



# **DevContainers What They Are and Why You Need Them**

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# About Joe Guadagno



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## Slide Deck, Source Code, and References



[https://jig.me/container\\_slides](https://jig.me/container_slides)

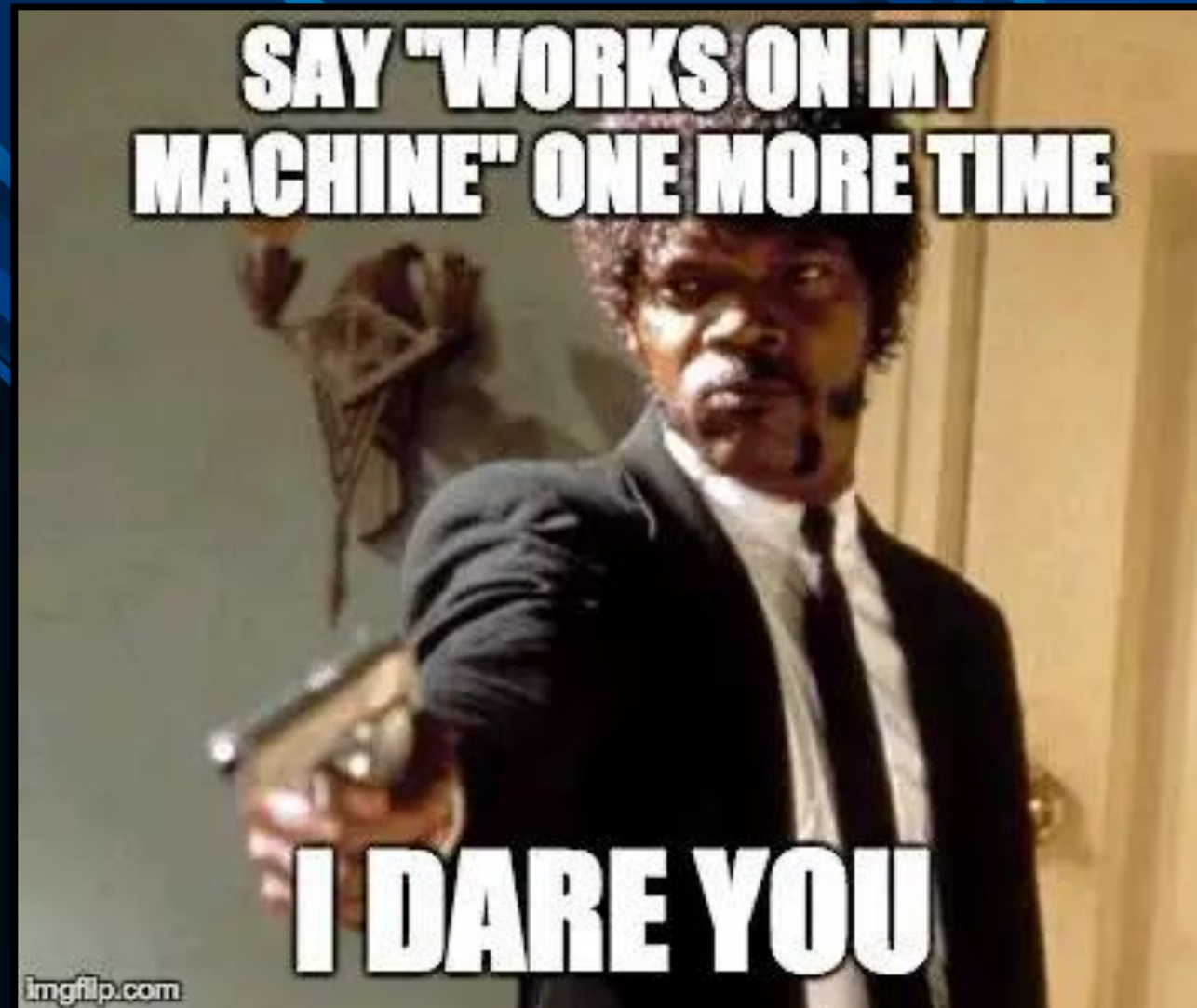
## **Agenda**

Getting Started  
What is a Developer Container  
Build Containers  
Customize the Containers  
Using Container in VS Code  
Multiple Containers  
Opening on GitHub

# Getting Started



**Why?**



## Requirements

Docker Desktop (macOS/Windows)

Docker CE/EE (Linux)

