

Right serverless deployment model for speed and agility

Bikram Bora

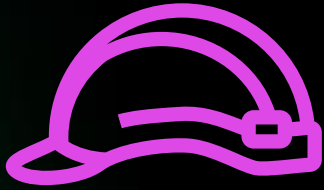
Enterprise Solutions Architect
Amazon Web Services



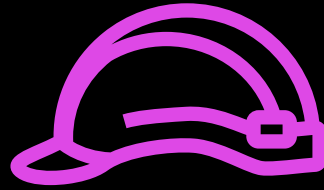
Agenda

- Challenges in serverless development
- A permission model for serverless deployments
- Serverless Application Model (SAM)
- SAM build, deploy & pipelines
- Summary and next steps

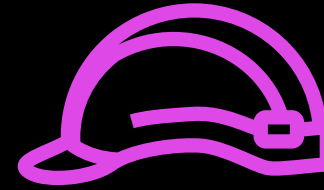
Modern Day software teams



Security



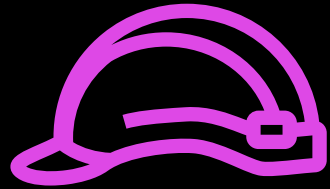
Development



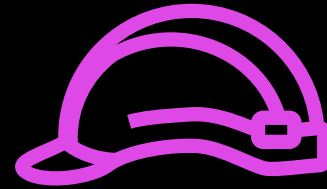
Operations

A Prescriptive Permission Model for Deployments

A Prescriptive Permission Model for Deployments



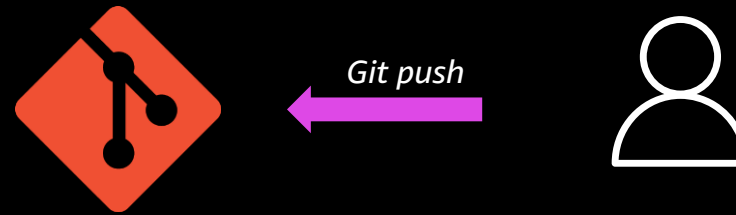
Deployer Role

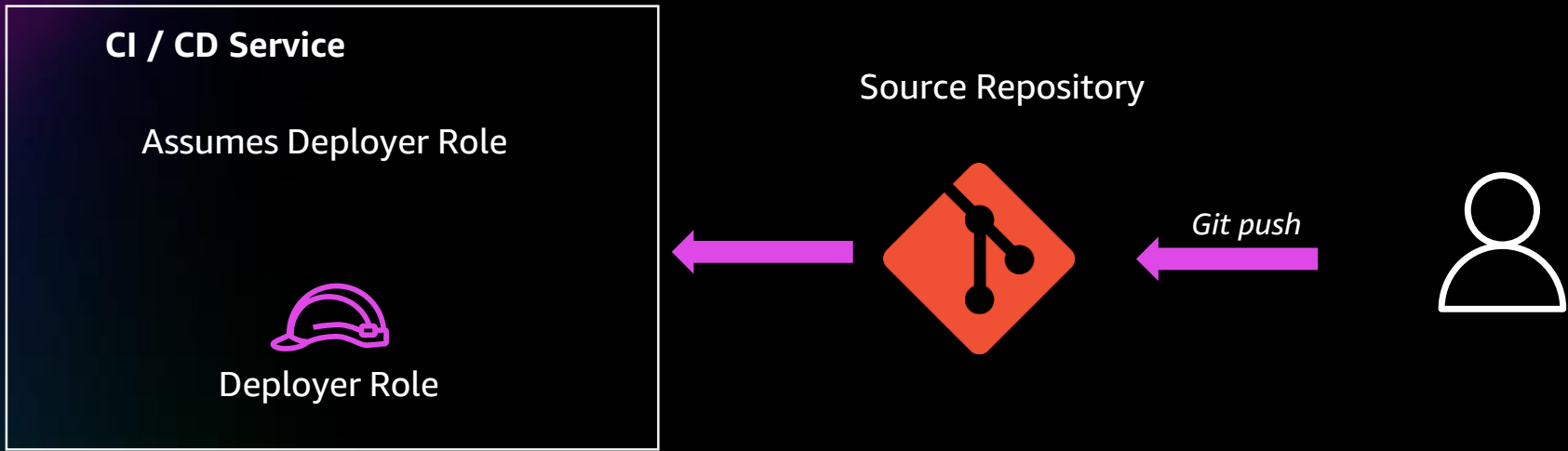


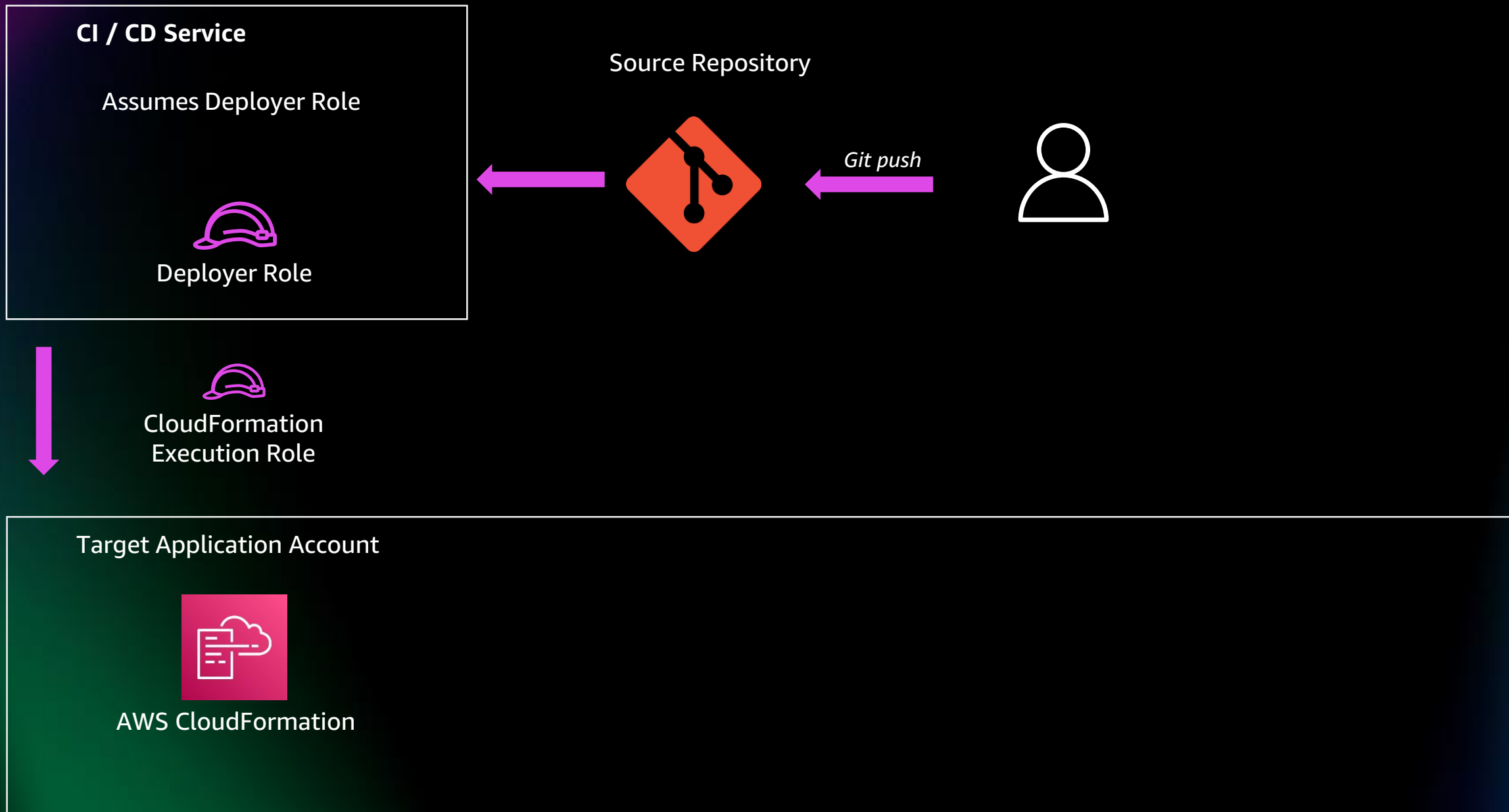
CloudFormation
Execution Role

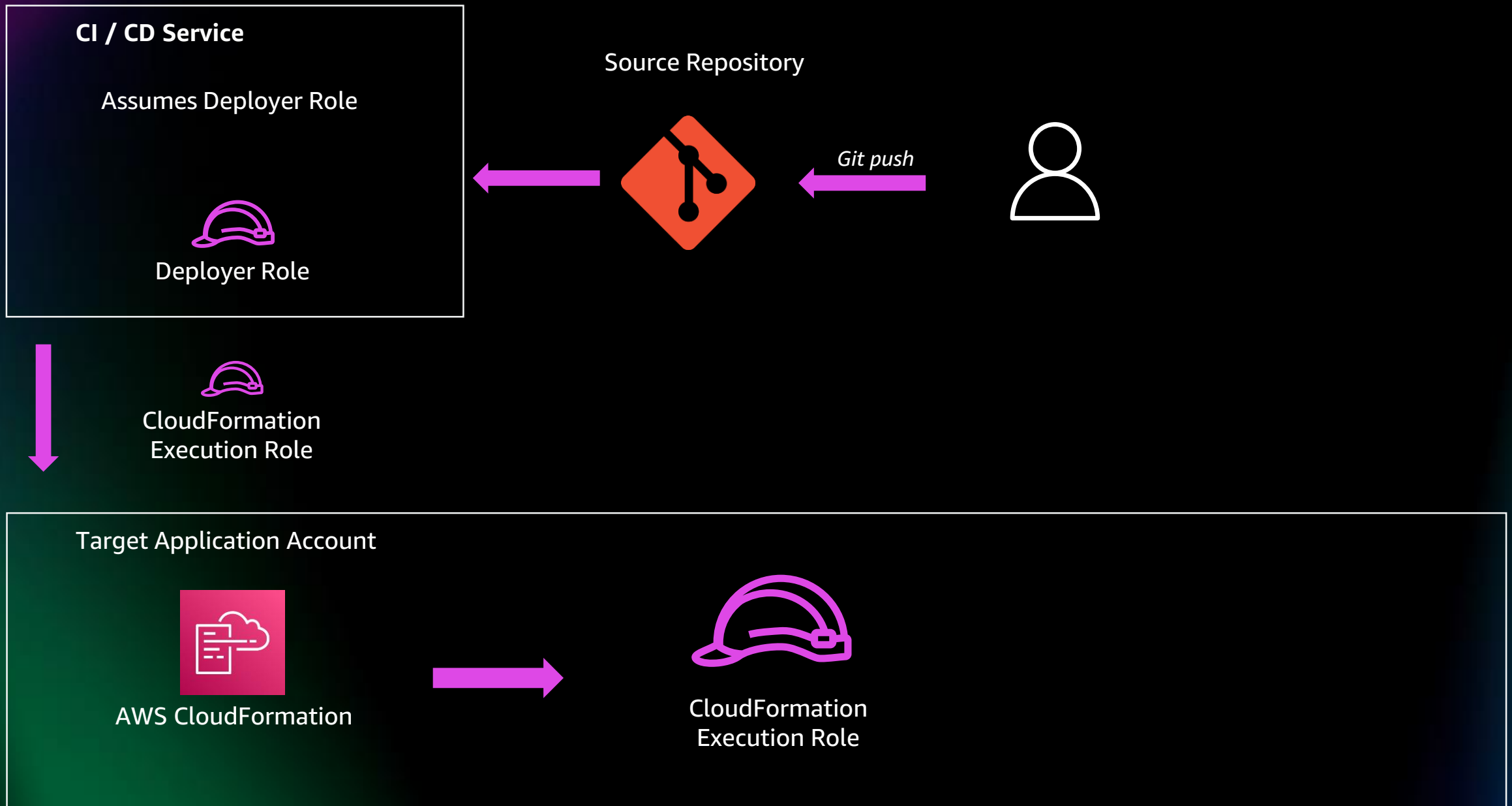
Let's look at how this permission model works for deployments

