

# Actions Runner Controller Scaling

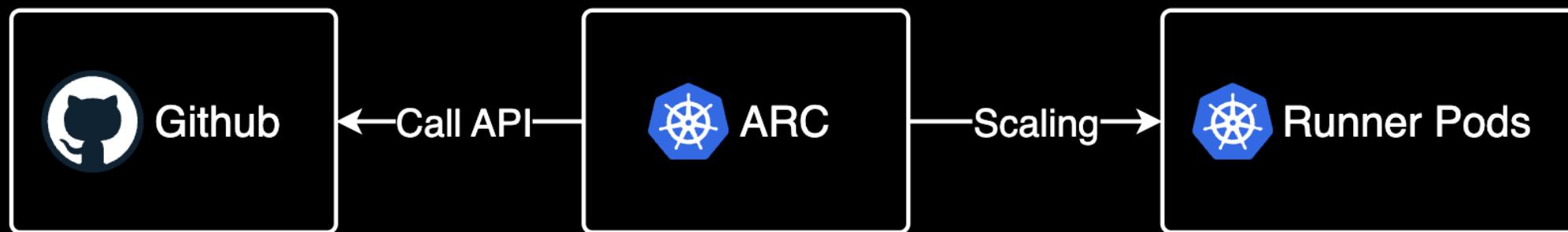
Scale-zero로 러너 컴퓨팅 비용 절감하기

## Topics

- Actions Runner Controller의 스케일링 방식
- Webhook-driven scaling 구현 방법
- Scale zero 설정시 주의사항

