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AWS SUMMIT



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K U B 3 0 4

Accelerate Platform Engineering on Amazon EKS

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“

Gartner identified Platform Engineering as one of the top strategic technology trends in 2024, and predicts that by 2026, 80% of software engineering organizations will establish platform teams as internal providers of reusable services, components, and tools for application delivery.

Gartner Report

<https://emt.gartnerweb.com/ngw/globalassets/en/publications/documents/2024-gartner-top-strategic-technology-trends-ebook.pdf>



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Platform Engineering

What does good look like?



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But building platforms are hard ...



Developer
Preference



Complex
Use-Cases



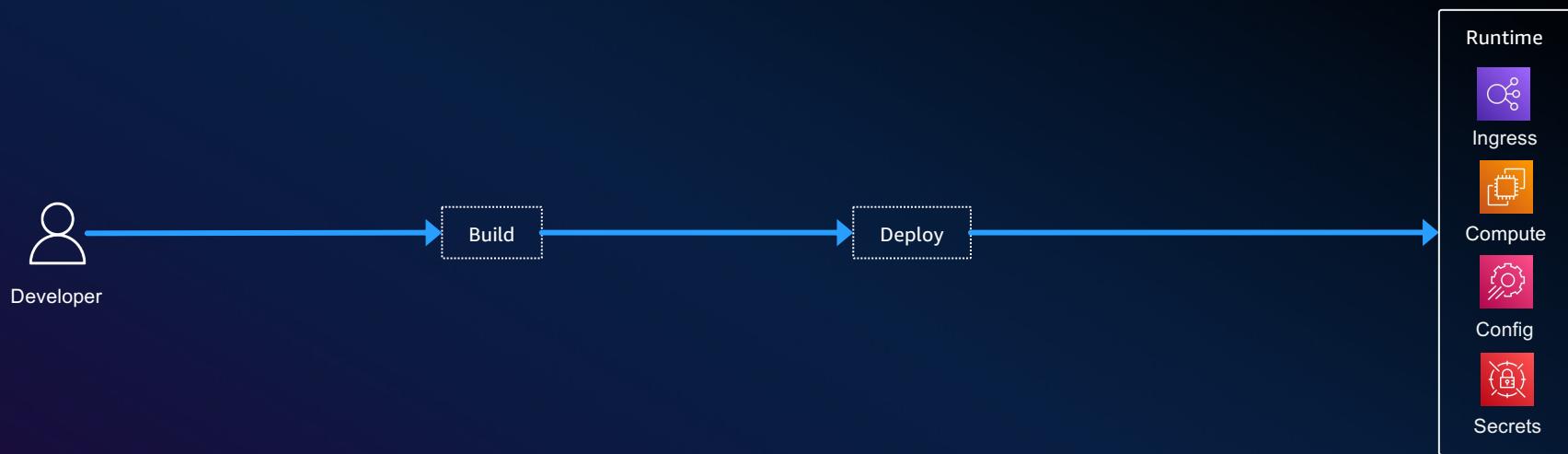
Upgrades and
Maintenance

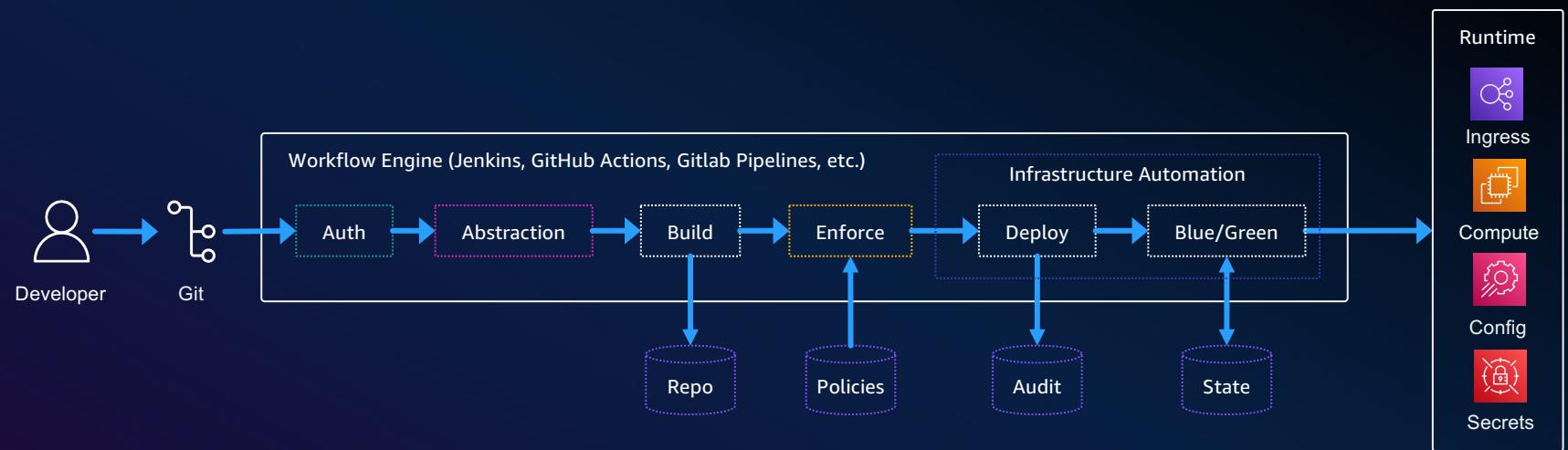


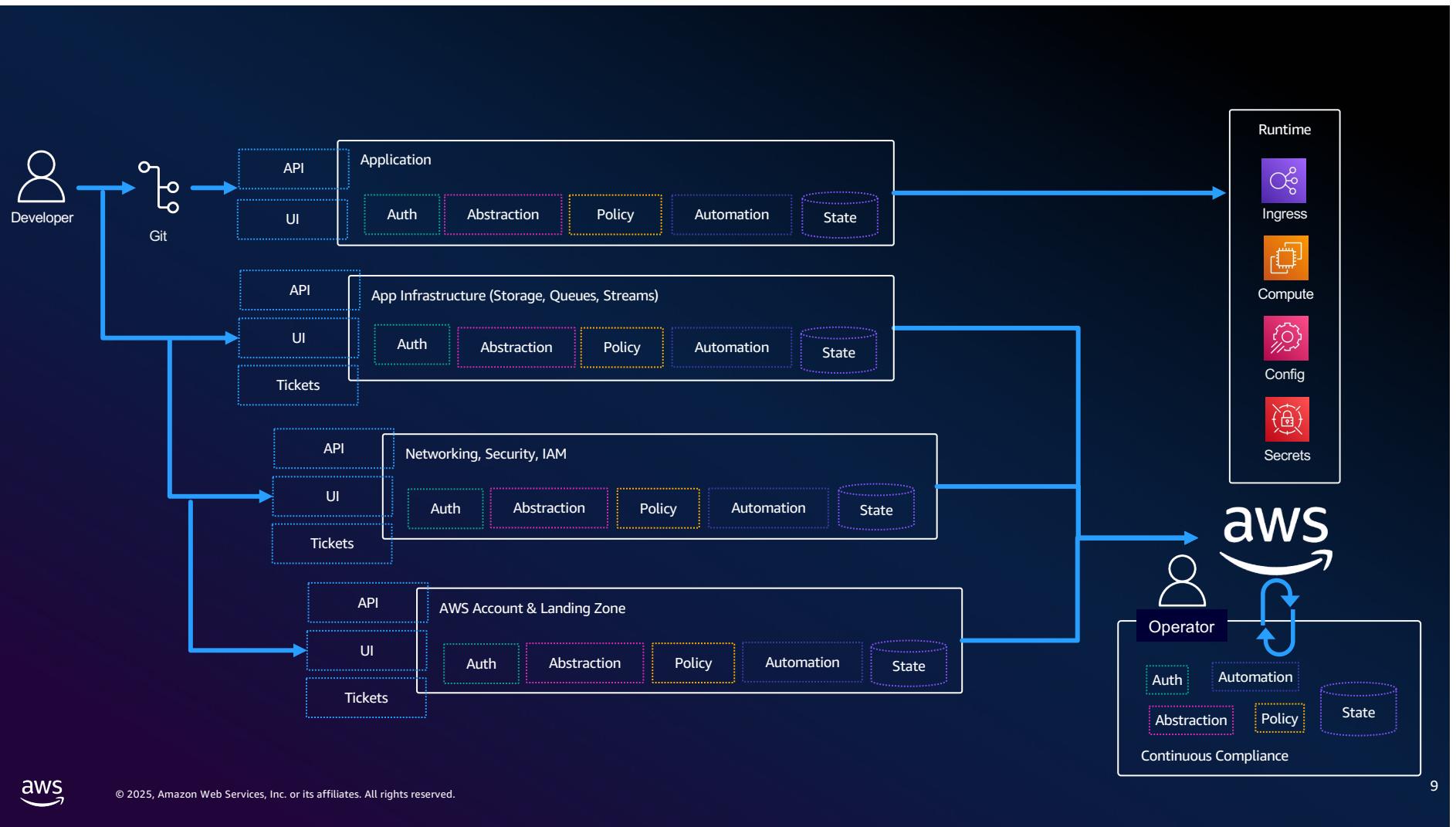
New Service
Launches

Implementations can take 12+ months and 3-5 years to gain adoption

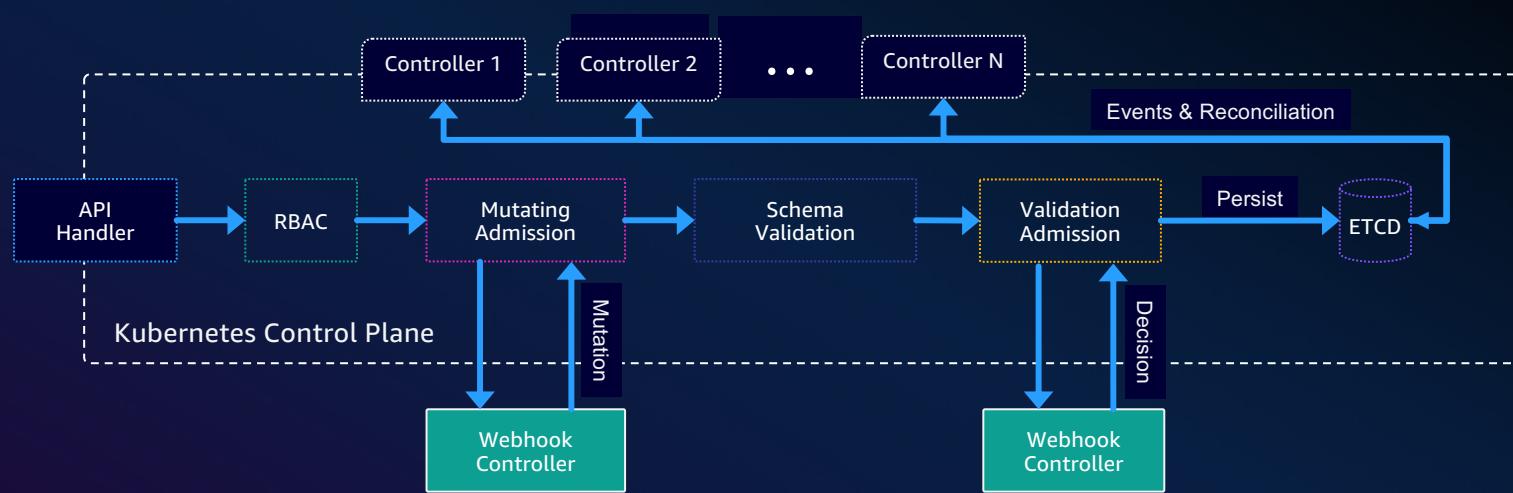
CI/CD Pipeline Evolution (Grossly over-simplified)