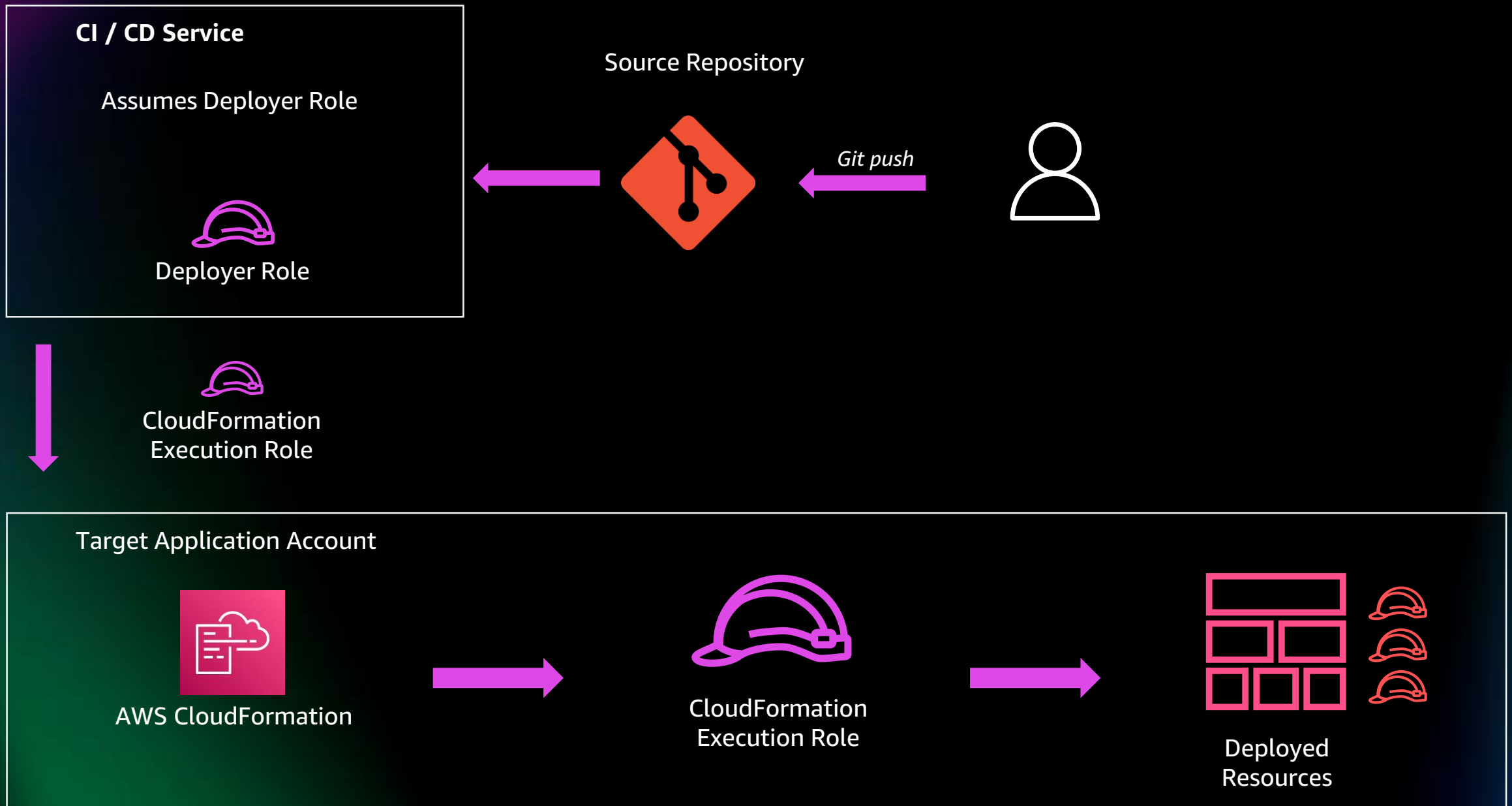
Source Repository











Deployer role uses

- Fetching **configuration data** required to synthesize a new AWS CloudFormation template
- **Creating an Amazon S3 bucket** for storing deployment state artifacts and metadata within it
