

**This version of GitHub Enterprise was discontinued on 2023-03-15.** No patch releases will be made, even for critical security issues. For better performance, improved security, and new features, [upgrade to the latest version of GitHub Enterprise](#). For help with the upgrade, [contact GitHub Enterprise support](#).

# Choosing the runner for a job

Define the type of machine that will process a job in your workflow.

**Note:** GitHub-hosted runners are not currently supported on GitHub Enterprise Server. You can see more information about planned future support on the [GitHub public roadmap](#).

## Overview [↗](#)

Use `jobs.<job_id>.runs-on` to define the type of machine to run the job on.

- The destination machine can be a [self-hosted runner](#).
- You can target runners based on the labels assigned to them.
- You can provide `runs-on` as:
  - a single string
  - a single variable containing a string
  - an array of strings, variables containing strings, or a combination of both
- If you specify an array of strings or variables, your workflow will execute on any runner that matches all of the specified `runs-on` values. For example, here the job will only run on a self-hosted runner that has the labels `linux`, `x64`, and `gpu`:

```
runs-on: [self-hosted, linux, x64, gpu]
```

For more information, see "[Choosing self-hosted runners](#)."

- You can mix strings and variables in an array. For example:

```
on:
  workflow_dispatch:
    inputs:
      chosen-os:
        required: true
        type: choice
        options:
          - Ubuntu
          - macOS

jobs:
  test:
    runs-on: [self-hosted, "${{ github.event.inputs.chosen-os }}"]
    steps:
      - run: echo Hello world!
```

- If you would like to run your workflow on multiple machines, use `jobs.<job_id>.strategy`.

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## Choosing GitHub-hosted runners [↗](#)

If you use a GitHub-hosted runner, each job runs in a fresh instance of a runner image specified by `runs-on`.

Available GitHub-hosted runner types are:

Runner image	YAML workflow label	Notes
Windows Server 2022	<code>windows-latest</code> or <code>windows-2022</code>	The <code>windows-latest</code> label currently uses the Windows Server 2022 runner image.
Windows Server 2019	<code>windows-2019</code>	None
Ubuntu 22.04	<code>ubuntu-latest</code> or <code>ubuntu-22.04</code>	The <code>ubuntu-latest</code> label currently uses the Ubuntu 22.04 runner image.
Ubuntu 20.04	<code>ubuntu-20.04</code>	None
macOS 13 Ventura [Beta]	<code>macos-13</code> or <code>macos-13-xl</code>	None
macOS 12 Monterey	<code>macos-latest</code> , <code>macos-12</code> , <code>macos-latest-xl</code> or <code>macos-12-xl</code>	The <code>macos-latest</code> and <code>macos-latest-xl</code> workflow labels currently uses the macOS 12 runner image. For information about macOS XL runner (12-core) per-minute pricing, see " <a href="#">About billing for GitHub Actions</a> ."
macOS 11 Big Sur	<code>macos-11</code>	None

**Note:** The `-latest` runner images are the latest stable images that GitHub provides, and might not be the most recent version of the operating system available from the operating system vendor.

**Warning:** Beta and Deprecated Images are provided "as-is", "with all faults" and "as available" and are excluded from the service level agreement and warranty. Beta Images may not be covered by customer support.

## Example: Specifying an operating system [↗](#)

```
runs-on: ubuntu-latest
```

For more information, see "[About GitHub-hosted runners](#)."

## Choosing self-hosted runners [↗](#)

To specify a self-hosted runner for your job, configure `runs-on` in your workflow file with self-hosted runner labels.

All self-hosted runners have the `self-hosted` label. Using only this label will select any self-hosted runner. To select runners that meet certain criteria, such as operating system or architecture, we recommend providing an array of labels that begins with `self-hosted` (this must be listed first) and then includes additional labels as needed. When you specify an array of labels, jobs will be queued on runners that have all the labels that you specify.

Although the `self-hosted` label is not required, we strongly recommend specifying it when using self-hosted runners to ensure that your job does not unintentionally specify any current or future GitHub-hosted runners.

### Example: Using labels for runner selection [↗](#)

```
runs-on: [self-hosted, linux]
```

For more information, see "[About self-hosted runners](#)" and "[Using self-hosted runners in a workflow](#)."

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