

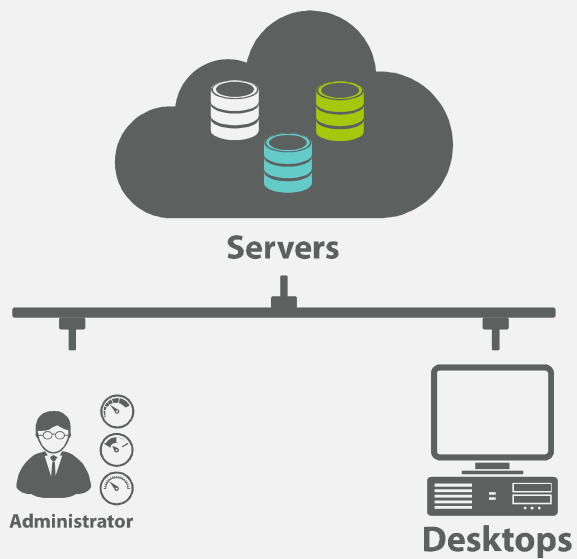


클라우드 인프라 운영

AWS를 이용한 운영 서버 환경 구축(2)



MEGAZONE
CLOUD



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03. WordPress 설치

04. Epilogue

개요

테크

아마존 | AWS | 클라우드

[韓 외국계 IT]'온라인 서점'서 출발한 아마존은 어떻게 클라우드 1위 'AWS'를 탄생시켰나

발행일 2022-09-12 16:00:02

한국에 진출한 외국계 IT 기업의 비즈니스 전략을 진단하고 인재상을 소개합니다.



미국 워싱턴 주 시애틀에 위치한 아마존 본사 캠퍼스의 '아마존 스피어스'.(사진=AWS코리아)

<https://www.bloter.net/newsView/blt202209080027?fbclid=IwAR0NbFGyCzsEsNs9LTPDkuw9tJdMXKQuxgWJNP-NXP10AezJtrDWEjsnu3A>



웹 서버와 웹 애플리케이션 서버





Servers



구글 데이터 센터의 서버, <https://namu.wiki/w/%EC%84%9C%EB%B2%84>

- **Client**에게
- **Network**을 통해
- **Service**하는
- **Computer**
- Server Hardware & Server Software

Server Hardware



<https://namu.wiki/w/%EC%84%9C%EB%B2%84>

- Server 전용 Hardware 사용
- Tower Type
- Rackmount Type
- Blade Type
- Workstation Type
- ref <https://www.fiberx.shop/product/dell-poweredge-t130-tower-server/>



