

A Beginner's Guide to Deploying Web Apps with Docker

Introduction

Docker has become a popular method for streamlining and standardizing web application deployments. This beginner's guide will explain how Docker can be used to deploy web apps.

What is Docker?

Docker is a platform for running applications in lightweight containers. Containers package up code with dependencies to create standardized, portable environments.

Why Docker?

Docker provides major benefits for deploying web applications:

- Portability - Allows apps to run reliably on any system.
- Isolation - Containers separate app resources from the host OS.
- Scalability - Apps can be replicated easily across multiple containers.
- Agility - Faster and easier revisions to code, configs and dependencies

Docker vs Virtual Machines

Unlike VMs, containers do not virtualize hardware and share the host OS kernel. This makes them very lightweight and fast to spin up.

Deploying with Docker

Common steps for deploying a web app with Docker:

- Containerize app components like frontend, backend, database.
- Define dependencies and configs in Dockerfiles and docker-compose.
- Set up Docker on server hosts.
- Run containers from registry using CLI or orchestration tools.
- Manage app lifecycle with workflows and pipelines.

Docker enables standardization across environments for consistent, reliable web app deployments. Following Docker best practices can streamline iterating on and scaling applications.

Conclusion

Docker has become an essential deployment tool for web devs and ops teams. Learn how to leverage it to deploy apps in a robust and repeatable way.