



Azure Rosenheim
Meetup

Pulumi & Azure: The turbo boost for your cloud projects



Disclaimer

Everything in this presentation is either OSS or part of a free tier!

Hello!



@_EDIRI



@DIRIEN



@_EDIRI

I am **Engin Diri**,

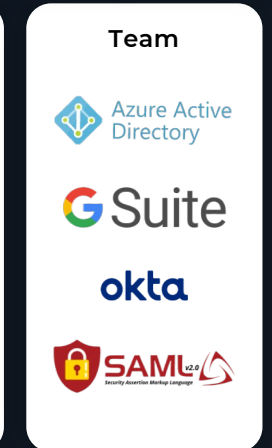
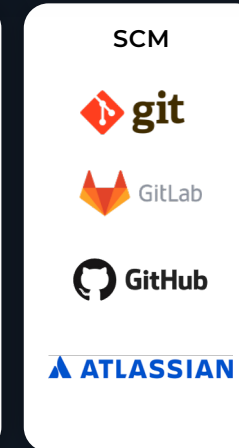
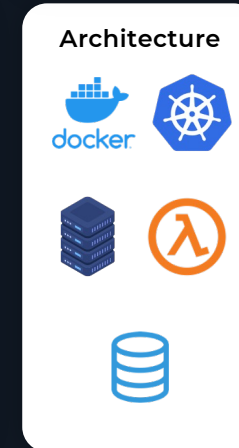
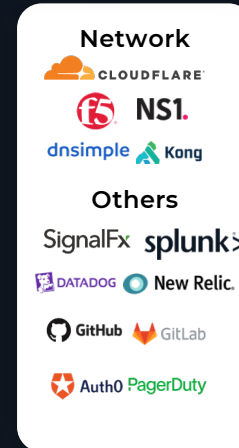
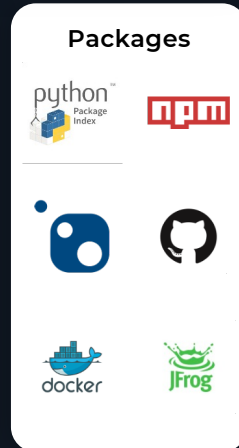
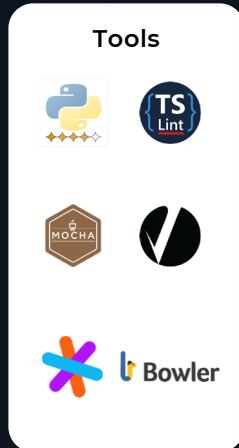
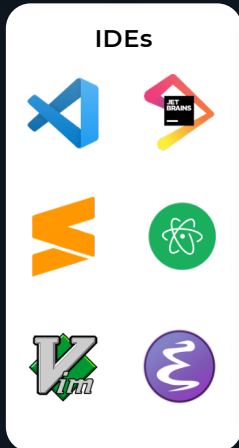
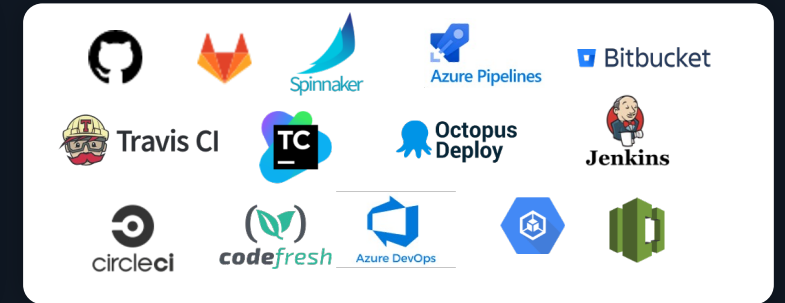
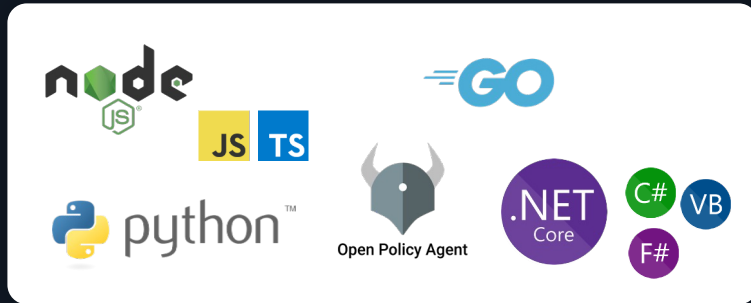
- Working at Pulumi as Customer Experience Architect
- Cloud Transformation and Enablement
- Continuous everything...



Agenda

- Introduction
- Pulumi High Level View
- Pulumi Automation API / Cloud /Policy as Code
- Pulumi and Azure
- Demo