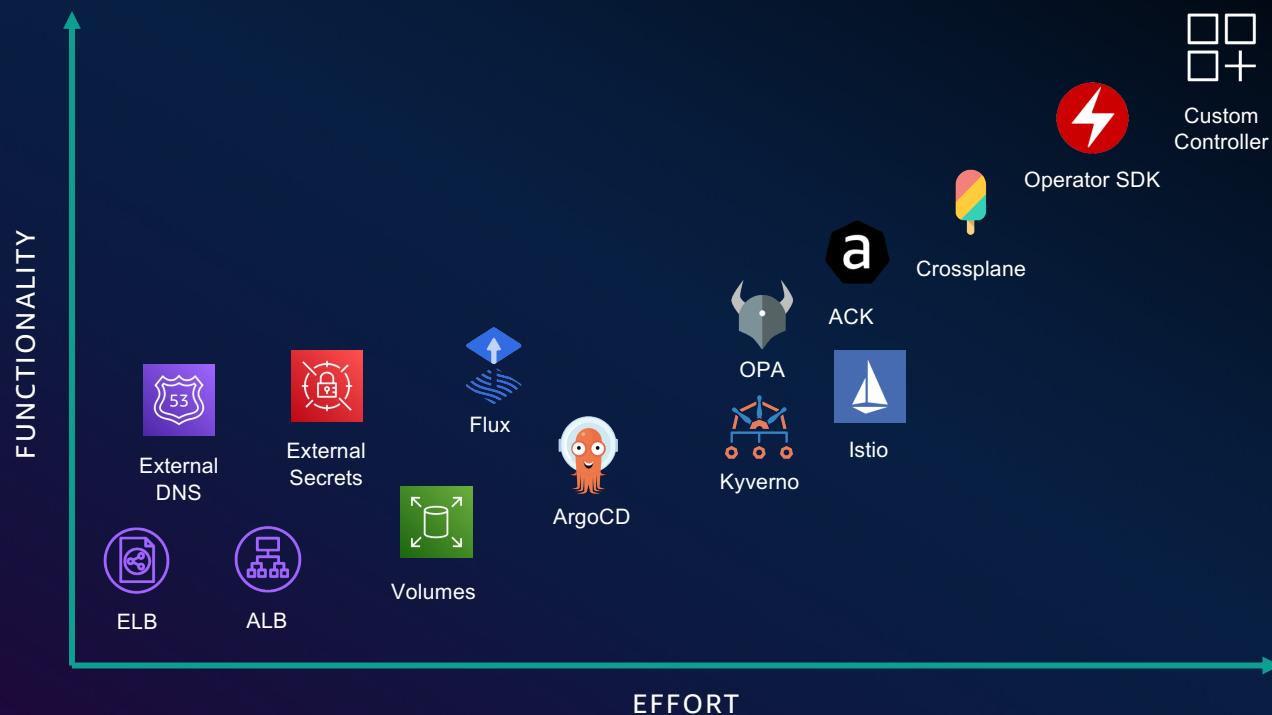




What if we used Kubernetes as the Platform Framework?