Server Hardware

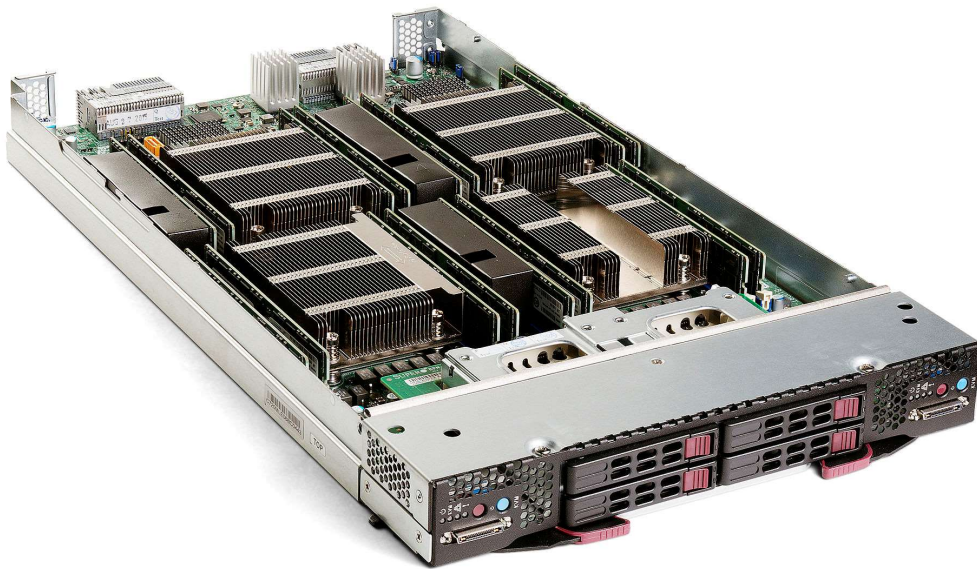


<https://namu.wiki/w/%EB%9E%99%EB%A7%88%EC%9A%B4%ED%8A%B8>



웹 서버와 웹 애플리케이션 서버

Server Hardware

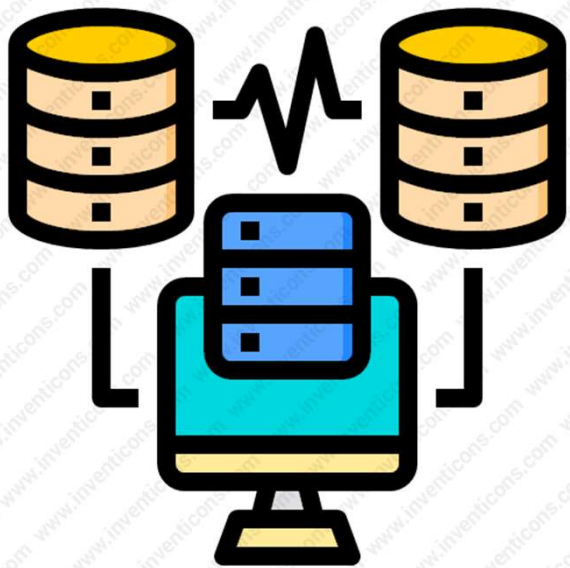


https://en.wikipedia.org/wiki/Blade_server





Server Software

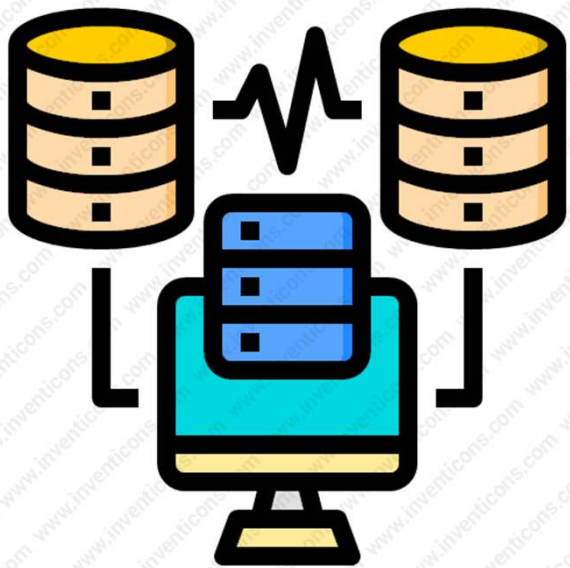


<https://www.inventicons.com/icon/server-47558>

- Is a type of software that is designed to be used, operated and managed **on a computing server**.
- Provides and facilitates the harnessing of underlying server computing power for use with an array of high-end computing services and functions.
- Is primarily built to interact with a server's hardware infrastructure, including the processor, memory, storage, input/output (I/O) and other communication ports.



Server Software

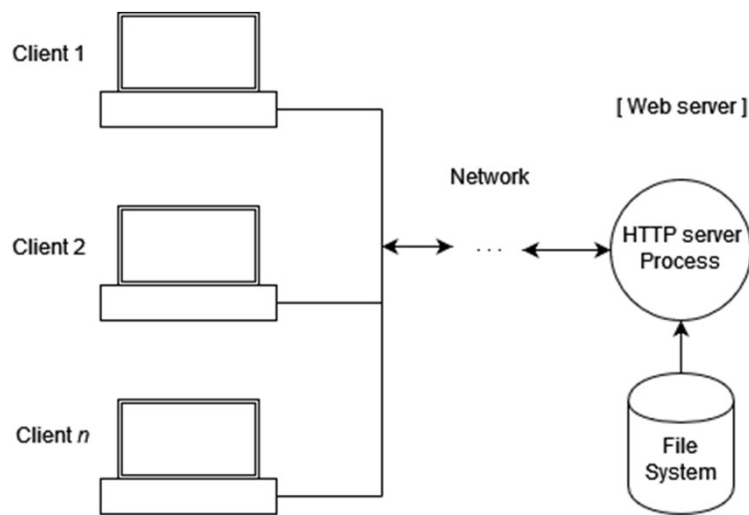


<https://www.inventicons.com/icon/server-47558>

- Web Server Software
- Application Server Software
- Database Server Software
- Cloud Computing Server Software
- File Server Software