Your Cloud, Your Language, Your Way

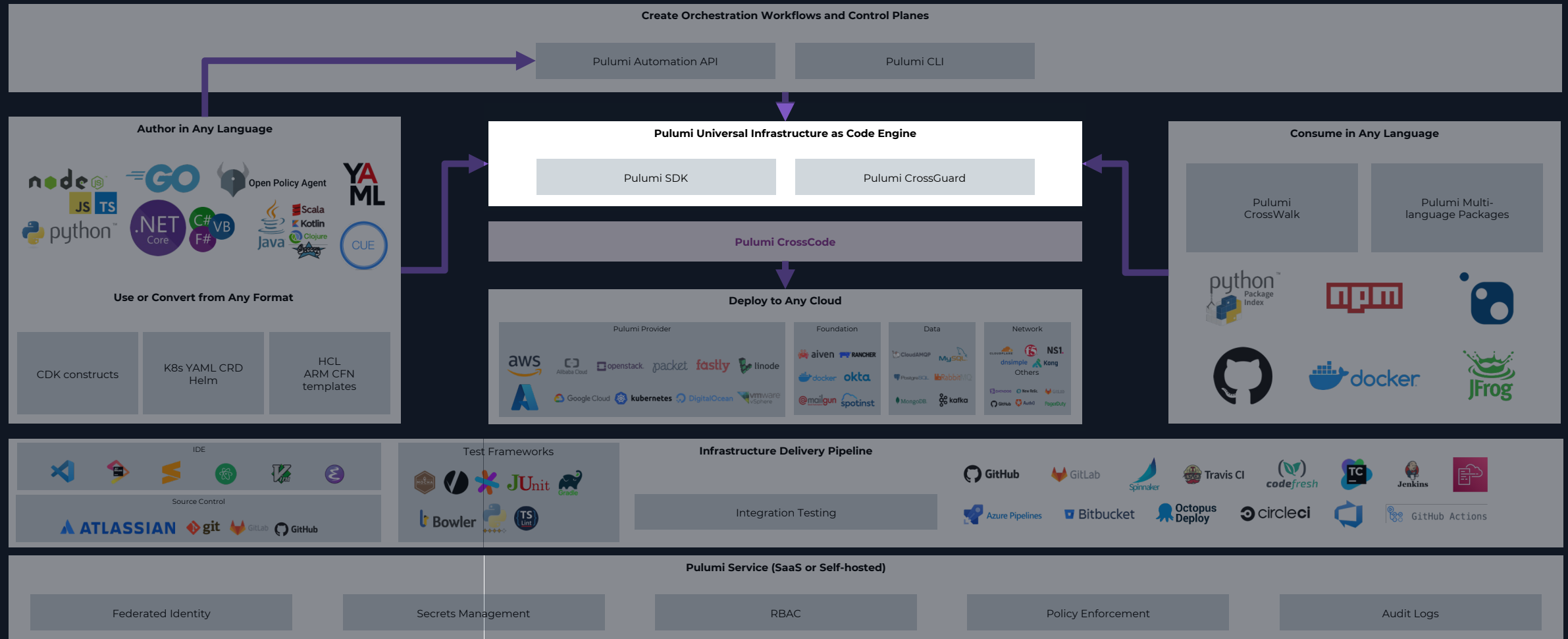


Build

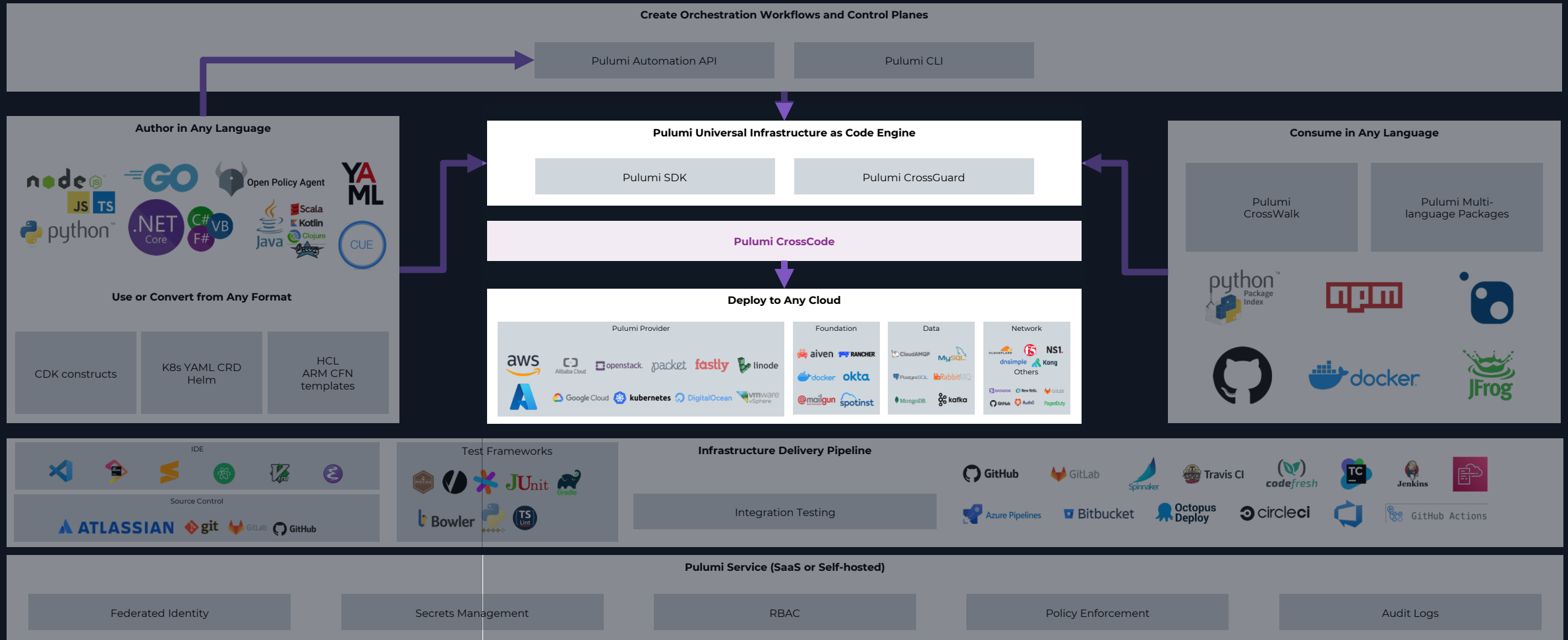
Deploy

Manage

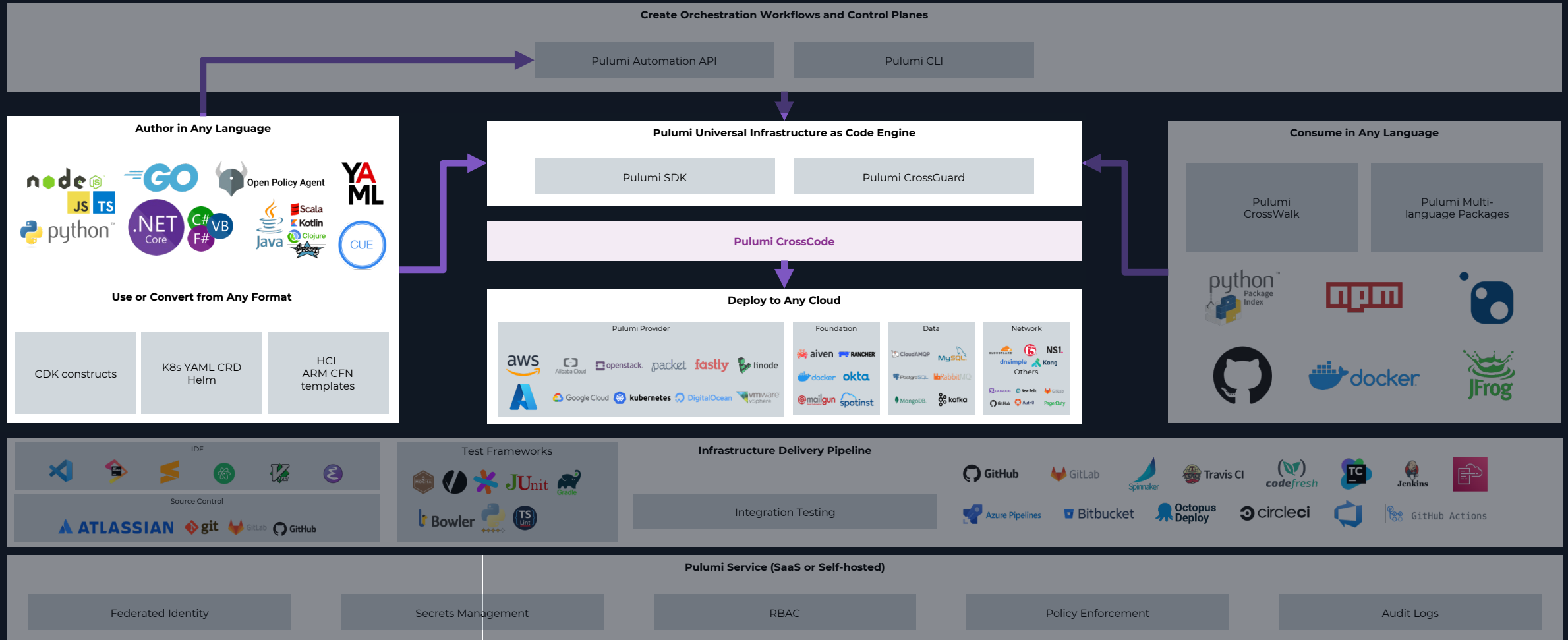
Pulumi: The Cloud Engineering Platform



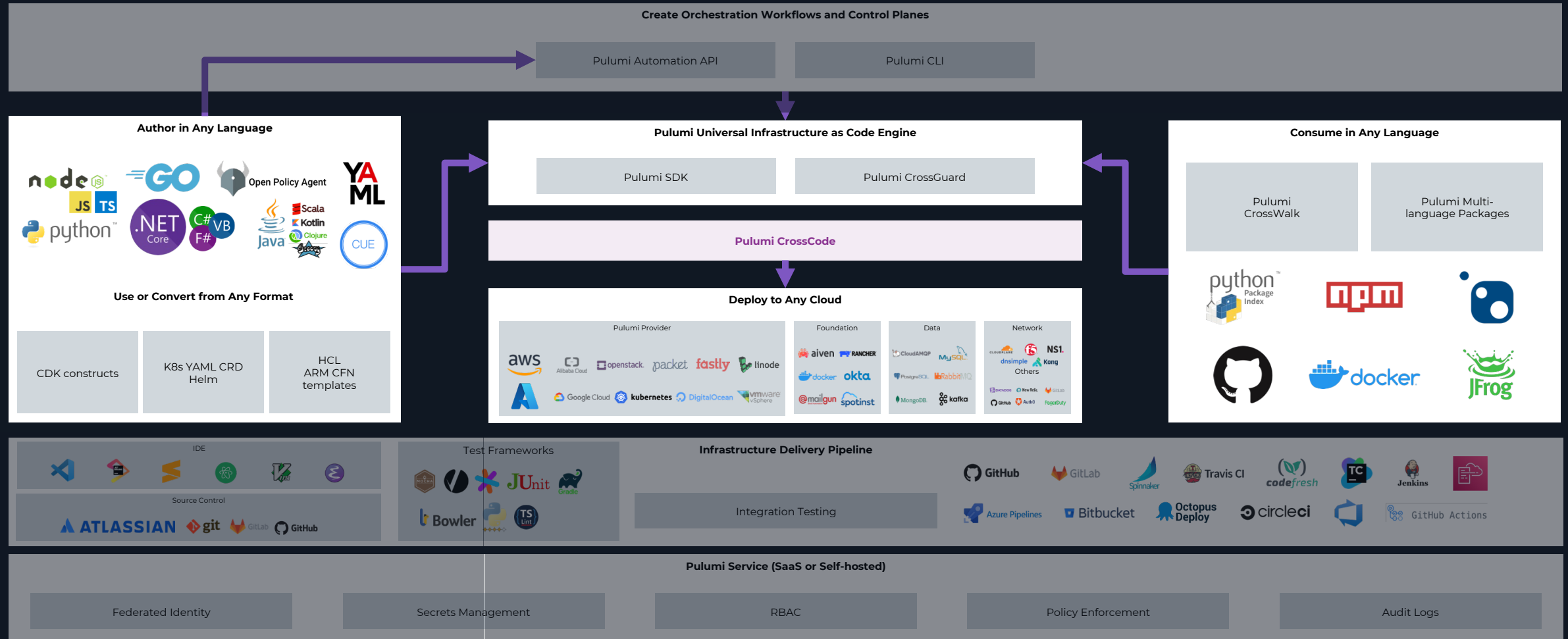
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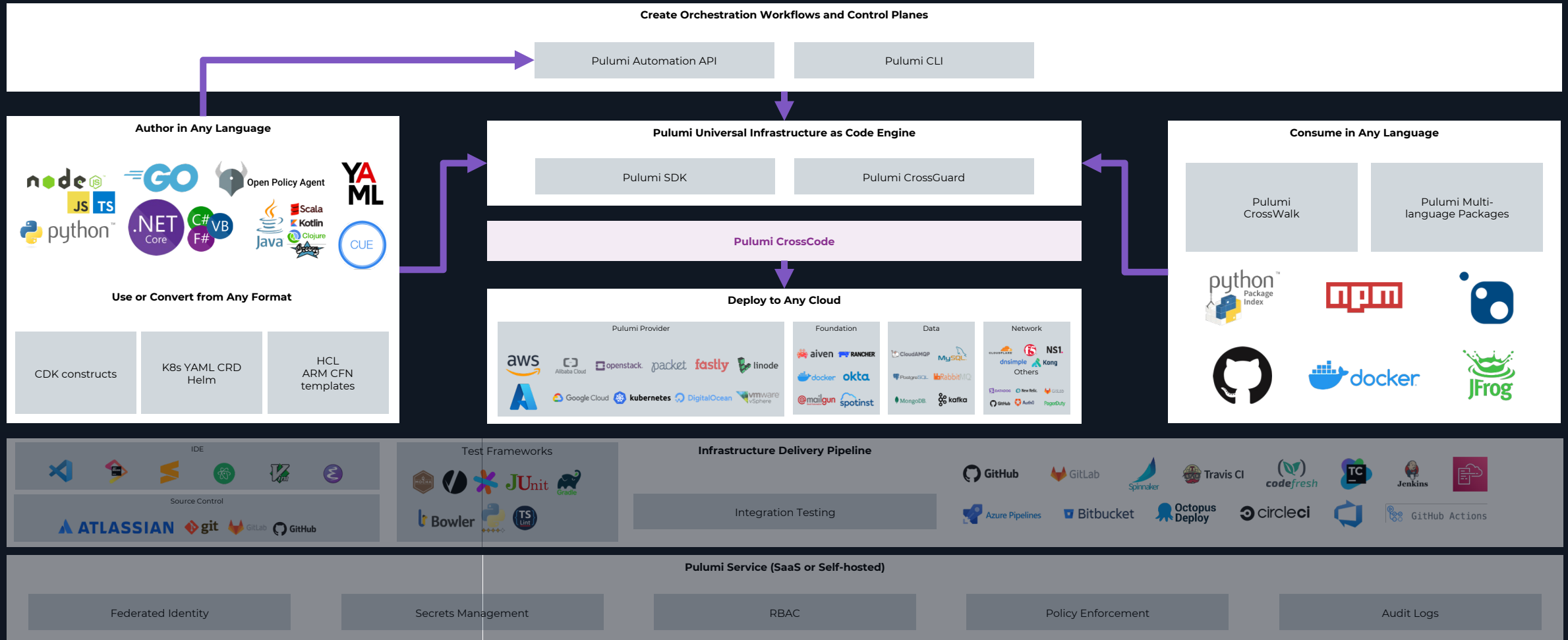
