Sonarqube-Github Workflow에 Sonarscanner 작업 만들기

이 문서는 Sonarqube-Gitlab Workflow에 Sonarscanner 작업 만들기 가이드를 공유하기 위해 작성되었다.

도구명	Sonarqube, Github
버전	9.5
OS	CentOS 8

• Github Self-hosted Runner 만들기
ㅇ 초기 서버 설정 및 설치
◎ Sonarscanner 설치 및 설정
 Github에 Self-hosted Runner 등록하기
Github Action
 비밀키 생성하기
 Sonarqube 용 Branch 생성
◎ Workflow 생성
 Java Maven용 Action yml 파일
 NodeJs용 Action yml 파일
 C/C++/Objective-C용 Action yml 파일
 확인
 Branch 삭제

참조 링크

Github Self-hosted Runner 만들기

초기 서버 설정 및 설치

- 시간 확인 및 파일 읽기 수 설정
 JDK11
 NodeJS 18

- Maven 3.8.6 설치
 cmake 설치

```
#
date
#
timedatectl list-timezones | grep Seoul
sudo timedatectl set-timezone Asia/Seoul
vi /etc/profile
#
        ulimit -n 131072
        ulimit -u 8192
ulimit -n
ulimit -u
#JDK 11
wget 'https://github.com/AdoptOpenJDK/openjdk11-binaries/releases/download/jdk-11.0.7%2B10/OpenJDK11U-
jdk_x64_linux_hotspot_11.0.7_10.tar.gz' -0 /opt/OpenJDK11U-jdk_x64_linux_hotspot_11.0.7_10.tar.gz
#JDK 11
cd /opt
chmod 700 OpenJDK11U-jdk_x64_linux_hotspot_11.0.7_10.tar.gz
tar -xvzf OpenJDK11U-jdk_x64_linux_hotspot_11.0.7_10.tar.gz
mkdir javall
mv jdk-11.0.7+10/ jdk11
mv jdk11 /opt/
#
vi /etc/profile
#
        JAVA_HOME=/opt/jdk11
        PATH=$PATH:$JAVA_HOME/bin
        export JAVA_HOME
        export PATH
source /etc/profile
#JDK
echo $JAVA_HOME
java -version
#NodeJS
sudo curl -fsSL https://rpm.nodesource.com/setup_18.x | bash -
sudo yum install -y nodejs
#Maven
cd /opt
wget https://archive.apache.org/dist/maven/maven-3/3.8.6/binaries/apache-maven-3.8.6-bin.tar.gz
chmod 700 apache-maven-3.8.6-bin.tar.gz
tar -xvzf apache-maven-3.8.6-bin.tar.gz
ln -s apache-maven-3.8.6 maven
#
        MAVEN_HOME=/opt/jdk11
        PATH=$PATH:$JAVA_HOME/bin:$MAVEN_HOME/bin
        export JAVA_HOME MAVEN_HOME
source /etc/profile
#Maven
echo $MAVEN_HOME
mvn -v
#CFamily (cmake)
yum install cmake -y
yum install gcc-c++
```

Sonarscanner 설치 및 설정

- Maven Sonarqube 설정
- Sonarscanner 다운로드
 Sonarscanner Cfamily 다운

```
#Maven Sonarqube
cd $MAVEN_HOME/conf
vim settings.xml
     (ex: PluginGroups PluginGroup)
#
<settings>
   <pluginGroups>
       <pluginGroup>org.sonarsource.scanner.maven</pluginGroup>
    </pluginGroups>
    <profiles>
       <profile>
            <id>sonar</id>
            <activation>
               <activeByDefault>true</activeByDefault>
            </activation>
            <properties>
            <project.reporting.outputEncoding>UTF-8</project.reporting.outputEncoding>
       <sonar.sourceEncoding>UTF-8</sonar.sourceEncoding>
           </properties>
       </profile>
    </profiles>
</settings>
#Sonarscanner
cd /opt
wget https://binaries.sonarsource.com/Distribution/sonar-scanner-cli/sonar-scanner-cli-4.7.0.2747-linux.zip
chmod 755 sonar-scanner-cli-4.7.0.2747-linux.zip
unzip sonar-scanner-cli-4.7.0.2747-linux.zip
±
ln -s sonar-scanner-4.7.0.2747-linux/ sonar-scan
#Sonarscanner CFamily
cd /opt/
wget {SonarQube URL}/static/cpp/build-wrapper-linux-x86.zip
chmod 755 build-wrapper-linux-x86.zip
unzip build-wrapper-linux-x86.zip
#
ln -s build-wrapper-linux-x86 build-wrapper
#
vi /etc/profile
#
       export SONAR_SCAN=/opt/sonar-scan
       export SONAR_CSCAN=/opt/build-wrapper
       #PATH
       PATH=$PATH:$JAVA_HOME/bin:$MAVEN_HOME/bin:$SONAR_SCAN/bin:$SONAR_CSCAN
       source /etc/profile
#
echo $SONAR_SCAN
echo $SONAR_CSCAN
#Runner Command
shasum
```

