



Enabling Continuous Integration with Azure Pipelines

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What is Continuous Integration?

Continuous Integration (CI)

CI is the process of automating the build and testing of code every time a team member commits changes to version control.

CI encourages developers to share their code and unit tests by merging their changes into a shared version control repository after every small task completion.

Committing code triggers an automated build system to grab the latest code from the shared repository and to build, test, and validate the full master branch(aka trunk and main).

Benefits of Continuous Integration

1. Manual tests are only a snapshot
2. Increase your code coverage
3. Deploy your code to production
4. Build stuff now
5. Build stuff faster
6. Never ship broken code
7. Decrease code review time
8. Build repeatable processes

Build Number Formatting and Build Status

- Build number formatting

Build properties

Define general build pipeline setting

Build number format ⓘ

`$(date:yyyyMMdd)$(rev:.r)`

- Build status (enabled, paused, disabled)

The new build request is processing

☒ Enabled - queue and start builds when eligible agent(s) available

☐ Paused - queue new builds but do not start

☐ Disabled - do not queue new builds

Authorization and Timeouts, and Badges

- Authorization and Timeouts (scope, job timeout, cancel job timeout)

Build job
Define build job authorization and timeout settings

Build job authorization scope ⓘ

Project collection

Build job timeout in minutes ⓘ

60

Build job cancel timeout in minutes ⓘ

5

- Build status (enabled, paused, disabled)



Demo

Resources

- docs.microsoft.com