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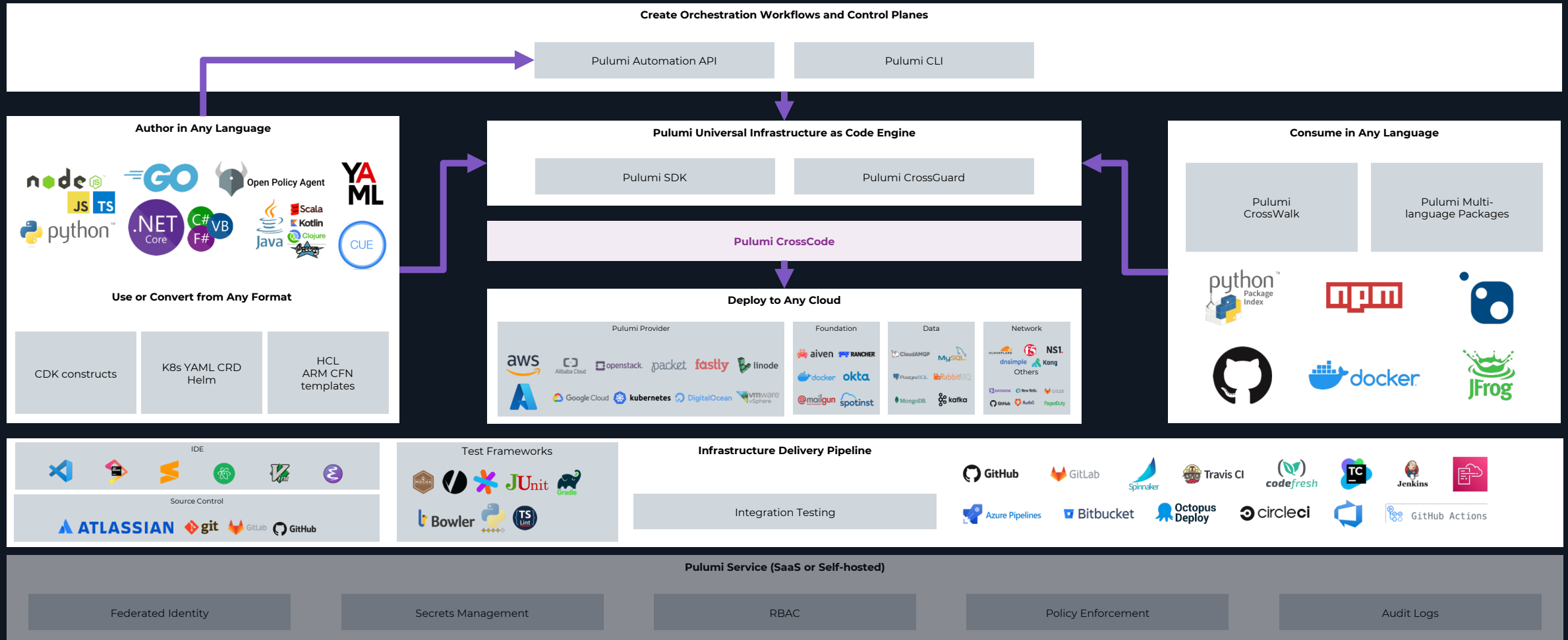
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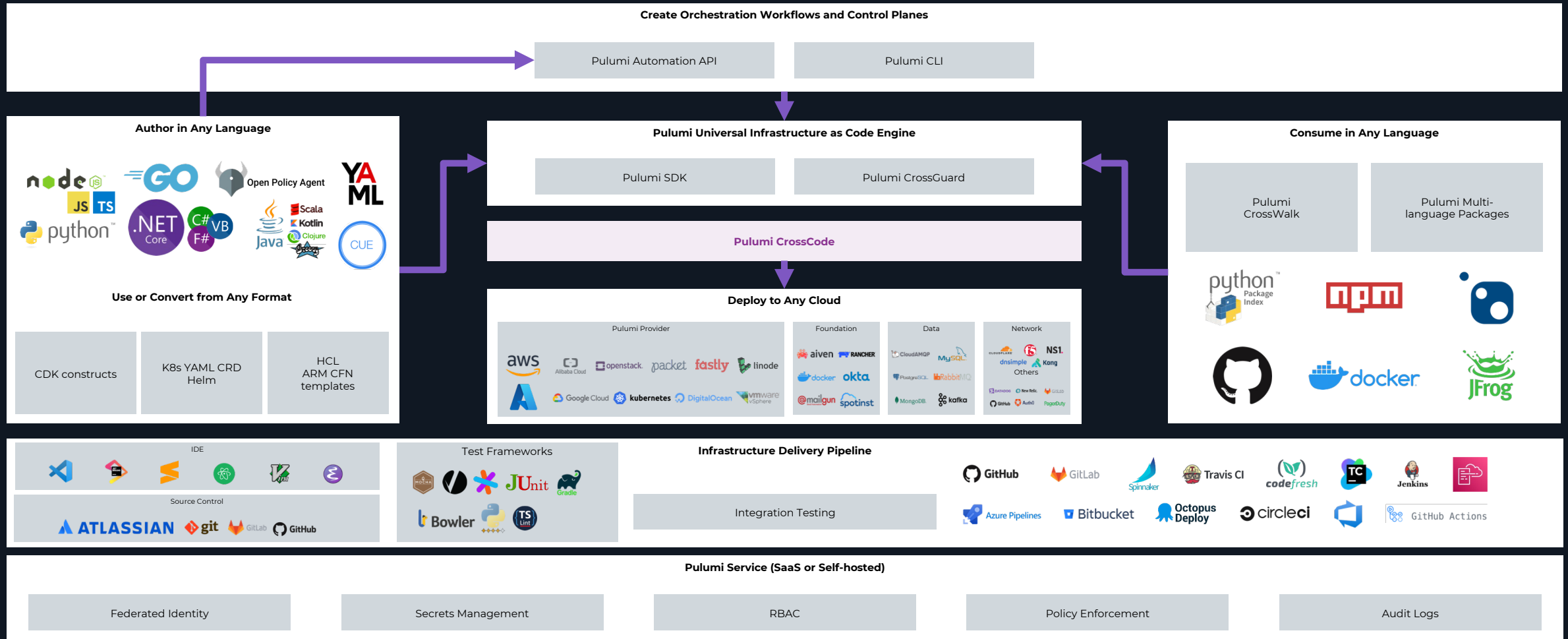
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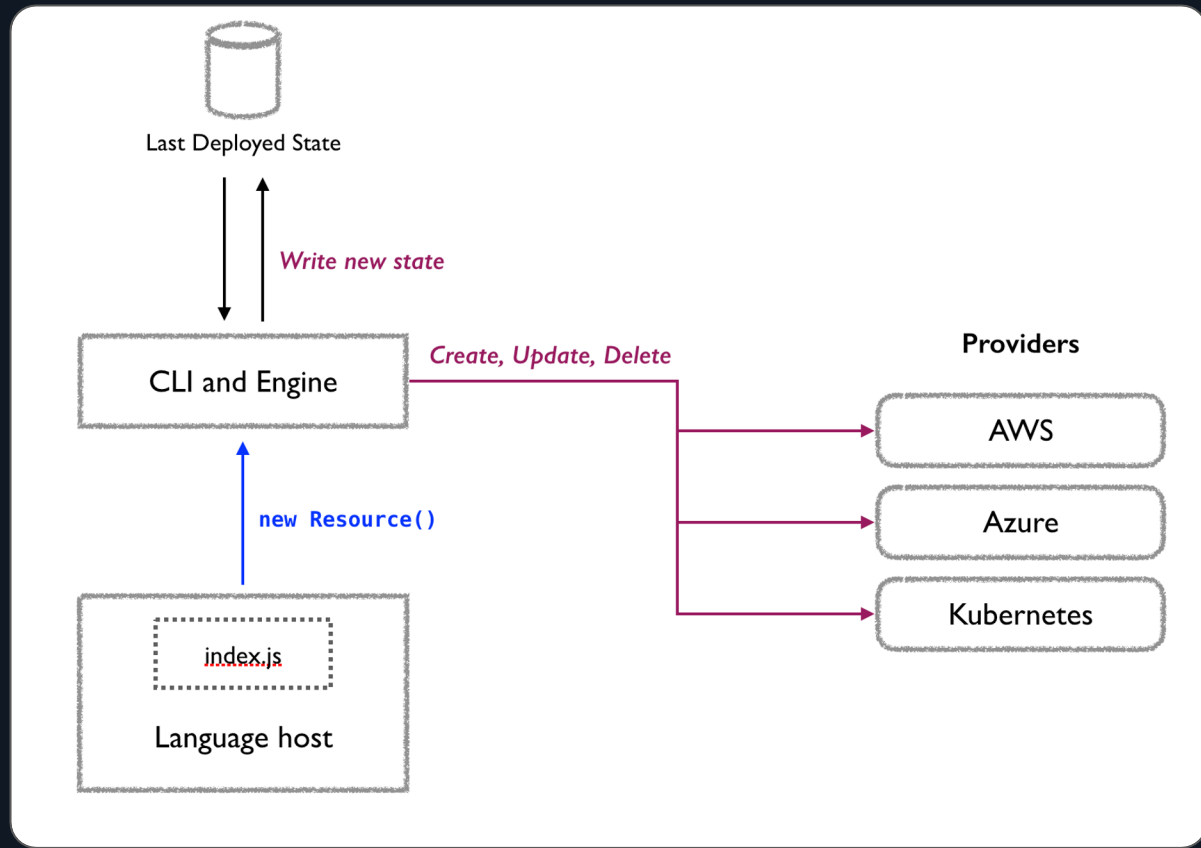
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Pulumi High Level View

