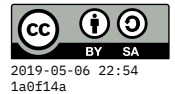


Hosting and Deployment options



(very rough notes)

Static sites

HTML is fixed at deployment time, not customized or regenerated on each request.

- Upload some tree of files, and let the server serve them over HTTP.
- Services differ on how those files get onto the server:
 1. File transfer interface (SFTP, SCP) to upload the files to a (Linux) server. Might have web portal – cPanel, webmin, ...
 2. Directly “push” from a local (git) repository onto a server.
 3. Log in (ssh) to a server, and git pull

Types of hosts:

- “Colocated” server (\$\$\$\$) – I own hardware, deliver it to data center for them to plug in to power & network.
- Private server (\$\$\$) – I’m renting the hardware in a data center, but I have exclusive access to it.
- Virtual private server (VPS) (\$\$) – I’m sharing physical server with other users, but we each have separate virtual servers, so we can have exclusive control over their configuration.
- Shared server (\$) – I have a personal **account** on a shared server, but I don’t have (nearly as much) control over its configuration. Often have a cPanel, webmin.
- Lots of cloud providers have “block storage” services. (Amazon S3 = Simple Storage Service). These can be configured for public access over HTTP. Amazon CloudFront = CDN = Content Delivery Network. It will copy your files to “edge locations” around the world. Can also stream media files.
- GitHub Pages, GitLab Pages

Dynamic sites

HTML can be customized or regenerated on each request. (Each request is handled by running a function in some programming language.)

Complicated because you need dependency management for the program running on the server. (Right version of Python, PHP, ...), and libraries for it.

- With VPS (and above), you have control over the OS and packages that are installed, so you can set up what you need.
- PaaS (Platform as a Service): Heroku, Amazon Elastic Beanstalk, GCP, ...