

Curso: Despliegue de Aplicaciones con Docker

Información del Curso

- **Curso:** Despliegue de Aplicaciones con Docker
 - **Proyecto:** Práctica de Docker Compose
 - **Profesor:** Ing. Edison Naranjo (CEC-EPN)
 - **Fecha:** 19 de Septiembre de 2025
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Proyecto – Análisis de Vulnerabilidades y Despliegue Automático con Docker Hub - Grupo 1 – Tarea 3

Descripción del Proyecto

Este proyecto implementa una aplicación **FastAPI** en GitHub y un archivo **.yaml** en GitHub Actions para:

1. Realizar análisis de vulnerabilidades de la aplicación.
 2. Construir la imagen Docker.
 3. Publicar la imagen automáticamente en **Docker Hub**.
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Integrantes - Grupo 1 (Municipio de Quito)

Integrante	Repositorio GitHub
Carpio Zaquinaula Byron Orlando	https://github.com/bcarpio16/fastapi-app-scout.git
Villarroel Vera Milton Orlando	https://github.com/movillarroel/fastapi-app-scout.git

Integrante	Repositorio GitHub
Mena Segura Edison Fabián	https://github.com/Bulls1168-C/fastapi-app-scout.git
Benavides Freire Alex Vicente	https://github.com/abenavides86/fastapi-app-scout.git
Gallardo Nicolalde Marcelo Iván	https://github.com/panivinux/fastapi-app-scout.git

Archivo workflow YAML de GitHub Actions 🚀

name: Build and Analyze Docker Image

on: push: branches: ["main"]

env: IMAGE_NAME: *panivinux/fastapi-app-scout*

SHA: \${{ github.sha }}

jobs: build-and-analyze: runs-on: ubuntu-latest

```

steps:
  - name: Checkout repository
    uses: actions/checkout@v4

  - name: Log in to Docker Hub
    uses: docker/login-action@v3
    with:
      username: ${{ secrets.DOCKERHUB_USERNAME }}
      password: ${{ secrets.DOCKERHUB_TOKEN }}

  - name: Set up Docker Buildx
    uses: docker/setup-buildx-action@v3

  - name: Build image and load to runner
    id: build
    uses: docker/build-push-action@v6
    with:
      context: .
      file: ./Dockerfile-single
      push: true
      load: true
      tags: ${{ env.IMAGE_NAME }}:sha-${{ env.SHA }}

  - name: Install Docker Scout

```

```

run: |
  mkdir -p ~/.docker/cli-plugins
  curl -sSfL https://raw.githubusercontent.com/docker/scout-
cli/main/install.sh | sh
  sudo cp ~/.docker/cli-plugins/docker-scout /usr/local/bin/
  docker-scout version

# 6. Escanear la imagen con Docker Scout
- name: Scan image with Docker Scout
  run: |
    echo "🔍 Ejecutando análisis de vulnerabilidades con Docker Scout..."
    docker scout cves ${env.IMAGE_NAME}:sha-${github.sha} --output json
2>&1 | tee scout-report.json
    echo "==== Resumen de vulnerabilidades detectadas ====="
    cat scout-report.json

# 7. Subir reporte como artefacto en GitHub Actions
- name: Upload Scout JSON report
  uses: actions/upload-artifact@v4
  with:
    name: docker-scout-report
    path: scout-report.json

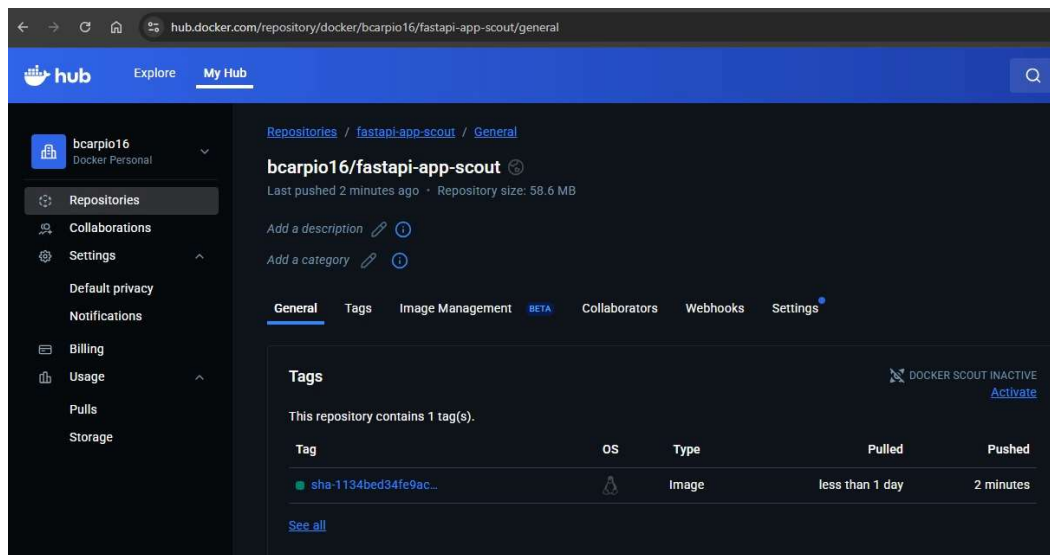
```