Pulumi - High Level View

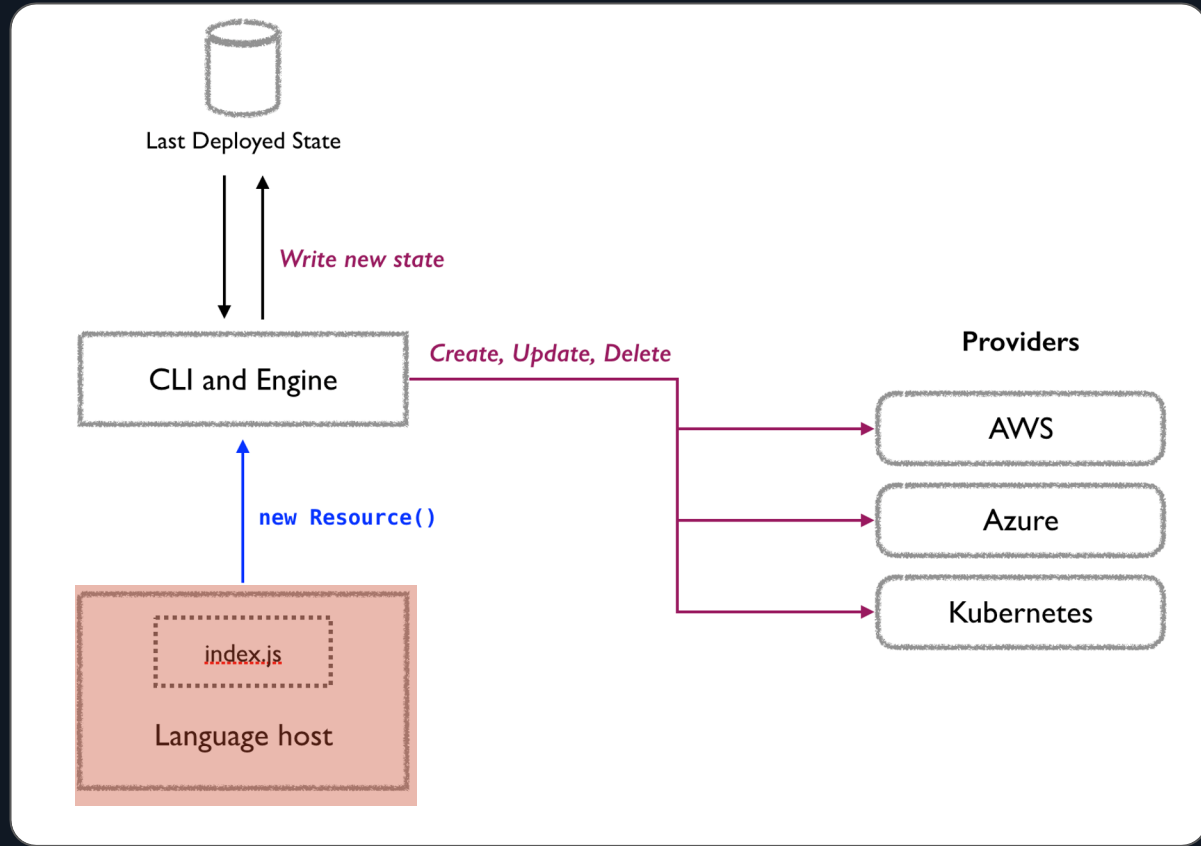
Pulumi Architecture



Pulumi - High Level View

Pulumi Architecture

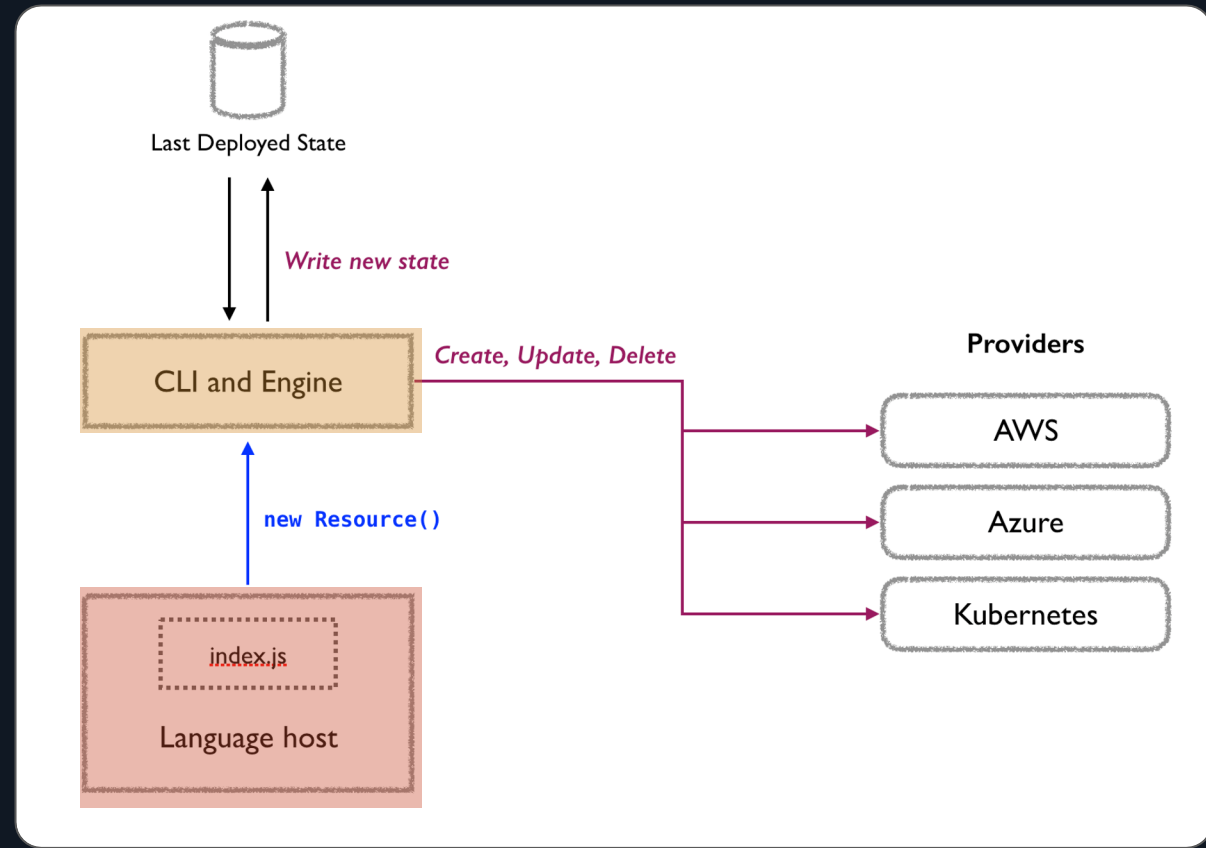
- Language Host



Pulumi - High Level View

Pulumi Architecture

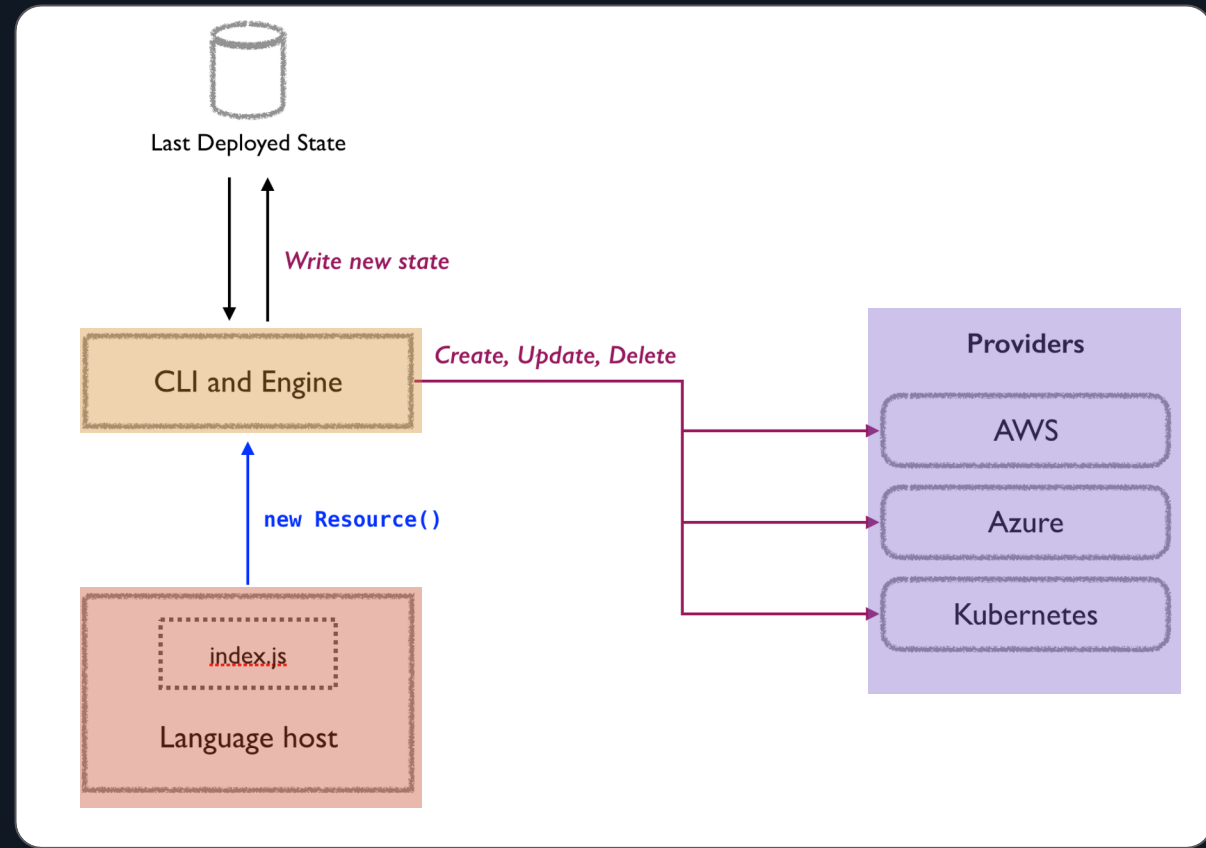
- Language Host
- CLI & Engine
- Providers
- State Backend
 - Pulumi Service
 - Cloud Storage (S3, ...)