Rancher

Visual Studio Code

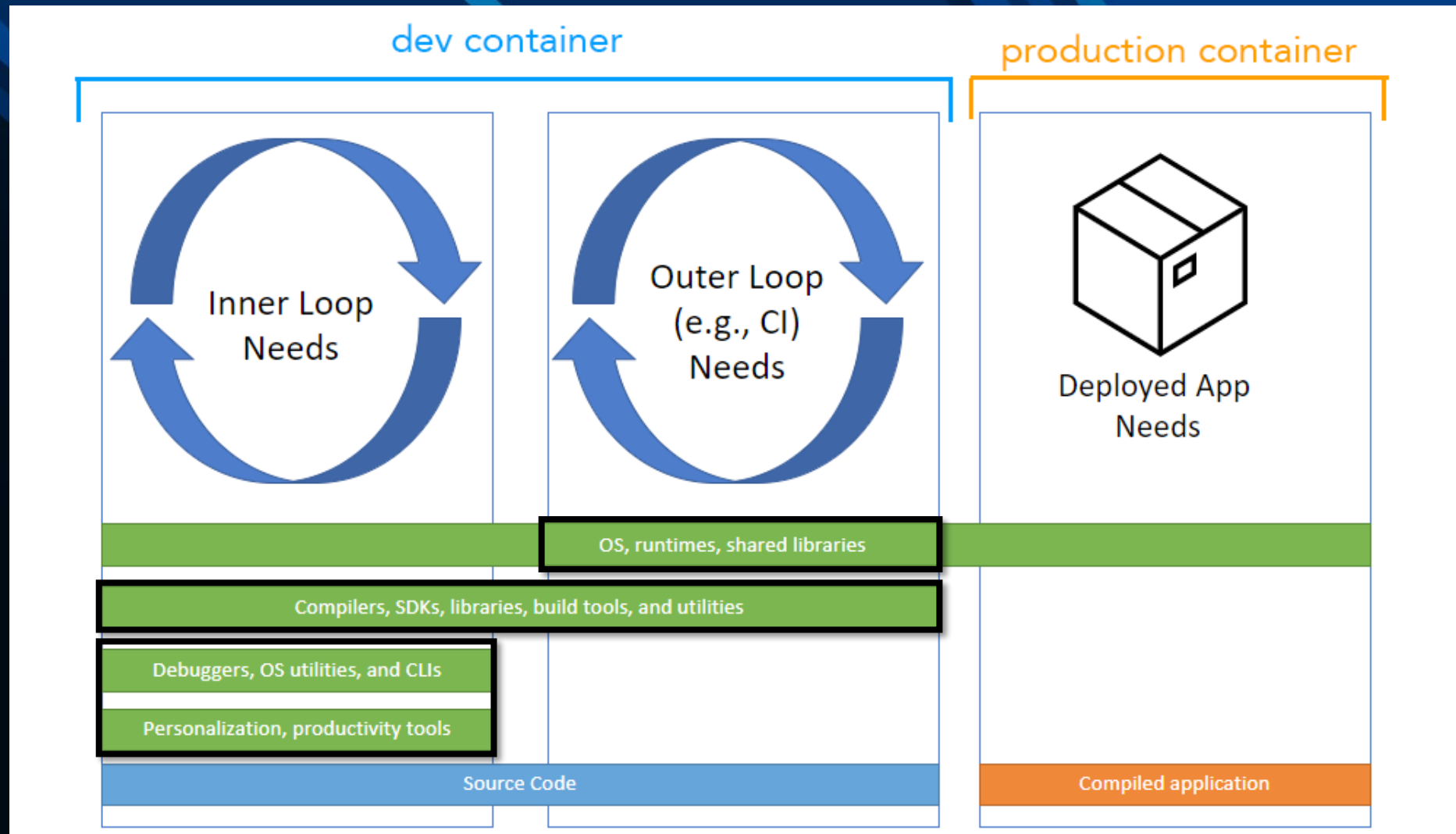
Dev Containers Extension

The background is a solid dark blue color. Overlaid on this are several diagonal lines of varying shades of blue, ranging from a medium blue to a lighter, almost white blue. These lines are oriented from the top-left towards the bottom-right, creating a sense of motion and depth. The lines vary in thickness and are slightly offset from each other, giving the impression of multiple layers or a 3D effect.

**Build Some Containers**



# Development vs. Production



# What Makes Up the Developer Container

## Developer Container

Productivity  
Tools

Debuggers

Personalization

### Feature

Compiler

Build Tools

### Template

Operating System

Libraries/SDKs

## **Templates (Images)**

Alpine

Debian

C#

C# and MS SQL

Java

Jekyll

Ruby

... and more

<https://containers.dev/templates>

## Features (Add-ons)

AWS CLI

Azure CLI

Dotnet CLI

Hugo

PowerShell

NPM

... and more

<https://containers.dev/features>

# **Build a Developer Container**



# DevContainers.json Common Settings

Settings	Usage
name	A name for the dev container displayed in the UI.
features	A Dev Container feature id and related options to be added into your primary container.
forwardPorts	An array of port numbers or "host:port" values that should always be forwarded from inside the container.
customizations	Product specific properties
remoteUser	Overrides the user that devcontainer.json supporting services tools / runs as in the container (along with sub-processes like terminals, tasks, or debugging).
postCreateCommand	This command is the last of three that finalizes container setup when a dev container is created.
postStartCommand	A command to run each time the container is successfully started.

Source: [https://containers.dev/implementors/json\\_reference/](https://containers.dev/implementors/json_reference/)

**Remember**

**IT WORKS ON MY MACHINE**



**IT'S A DEVOP PROBLEM NOW**

imgflip.com

## Resources

Site	Url
JosephGuadagno.NET	<a href="https://jjg.me/mysite">https://jjg.me/mysite</a>
jguadagno.github.io	<a href="https://jjg.me/blog_repo">https://jjg.me/blog_repo</a>
Blog Post	<a href="https://jjg.me/container_post">https://jjg.me/container_post</a>
Docker Desktop	<a href="https://www.docker.com/">https://www.docker.com/</a>
Visual Studio Code	<a href="https://visualstudio.microsoft.com/">https://visualstudio.microsoft.com/</a>
Remote Containers Extension	<a href="https://jjg.me/container_ext">https://jjg.me/container_ext</a>
Available Dev Container Features	<a href="https://containers.dev/features">https://containers.dev/features</a>



**Q & A**

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