- **Validating** an AWS CloudFormation template that it has just synthesized
- **Deploying** the AWS CloudFormation template

AWS Serverless Application Model (SAM)

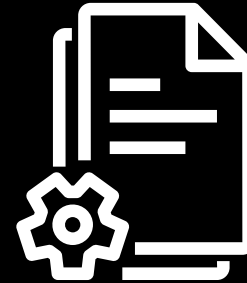


AWS Serverless Application Model (SAM)

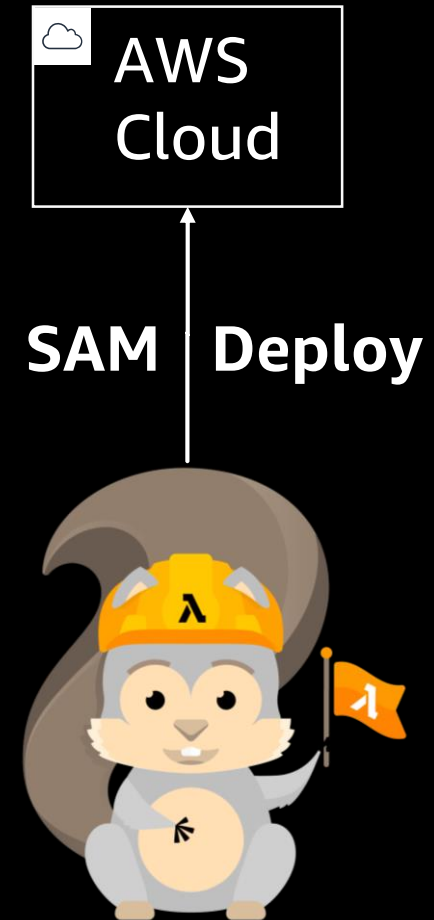
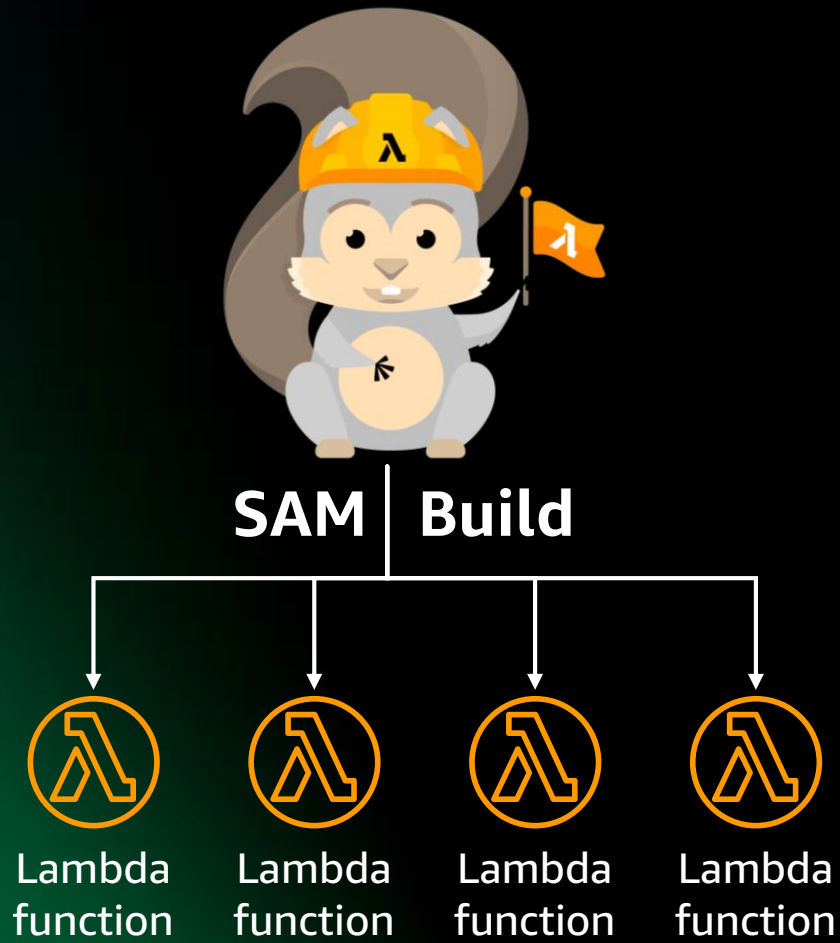
SAM CLI



