



Intro to CI/CD

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What Is CI/CD

- ◇ Continuous Integration (CI)
 - ◆ Every change to code is tested and built
- ◇ Continuous Deployment (CD)
 - ◆ Every (production) change is automatically deployed to servers





Continuous Integration

- ◇ Ensures separate code branches can be correctly integrated into the main code
 - ◇ Includes ideas such as:
 - ◆ Linting - Check code for content/syntax errors
 - ◆ Formatting - making code look nice/consistent
 - ◆ Build - Ensure code can compile successfully
 - ◆ Test - Run various (unit, regression, integration, etc.) tests
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Continuous Deployment

- ◇ Accepts code which passes CI
- ◇ Pushes code to server
- ◇ Ensures configuration and environment updates
- ◇ Transitions between previous and current version
- ◇ Continuous Delivery
 - ◆ Create build artifacts
 - ◆ Present for download/use





Follow Along (basic site)

- ◇ Create Account/Sign in to GitHub
- ◇ Go to <https://github.com/jhollowe/ci-workshop>
- ◇ Fork Repository
- ◇ Enable GitHub Pages
 - ◆ Settings > Pages > branch=main > folder=/ (root) > Save

◇ View site:

<https://<username>.github.io/ci-workshop>



Follow Along 2 (blog)

- ◇ Change to “blog” branch
- ◇ Add .github/workflows/gh-pages.yaml file
 - ◆ Copy contents from <https://raw.githubusercontent.com/jhollowe-forks/ci-workshop/blog/.github/workflows/gh-pages.yaml>
 - ◆ Commit and push changes

◇ View build process

◇ Change Pages to serve from gh-pages branch





Real World Examples

Home Assistant Core

- ◇ <https://github.com/home-assistant/core/actions/workflows/ci.yaml>





Questions?