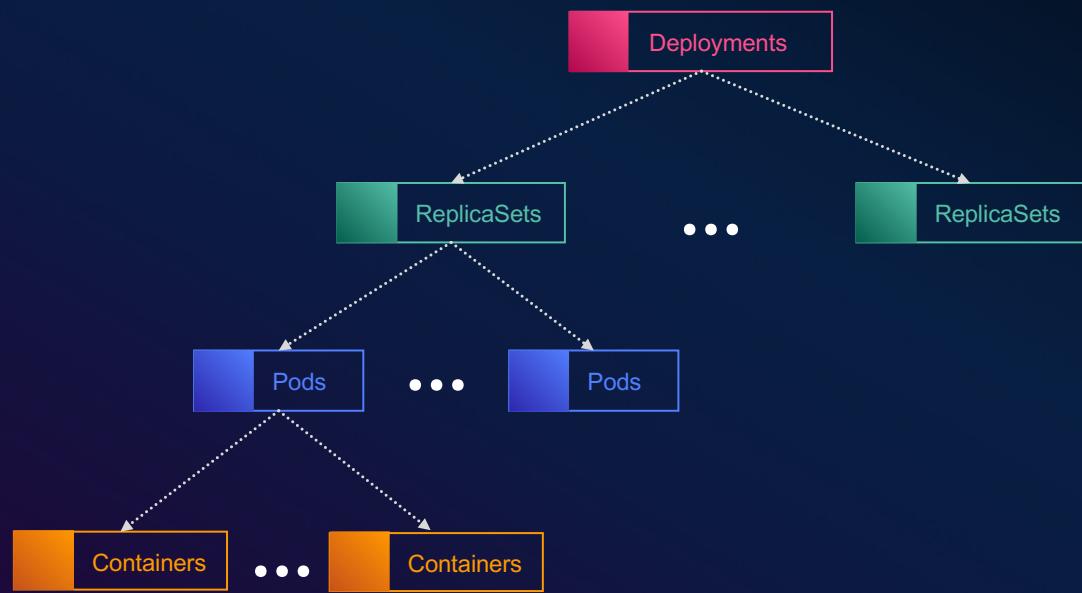


Large Controller Ecosystem

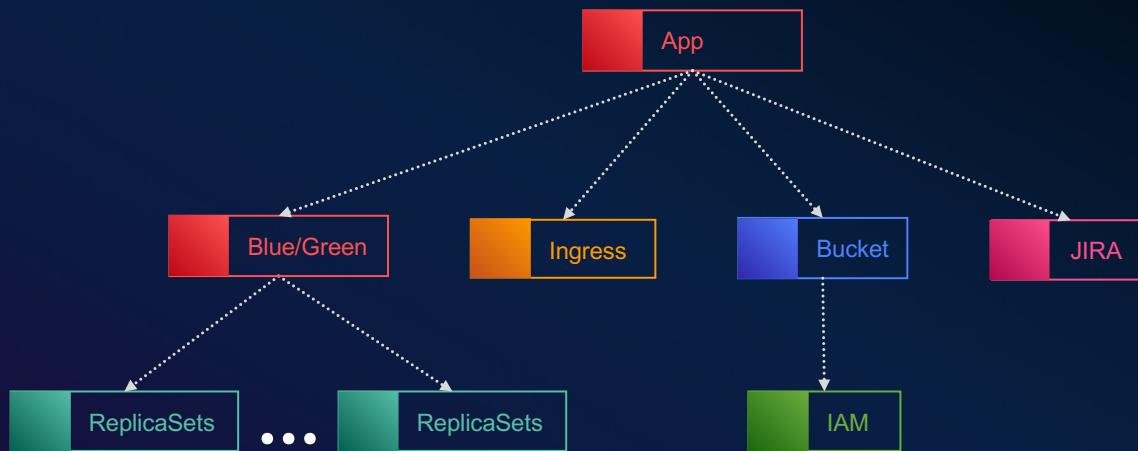


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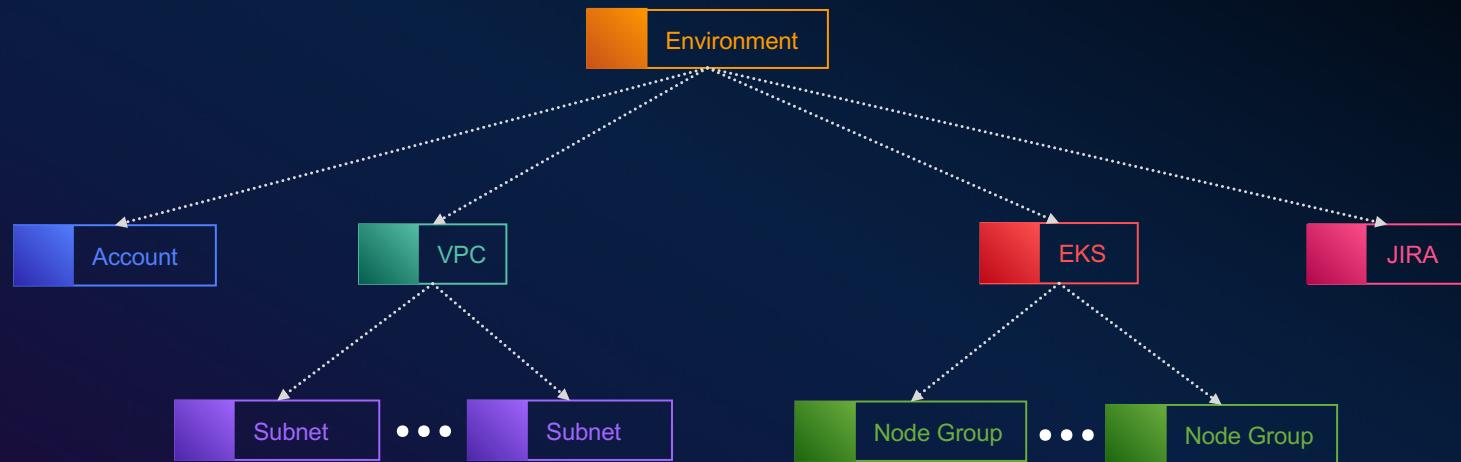
Composable Abstractions



