# Apache Basics

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# About me

- Senior Software Engineer.

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- Advised 100+ organizations on Apache issues.

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- It's a software and hardware that uses HTTP or other protocols to respond to client's request.
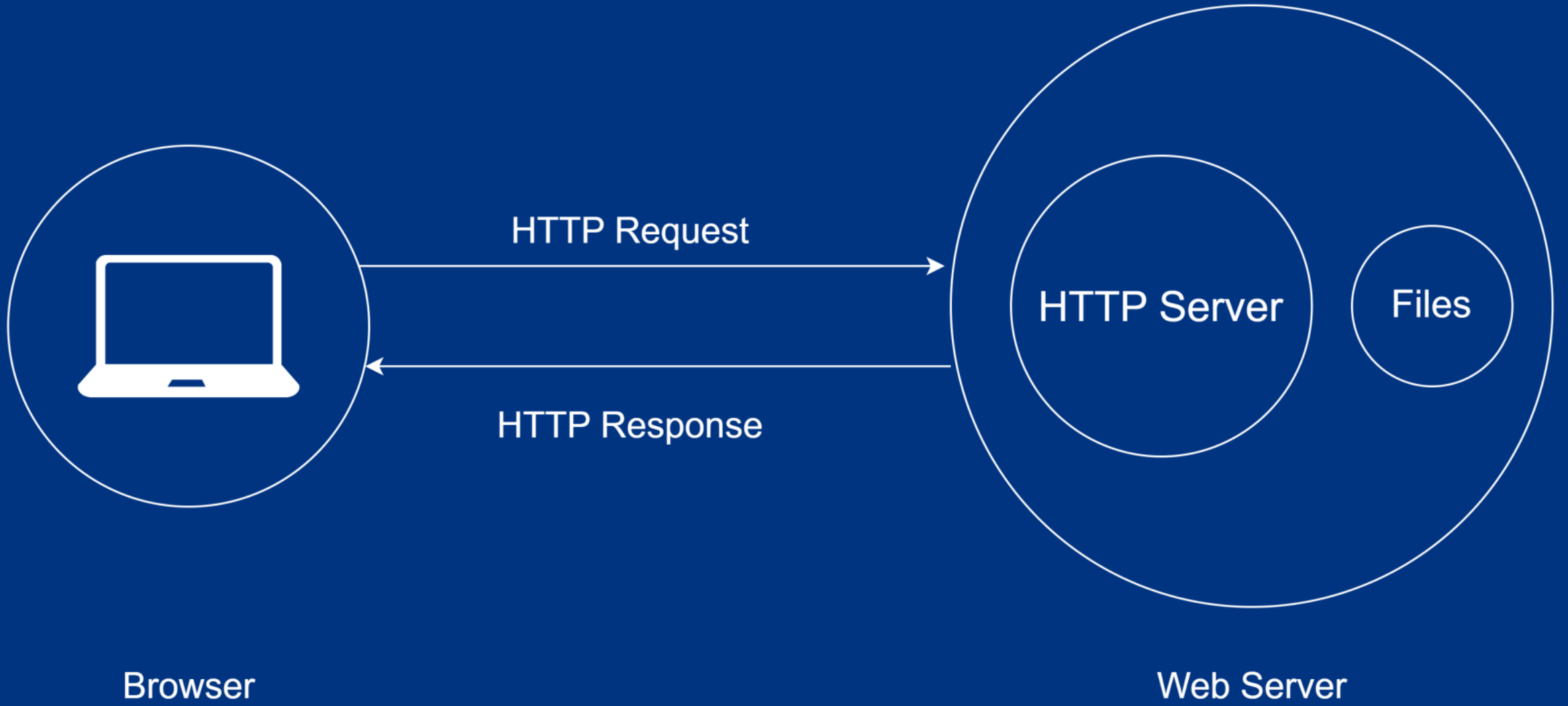


**miniOrange**

# What is a web server?

- It's a software and hardware that uses HTTP or other protocols to respond to client's request.