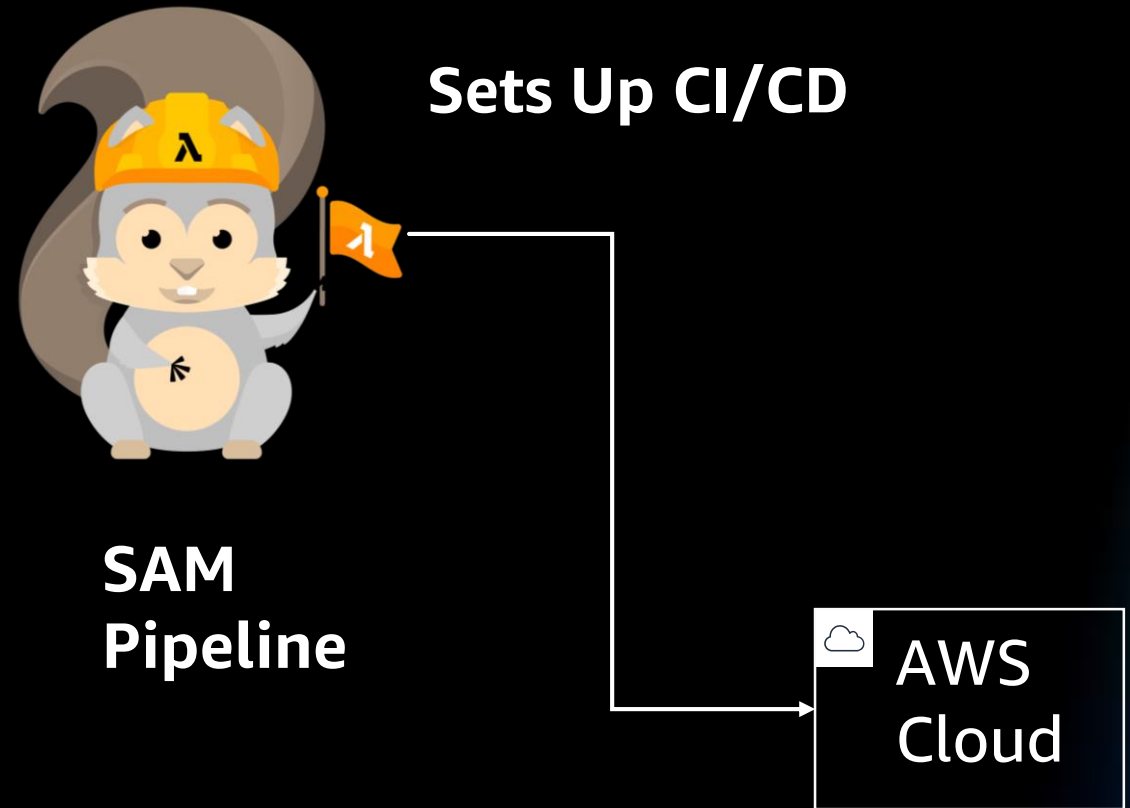
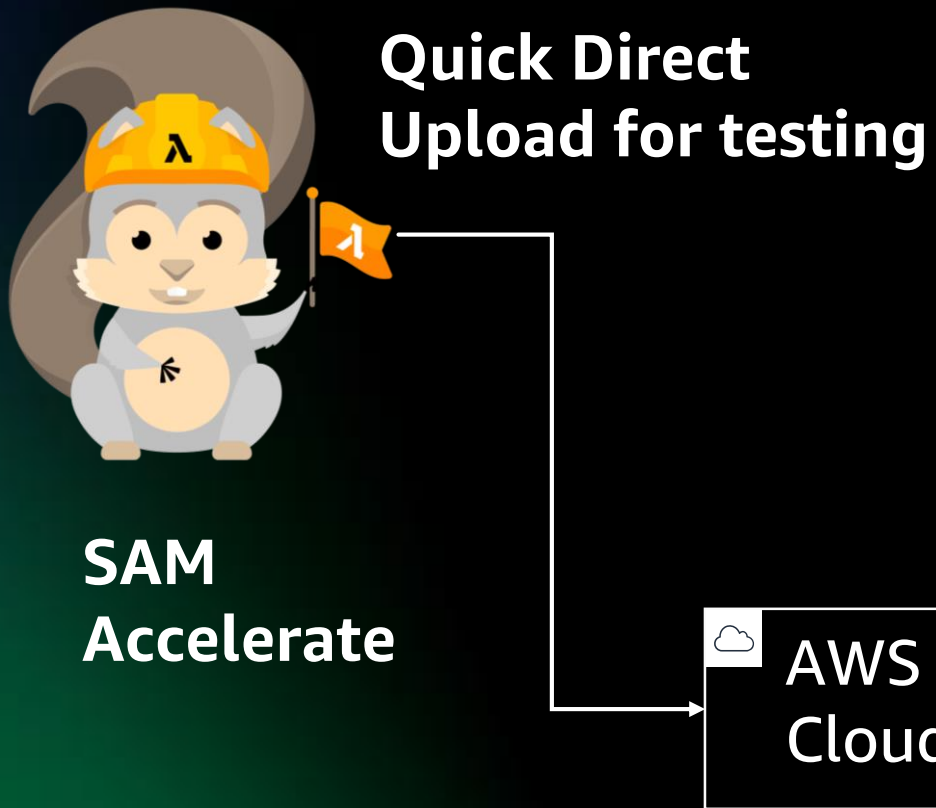
SAM Template