Composable Abstractions



Composable Abstractions





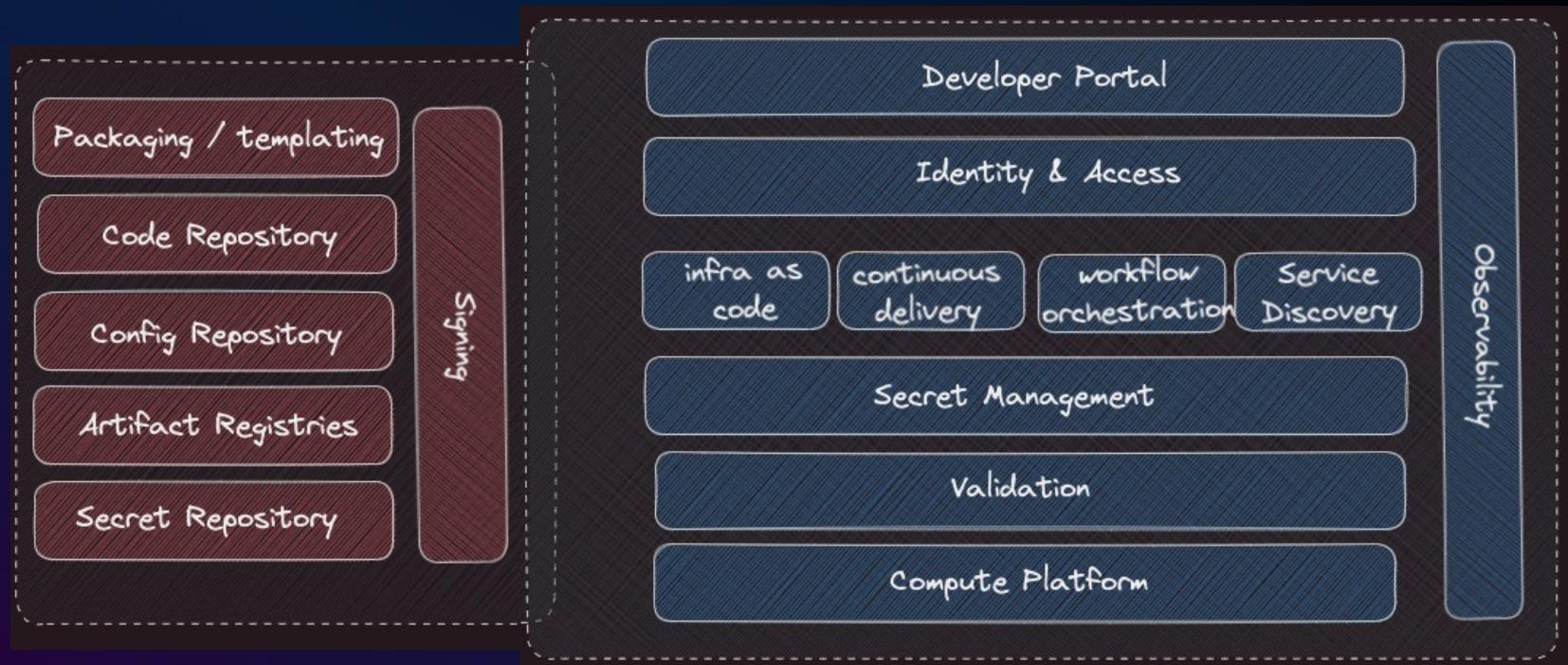
<http://cnoe.io>

Cloud Native Operational Excellence (CNOE) for Internal Developer Platforms

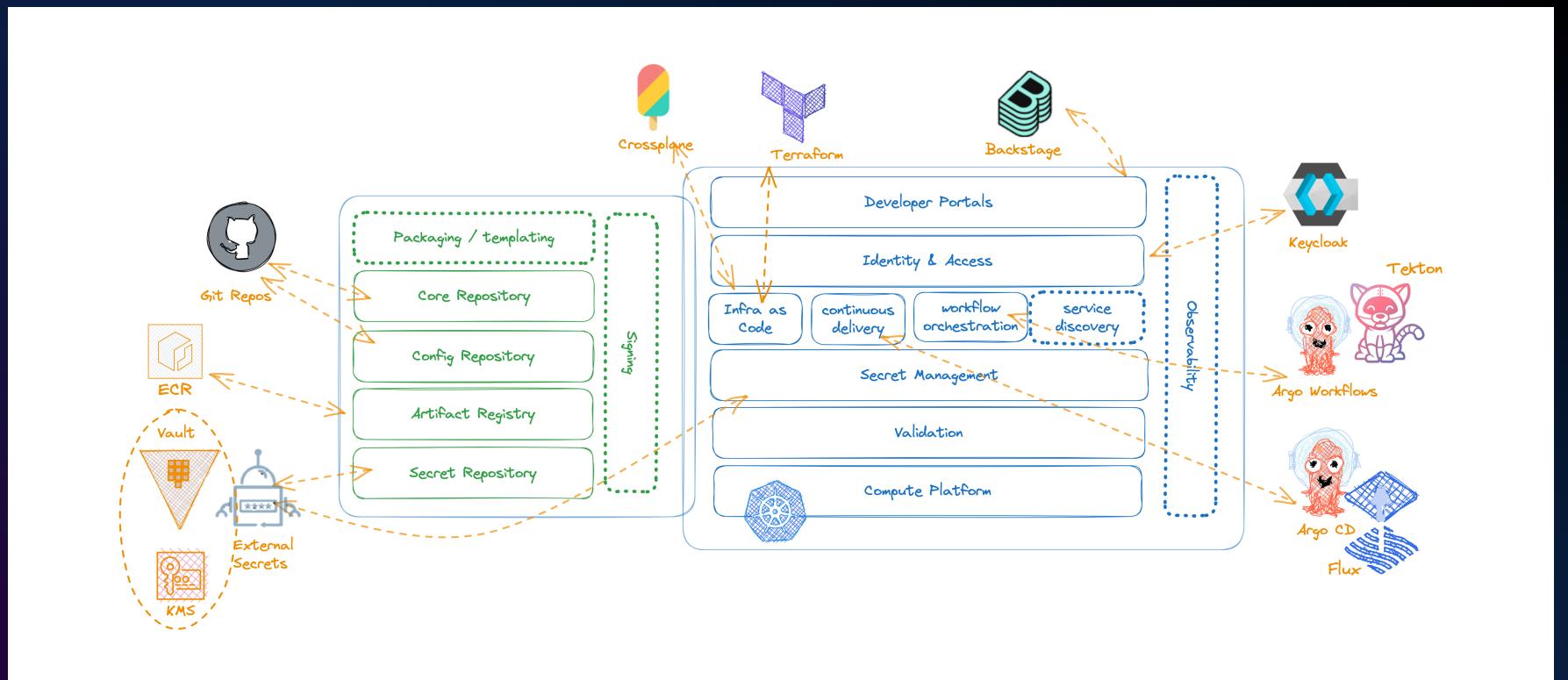


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Internal Developer Platform - Capabilities



Reduced Technology Choices



Key Takeaways



.Increased developer productivity



.Secured and well architected infrastructure

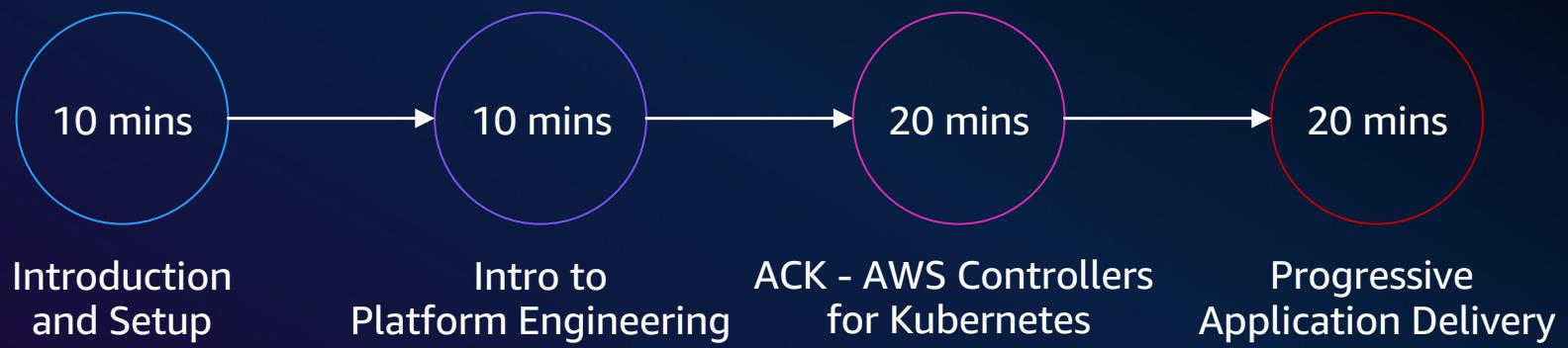


.Lower costs and better system health



•Preserving teams flexibility and agility

Our plan for today



Getting started with Workshop Studio



You have access to an AWS account with everything needed to complete this workshop.



The AWS account is only available for the duration of this session. **You will lose access to the account once the session is complete.**



The workshop environment is deployed to a specific AWS Region. Make sure that you are working in this Region; other Regions are blocked.



Review the terms and conditions of the event. **Do not upload any personal or confidential information to the account.**



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Accessing the workshop environment for this session

- 01** Sign in using your preferred method – <https://join.workshops.aws>
- 02** Enter the event access code – **[7404-007ca8-da]**
- 03** Review terms and join event
- 04** Select **Get Started** to begin the workshop
- 05** Access AWS accounts – access the AWS Management Console or generate AWS CLI credentials as needed