Pulumi - High Level View

Pulumi Architecture

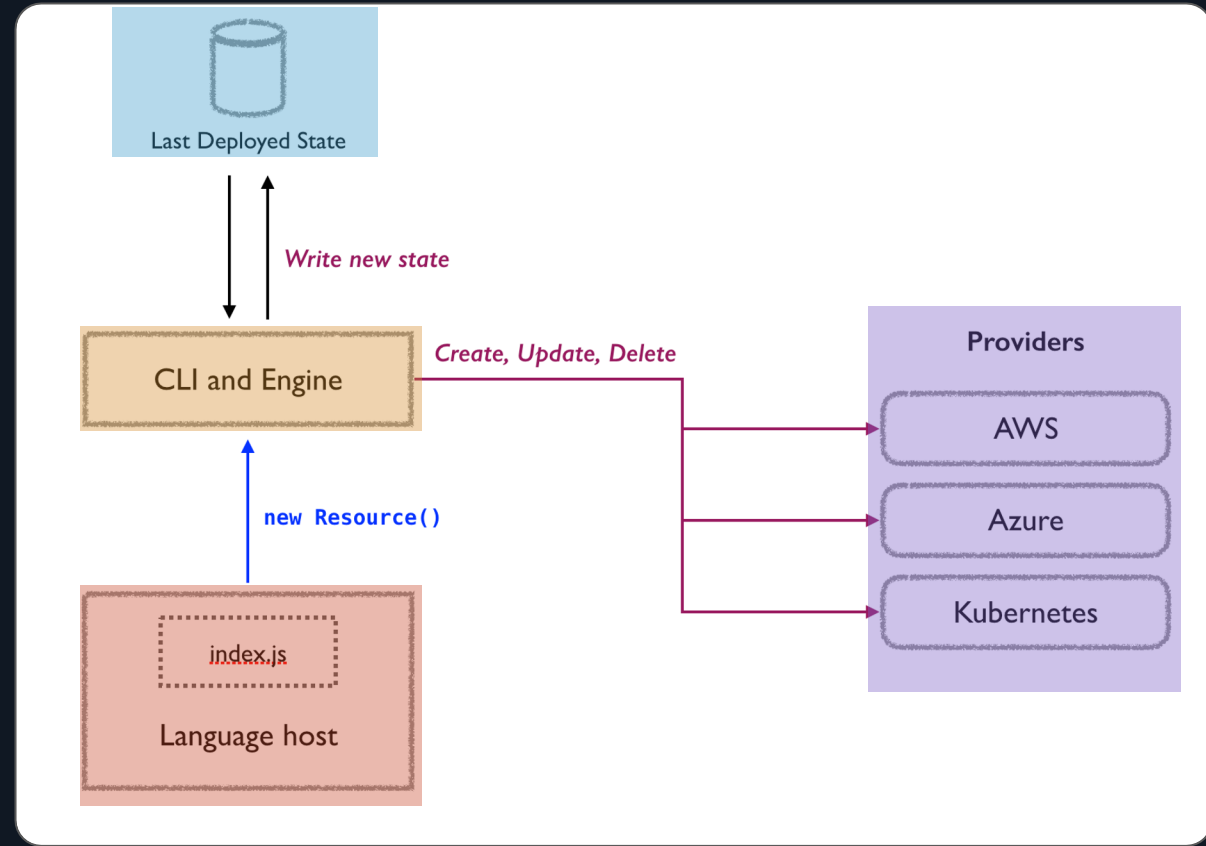
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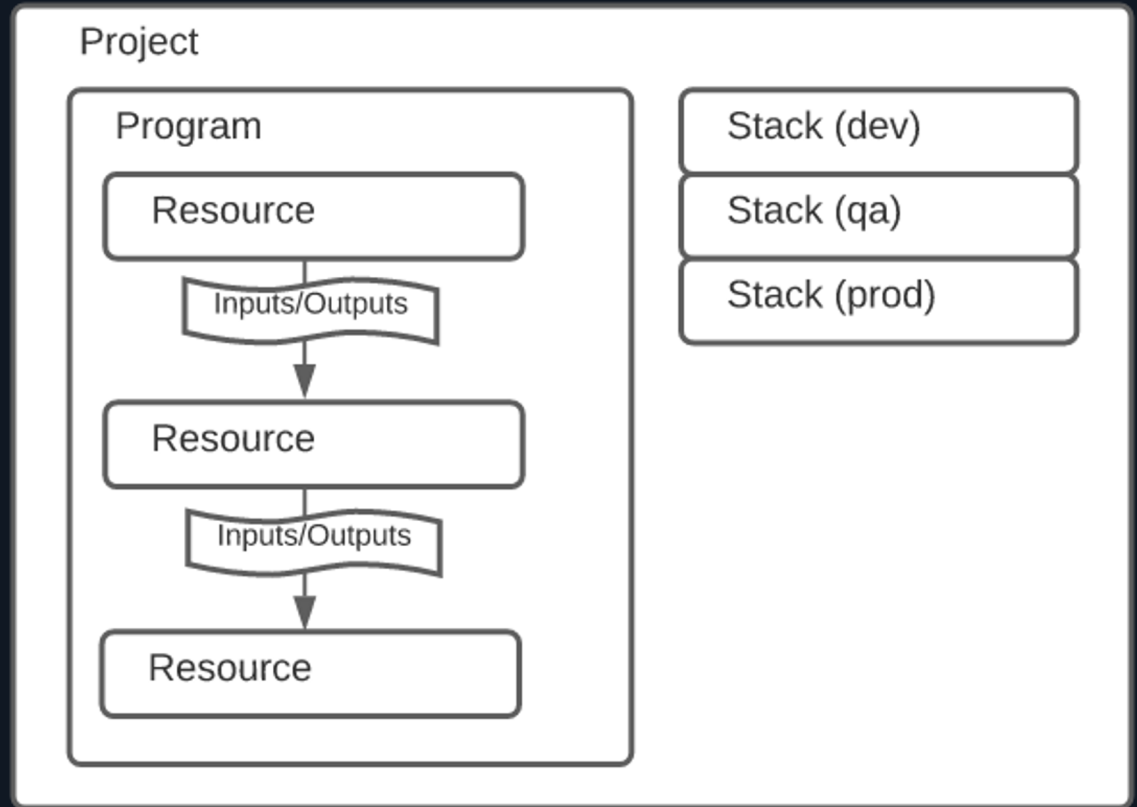
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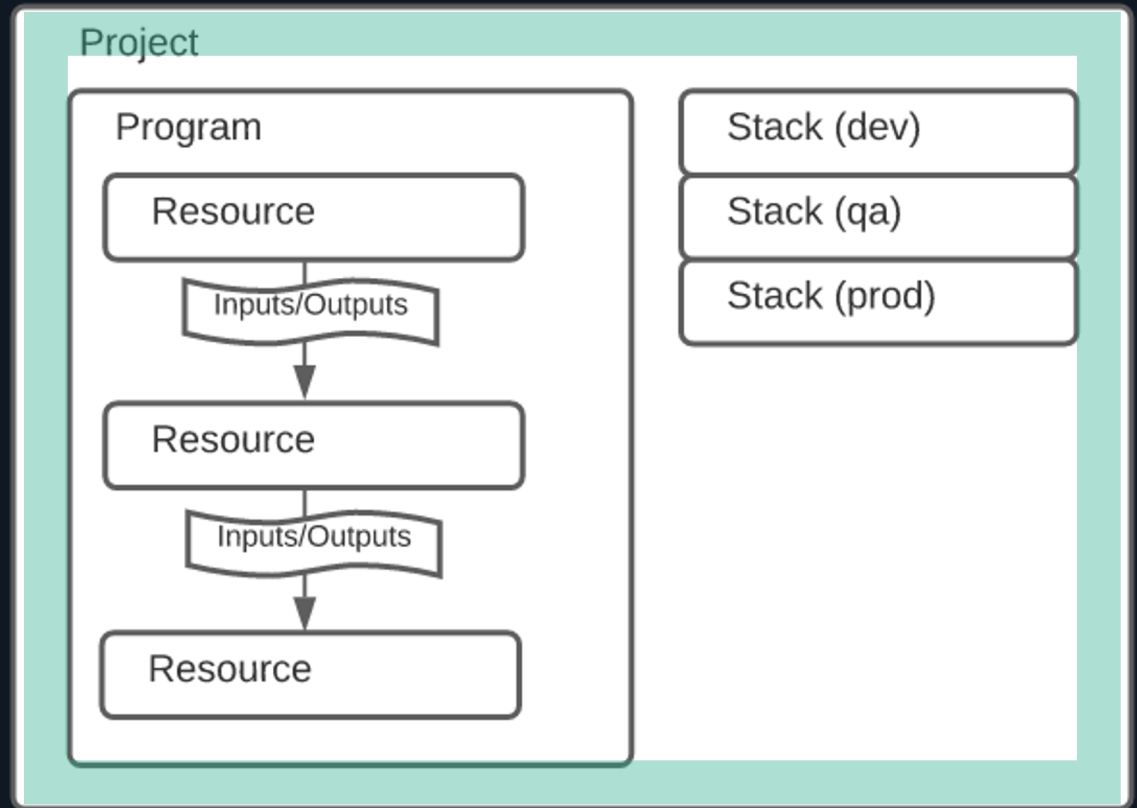
Pulumi - High Level View

