

# CI/CD Envionment

T3

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**Static Analysis**

Flawfinder  
CppCheck Clang Power Tools

**sonarcloud**

**Issue Tracking**

Github Issues

**slack**

Development Team  
Repository



V&V Team  
Repository



Repository  
Clone  
(virtual)

Access

Upload

**Development Environment**

VSCode

Google Test

CMake

**Continuous Integration Environment**

GitHub Actions

Google Test

CMake

# 동작 방식

- Cron 방식 및 수동 실행 사용

```
on:
  workflow_dispatch:
  schedule:
    - cron: '**/5 * * * *' # 5분마다 워크플로우 실행
  repository_dispatch:
  types: [trigger-ci]
```

- Repository change 여부 확인 (commit SHA 변경 여부 확인)

```
- name: Get latest commit SHA # Dev repo의 main 브랜치 최신 커밋 SHA 조회 및 변경
  id: get-sha
  run: |
    mkdir -p .trace
    curl -s https://api.github.com/repos/yoona96/Dev-Sample-Repo/commits/main \
      | jq -r '.sha' > .trace/latest.txt

    echo "Latest SHA: $(cat .trace/latest.txt)"

    # 이전 SHA가 저장되어 있다면 비교
    if [ -f .trace/old.txt ]; then
      if cmp -s .trace/latest.txt .trace/old.txt; then
        echo "changed=false" >> $GITHUB_OUTPUT # 변경 없음
        echo "sha=$(cat .trace/latest.txt)" >> $GITHUB_OUTPUT
        exit 0
      fi
    fi

    # 변경 감지됨: 상태 갱신
    echo "changed=true" >> $GITHUB_OUTPUT
    echo "sha=$(cat .trace/latest.txt)" >> $GITHUB_OUTPUT
    cp .trace/latest.txt .trace/old.txt
    echo "✅ 저장소에 변경이 감지되었습니다!"

- name: Commit updated SHA # 변경 시 최신 SHA 저장 및 커밋
  if: steps.get-sha.outputs.changed == 'true'
  run: |
    git config user.name "github-actions"
    git config user.email "github-actions@github.com"
    git add .trace/old.txt
    git commit -m "Update last seen commit SHA"
    git push
```

# 동작 방식

Manually triggered 37 minutes ago

 yoona96 -o- 50bab94 main

Status

**Success**

Total duration

**1m 44s**

Artifacts

-

**ci-cron.yml**

on: workflow\_dispatch



check-change

4s



static-analysis

1m 32s

# 결과

## cppcheck Results

Message	File	Line
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## clang-tidy Results

File	Description
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## flawfinder Results

File	Line	Risk	Description
File	Line	Risk	Description
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## Coverage Summary

| Coverage | N/A |

## SonarCloud Issues

Type	Severity	File	Line	Description
CODE_SMELL	MAJOR	ExpressionEvaluator.cpp	8	This function should be declared "const".
CODE_SMELL	MAJOR	ExpressionEvaluator.cpp	20	Replace this use of "push_back" with "emplace_back".
CODE_SMELL	MAJOR	ExpressionEvaluator.cpp	29	This function should be declared "const".
CODE_SMELL	MINOR	ExpressionEvaluator.cpp	29	Replace this const reference to "std::string" by a "std::string_view".