Github에 Self-hosted Runner 등록하기

 Actions 권한 확인 Settings → Actions → General → Actions permissions



 저장소 기준: 저장소 → Settings → Actions → Runner → New Self-hosted runner root로 실행불가



 Architecture : 해당 서버에서 uname -m 으로 확인 해당 페이지에 나오는 대로 명령어 입력

钧 General	Runners / Create self-hosted runner
Access At Collaborators D Moderation options Code and sutomation B Branches C as	Adding a self-hosted runner requires that you download, configure. and execute the GitHub Actions Runner. By downloading and configuring the GitHub Actions Runner. you agree to the GitHub Terms of Service or GitHub Corporate Terms of Service as applicable. Runner image macOS C m
Actions General Runners & Webbhooks	Architecture x64 • Download
Environments Pages Security Q Code security and analysis P Deploy keys Secrets V	<pre># Create a folder \$ Modir actions-runner && cd actions-runner # Downlad the latest runner package \$ curl - a actions-runner-linux.x64-2.294.0.tar.gz -L https://github.com/actions/runner/relasses/downladd/v2.294.0/actions-runner-linux-x64-2.294.0.tar.gz # Optional: Validate the hash \$ com or assorbides/baseb060/56/004800c56109dba4a859eaf65e131780 actions-runner-linux-x64- 2.294.0.tar.gz = instant -a 255 -c </pre>
Integrations 88 GitHub apps 🖾 Email notifications	# Extract the installer \$ tar xf //actions-runner-linux-x64-3.294.0.tar.gz Configure
	<pre># Create the runner and start the configuration experience \$./config.shurl https://github.com/wotn112/serverless-stack-clienttoken AP21U0213PL10P0125NR2MTC365RY # Last step, run it! \$./run.sh</pre>

 name: sonar label: sonar

Runner removal
<pre>Inter runner remove token: ************************************</pre>
atlasslans)A atlansing John Line and An
Runner removal
Removed successfully Removed scredentials Removed successfully
[atlassian@jk actions-runner]\$./config.shurl https://github.com/wotnll2/sonarqubeCrunnertoken AP2IUX73RWPZIBMEP7RFDG3C4EHRM
Self-hosted runner registration
Authentication
(Connected to GitHub
+ Runner Registration
Enter the name of the runner group to add this runner to: [press Enter for Default]
Inter the name of runner: [press Enter for jk] sonar
fhis runner will have the following labels: 'self-hosted', 'Linux', 'X64' Enter any additional labels (ex. label-1,label-2): [press Enter to skip] sonar
(Runner successfully added Runner connection is good
<pre># Runner settings</pre>
inter name of work folder: [press Enter for _work]
/ Setings Saved.
[atlassian@jk actions-runner]\$

■ 해당 서버에 ./run.sh 실행(백그라운드 실행 시 "./run.sh &")

서비스로 변경(sudo ./svc.sh install USERNAME) 시작(sudo ./svc.sh start)



■ Settings → Actions → Runners 에서 상태 확인

Search or jump to	Pull requests Issues Marketplace Exp	lore	Q +• 6 •
🖟 wotn112/serverless-stack-clien	t Public		Image: Second state Image: Second state
<> Code 💿 Issues 🏦 Pull requests (💿 Actions 🖽 Projects 🖽 Wiki 🛈 S	Security 🗠 Ins 1 🛞 Settings	
	鐐 General	Runners	osted runner
	Access 83. Collaborators	Host your own runners and customize the environment used to run jobs in your GitHub Actions workflows. Lear about self-hosted runners.	rn more
	Q Moderation options ✓	Runners Status	
	Code and automation	Sonar self-hosted Linux (X64) sonar • Ide	
	🔁 Tags		
	General		
	Runners		
	🖽 Environments		
	Security		
	 Code security and analysis Deploy keys 		
	* Secrets ~		
	Integrations 88 GitHub apps		
	Email notifications		
			,