AWS SAM Build & SAM Deploy



AWS SAM Accelerate & SAM Pipeline



AWS SAM Pipeline

RINGING EVERYTHING TOGETHER

Source Repository

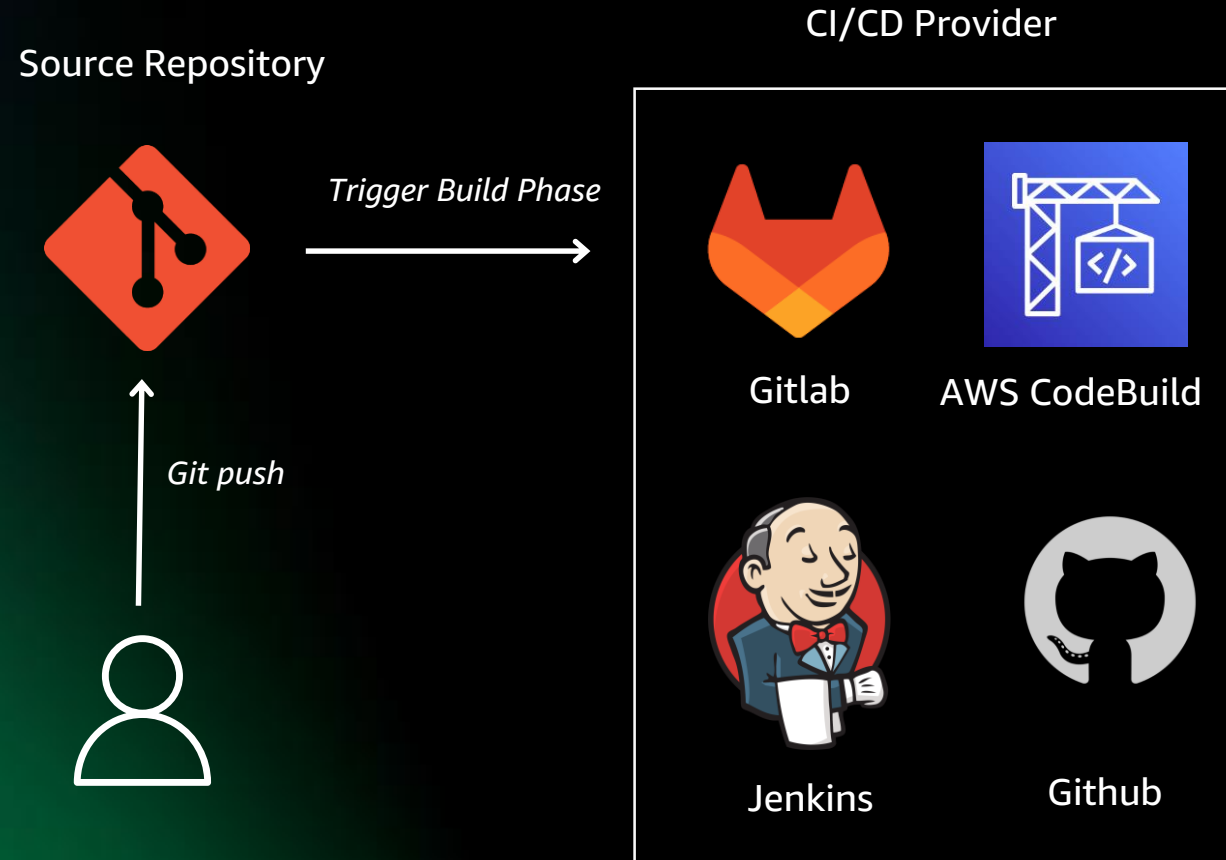


Git push



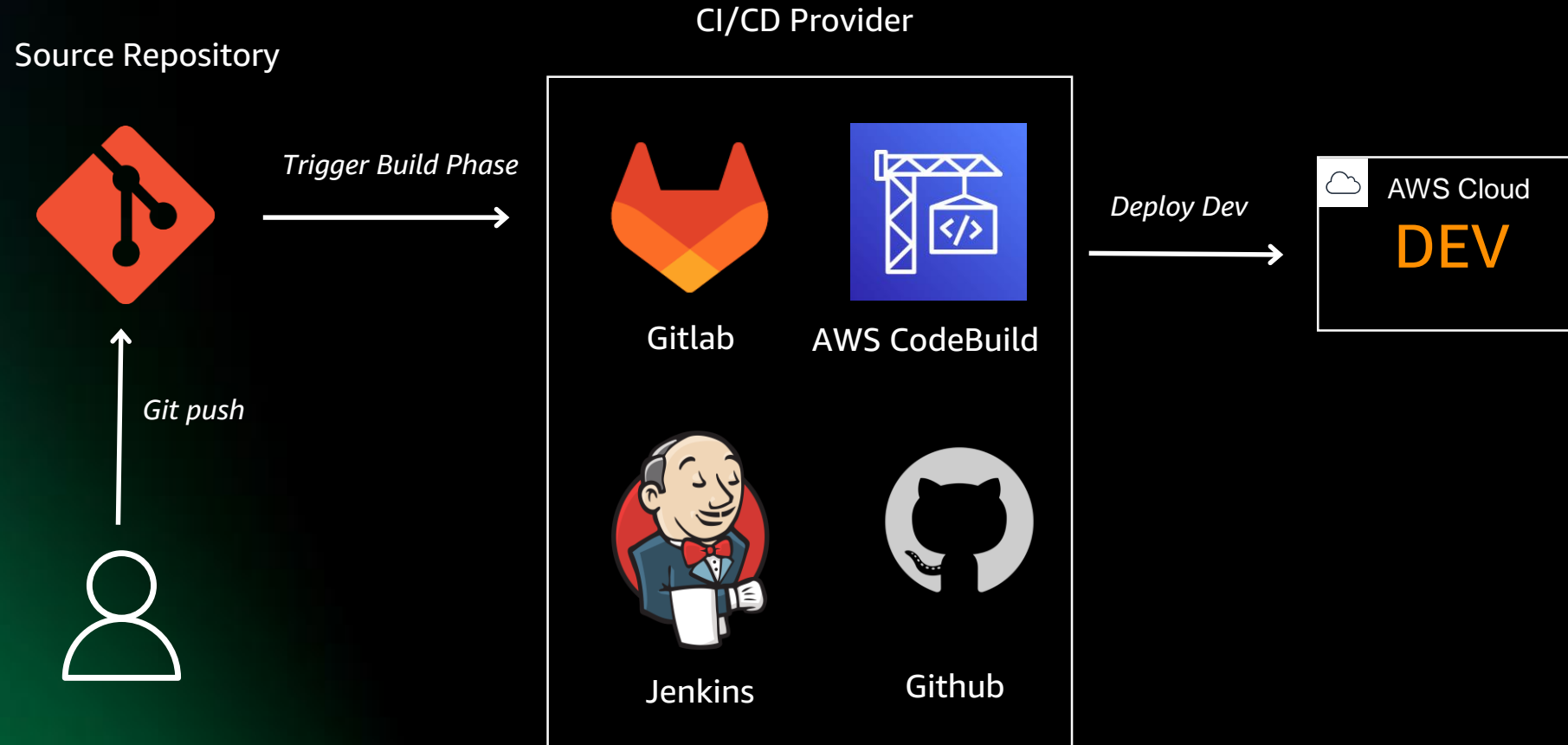
AWS SAM Pipeline

RINGING EVERYTHING TOGETHER



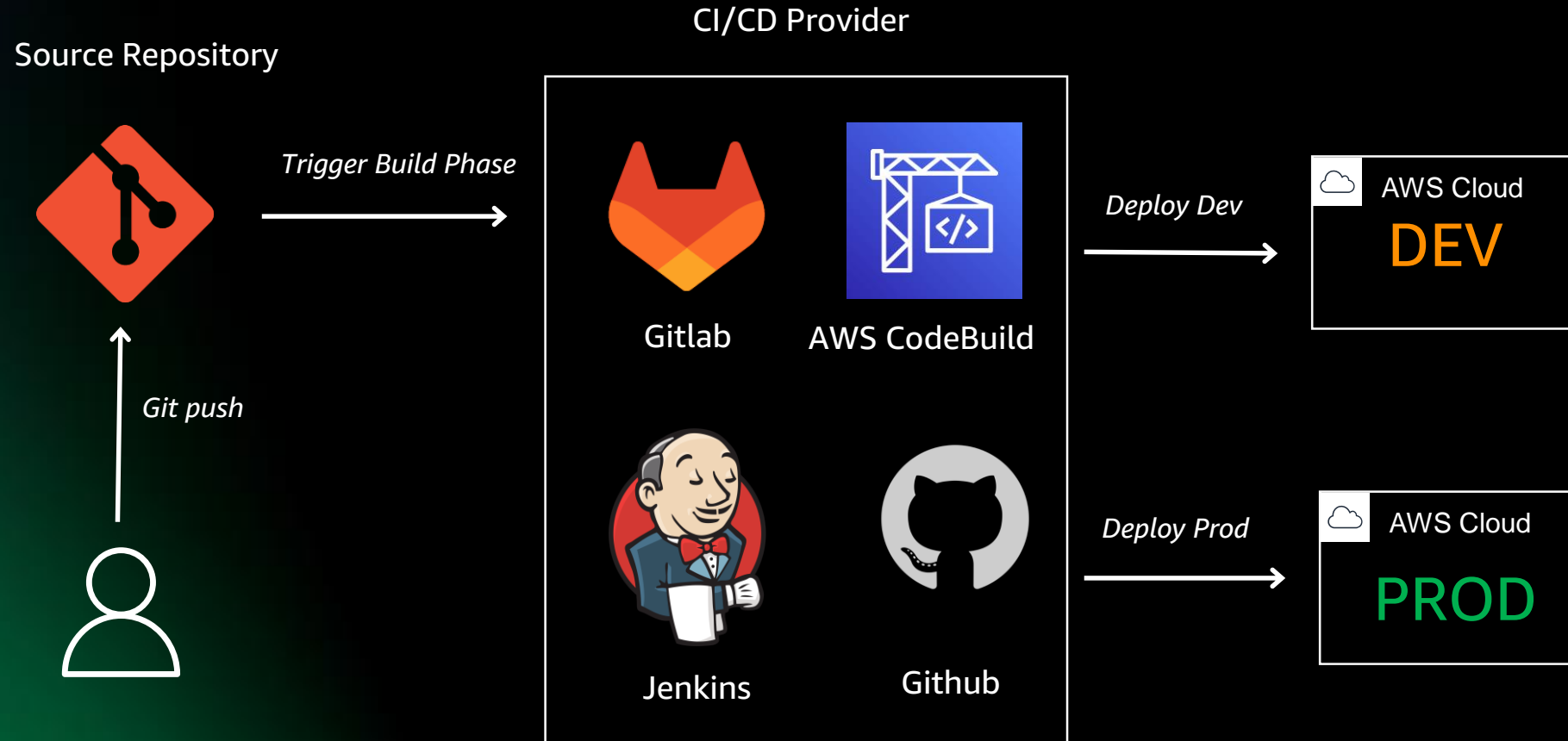
AWS SAM Pipeline

RINGING EVERYTHING TOGETHER



AWS SAM Pipeline

RINGING EVERYTHING TOGETHER



SAM in Action

Summary

- Deployer role has very small scope, it builds and packages the application
- SAM Build and SAM Deploy help you to build and directly deploy your application
- SAM Pipeline makes integration with your CI/CD Provider easy

Visit the Modern Applications resource hub

