

I want an account vended within 5 minutes of requesting



I want an account vended within 1 week of requesting



I want an account vended within 1 business day of requesting

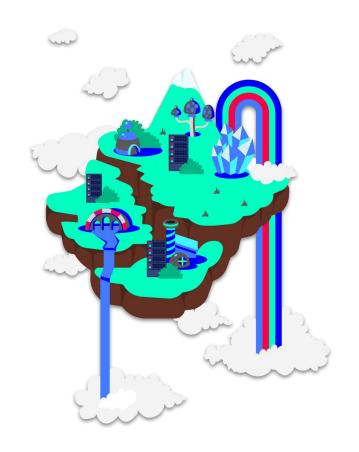


## **Specific** Measurable **Attainable** Relevant Time Boxed

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## Specific Measurable **Attainable** Relevant **Time Boxed**

**Account vending** happens within 1 business day 99% of the time over a 30 day window



### **Every 30 Days**

**Number of Accounts: 200!!** 

**Number of Failures: 2** 

**SLO: 99%** 

### **Every 30 Days**

**Number of Accounts: 10** 

**Number of Failures: 2** 

**SLO: 80%** 

**Account vending** happens within 1 business day 80% of the time over a 30 day window



# Every extra 9 is a 10x investment

## Team capacity is limited

### Less is more

As a development team

I want to be able to provision AWS accounts

So I can deploy my application

**Account vending** happens within 1 business day 80% of the time over a 30 day window

## Schrödinger's SLA



Managed Grafana



Cloudwatch



Eventbridge

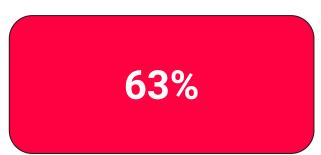


Quicksight

### Account Vending



#### IaC Compliance Scans



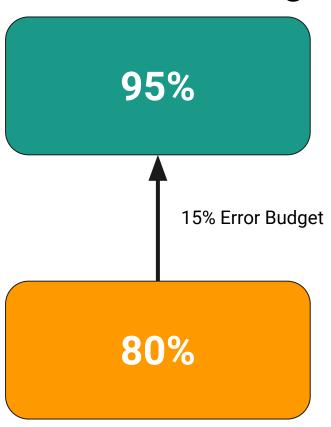
#### **Access Provisioning**



#### On-Premise Connectivity



### **Account Vending**



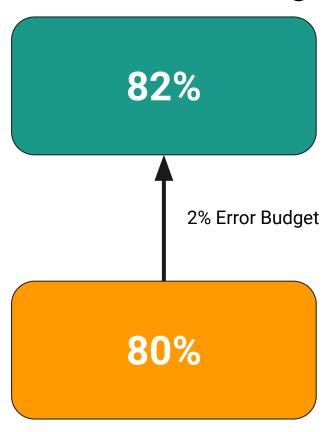
Big refactor

New features

Shift focus away

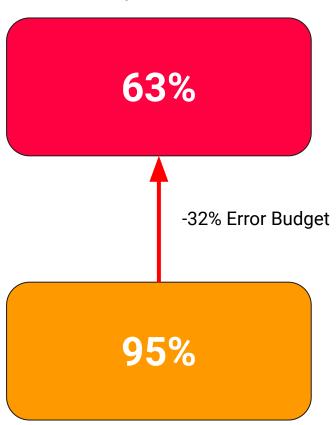
# Be wary of inflating expectations

#### **Access Provisioning**



Paydown debt
Build up budget
No new features

#### IaC Compliance Scans



Invest in stability

Capability	SLI	SLO
Account Vending	The account is usable by the requesting person within one business day of the request being submitted	80%
User Provisioning	The user is provided with credentials within four business hours of the request being submitted	90%
User Access	The user is provided with the access within four business hours of the request being submitted	90%
Public Egress Network Connectivity	The network traffic is successfully routed to the public internet within 50ms	99.5%
On-Premise Egress Network Connectivity	The network traffic is successfully routed to on-premise within 30ms	99.5%
On-Premise Ingress Connectivity	The network traffic is successfully routed from on-premise within 30ms	99.5%
IaC Compliance Scanning	A full run of the compliance scan finishes in under 5 minutes	95%
SAST Coding	The SAST tooling successfully services a request within 5 minutes	95%

# https://github.com/JoshArmi/tf2eventbridge/

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