Github Action

비밀키 생성하기

■ Settings \rightarrow Secrets \rightarrow Actions \rightarrow New repository secret 선택

Search or jump to 7	Pull requests Issues Market	place Explore					ၞ +• ∰•
🖟 wotn112 / serverless-stack-clien	t Public				🛇 Pin	⊙ Unwatch 1 ▾ 😵 Fork 0 ▾	☆ Star 0 マ
<> Code ⊙ Issues 11 Pull requests (∋ Actions 🗄 Projects 🖽 W	/iki 🛈 Secu	ity 🗠 Ins 🚺 🕸 Settings				
			Actions socrats		4 New repeating a correct]	
	893 General		Actions secrets		New repository secret		
	Access		Secrets are environment variables that are secrets for Actions.	e encrypted. Anyone with collaborator access	to this repository can use these		
	Moderation options	~	Secrets are not passed to workflows that	are triggered by a pull request from a fork. Lea	arn more.		
	Code and automation		Environment secrets				
	Tags		-1				
	Actions Mebbooks	~	Encrypted environment secrets allo	secrets for this repository's envi- w you to store sensitive information, such as a	ironments. iccess tokens, in your repository		
	Environments		Manage	environments. e your environments and add environment sec	rets		
	🗂 Pages						
	Security						
	Deploy keys		Repository secrets				
3	* Secrets Actions	^	There	e are no secrets for this reposito	ory.		
L	Dependabot		Encrypted secrets allow you t	to store sensitive information, such as access to	okens, in your repository.		
	Integrations						
	器 GitHub apps ⊡ Email notifications						
SONAR_URL: son SONAR_TOKEN: s	arqube Url sonarqube token						
SONAR_USER: so							
SONAR_PASSWO	RD: 해당 ID passv	vord					
sona	arqube Projects Portfolios	Issues Rules	Quality Profiles Quality Gates A	dministration	 Q Search for project 	S	
				Drafile Seauch	National Desirate		
		A Adri	Inistrator	Prolite Security	Nonications Projects		
		Tokens					
		If you want to e services, you co not letting your	nforce security by not providing credentials o in provide a User Token as a replacement of analysis user's password going through your	f a real SonarQube user to run your code scan or the user login. This will increase the security of yo network.	r to invoke web our installation by		
		Generate Tok	ens				
		Github	User Token	- Generate			
		Name	Type Project	Last use Created	Revoke		
		2411000			Lierone		

test2323 User < 1 hour ago July 27, 2022 Revoke

Enter a new password All fields marked with * are required Old Password * New Password * Confirm Password *

Update

or ocheran		Actions secrets		New repository secret			
access २२ Collaborators २३ Moderation options	~	Secrets are environment variables that are encr secrets for Actions. Secrets are not passed to workflows that are tri	ypted. Anyone with collaborator access to this re ggered by a pull request from a fork. Learn more.	pository can use these			
Code and automation		Environment secrets					
∑ Tags D Actions & Webhooks ∰ Environments ∰ Pages	~	There are no secr Encrypted environment secrets allow you Manage your	There are no secrets for this repository's environments. Encrypted environment secrets allow you to store sensitive information, such as access tokens, in your repository environments. Manage your environments and add environment secrets				
ecurity							
④ Code security and analysis ∅ Deploy keys		Repository secrets					
Secrets Actions	^	SONAR_PASSWORD	Updated now	Update Remove			
Dependabot		SONAR_TOKEN	Updated 34 minutes ago	Update Remove			
ntegrations 18 GitHub apps			Updated 1 hour ago	Update Remove			
Email notifications		SONAR_USER	Updated 10 seconds ago	Update Remove			