Step 1: Sign in using your preferred method

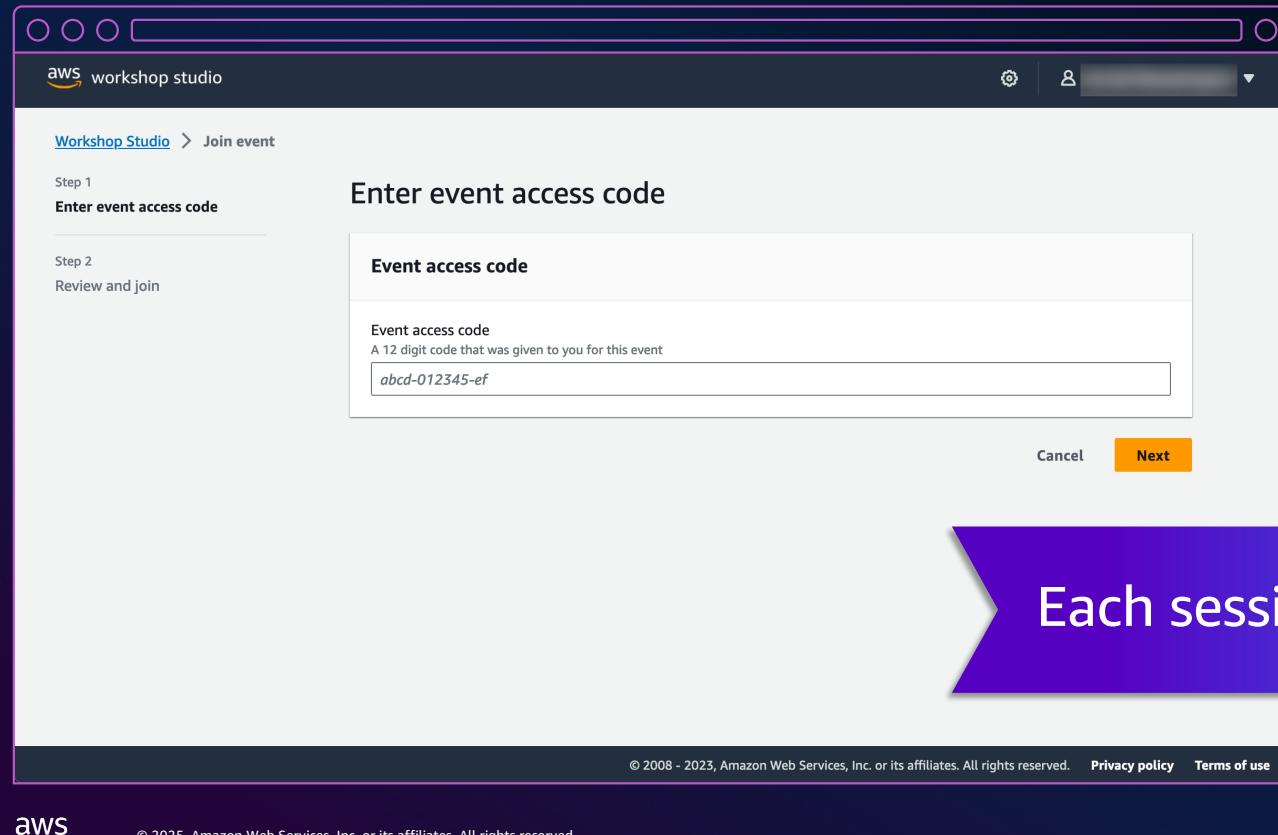
The screenshot shows a web browser window with the title bar "aws workshop studio". Below the title bar, the URL "Workshop Studio > Sign in" is visible. The main content area is titled "Sign in" and contains the sub-instruction "Choose a preferred sign-in method". There are three distinct login options:

- Email one-time password (OTP)**: An orange button with the text "Email one-time password (OTP)" in white. Below it, a placeholder text says "Enter your personal or corporate email to receive a one-time password".
- Login with Amazon**: A white button with the text "Login with Amazon" in black. Below it, a placeholder text says "Login with your Amazon.com retail account".
- Amazon employee**: A white button with the text "Amazon employee" in black. Below it, a placeholder text says "Login with your Amazon Corporate account. Only for Amazon Employees.".

A large blue arrow points from the bottom right towards the "Email one-time password (OTP)" button. To the right of the arrow, the URL <https://catalog.workshops.aws/join> is displayed in white text on a blue background.

At the bottom of the page, there is a footer with the text "© 2008 - 2023, Amazon Web Services, Inc. or its affiliates. All rights reserved." followed by "Privacy policy" and "Terms of use". The AWS logo is located at the bottom left.

Step 2: Enter the event access code



Each session has a unique code



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Step 3: Review terms and join event

The screenshot shows the 'Review and join' step of the AWS Workshop Studio 'Join event' process. The top navigation bar includes 'Workshop Studio' and 'Join event'. A sidebar on the left lists 'Step 1: Enter event access code' (selected) and 'Step 2: Review and join' (highlighted with a blue circle).

Event details:

Name: Platform Engineering on EKS event	Start time: 6/02/2025 12:36 PM	Duration: 12 hours	Level: 400
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Description:
Test event for content Platform Engineering on EKS

Terms and Conditions:
Read and accept before joining the event
Read and accept before joining the event:
1. By using AWS Workshop Studio for the relevant event, You agree to [the AWS Event Terms and Conditions](#), the [AWS Responsible AI Policy](#), and the [AWS Acceptable Use Policy](#).
2. If You are under 18 years old, you may participate in the relevant event using AWS Workshop Studio: (a) If You are at least the minimum age below based on the country or region in which You reside, and (b) with the involvement of a parent, guardian, or educator.

Country or region	Minimum age
All countries or regions not listed below (including the United States, Brazil, the United Kingdom, and India)	13
Canada, China, Republic of Korea (South Korea)	14
Australia	15
Japan, Switzerland, Vietnam, and countries in the European Economic Area	16
Azerbaijan, Bolivia, Colombia, Dominican Republic, Indonesia, Lebanon, Malaysia, Mexico, Montenegro, Nepal, Philippines, Thailand, Turkey, and countries in Africa	18