- Automate your infrastructure setup with one or more Pulumi projects



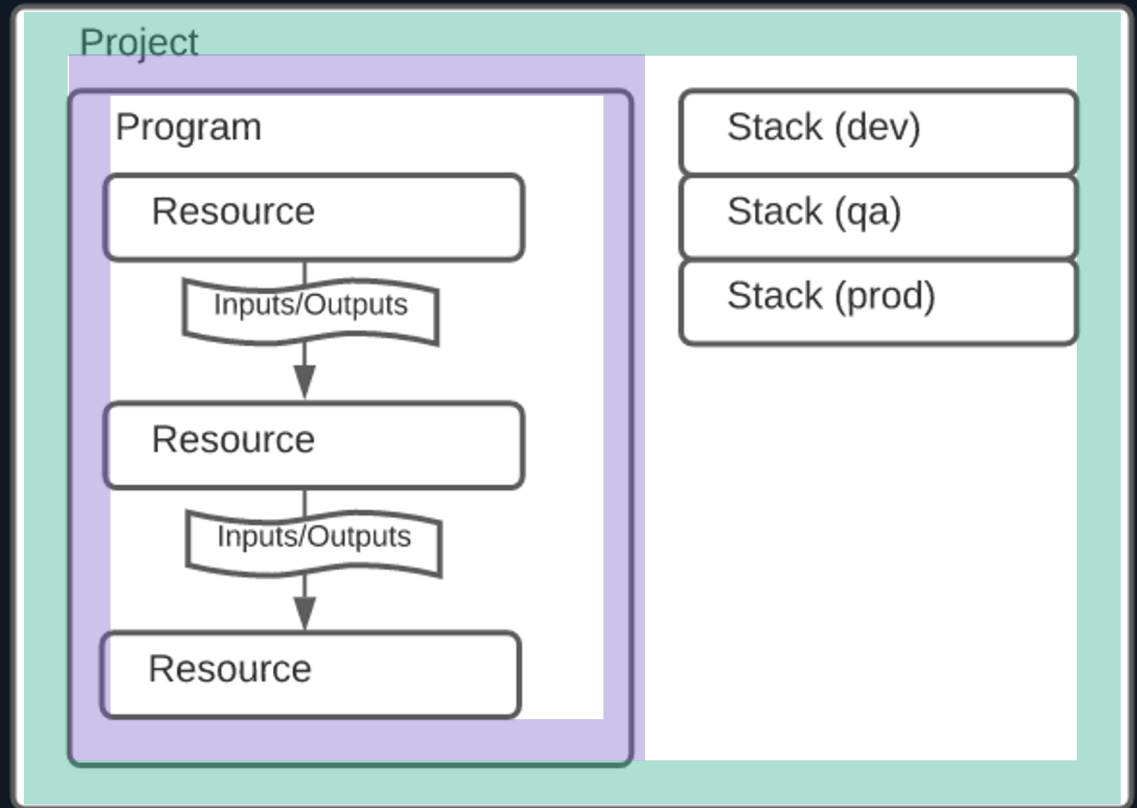
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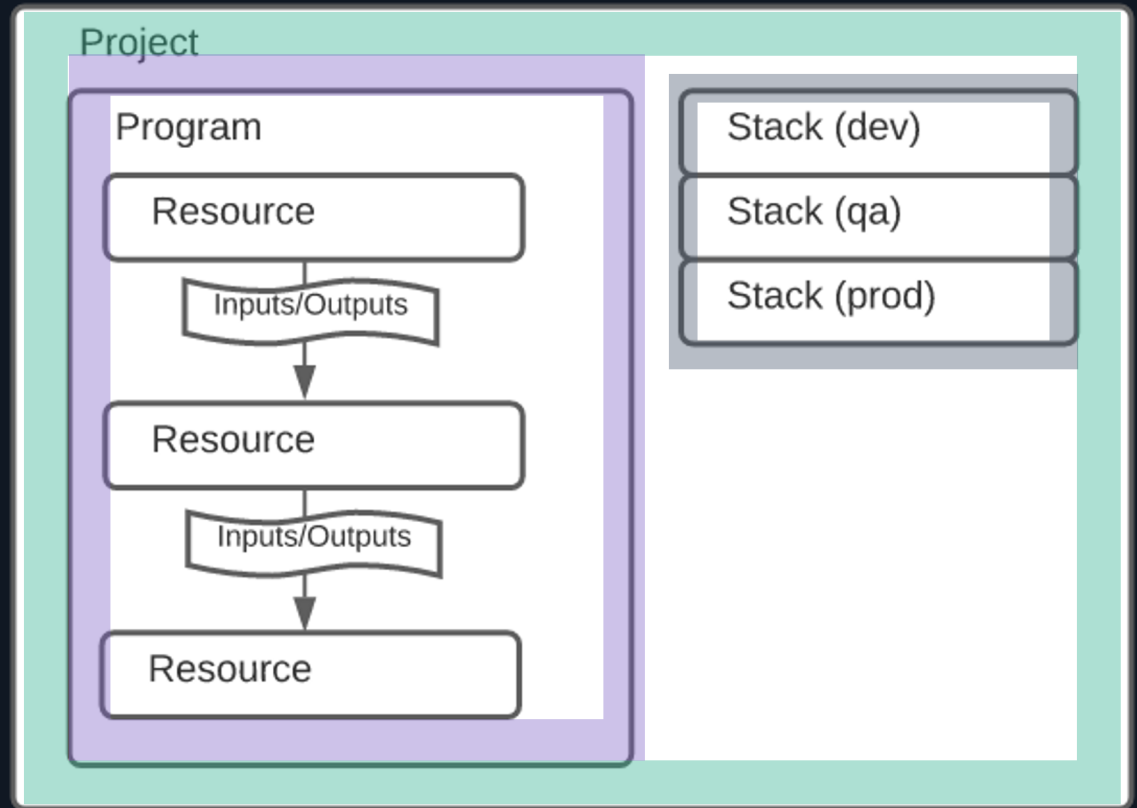
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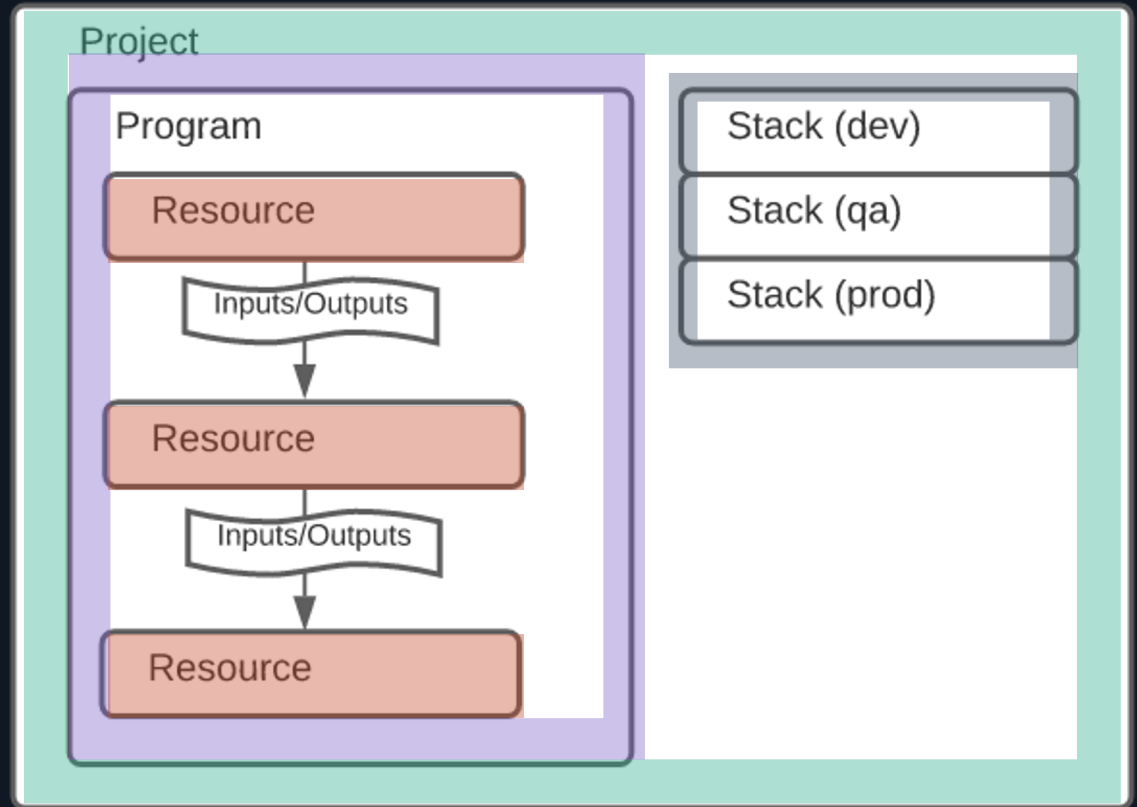
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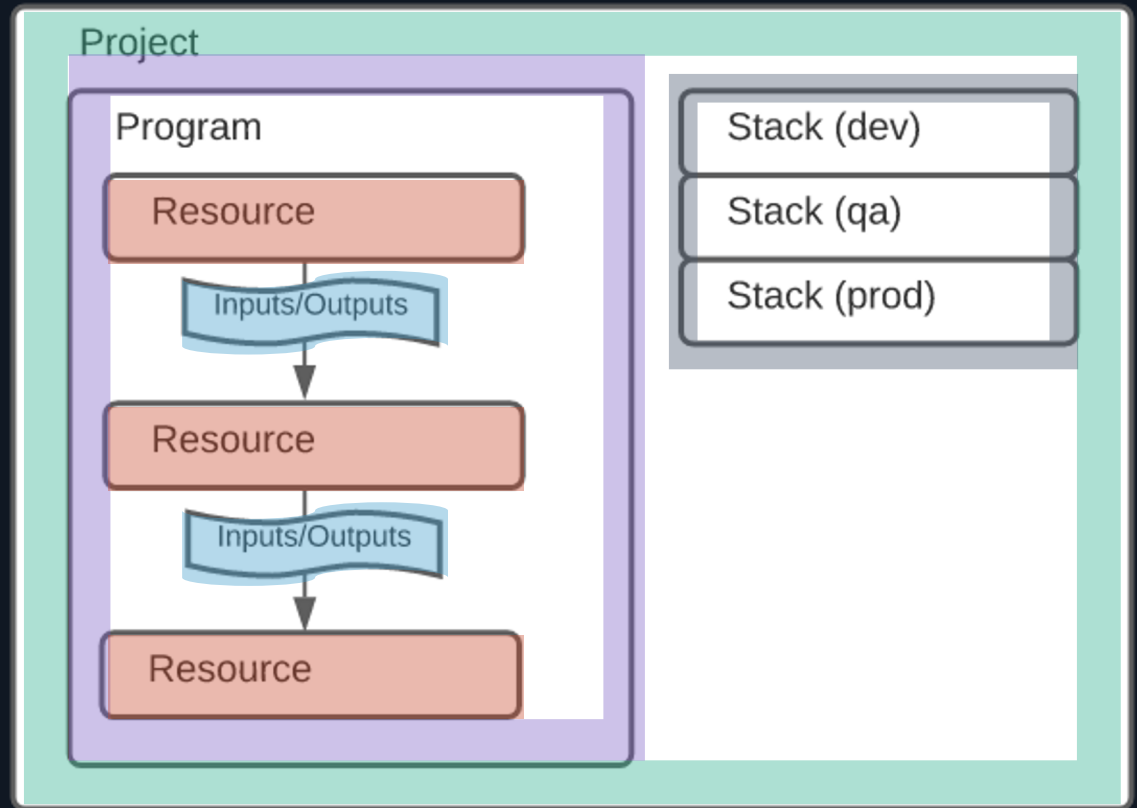
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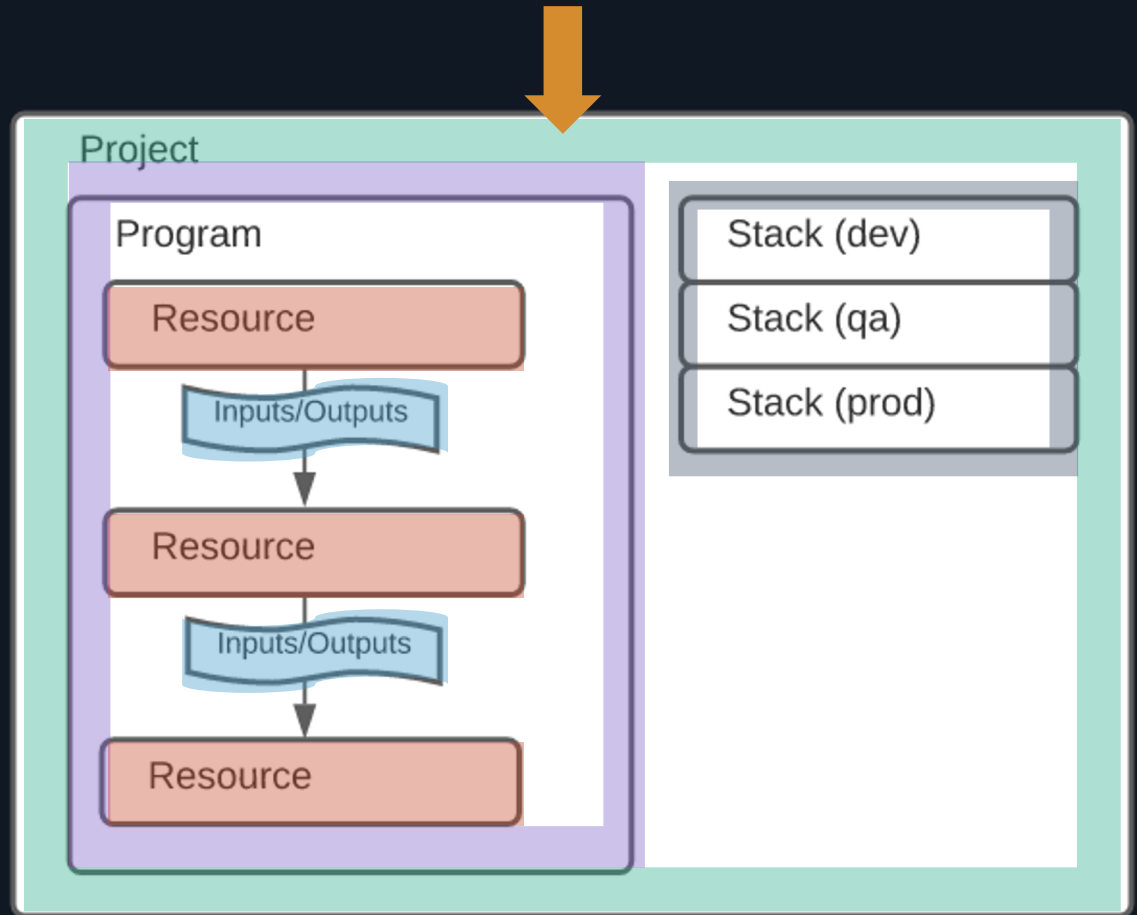
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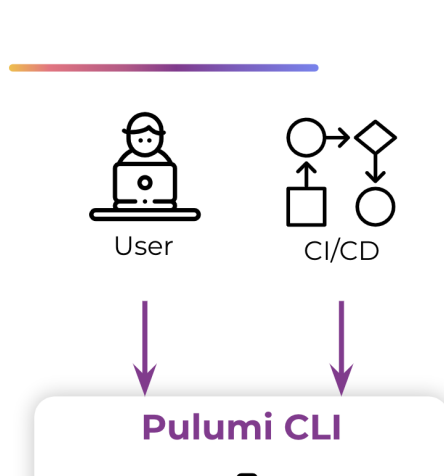
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- One project can use **info** from another project as input