Sonarqube 용 Branch 생성

■ 해당 저장소에서 branch 선택

Search or jump to	7 Pull requests Issues Marketpla	ce Explore			¢ +• 🐠
🖟 wotn112 / serverless-stack	c-client (Public)			Image: Second	k 0 - 🔂 Star 0 -
<> Code ⊙ Issues \$1 Pull requ	ests 🕟 Actions 🖽 Projects 🖽 Wiki	🛈 Security 🗠 Insights 🚳 Settings			
	🐉 master 👻 🕻 1 branch 🛇	0 tags	Go to file Add file - Code -	About 🕸	
	Daud Setting up our React app		fcd12a0 on 5 Oct 2020 🔞 3 commits	No description, website, or topics provided.	
	public	Setting up our React app	2 years ago	☆ 0 stars	
	src src	Setting up our React app	2 years ago	1 watching 0 forks	
	.gitignore	Setting up our React app	2 years ago	8 010165	
	C README.md	Initialize project using Create React App	2 years ago	Releases	
	package-lock.json	Setting up our React app	2 years ago	No releases published	
	package.json	Setting up our React app	2 years ago	Create a new release	
	E README.md		ı	Packages	
	This project was bootstrapped	d with Create React App.		No packages published Publish your first package	
	Available Scripts				
	In the project directory, you c	an run:		Languages	
	num stant			JavaScript 70.7% • HTML 18.4%	
	npm scarc			 C22 10.9% 	
	Open http://localhost:3000 to	view it in the browser.			
The page will reload if you make edits. You will also see any lint errors in the console.					
	npm test				
Neuro Due 1 4	160				

New Branch 선택

Search or jump to	Pull requests Issues Marketplace Explore	ር +• 🐠
🖟 wotn112 / serverless-stack-clie	ent (Public) 🛇 Vinwatch 1 +) 💱 Fork 🛛	* ☆ Star 0 *
<> Code ⊙ Issues 11 Pull requests	🕟 Actions 🖽 Projects 🕮 Wilki 🛈 Security 🗠 Insights 🚯 Settings	
	Q. Search branches Yours Active Stale All branches New branch	
	Default branch z²	
	master D Updated 2 years ago by Daud (Default)	
	🗘 © 2022 GitHub, Inc. Terms Privacy Security Status Docs Contact GitHub Pricing API Training Blog About	

Branch Name: sonarscan

Search or jump to 7 Pt	uli requests Issues Marketplace Explore			۵ +۰ 🚱	
wotn112 / serverless-stack-client @ut	blic) tions 🖽 Projects 🖽 Wiki ① Security 🗠 I=	Create a branch	×	○ Unwatch 1 •	
Q	Search branches	Branch name sonarscan Branch source	C Active Stale All branches	New branch	
	naster (D Updated 2 years ago by Daud	P master Refail Share feedback Create	branch	1	
O •	2022 GitHub, Inc. Terms Privacy Security	Status Docs Contact GitHub Pricing	API Training Blog About		

Workflow 생성

■ 저장소에서 sonarscan Branch 선택

Search or jump to 7 Pull re	equests Issues Marketplace Explore	2			Q +• 🚱•
United Serverless-stack-client (Public)				♀ Pin	▼ ¹² / ₀ Fork 0 ▼ ☆ Star 0 ▼
<> Code Issues Pull requests Actions	is 🗄 Projects 🕮 Wiki 🛈 Secu	urity 🗠 Insights 🚯 Settings			
1 🐉 mas	aster 🗸 🕻 2 branches 💿 0 tags		Go to file Add file - Code -	About 🕸	
Switch b Find or	branches/tags X or create a branch	n, or require status checks before merging.	Protect this branch ×	No description, website, or topics provided.	
Branch	hes Tags sster default		fcd12a0 on 5 Oct 2020 😗 3 commits	 O 1 watching ♀ 0 forks 	
2 sona	tarscan S	etting up our React app	2 years ago		
	View all branches S	etting up our React app	2 years ago	Releases	
.gi	jitignore S	etting up our React app	2 years ago	No releases published Create a new release	
	EADME.md Ir	nitialize project using Create React App	2 years ago		
C pa	ackage-lock.json S	etting up our React app	2 years ago	Packages	
pa	ackage.json S	etting up our React app	2 years ago	No packages published Publish your first package	
II RE	LEADME.md		ı		
This project was bootstrapped with Create React App.				Languages	
Ava	/ailable Scripts			 JavaScript 70.7% HTML 18.4% CSS 10.9% 	
In th	he project directory, you can run:				
npr	m start				
Run: Ope	is the app in the development mode. en http://localhost:3000 to view it in t	the browser.			

