



TECHORAMA

Make Developer Onboarding a Breeze with GitHub Codespaces

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Pasi Huuhka

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CURRENTLY WORKING ON:

- Kubernetes with GitOps
- Championing GitHub
- Mentoring Projects
- Driving ARM -> Bicep transition for all our teams



100%

Azure since 2011

62 / 67

experts

14,2

experience avg.

4,6 / 5

customer satisfaction

4

Azure MVPs

2

Offices

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Session Agenda

- You'll learn what Github Codespaces are and why you should think about using them
- We'll take a look at how you can customize your projects for everyone, dev environments as code
- And of course how you can get all your nifty personal configurations on top of it all

Codespaces!

"YOUR INSTANT DEV ENVIRONMENT"

The marketing team inside my head would explain codespaces as...

- Visual Studio or Visual Studio Code on your browser
- Available from any location, from any device
- Customizable for almost any need
- With your own tools
- ... and great GitHub integration

DISCLAIMER: I'm not very good at marketing



Setting up your first codespace

Some details

-  Can connect from your local VS Code instance too
-  Free during the beta, will be billed by use later
-  Multiple VM sizes available even during the beta, though specifics are still unclear
-  Still in beta, so some of the bugs we might spot are most likely still being polished out
-  GA in Q3-2021 according to [the GitHub public roadmap](#)

So what's my angle?

I believe codespaces will become a common tool for teams for

- Setting up environments as config, allowing everyone to have a similar development setup
 - Pretty much like containers do, without you actually having to containerize your application
 - Bugfixes to older projects no longer require (as much) arcane knowledge
- Arranging trainings
- Sharing cool VS code modules, of course

Configuration

- Config isn't just a feature of codespaces, it's built in to VS code
 - The base is the `'.devcontainer'` folder in the root of your repo
 - You can actually use these for local development inside a container just as well, and reap a subset of the benefits
- You can use a default container, select from ready made ones, or just customize your own from scratch
- There are decent community made lists of devcontainers too, like [this set by Ben Coleman](#)

Let's create a configuration for our project

But what about my cool toys?

DON'T WORRY, YOU CAN HAVE THOSE TOO

- Enter dotfiles and VS code settings sync
- `yourGitHubUser/dotfiles` repository will get synced to every codespace you create
- Whenever a file with a certain name, in my case "Setup.sh" is found in the dotfiles repository, it will be fun after(?) `devcontainer` customizations
- Documentation does say "before" but this doesn't seem to be the case
- If no setup file is found, files and directories starting with . will get symlinked to your home folder in codespaces
- You might want to consider using some tooling for this, but I've just written some spaghetti code

Settings Sync

- Built in to VS Code (so NOT the extension in the marketplace)
- Allows you to log in to your GitHub or Microsoft account to sync all settings from keybindings to extensions and themes
- Sync is almost instant from one device to another
- Can ignore certain settings easily

Dotfiles & Settings Sync demo

Management & Security

- Security logs are available for you personally
- Audit logs are available for your organization
- Personal Secrets can be set on a repository level for Codespaces

on

Switch to another account ▾

Audit log

Filters ▾

Search audit logs

↓ Export

Recent events

-  [octokitten – codespaces.destroy](#)
Deleted Codespace for octo-org/octokitten-octo-test
[Australia](#) | 2 days ago
-  [frostysonic – codespaces.create](#)
Created Codespace for octo-org/octokitten-octo-test
[Australia](#) | 2 days ago
-  [OctoMona – org.codespaces_trusted_repo_access_granted](#)
Granted Codespaces trusted repo access to all repositories on the Octo...
[Australia](#) | 2 days ago
-  [OctoMona – codespaces.trusted_repositories_access_update](#)
Updated codespace access and security settings to enable access to a...
[Australia](#) | 2 days ago

Useful Links

- Devcontainer development
- devcontainer.json reference
- Remote - Containers VS Code extension
- Personalization of Codespaces
- Dotfiles In-depth
- My Blog



Slides: zure.ly/pasi/techorama