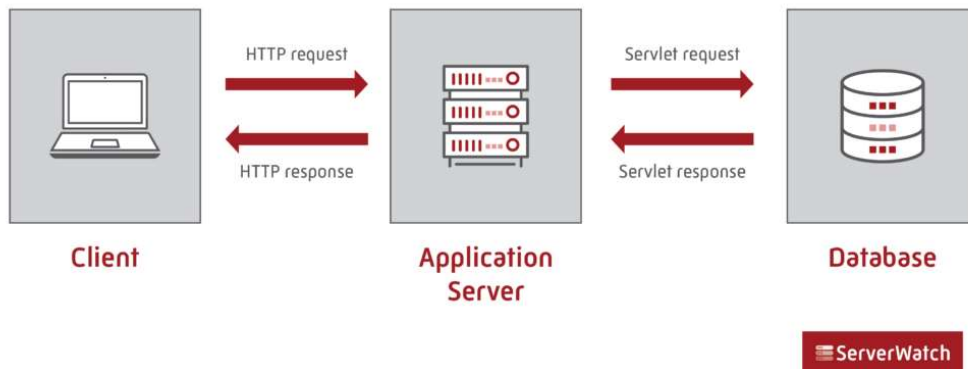
Web Server



https://en.wikipedia.org/wiki/Web_server

- Client에서 **HTTP or HTTPS** Protocol로 **Request**를 받고 **Static File**들을 **Response**로 전달하는 Server Software.
- Static Script Files(HTML, CSS, JavaScript(ECMAScript))의 내용을 그대로 전달
- Application Code를 실행할 수 없음.
- Apache, Nginx, IIS

Web Application Server (WAS)



<https://www.serverwatch.com/guides/web-server-vs-app-server/>

- Is a computer capable of processing HTTP requests, serving web-based apps, and using **web containers** for fulfilling client requests.
- Is access to application databases and transferring **dynamic content**.
- With the capacity to process **business logic requests**, take on heavier workloads than a web server, and support multi-threading.



Web Server vs WAS

Web Server

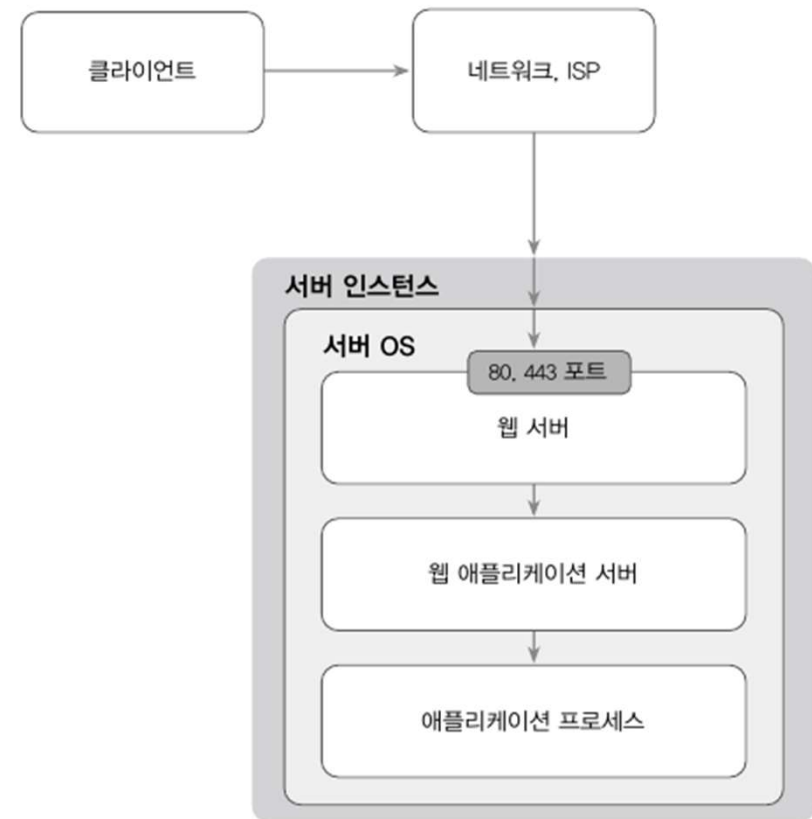
- Hosts web pages and responds to requests
- Delivers static content
- Uses HTTP protocol only
- Serves only web-based apps
- No support for multi-threading
- Accesses static database
- Facilitates lightweight web traffic
- Low storage capacity
- Employs web containers
- Fit for web browsers
- Provides hypertext on a browser