■ Add File → Create New file 선택

Search or jump to	7 Pull requests Issues Marketplace E	cplore			Q +• 👫
🖟 wotn112/serverless-stack-clier	nt (Public)			Q Pin	♥ Fork 0 ▼ ☆ Star 0 ▼
<> Code 🕑 Issues 👫 Pull requests	⊙ Actions 🗄 Projects 🖽 Wiki ①	Security 🗠 Insights 🔞 Settings			
	1 ⁴ sonarscan - 1 ⁴ 2 branches 0 tags Go to Add file - Code -			About 🕸	
	This branch is up to date with master.		Create new file Upload files	No description, website, or topics provided.	
	Daud Setting up our React app		fcd12a8 on 5 Oct 2020 🔞 3 commits	 ☆ 0 stars ⊙ 1 watching 2 0 fordure 	
	public	Setting up our React app	2 years ago	V 0 TORKS	
	src src	Setting up our React app	2 years ago	Palassas	
	gitignore	Setting up our React app	2 years ago No releases published		
	README.md	Initialize project using Create React App	2 years ago	Create a new release	
	package-lock.json	Setting up our React app	2 years ago		
	package.json	Setting up our React app	2 years ago	Packages	
	i≣ README.md		1	No packages published Publish your first package	
	This project was bootstrapped with	Create React App.		Languages	
	Available Scripts	Available Scripts In the project directory, you can run:			
	In the project directory, you can run				
	npm start				
	Runs the app in the development n Open http://localhost:3000 to view				
	The page will reload if you make eo	lits.			

■ 해당 부분에 "/.github/workflows/sonar.yml" 입력

Search or jump to 🕧	Pull requests issues Marketplace Explore	Q +• 🚱•
🖟 wotn112/serverless-stack-client	Public	
<> Code 🕥 Issues 11 Pull requests 🕥	Actions 🖽 Projects 🖽 Wilki 🛈 Security 🗠 Insights 🔯 Settings	
	serverless-stack-client / Name your file ir senarscan	Cancel changes
	Edit new file O Preview	Spaces
	1	

■ 적용할 yml 파일 작성 후 commit new file(yml 내용은 아래 참조)

	runs-on: [self-hosted, sonar]	
12	steps:	
13	- usesi actions/checkout@v3	
15	run: \$SONAR_SCAN/bin/sonar-scanner	
16	- Usoner.projectkeyrsbillub_ktvDilluKY - Usoner.sources/StTHUB_URKPACE	
18	-Dsonar.sourceEncoding=UTF-8	
19	-Dsonar.languagerjs	
21	-Dsonar.logins{{ secrets.SOURT_TOKEN }}	
л	Commit new file	
a	Commit new file Create sonarymi	
n	Commit new file Create sonarymt	
a	Commit new file Create sonaryml Add an optional extended description	
a	Commit new file Create sonaryml Add an optional extended description	
n	Commit new file Create sonaryml Add an optional extended description	
a	Commit new file Create sonaryml Add an optional extended description	
n	Commit new file Create sonaryml Add an optional extended description	
	Commit new file Create sonarymi Add an optional extended description • • Commit directly to the isonarscan branch. • • Or this commit and start a pull request. Learn more about pull requests.	
	Commit new file Create sonaryml Add an optional extended description •	
	Commit new file Create sonaryml Add an optional extended description •	
n	Commit new file Create sonarymi Add an optional extended description • ~ Commit directly to the "sonarscan branch. • 17 Create a new branch for this commit and start a pull request. Learn more about pull requests. Commit new file Carnel	
	Create sonaryml Create sonaryml Add an optional extended description Add an optional extended description Commit directly to the isonarscan branch. Commit new file Create	
• 2022 GitHu	Create sonaryml Add an optional extended description Image: Create sonaryml Image: Cre	

🏠 Github 자체 Runner를 통해 Sonarqube를 사용하려는 경우 Sonarqube 서버와 Github 자체 Runner 가 통신 가능해야한다

Java Maven용 Action yml 파일

■ Self-hosted Runner 사용 시

```
on:
 push:
   branches:
     - "sonarscan"
   paths:
     - ".github/workflows/sonar.yml"
name: SonarQube
env:
 MAVEN_HOME: /opt/maven
 SONAR_PROJECTKEY: maven
jobs:
 sonarQubeTrigger:
   name: SonarQube Scan
   runs-on: [self-hosted, sonar]
   steps:
   - uses: actions/checkout@v3
   - name: memory increase
     run: export MAVEN_OPTS="-Xmx512m"
   - name: Run sonarqube
     run: $MAVEN_HOME/bin/mvn sonar:sonar
         -Dsonar.host.url=${{ secrets.SONAR_URL }}
         -Dsonar.login=${{ secrets.SONAR_TOKEN }}
         -Dsonar.projectName=$GITHUB_REPOSITORY
         -Dsonar.projectKey=$SONAR_PROJECTKEY
         -Dsonar.sourceEncoding=UTF-8
```