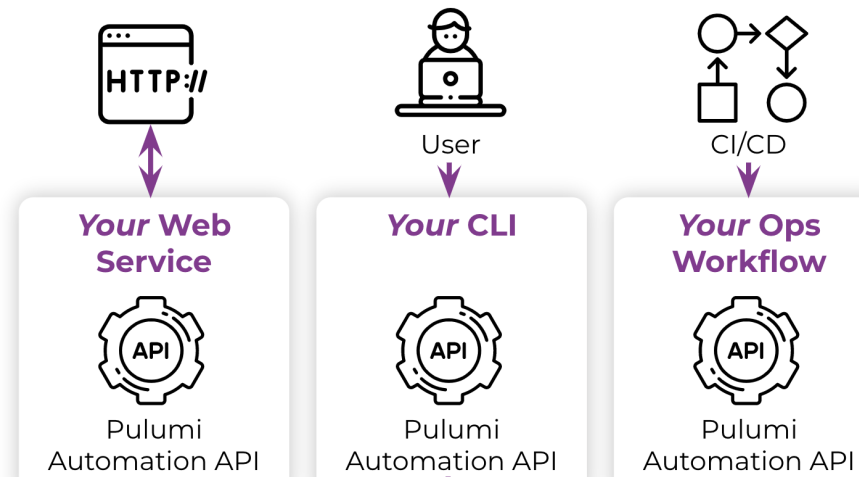
Pulumi Automation API

Deploy Your Workflow



Automation API

NEW!



Pulumi Automation API

- Unlock workflows
 - Allow organizations to let the tooling fit their workflow
- Enablement
 - Allow nontechnical users to provision infrastructure without burden
- Powerful building blocks
 - Use declarative provisioning with imperative actions to build whatever you need from self-service platforms to custom tooling

Pulumi Cloud

Pulumi Cloud



Pulumi Cloud

- Built-in **state** and **secret management**



SCAN ME

Pulumi Cloud

- Built-in **state** and **secret management**
- Pulumi **Deployment**



SCAN ME

Pulumi Cloud

- Built-in state and secret management
- Pulumi Deployment
- Pulumi Insights



SCAN ME

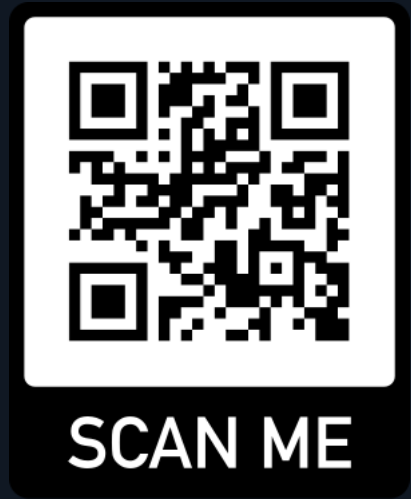
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- Pulumi **Policy as Code**



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Pulumi Cloud



- Built-in **state** and **secret management**
- Pulumi **Deployment**
- Pulumi **Insights**
- Pulumi **Policy as Code**
- **Webhooks**, Dashboards, and much more.

Pulumi **Insights**

Pulumi Insights



Pulumi Insights



Intelligence - Be more productive with the power of AI

Pulumi **Insights**

Intelligence - Be more productive with the power of AI

Search - Find anything in any cloud

Pulumi **Insights**

Intelligence - Be more productive with the power of AI

Search - Find anything in any cloud

Analytics - Deep insights with dashboards and export

Pulumi Policy as Code

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What is it?

Pulumi Policy as Code

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- Enforce security, compliance and best practices

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- Use general purpose programming languages*

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Pulumi Policy as Code

What is it?

- Enforce security, compliance and best practices
- Use general purpose programming languages*
- Write expressive policies
- Enforce gated deployments

Pulumi and Azure

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Pulumi and Azure



- Three different options to deploy Azure resources:

Pulumi and Azure



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 - Azure Classic

Pulumi and Azure



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 - Azure Native (v2 is in pre-release)

Pulumi and Azure



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-

Pulumi and Azure



- Three different options to deploy Azure resources:
 - Azure Classic
 - Azure Native (v2 is in pre-release)
 - AzAPI
- **Azure Native** build by Pulumi (using ARM APIs)
- **.NET** support!

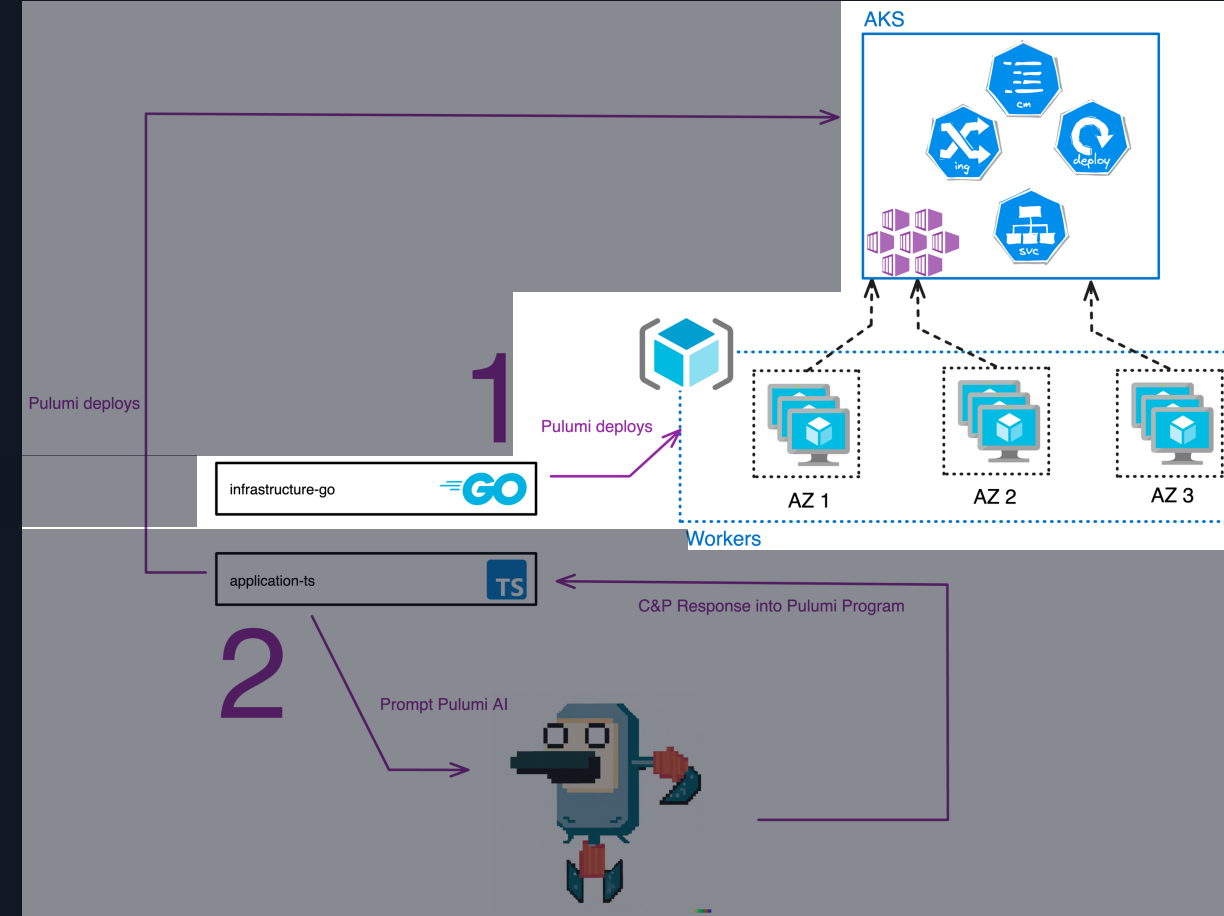
Demo time!