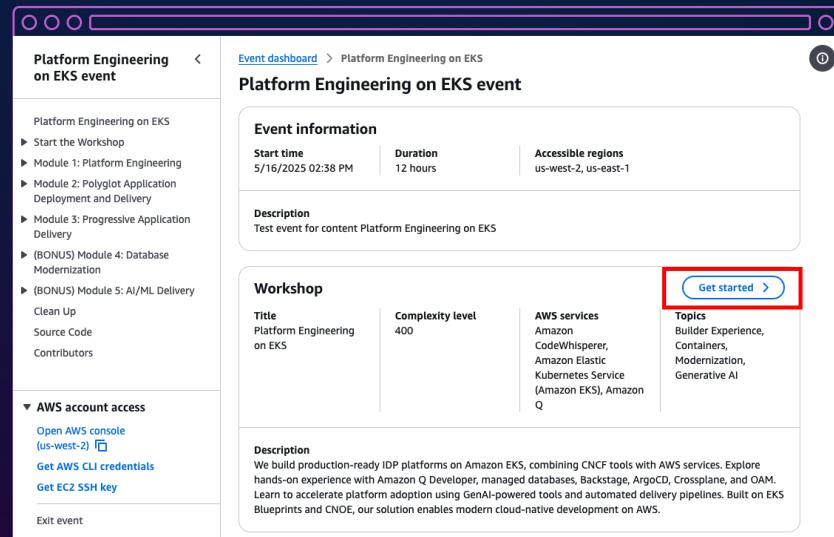
3. You acknowledge and agree that You are using an AWS-owned account that You will only be able to access during the relevant event. You have no ownership rights over this AWS-owned account.
4. During the relevant event, while using this AWS-owned account, You will not use, import, input, or introduce any data, dataset, or other material that contains personal data, financial information, or any other data or materials that may be subject to laws and regulations (such as the General Data Protection Regulation or The Health Insurance Portability and Accountability Act of 1996).
5. If You find residual resources or materials in this AWS-owned account, You will notify your Event Operator immediately.
6. AWS, its affiliates, and any entities or persons acting on AWS's behalf reserves the right to terminate this AWS-owned account and to delete its contents at any time, without any notice to You.
7. During the relevant event, while using this AWS-owned account, You will not process or run any operation on any data other than test datasets or lab materials that have been approved by AWS.
8. You will not copy, import, export or otherwise create derivative works of materials provided by AWS for use outside of the relevant event.
9. AWS, its affiliates, and any entities or persons acting on AWS's behalf have no obligation to enable the transmission of Your materials through AWS Workshop Studio, and may, in their discretion, edit, block, refuse to post, or remove Your materials at any time, without notice to You.
10. If You access and use a service and/or third-party models that have their own terms during the relevant event, while in the AWS-owned account, You agree to review those terms and comply with them during the event.
11. If You are an AWS Partner using AWS Workshop Studio as part of Your participation in the AWS Partner Network Program, Your use of AWS Workshop Studio is governed by these terms, the AWS Partner Network Terms and Conditions, and the AWS Customer Agreement or other agreement with us governing your use of AWS Services.
12. Your use of AWS Workshop Studio will comply with these terms and all applicable laws. If You fail to comply with any of these terms, Your access to AWS Workshop Studio may be immediately terminated, without notice to You.

I agree with the Terms and Conditions

Cancel Previous Join event



Step 4: Get started with the workshop



Platform Engineering on EKS event

Event dashboard > Platform Engineering on EKS

Platform Engineering on EKS event

Event information

Start time	5/16/2025 02:38 PM	Duration	12 hours
Accessible regions			
us-west-2, us-east-1			

Description
Test event for content Platform Engineering on EKS

Workshop

Title	Platform Engineering on EKS	Complexity level	400
AWS services	Amazon CodeWhisperer, Amazon Elastic Kubernetes Service (Amazon EKS), Amazon Q		
Topics	Builder Experience, Containers, Modernization, Generative AI		

[Get started >](#)

Description
We build production-ready IDP platforms on Amazon EKS, combining CNCF tools with AWS services. Explore hands-on experience with Amazon Q Developer, managed databases, Backstage, ArgoCD, Crossplane, and OAM. Learn to accelerate platform adoption using GenAI-powered tools and automated delivery pipelines. Built on EKS Blueprints and CNOE, our solution enables modern cloud-native development on AWS.

AWS account access

- Open AWS console (us-west-2)
- Get AWS CLI credentials
- Get EC2 SSH key

Exit event



Platform Engineering on EKS event

Event dashboard > Platform Engineering on EKS

Platform Engineering on EKS

Welcome to the Platform Engineering on EKS Workshop



Platform Engineering on EKS

- Start the Workshop
- Module 1: Platform Engineering
- Module 2: Polyglot Application Deployment and Delivery
- Module 3: Progressive Application Delivery
- (BONUS) Module 4: Database Modernization
- (BONUS) Module 5: AI/ML Delivery
- Clean Up
- Source Code
- Contributors

AWS account access

- Open AWS console (us-west-2)
- Get AWS CLI credentials
- Get EC2 SSH key

Exit event



Step 5: Access AWS account

The diagram illustrates the workflow for accessing an AWS account. On the left, a screenshot of the 'Platform Engineering on EKS event' dashboard shows the 'Event information' section and a 'Workshop' section. In the 'Workshop' section, the 'Get AWS CLI credentials' and 'Get EC2 SSH key' links are highlighted with a red box and a yellow arrow pointing to the right. A large orange arrow points from the event dashboard to the AWS Management Console Home page on the right. The AWS Management Console Home page displays the 'Recently visited' services, 'Welcome to AWS' section, 'AWS Health' status, and 'Cost and usage' metrics.

Access the AWS Management Console or generate AWS CLI credentials as needed



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Event access code

<https://tinyurl.com/kub304-dc>

7404-007ca8-da



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Continue your Amazon EKS learning

Learn at your own pace



Take the [Amazon EKS Workshop](#) to expand your EKS skills



Increase your knowledge



Use our [Best Practices Guide](#) to build your Kubernetes knowledge

Earn Amazon EKS badge



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<https://github.com/aws-samples/>



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skillbuilder.aws



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on AWS Skill Builder to
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Thank you!



Please complete the session
survey in the mobile app

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