■ Github 제공 Runner 사용 시

```
on:
 push:
   branches:
     - "sonarscan"
   paths:
      - ".github/workflows/sonar.yml"
name: SonarQube
env:
 MAVEN_HOME: /opt/maven
 SONAR_PROJECTKEY: maven
jobs:
 sonarOubeTrigger:
   name: SonarQube Scan
   runs-on: [self-hosted, sonar]
   steps:
      - uses: actions/checkout@v2
       with:
           fetch-depth: 0 # Shallow clones should be disabled for a better relevancy of analysis
      - name: Set up JDK 11
       uses: actions/setup-java@v1
       with:
          java-version: 11
      - name: Cache SonarQube packages
       uses: actions/cache@v1
       with:
         path: ~/.sonar/cache
         key: ${{ runner.os }}-sonar
         restore-keys: ${{ runner.os }}-sonar
      - name: Cache Maven packages
       uses: actions/cache@v1
       with:
         path: ~/.m2
         key: ${{ runner.os }}-m2-${{ hashFiles('**/pom.xml') }}
         restore-keys: ${{ runner.os }}-m2
      - name: Build and analyze
        env:
         SONAR_TOKEN: ${{ secrets.SONAR_TOKEN }}
         SONAR_HOST_URL: ${{ secrets.SONAR_URL }}
       run: mvn -B verify org.sonarsource.scanner.maven:sonar-maven-plugin:sonar
          -Dsonar.host.url=$SONAR_HOST_URL
          -Dsonar.login=$SONAR_TOKEN
          -Dsonar.projectName=$GITHUB_REPOSITORY
          -Dsonar.projectKey=$SONAR_PROJECTKEY
          -Dsonar.sourceEncoding=UTF-8
```

NodeJs용 Action yml 파일

• Self-hosted Runner 사용 시

```
on:
 push:
   branches:
      - "sonarscan"
   paths:
      - ".github/workflows/sonar.yml"
name: SonarQube
env:
 SONAR_SCAN: /opt/sonar-scan
 SONAR_PROJECTKEY: nodejs
jobs:
 sonarOubeTrigger:
   name: SonarQube Scan
   runs-on: [self-hosted, sonar]
   steps:
    - uses: actions/checkout@v3
    - name: memory increase
     run: export SONAR_SCANNER_OPTS="-Xmx512m"
    - name: Run sonarqube
     run: $SONAR_SCAN/bin/sonar-scanner
          -Dsonar.projectBaseDir="${GITHUB_WORKSPACE}/src"
          -Dsonar.host.url=${{ secrets.SONAR_URL }}
          -Dsonar.login=${{ secrets.SONAR_USER }}
          -Dsonar.password=${{ secrets.SONAR_PASSWORD }}
          -Dsonar.projectName=$GITHUB_REPOSITORY
          -Dsonar.projectKey=$SONAR_PROJECTKEY
          -Dsonar.sources=$GITHUB_WORKSPACE
          -Dsonar.sourceEncoding=UTF-8
          -Dsonar.language=js
```

• Github 제공 Runner 사용 시

```
on:
 push:
   branches:
     - "sonarscan"
   paths:
     - ".github/workflows/sonar.yml"
name: SonarQube
env:
 SONAR_PROJECTKEY: nodejs
iobs:
 sonarQubeTrigger:
   name: SonarQube Scan
   runs-on: ubuntu-latest
   steps:
   - uses: actions/checkout@v3
    - name: SonarOube Scan
     uses: sonarsource/sonarqube-scan-action@master
     env:
       SONAR_TOKEN: ${{ secrets.SONAR_TOKEN }}
       SONAR_HOST_URL: ${{ secrets.SONAR_URL }}
      with:
       projectBaseDir: ./src
       args: >
          -Dsonar.projectName=$GITHUB_REPOSITORY
          -Dsonar.projectKey=$SONAR_PROJECTKEY
          -Dsonar.sourceEncoding=UTF-8
          -Dsonar.language=js
```