📁 Carpio Zaquinaula Byron Orlando

The screenshot shows a GitHub Actions workflow run for the 'build-and-analyze' job. The workflow is titled 'build-and-analyze' and is located at github.com/bcarpio16/fastapi-app-scout/actions/runs/17861386076/job/50792773719. The job status is 'succeeded now in 47s'.

The workflow steps are as follows:

- Artifact download URL:** <https://github.com/bcarpio16/fastapi-app-scout/actions/runs/17861386076/job/50792773719/artifacts/4857826853>
- Writing summary**
- Removing temp folder** /home/runner/work/_temp/docker-actions-toolkit-z17Raw
- Post cache**
- Post Set up Docker Buildx**
 - 1 Post job cleanup.
 - 2 Removing builder
 - 3 /usr/bin/docker buildx rm builder-5772ff8a-7948-4cb4-bd21-ae055d8d2c3e
 - 4 builder-5772ff8a-7948-4cb4-bd21-ae055d8d2c3e removed
 - 5 Cleaning up certificates
 - 6 Post cache
- Post Log in to Docker Hub**
 - 1 Post job cleanup.
 - 2 /usr/bin/docker logout
 - 3 Removing login credentials for <https://index.docker.io/v1/>
 - 4 Post cache
- Post Checkout repository**
 - 1 Post job cleanup.
 - 2 /usr/bin/git version
 - 3 git version 2.51.0
 - 4 Temporarily overriding HOME="/home/runner/work/_temp/c9f5179d-5138-483b-ba02-e2aa4d43402f" before making global p
 - 5 Adding repository directory to the temporary git global config as a safe directory
 - 6 /usr/bin/git config --global --add safe.directory /home/runner/work/fastapi-app-scout/fastapi-app-scout
 - 7 /usr/bin/git config --local --name-only --get-regexp core.sshCommand
 - 8 /usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp 'core.sshCommand'
 - 9 /usr/bin/git config --local --name-only --get-regexp http.https://github.com/\,extraheader
 - 10 http.https://github.com/extraheader
 - 11 /usr/bin/git config --local --unset-all http.https://github.com/extraheader
 - 12 /usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp 'http.https://github.com/extraheader'
- Complete job**
 - 1 Cleaning up orphan processes



 Villarroel Vera Milton Orlando

← → ↺ 📄 github.com/movillarroel/fastapi-app-scout/actions/runs/17860416594/job/50789437197

📄

🏠 Summary

Jobs

✅ build-and-analyze

Run details

🕒 Usage

📄 Workflow file

build-and-analyze

succeeded 4 minutes ago in 58s

- > ✅ Set up job
- > ✅ Checkout repository
- > ✅ Log in to Docker Hub
- > ✅ Set up Docker Buildx
- > ✅ Build image and load to runner
- > ✅ Install Docker Scout
- > ✅ Scan image with Docker Scout
- > ✅ Upload Scout JSON report
- > ✅ Post Build image and load to runner
- > ✅ Post Set up Docker Buildx
- > ✅ Post Log in to Docker Hub
- > ✅ Post Checkout repository
- > ✅ Complete job

hub

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Billing

Usage

Pulls

Storage

Repositories / fastapi-app-scout / General

movillarroel/fastapi-app-scout

Last pushed 6 minutes ago • Repository size: 58.6 MB

Add a description

Add a category

General

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Settings

Tags

DOCKER SCOUT INACTIVE

Activate

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
sha-262a75f9915cf6...		Image	less than 1 day	6 minutes