Application Server

- Hosts apps and advanced data resources
- Delivers dynamic content
- Uses HTTP and business logic for apps
- Serves web and enterprise-based apps
- Supports multi-threading in parallel
- Accesses application database
- Facilitates heavier data workloads
- High storage capacity
- Employs web and app client containers
- Fit for browsers and web and mobile apps
- Provides multitude of data resources

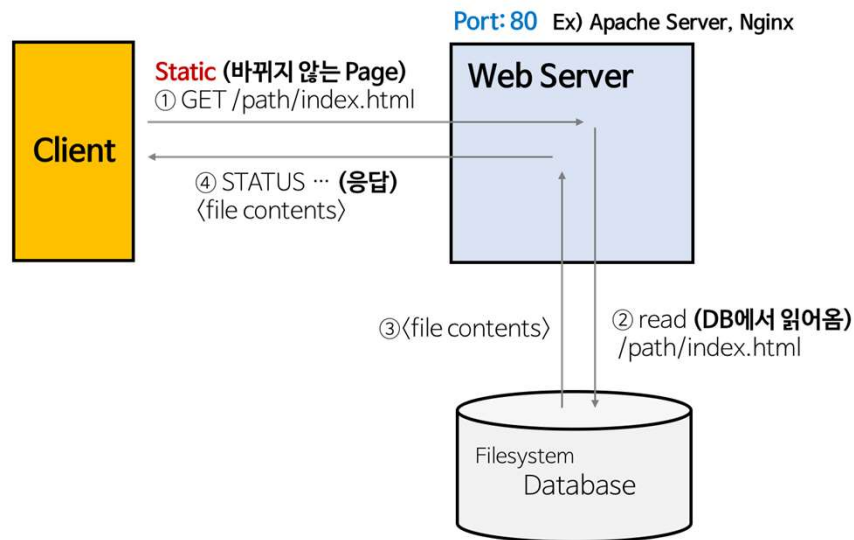
<https://www.serverwatch.com/guides/web-server-vs-app-server/>