C/C++/Objective-C용 Action yml 파일

CFamily의 경우 먼저 Build가 되어야한다

■ Self-hosted Runner 사용 시

```
on:
  push:
   branches:
     - "sonarscan"
   paths:
      - ".github/workflows/sonar.yml"
name: SonarQube
env:
  SONAR_PROJECTKEY: cfamily
  SONAR_CSCAN: /opt/build-wrapper
  SONAR_SCAN: /opt/sonar-scan/
jobs:
  sonarOubeTrigger:
   name: SonarQube Scan
   runs-on: [self-hosted, sonar]
   steps:
    - uses: actions/checkout@v3
   - name: create property file
     run:
       echo "sonar.host.url=${{ secrets.SONAR_URL }}" >> sonar-project.properties
        echo "sonar.login=${{ secrets.SONAR_TOKEN }}" >> sonar-project.properties
        echo "sonar.projectKey=$SONAR_PROJECTKEY" >> sonar-project.properties
       echo "sonar.projectName=$GITHUB_REPOSITORY" >> sonar-project.properties
        echo "sonar.sources=$GITHUB_WORKSPACE" >> sonar-project.properties
       echo "sonar.cfamily.build-wrapper-output=${GITHUB_WORKSPACE}/build" >> sonar-project.properties
       echo "sonar.sourceEncoding=UTF-8" >> sonar-project.properties
    - name: build sonarqube
      run: |
       mkdir build
       cmake -S . -B build
       $SONAR_CSCAN/build-wrapper-linux-x86-64 --out-dir ${GITHUB_WORKSPACE}/build cmake --build build/ --
config Release
   - name: scanner start
      run: $SONAR_SCAN/bin/sonar-scanner
```

• Github 제공 Runner 사용 시

```
on:
 push:
   branches:
      - "sonarscan"
   paths:
      - ".github/workflows/sonar.yml"
name: SonarQube
env:
 SONAR_PROJECTKEY: cFamily
jobs:
 Sonarscan:
   name: Build
   runs-on: ubuntu-latest
    env:
     SONAR SCANNER VERSION: 4.7.0.2747
      SONAR_SERVER_URL: ${{ secrets.SONAR_URL }}
     BUILD_WRAPPER_OUT_DIR: sonar_build
     SONAR_PROJECTKEY: cFamily
   steps:
      - uses: actions/checkout@v2
       with:
          fetch-depth: 0 # Shallow clones should be disabled for a better relevancy of analysis
      - name: Set up JDK 11
       uses: actions/setup-java@v1
       with:
          java-version: 11
      - name: Download and set up sonar-scanner
       env:
         SONAR_SCANNER_DOWNLOAD_URL: https://binaries.sonarsource.com/Distribution/sonar-scanner-cli/sonar-
scanner-cli-${{ env.SONAR_SCANNER_VERSION }}-linux.zip
       run:
         mkdir -p $HOME/sonar
         curl -sSLo "$HOME/sonar/sonar-scanner.zip" ${{ env.SONAR_SCANNER_DOWNLOAD_URL }}
         unzip -o "$HOME/sonar/sonar-scanner.zip" -d $HOME/sonar/
         echo "$HOME/sonar/sonar-scanner-${{ env.SONAR_SCANNER_VERSION }}-linux/bin" >> $GITHUB_PATH
      - name: Download and set up build-wrapper
       env:
         BUILD_WRAPPER_DOWNLOAD_URL: ${{ env.SONAR_SERVER_URL }}/static/cpp/build-wrapper-linux-x86.zip
       run:
          curl -sSLo $HOME/sonar/build-wrapper-linux-x86.zip ${{ env.BUILD_WRAPPER_DOWNLOAD_URL }}
         unzip -o $HOME/sonar/build-wrapper-linux-x86.zip -d $HOME/sonar/
          echo "$HOME/sonar/build-wrapper-linux-x86" >> $GITHUB_PATH
      - name: create property file
       run: |
          echo "sonar.host.url=${{ secrets.SONAR_URL }}" >> sonar-project.properties
          echo "sonar.login=${{ secrets.SONAR_TOKEN }}" >> sonar-project.properties
          echo "sonar.projectKey=$SONAR_PROJECTKEY" >> sonar-project.properties
          echo "sonar.projectName=$GITHUB_REPOSITORY" >> sonar-project.properties
          echo "sonar.sources=$GITHUB_WORKSPACE" >> sonar-project.properties
          echo "sonar.cfamily.build-wrapper-output=${GITHUB_WORKSPACE}/build" >> sonar-project.properties
          echo "sonar.sourceEncoding=UTF-8" >> sonar-project.properties
      - name: Run build-wrapper
       run:
          mkdir ${{ env.BUILD_WRAPPER_OUT_DIR }}
          cmake -S . -B ${{ env.BUILD_WRAPPER_OUT_DIR }}
         build-wrapper-linux-x86-64 --out-dir ${{ env.BUILD_WRAPPER_OUT_DIR }} cmake --build build/ --config
Release
      - name: Run sonar-scanner
       run: sonar-scanner
```