- Display web content through storing, processing and delivering requested resources to users.



IdentityShield

miniOrange

HTTP Request

HTTP Response

HTTP Server

Files

Browser

Web Server

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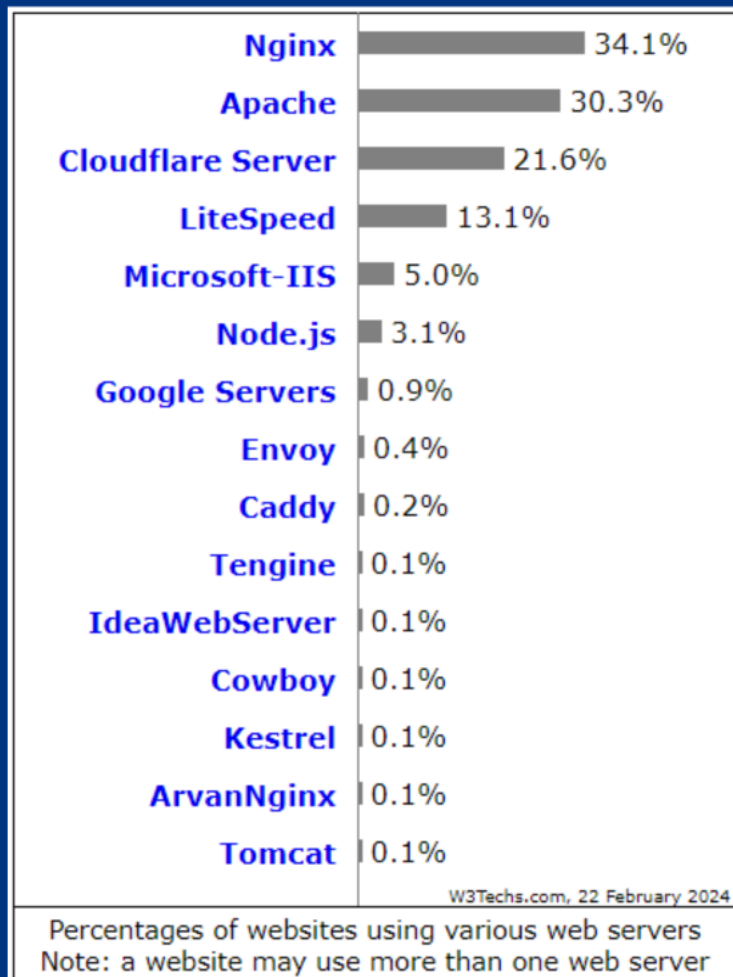
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| Server | Percentage |
|---|---|
| Nginx | 34.1% |
| Apache | 30.3% |
| Cloudflare Server | 21.6% |
| LiteSpeed | 13.1% |
| Microsoft-IIS | 5.0% |
| Node.js | 3.1% |
| Google Servers | 0.9% |
| Envoy | 0.4% |
| Caddy | 0.2% |
| Tengine | 0.1% |
| IdeaWebServer | 0.1% |
| Cowboy | 0.1% |
| Kestrel | 0.1% |
| ArvanNginx | 0.1% |
| Tomcat | 0.1% |

W3Techs.com, 22 February 2024

Percentages of websites using various web servers
Note: a website may use more than one web server

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- htaccess: A configuration file used by Apache web servers to control directory-level configuration settings. It allows users to override the server's global settings for specific directories.

# Use case:

Create a new website "mysecureshop.app" for end-users and implement an admin dashboard for employees to monitor the site.

Use "mysecureshop.app/admin" to access the admin dashboard.

Application used by Admins is running on port 8080 on the same Machine.

