



# Running jobs in a container

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Use a container to run the steps in a job.

**Note:** GitHub-hosted runners are not currently supported on GitHub Enterprise Server. You can see more information about planned future support on the <u>GitHub public roadmap</u>.

#### Overview @

Use <code>jobs.<job\_id>.container</code> to create a container to run any steps in a job that don't already specify a container. If you have steps that use both script and container actions, the container actions will run as sibling containers on the same network with the same volume mounts.

If you do not set a container, all steps will run directly on the host specified by runs-on unless a step refers to an action configured to run in a container.

**Note:** The default shell for run steps inside a container is sh instead of bash. This can be overridden with <u>jobs.<job\_id>.defaults.run</u> or <u>jobs.<job\_id>.steps[\*].shell</u>.

### Example: Running a job within a container &

```
YAML
                                                                                   Q
name: CI
on:
  push:
    branches: [ main ]
  container-test-job:
    runs-on: ubuntu-latest
    container:
       image: node:18
        NODE ENV: development
       ports:
         - 80
       volumes:
         - my_docker_volume:/volume_mount
       options: --cpus 1
```

When you only specify a container image, you can omit the image keyword.

```
jobs:
   container-test-job:
    runs-on: ubuntu-latest
   container: node:18
```

### Defining the container image @

Use <code>jobs.<job\_id>.container.image</code> to define the Docker image to use as the container to run the action. The value can be the Docker Hub image name or a registry name.

## Defining credentials for a container registry &

If the image's container registry requires authentication to pull the image, you can use jobs.<job\_id>.container.credentials to set a map of the username and password. The credentials are the same values that you would provide to the <a href="docker login">docker login</a> command.

### Example: Defining credentials for a container registry $\mathscr O$

```
container:
  image: ghcr.io/owner/image
  credentials:
    username: ${{ github.actor }}
    password: ${{ secrets.github_token }}
```

## Using environment variables with a container &

Use jobs.<job\_id>.container.env to set a map of environment variables in the container.

## **Exposing network ports on a container** $\mathscr O$

Use jobs.<job\_id>.container.ports to set an array of ports to expose on the container.

## Mounting volumes in a container @

Use <code>jobs.<job\_id>.container.volumes</code> to set an <code>array</code> of volumes for the container to use. You can use volumes to share data between services or other steps in a job. You can specify named Docker volumes, anonymous Docker volumes, or bind mounts on the host.

To specify a volume, you specify the source and destination path:

```
<source>:<destinationPath> .
```

The <source> is a volume name or an absolute path on the host machine, and <destinationPath> is an absolute path in the container.

#### Example: Mounting volumes in a container @

#### volumes:

- my\_docker\_volume:/volume\_mount
- /data/my\_data
- /source/directory:/destination/directory

# **Setting container resource options** $\mathscr {P}$

Use jobs.<job\_id>.container.options to configure additional Docker container resource options. For a list of options, see " <a href="docker create">docker create</a> options."

Warning: The --network and --entrypoint options are not supported.

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