확인

■ Actions → All workflows 에 해당 작업의 성공여부를 확인 할 수 있다

	r
Workflow run deleted successfully.	×
🖟 wotn112/sonarqubeCrunner (Public) 🔍 Pin (0) 🔹 🖞 Star (0) 🔹	•
<> Code 💿 Issues 1 Pull requests 💿 Actions 🖽 Projects 🖽 Wilki 🛈 Security 🗠 Insights 🛞 Settings	
Workflows New workflow All workflows Cive feedback × Q	

https://github.com/wotn112/sonarqubeCrunner/actions/runs/2745045553

Branch 삭제

■ 해당 작업을 완료한 후 해당 Branch를 삭제하고자 하는 경우 Branch 선택 → 삭제하고자 하는 Branch 오른쪽 휴지통 선택

Search or jump to 7	Pull requests Issues Marketplace E	xplore			+• 🐠
G wotn112/sonarqubeCrunner (Public)				A Pin O Unwatch 1	ar () -
<> Code O Issues 11 Pull requests (🕥 Actions 🖽 Projects 🖽 Wiki 🛈	Security 🗠 Insights 🚯 Settings			
	🐉 sonarscan had recent pushes 15 minut	es ago	Compare & pull request	About B About About	
	🐉 main 👻 🐉 3 branches 🔊 0 tags		Go to file Add file - Code -	印 Readme ☆ O stars	
	Your main branch isn't protect Protect this branch from force pushing, d	ed eletion, or require status checks before merging.	Protect this branch ×	 ⊙ 1 watching ♀ 0 forks 	
	SonarTech up the date to retrigger an	nalysis	73d30cb 2 days ago 😗 100 commits	Releases	
	.github/workflows	Replace token	3 months ago	No releases published Create a new release	
	src src	Add coverage	3 months ago		
	.gitattributes	Add code and boilerplate files	14 months ago	Packages	
	🗋 .gitignore	Ignore XCode stuff	14 months ago	No packages published	
	CMakeLists.txt	Add coverage	3 months ago	Publish your first package	
	README.adoc	Go back to the default section tag	3 months ago	Contribution (1)	
	examples-structure.adoc	Updated github links v2	13 months ago	Contributors 4	
	sonar-project.properties	stray indent	3 months ago	arseniy-sonar Arseniy Zaostrovnykh	
	🗋 update-date.txt	up the date to retrigger analysis	2 days ago	ere tomasz-kaminski-sonarsource	
	i≣ README.adoc		ı	amelie-renard-sonarsource Amélie Ren geoffray-adde-sonarsource Image: Comparison of the sonarsource	
		·		-	

Search or jump to 7	Pull requests Issues Marketplace Explore			4 +• 🐠
🖟 wotn112/sonarqubeCrunner 🖻	blic		◊ Pin ③ Unwatch 1 → ♀ Fork 0	* 🟠 Star 0 *
<> Code 💿 Issues 11 Pull requests 📀	Actions 🖽 Projects 🖽 Wiki 🛈 Security 🗠 Insights 🚯 Settings			
	Q Search branches	Overview Yours Active Stale	All branches New branch	
	Default branch		₹	
	main 🖵 Updated 2 days ago by SonarTech	Default	ı	
	Your main branch isn't protected Protect this branch from force pushing, deletion, or require status checks before merging.		Dismiss Protect this branch	
	Your branches			
	sonanscan Updated 16 minutes ago by wotn112	9 0	11 New pull request	
	geoffray/coverage_conf_after_config LD Updated 3 months ago by geoffray-adde-sonarsource	15 4	រ៉ា New pull request 🖉 ប៊ំ	
	Active branches			
	sonarscan D Updated 16 minutes ago by wotn112	0 9	גע אפא א א א א א א א א א א א א א א א א א	
	geoffray/coverage_conf_after_config 🖸 Updated 3 months ago by geoffray-adde-sonarsource	15 4	រិឯ New pull request 🖉 📋	

참조 링크

Sonarqube

- Sonarqube Doc-Maven scanner
 Sonarqube Doc-JS, CSS scanner
 Sonarqube Doc-Cfmaily scanner
- Github
 - Github Doc-Self_hosted_runnerGithub Doc-Workflow