Client의 Request 이동 경로

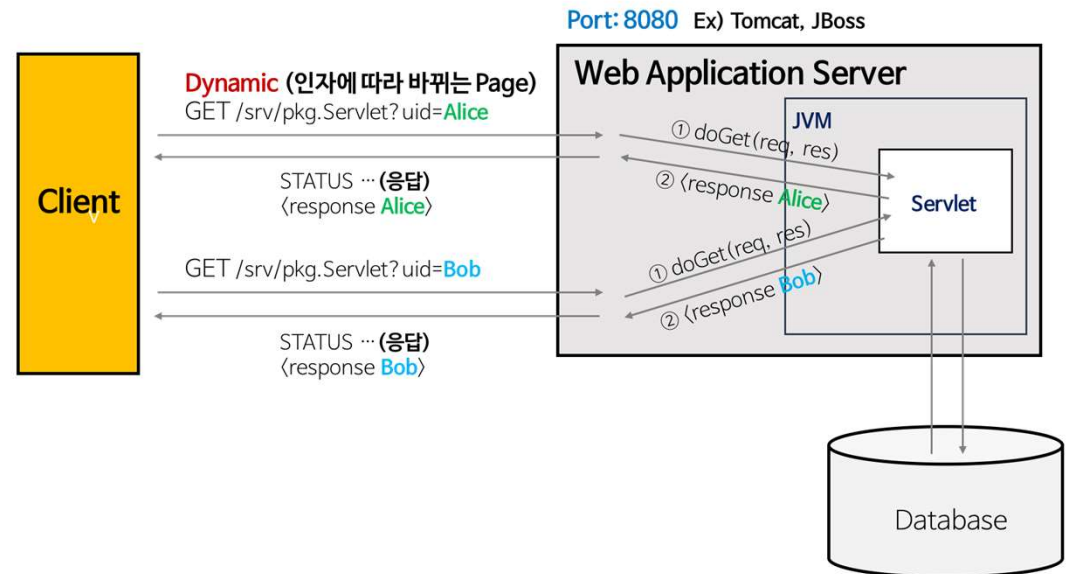


Client의 Request 이동 경로

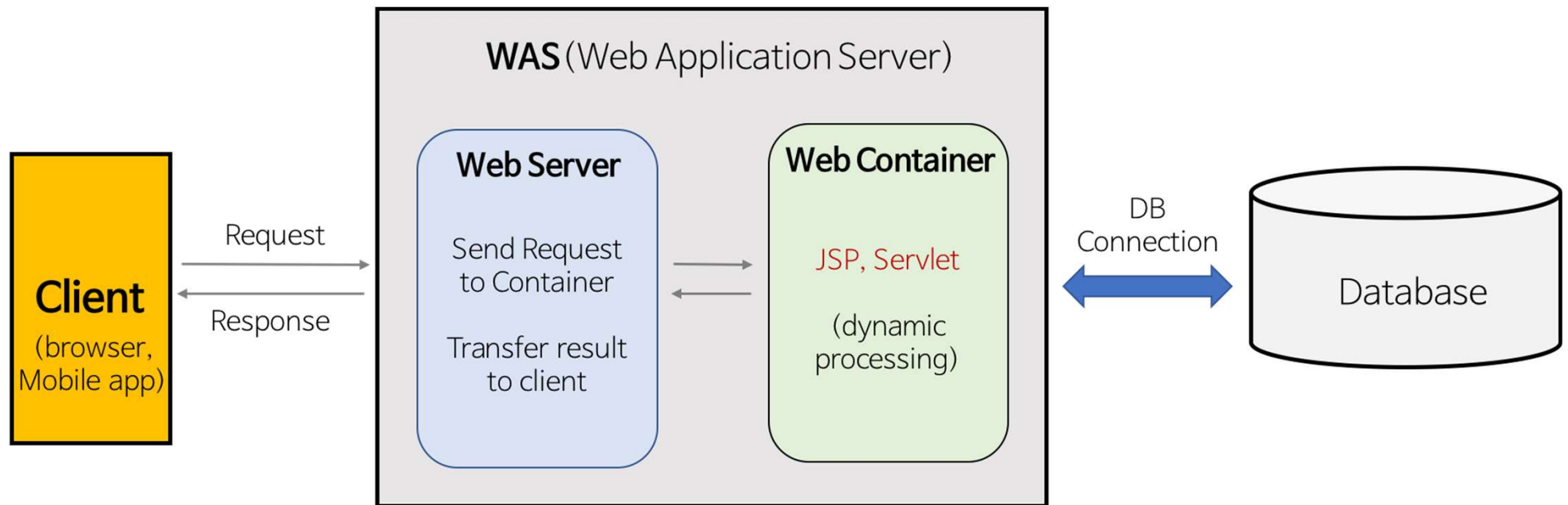
Static Pages



Dynamic Pages



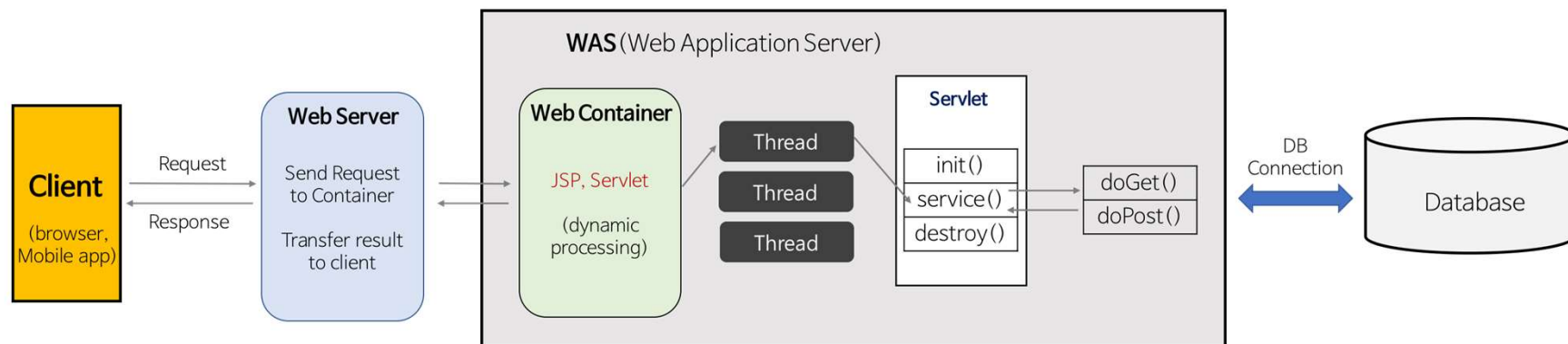
Client의 Request 이동 경로



Web Service Architecture

- Client → Web Server → DB
- Client → WAS → DB
- Client → Web Server → WAS → DB

Web Service Architecture



<https://gmlwjd9405.github.io/2018/10/27/webserver-vs-was.html>

Web Service Architecture



APACHE
HTTP SERVER



Apache Tomcat



<https://gmlwjd9405.github.io/2018/10/27/webserver-vs-was.html>



Lab1. Web Server와 RDS 연결하기





WordPress 설치



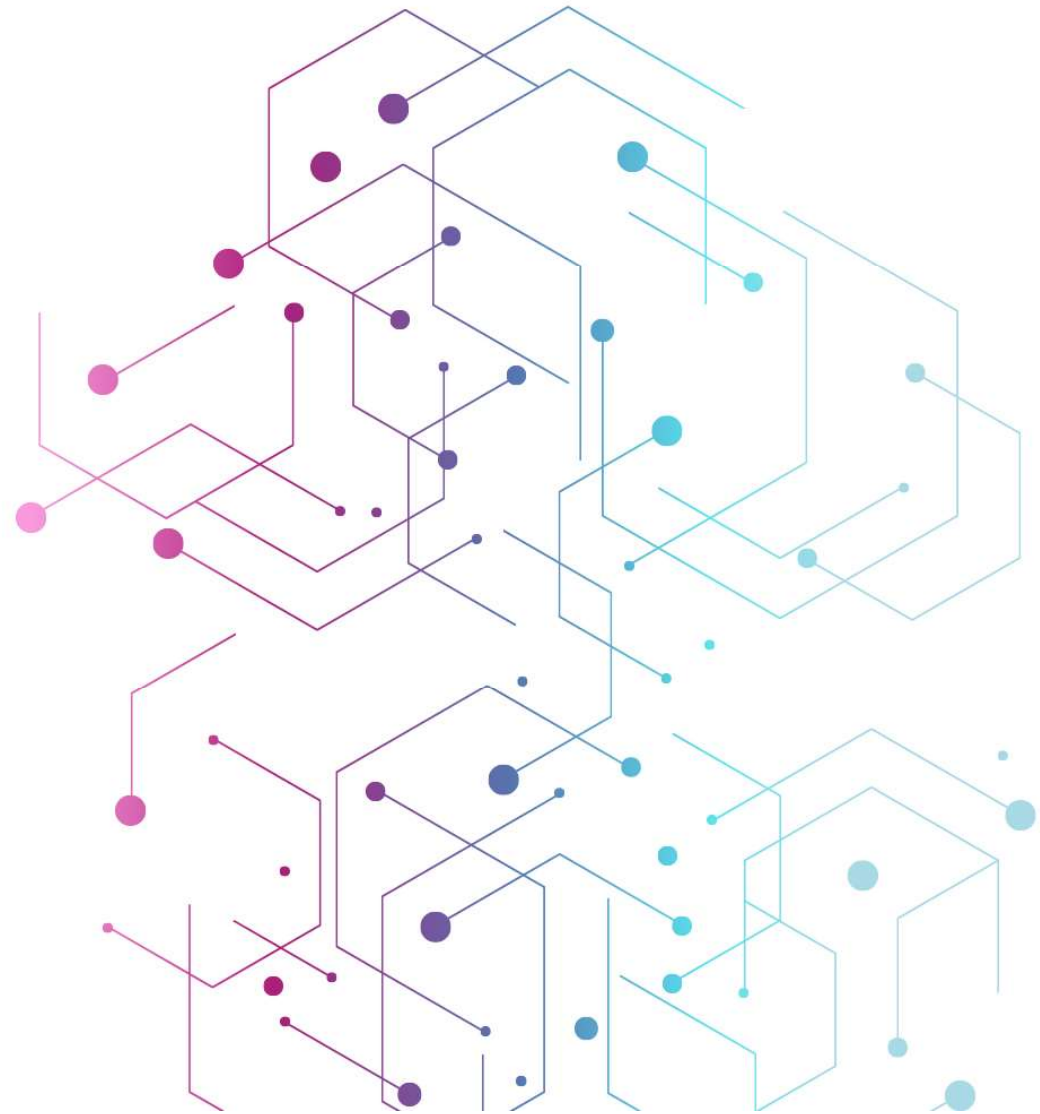
WordPress

	WORDPRESS
Developer(s)	WordPress Foundation
Initial release	May 27, 2003; 19 years ago ^[1]