See all

Mena Segura Edison Fabián

Create requirements.txt · Bulls1168-C

github.com

Bulls1168-C/fastapi-app-scout/actions/runs/17863474996/job/50799943409

Bulls1168-C / fastapi-app-scout

Code

Issues

Pull requests

Actions

Projects

Wiki

Security

Insights

Settings

Build and Analyze Docker Image

Create requirements.txt #3

Re-run all jobs

Summary

Jobs

Run details

Usage

Workflow file

build-and-analyze

succeeded 1 minute ago in 46s

Search logs

Set up job

3s

Checkout repository

0s

Log in to Docker Hub

1s

Set up Docker Buildx

4s

Build image and load to runner

14s

Install Docker Scout

2s

Scan image with Docker Scout

14s

Upload Scout JSON report

0s

Post Build image and load to runner

2s

Post Set up Docker Buildx

0s

Post Log in to Docker Hub

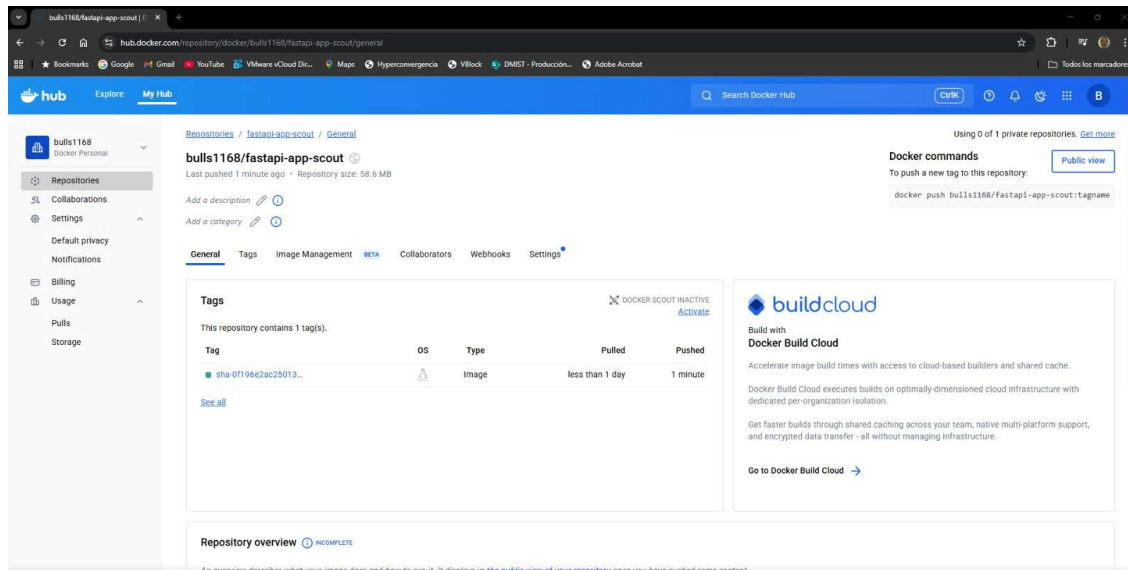
1s

Post Checkout repository

0s

Complete job

0s



Benavides Freire Alex Vicente

← → ↺ github.com/abenavides86/fastapi-app-scout/actions/runs/17863002040/job/50798275439