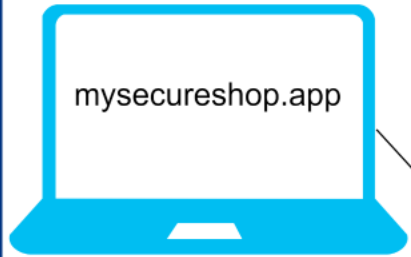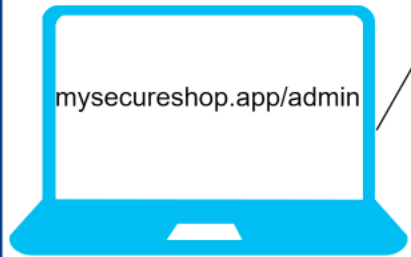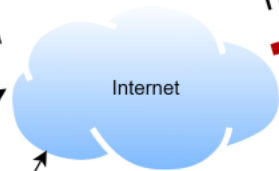Ensure the website is SSL protected.

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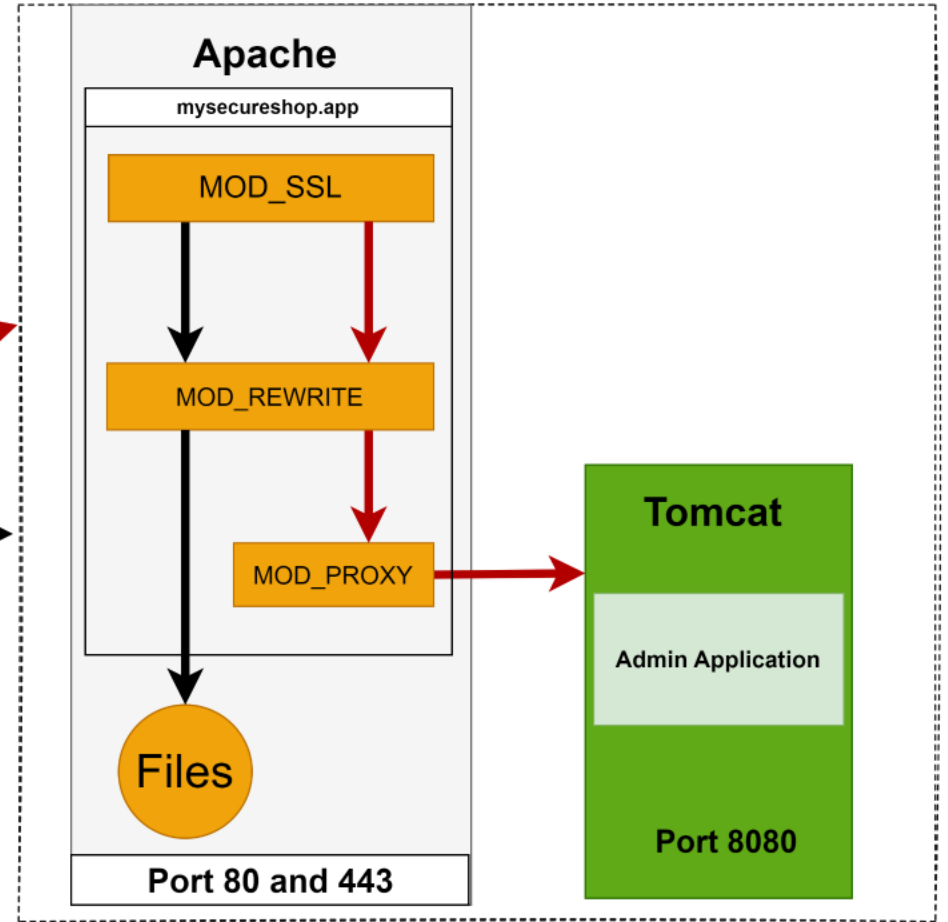the same Machine.

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## Solution Overview

- We will create a Virtualhost to isolate configurations for our website.
- We will configure mod_ssl module for SSL verification.
- Module mod_rewrite will be used to upgrade insecure connection ( http requests ) to secure connection ( https requests ).
- Module mod_proxy and mod_proxy_http will be used to setup a reverse proxy for "/admin" path.

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