Getting Started

This page will act as a guide through the five books that make up this lesson. We will be exploring how to self-host your own server from home using Do-It-Yourself guides paired with educational resources exploring the history of computing. Along the way, we will critically reflect on what it means for our communities to host your own server.

0. Background

info

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Flag

Your Personal Cloud

- Welcome
- What is the Cloud?
- Getting Started
- Background
- Understanding the Requirements
- About the Author

Before getting started, we should know what we're building. Running your own server is an excellent avenue to explore what it means to think like a designer and a developer. By taking ownership of our own digital security and privacy, we can help protect our families and communities.

Project Description keyboard_arrow_right

1. Hardware



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Host

Hardware

- What is a Server?
- Community Impact
- Quick-Start Examples
- Layers of Computing
- Firmware Configuration

Now that we understand our hardware requirements, we need to find a machine that supports them. We can create an open-source server using consumer hardware. Finally, there are some firmware configuration we should check before installing an operating system.

See the Hardware Guide keyboard_arrow_right

2. Software

terminal

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Terminal

Software

- What is Linux?
- An Open Ecosystem
- Installing an Operating System
- Configuring Debian
- Building Community
- Collectives and Identity
- What is Docker?
- Installing Docker

We need to install Debian Linux onto our computer to form a foundation. We will use Docker to create secure, self-contained "virtual operating systems" that are easy to monitor and keep up-to-date. Importantly, we need to create a backup solution and setup remote access for our server.

See the Software Guide keyboard_arrow_right

3. Services

cloud_circle

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Cloud

Services

- What is a Service?
- Considerations
- Evaluating Safety
- Selecting Your Services
- Managing Services
- Home Page

Through Portainer, an intuitive interface for installing Docker services through a browser. We will be using a simple structured syntax known as Docker Compose to pop-up services from pre-built images.

See the Services Guide keyboard_arrow_right

4. Monitoring & Maintenance



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Build

Monitoring & Maintenance

- Sustainable Solutions
- Network Access
- Backup Solutions
- Administration
- Troubleshooting
- Cleaning

When running your own server, it's important to have ways to monitor your system and perform any required maintenance. This server will always be operating which makes it even more important to take our system apart to remove dust and dirt.

See the Monitoring & Maintenance Guide keyboard_arrow_right

5. World Wide Web

public

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World Wide Web

- What are Computer Networks?
- How to Remotely Connect
- Virtual Private Network
- Web Domain Name
- Digital Stewardship
- Security & Privacy
- Router Configuration
- What Next?

We will configure our local network through our router to prepare for connection. We will use SWAG, a community-driven project to assist everyday people with creating a secure, self-hosted server. This solution uses a reverse proxy server to route traffic from a domain address to your hosted services. Finally, we will configure your router to connect your server to the internet.

See the World Wide Web Guide keyboard_arrow_right

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