Summary

Jobs

✓ build-and-analyze

Run details

Usage

Workflow file

build-and-analyze

succeeded now in 55s

- ✓ Post Build image and load to runner
 - 15 ▶ Removing temp folder `/home/runner/work/_temp/docker-actions-toolkit-g8Cpox`
 - 16 ▶ Post cache
- ✓ Post Set up Docker Buildx
 - 1 Post job cleanup.
 - 2 ▼ Removing builder
 - 3 `/usr/bin/docker buildx rm builder-9c4c0fdc-b23e-4385-80bf-a56f611fcefc`
 - 4 `builder-9c4c0fdc-b23e-4385-80bf-a56f611fcefc` removed
 - 5 ▶ Cleaning up certificates
 - 6 ▶ Post cache
- ✓ Post Log in to Docker Hub
 - 1 Post job cleanup.
 - 2 `/usr/bin/docker logout`
 - 3 Removing login credentials for <https://index.docker.io/v1/>
 - 4 ▶ Post cache
- ✓ Post Checkout repository
 - 1 Post job cleanup.
 - 2 `/usr/bin/git version`
 - 3 `git version 2.51.0`
 - 4 Temporarily overriding HOME=`'/home/runner/work/_temp/bee1de7e-bda8-4fc5-884c-875a847e9224'` before making global
 - 5 Adding repository directory to the temporary git global config as a safe directory
 - 6 `/usr/bin/git config --global --add safe.directory /home/runner/work/fastapi-app-scout/fastapi-app-scout`
 - 7 `/usr/bin/git config --local --name-only --get-regexp core.sshCommand`
 - 8 `/usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp 'core.sshCommand'`
 - 9 `/usr/bin/git config --local --name-only --get-regexp http.https://github.com/.extraheader`
 - 10 `http.https://github.com/.extraheader`
 - 11 `/usr/bin/git config --local --unset-all http.https://github.com/.extraheader`
 - 12 `/usr/bin/git submodule foreach --recursive sh -c "git config --local --name-only --get-regexp 'http.https://github.com/.extraheader'`
- ✓ Complete job
 - 1 Cleaning up orphan processes

hub

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Repositories

Collaborations

Settings

Default privacy

Notifications

Billing

Usage

Pulls

Storage

Repositories / fastapi-app-scout / General

abnavides86/fastapi-app-scout

Last pushed 2 minutes ago · Repository size: 58.6 MB

Add a description

Add a category

General

Tags

Image Management

Collaborators

Webhooks

Settings

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
sha-9f768662f2f7dd...		Image	less than 1 day	2 minutes

See all

DOCKER SCOUT INACTIVE

Activate

buildcloud

Build with Docker Build Cloud

Accelerate image build times with access to

Docker Build Cloud executes builds on optim

dedicated per-organization isolation.

Get faster builds through shared caching acn

and encrypted data transfer - all without man



Go to Docker Build Cloud

Repository overview

INCOMPLETE


An overview describes what your image does and how to run it. It displays in the public view of your repository once you have pushed some content.

Gallardo Nicolalde Marcelo Iván

 panivinux / fastapi-app-scout


[Code](#) [Issues](#) [Pull requests](#) [Actions](#) [Projects](#) [Wiki](#) [Security](#)

[← Build and Analyze Docker Image](#)

 **Update README.md #10**

[Summary](#)

Jobs














 **build-and-analyze**

Run details

[Usage](#)

[Workflow file](#)


build-and-analyze
succeeded 16 hours ago in 45s

- >  Set up job
- >  Checkout repository
- >  Log in to Docker Hub
- >  Set up Docker Buildx
- >  Build image and load to runner
- >  Install Docker Scout
- >  Scan image with Docker Scout
- >  Upload Scout JSON report
- >  Post Build image and load to runner
- >  Post Set up Docker Buildx
- >  Post Log in to Docker Hub
- >  Post Checkout repository
- >  Complete job

hub

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Settings

Default privacy

Notifications

Billing

Usage

Pulls

Storage

Repositories / fastapi-app-scout / General

panivinux/fastapi-app-scout

Last pushed about 16 hours ago · Repository size: 179 MB

Add a description

Add a category

General

Tags

Image Management

BETA

Collaborators

Webhooks

Settings

Tags

DOCKER SCOUT INACTIVE

Activate

This repository contains 9 tag(s).

Tag	OS	Type	Pulled	Pushed
sha-bb2634e999deb...		Image	less than 1 day	about 16 hours
sha-1d1bcf2b58c3cc...		Image	less than 1 day	about 16 hours
sha-e78bf754b454f3...		Image	less than 1 day	about 16 hours
sha-7f530092dde36e...		Image	less than 1 day	about 16 hours
sha-634c11b2c29d5b...		Image	less than 1 day	about 16 hours

See all