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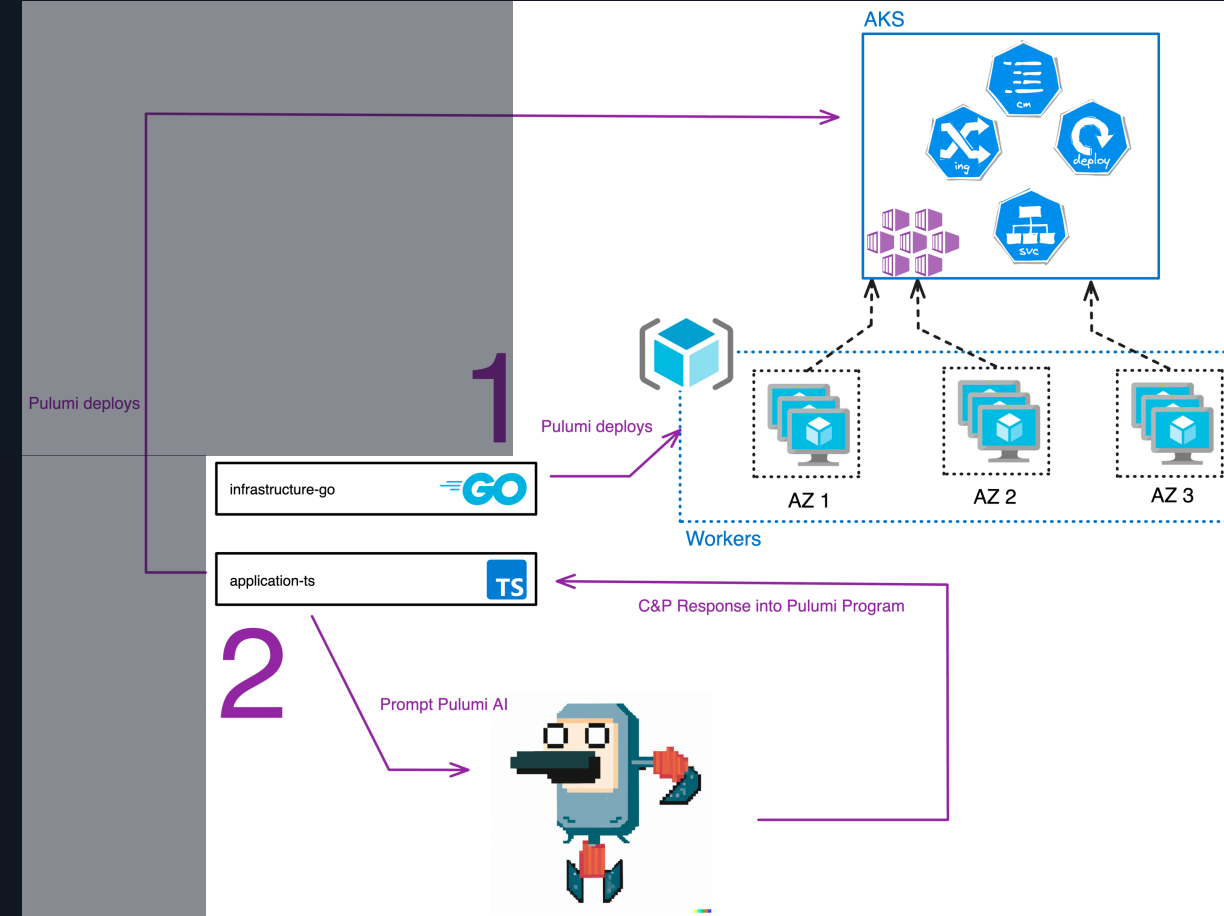
The Demo

- Deployment of Azure AKS infrastructure



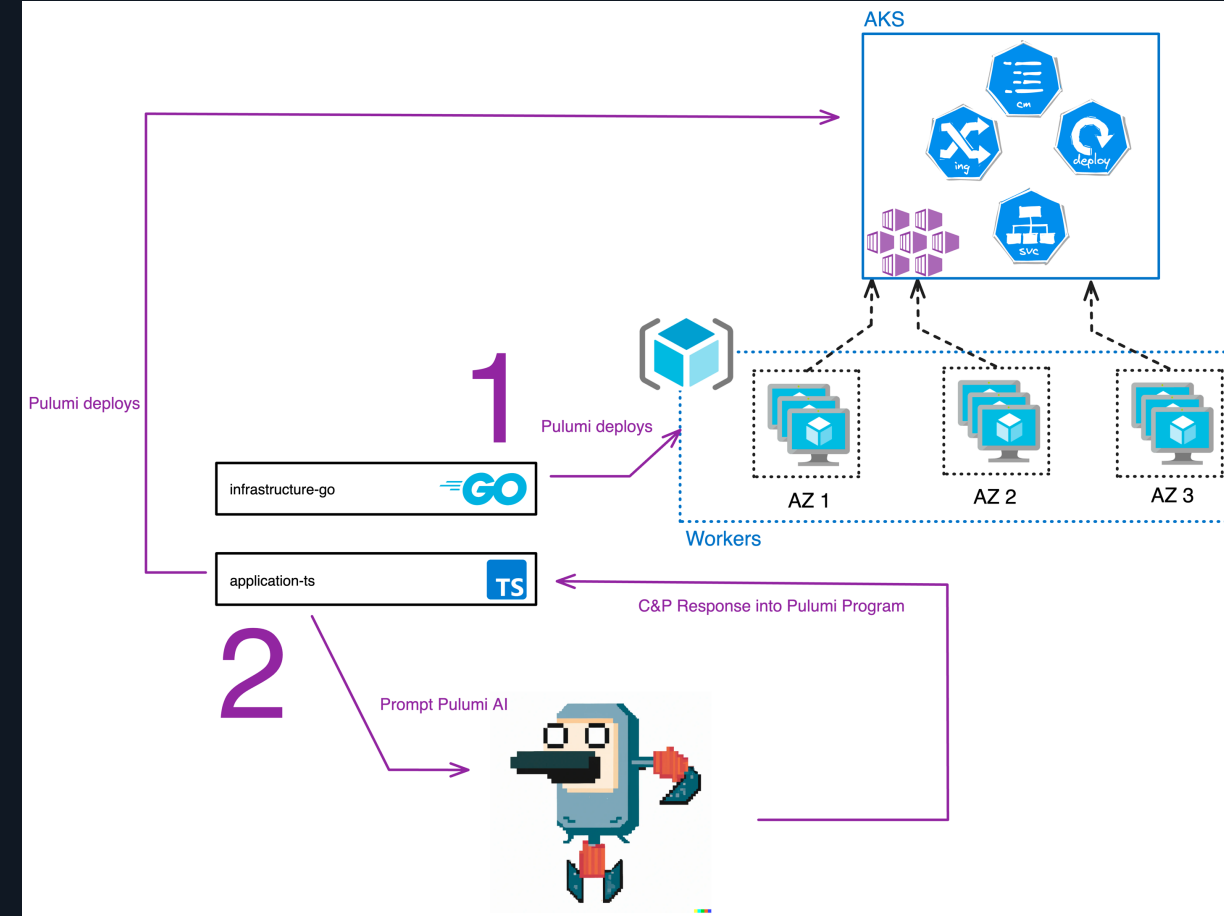
The Demo

- Deployment of Azure AKS infrastructure
- Using Pulumi AI to generate K8s Nginx Deployment



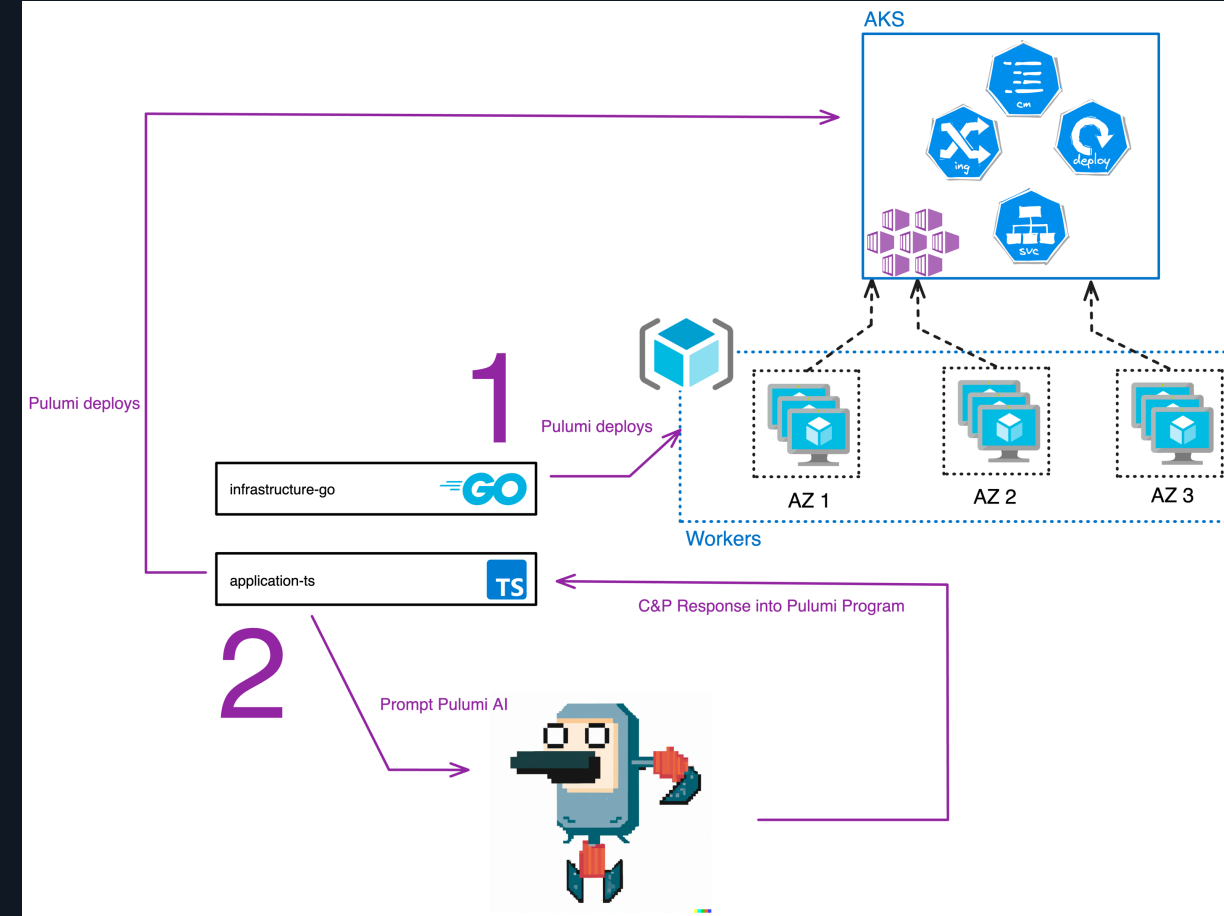
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- Deployment of AI generated workload



The Demo

- Deployment of Azure AKS infrastructure
- Using Pulumi AI to generate K8s Nginx Deployment
- Deployment of AI generated workload
- Language Go and Typescript



Wrap up!



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