Stable release	6.0.2 ^[2] / 30 August 2022; 12 days ago
Repository	core.trac.wordpress.org / browser
Written in	PHP
Operating system	Unix-like, Windows, Linux
Size	21.72 MB
Type	Blog software, content management system, content management framework
License	GPLv2+ ^[3]
Website	wordpress.org

- Is a free and open-source content management system (**CMS**) written in PHP and paired with a MySQL or MariaDB database with supported HTTPS.
- Was originally created as a **blog-publishing system** but has evolved to support other web content types including more traditional mailing lists and forums, media galleries, membership sites, learning management systems (LMS) and online stores.
- One of the most popular content management system solutions in use, WordPress is used by 42.8% of the top 10 million websites as of October 2021.



Lab2. Install WordPress





Quiz

1. 다음 중 스크립트를 통해 AWS 서비스 및 애플리케이션에 대한 작업을 자동화하는 데 사용되는 도구는 무엇입니까?

- ① AWS Snowball
- ② Amazon Redshift
- ③ AWS 명령줄 인터페이스
- ④ Amazon QLDB



Quiz

2. Amazon EC2 인스턴스를 실행 중이며 연결된 리소스에 데이터를 저장하려고 합니다. 이 데이터는 일시적이며 장기간 보관되지 않습니다. 어떤 리소스를 사용해야 합니까?

- ① Amazon S3 버킷
- ② Amazon Elastic Block Store(Amazon EBS) 볼륨
- ③ 인스턴스 스토어
- ④ 서브넷



Quiz

3. 다음 중 AWS에서 애플리케이션을 신속하게 배포하고 확장하는데 사용되는 서비스는 무엇입니까?

- ① AWS Snowball
- ② AWS Outposts
- ③ Amazon CloudFront
- ④ AWS Elastic Beanstalk



Quiz

4. 다음 중 Amazon GuardDuty를 가장 잘 설명한 것은 무엇입니까?
- ① 분산 서비스 거부(DDoS) 공격으로부터 애플리케이션을 보호하는 데 도움이 되는 서비스
 - ② AWS 인프라 및 리소스에 대한 지능형 위협 탐지 기능을 제공하는 서비스
 - ③ 웹 애플리케이션으로 들어오는 네트워크 요청을 모니터링할 수 있는 서비스
 - ④ 애플리케이션에서 보안 모범 사례 위반 및 보안 취약성을 검사하는 서비스