## Actions Runner Controller의 스케일링 방식

Pull-driven scaling



## Actions Runner Controller의 스케일링 방식

**Webhook-driven scaling**



## ARC에서 권장하는 스케일링 방식

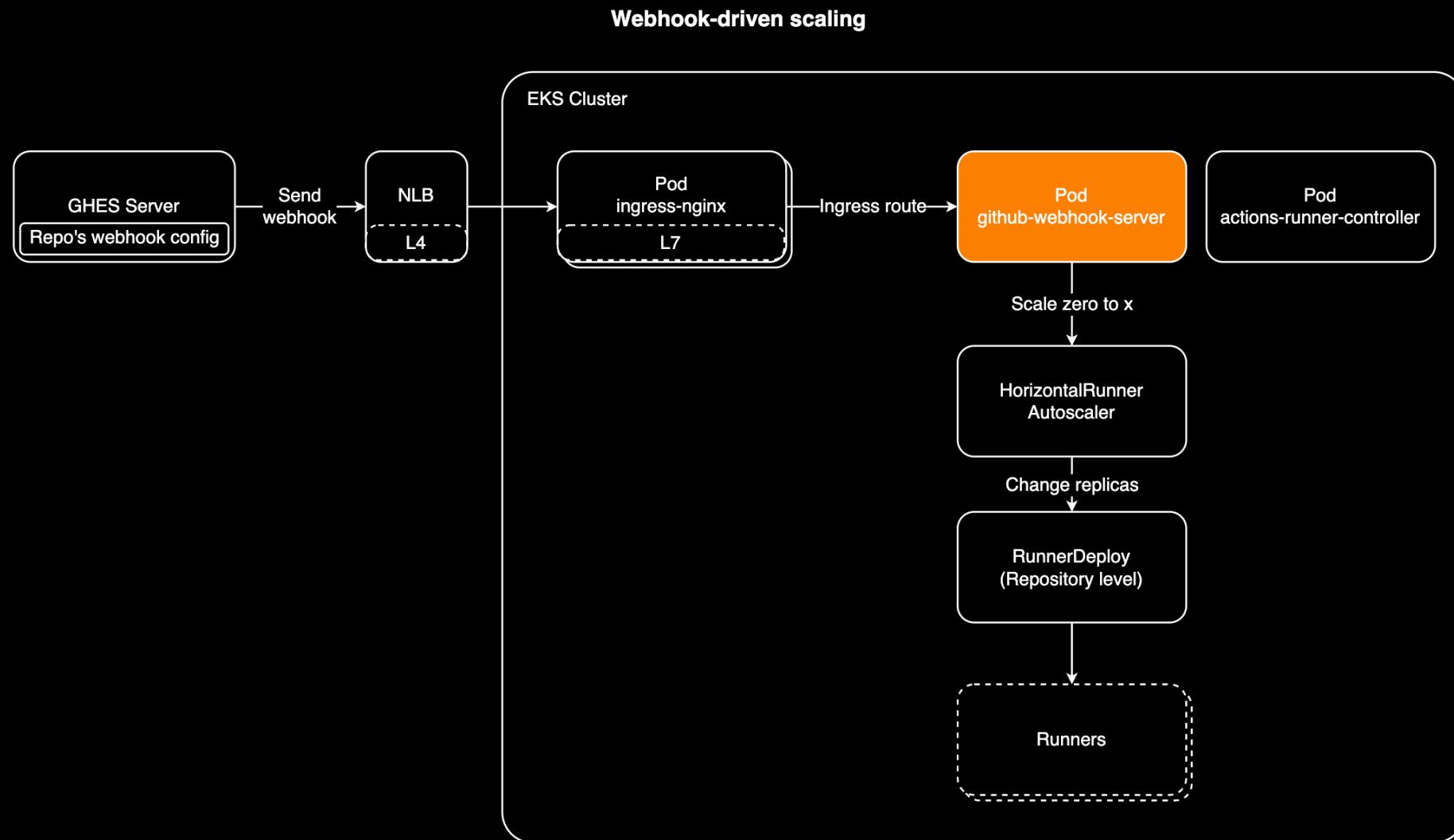
Pull-driven scaling

Webhook-driven scaling

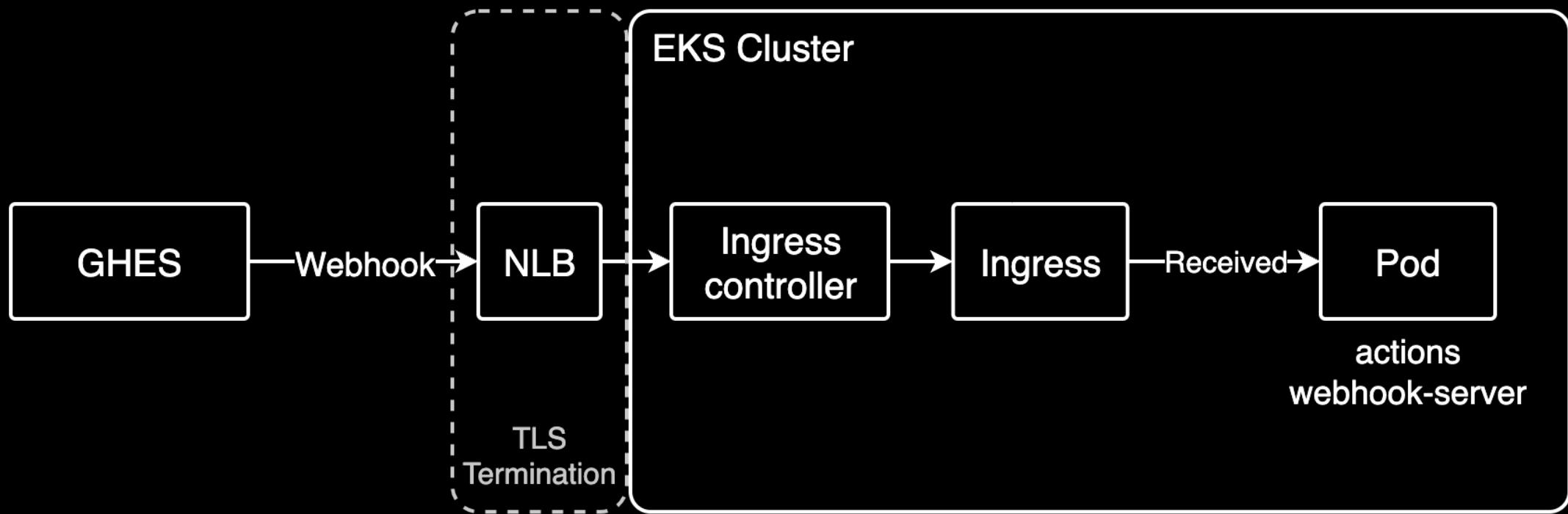
Recommended

반응 빠름, Scale zero 가능, 안전함 (Github API Rate Limit 영향 받지 않음)

# Actions Runner Controller 아키텍처



## 웹훅의 여정



# HorizontalRunnerAutoscaler 설정

```
apiVersion: actions.summerwind.dev/v1alpha1
kind: HorizontalRunnerAutoscaler
metadata:
  name: scalezero-test-runner-hra
  namespace: actions-runner
spec:
  # You can set minReplicas to 0 to enable scale-to-zero functionality
  minReplicas: 0
  maxReplicas: 5
  scaleTargetRef:
    kind: RunnerDeployment
    name: scalezero-test-runner
  scaleUpTriggers:
  - amount: 1
    duration: 5m
    githubEvent:
      # Workflow job queued, waiting, in progress, or completed on a repository
    workflowJob: {}
```

# RunnerDeployment 설정 및 주의사항

```
apiVersion: actions.summerwind.dev/v1alpha1
kind: RunnerDeployment
metadata:
  name: scalezero-test-runner
  namespace: actions-runner
spec:
  template:
    spec:
      labels:
        - self-hosted # Explicitly add this label for GHES
        - linux       # Explicitly add this label for GHES
        - test-runner
      repository: ORGANIZATION_NAME/REPO_NAME
```

⚠️ runnerDeployment에 러너에 자동생성되는 라벨도 명시적(Explicitly)으로 추가해야 ARC 웹훅 서버가 웹훅 이벤트를 받아 스케일링 대상(scale target)을 인식할 수 있습니다.

EOD.