Dive deeper with these resources to help you develop an effective plan for your modernization journey.

- Build modern applications on AWS
- Business value of cloud modernization
- An introduction to event-driven architectures
- Accelerate full-stack web and mobile app development
- Determining the total cost of ownership: Comparing serverless and server-based technologies
- Building event-driven architectures with AWS
- Continuous learning, continuous modernization



<https://tinyurl.com/modern-apps-aws>

Visit resource hub

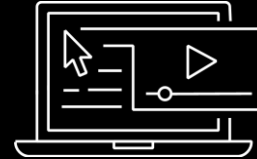


AWS Training and Certification

Get started with Free Digital Training for you and your team today



Achieve key milestones and plan your next steps with the AWS Modern Application skills training



Access 500+ free digital courses with [AWS Skill Builder](#)



Earn an industry-recognized credential:
[AWS Certified Developer – Associate](#)
[AWS Certified DevOps – Professional](#)



Create a self-paced learning roadmap
[AWS ramp-up guide - Developer](#)
[AWS ramp-up guide - DevOps](#)

Thank you for attending AWS Innovate Modern Applications Edition

We hope you found it interesting! A kind reminder to **complete the survey**.
Let us know what you thought of today's event and how we can improve the event
experience for you in the future.



aws-apj-marketing@amazon.com



twitter.com/AWSCloud



facebook.com/AmazonWebServices



youtube.com/user/AmazonWebServices



slideshare.net/AmazonWebServices



twitch.tv/aws

Thank you!