### **GitHub Actions**

Running workflows from you GitHub repositories

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#### About workflows

Workflows are custom automated processes that you can set up in your repository to build, test, package, release, or deploy any project on GitHub. With workflows you can automate your software development life cycle with a wide range of tools and services.

#### Howto create it

- You can create more than one workflow in a repository. You must store workflows in the .github/workflows directory in the root of your repository.
- You need to configure workflows using YAML syntax, and save them as
  workflow files in your repository. Once you've successfully created a
  YAML workflow file and triggered the workflow, you will see the build
  logs, tests results, artifacts, and statuses for each step of your workflow.

Workflow syntax for GitHub Actions

## Workflow example

```
name: Greet Everyone
# This workflow is triggered on pushes to the repository.
on: [push]
jobs:
  build:
    # Job name is Greeting
    name: Greeting
    # This job runs on Linux
    runs-on: ubuntu-latest
    steps:
      # This step uses GitHub's hello-world-javascript-action:
      - name: Hello world
        uses: actions/hello-world-javascript-action@v1
                                                             4/13
        with:
```

### Howto trigger workflows

You can configure a workflow to start once:

- An event on GitHub occurs, such as when someone pushes a commit to a repository or when an issue or pull request is created.
- · A scheduled event begins.
- · An external event occurs. (Webhooks)

### Howto use GitHub events

```
# Trigger on push
on: push
# Trigger the workflow on push or pull request
on: [push, pull_request]
```

### Howto schedule it

```
on:
    schedule:
    - cron: '0 * * * *'
```

### Define virtual environments

- · Windows Server 2019
- · Ubuntu 18.04
- · macOS Catalina 10.15

runs-on: ubuntu-latest

# Define your build environment

```
strategy:
  matrix:
    node-version: [12.x]
```

# Define one or more jobs with steps

• Example



You can use all commands that you can use in a Linux shell

# Use predefined actions

GitHub Marketplace

# Use secrects for sensitive configuration data

Options	Secrets
Collaborators	Secrets are environment variables that are <b>encrypted</b> and only exposed to se
Branches	collaborator access to this repository can use these secrets in a workflow.  Secrets are not passed to workflows that are triggered by a pull request from a
Webhooks	
Notifications	A access token
Integrations & services	E_MOCESS_TOREM
Deploy keys	A GIT_AUTHOR_EMAIL
Secrets	
Actions	☐ GIT_AUTHOR_NAME
Moderation	Add a new secret
Interaction limits	

