#### 1. Docker Compose YAML 파일

```
services:
 eureka:
    container name: eureka
    build:
      context: .
      dockerfile: backend/cloud/Dockerfile
    ports:
      - "8301:8301"
    networks:
      - olivepay-net
    environment:
      - CLOUD PORT=8301
      - CLOUD_HOST_NAME=[CLOUD_HOST_NAME]
 donation:
    container_name: donation
    build:
      context: .
      dockerfile: backend/donation/Dockerfile
    ports:
      - "8107:8107"
    depends_on:
      donation-db:
        condition: service started
      eureka:
        condition: service_started
      gateway:
        condition: service_started
```

```
networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
      - DB_URL=[DB_URL]
      - DB_USER=[DB_USER]
      - DB_PASSWORD=[DB_PASSWORD]
      - EUREKA PORT=8301
      - DONATION PORT=8107
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      - KAFKA_SERVER1=[KAFKA_SERVER1]
      - KAFKA_SERVER2=[KAFKA_SERVER2]
      - KAFKA SERVER3=[KAFKA SERVER3]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8107/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  funding:
    container_name: funding
    build:
      context: .
      dockerfile: backend/funding/Dockerfile
    ports:
      - "8106:8106"
    depends_on:
      funding-db:
        condition: service_started
      eureka:
        condition: service_started
      gateway:
        condition: service_started
    networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
```

```
- DB_URL=[DB_URL]
      - DB USER=[DB USER]
      - DB_PASSWORD=[DB_PASSWORD]
      - EUREKA PORT=8301
      - FUNDING PORT=8106
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      - FINTECH URL=[FINTECH URL]
      - FINTECH APP NO=[FINTECH APP NO]
      - FINTECH API KEY=[FINTECH API KEY]
      - INSTITUTION CODE=[INSTITUTION CODE]
      - FINTECH_MANAGER_USER_KEY=[FINTECH_MANAGER_USER_KEY]
      - KAFKA_SERVER1=[KAFKA_SERVER1]
      - KAFKA SERVER2=[KAFKA SERVER2]
      - KAFKA SERVER3=[KAFKA SERVER3]
      - ORGANIZATION ACCOUNT NO=[ORGANIZATION ACCOUNT NO]
      - DONATION ACCOUNT NO=[DONATION ACCOUNT NO]
      - CHANGE_ACCOUNT_NO=[CHANGE_ACCOUNT_NO]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8106/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  card:
    container name: card
    build:
      context: .
      dockerfile: backend/card/Dockerfile
    ports:
      - "8105:8105"
    depends on:
      card-db:
        condition: service_started
      eureka:
        condition: service_started
      gateway:
        condition: service_started
```

```
networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
      - DB URL=[DB URL]
      - DB_USER=[DB_USER]
      - DB_PASSWORD=[DB_PASSWORD]
      - EUREKA PORT=8301
      - CARD PORT=8105
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      accountTypeUniqueNo=[accountTypeUniqueNo]
      - apiKey=[apiKey]
      - BCCard=[BCCard]
      - DTCard=[DTCard]
      - fintechAppNo=[fintechAppNo]
      - HDCard=[HDCard]
      - HNCard=[HNCard]
      - IBKCard=[IBKCard]
      - institutionCode=[institutionCode]
      - KBCard=[KBCard]
      - LTCard=[LTCard]
      - NHCard=[NHCard]
      - SHCard=[SHCard]
      - SSCard=[SSCard]
      - WRCard=[WRCard]
      - KAFKA SERVER1=[KAFKA SERVER1]
      - KAFKA_SERVER2=[KAFKA_SERVER2]
      - KAFKA_SERVER3=[KAFKA_SERVER3]
      - FINTECH SERVER=[FINTECH SERVER]
      OLIVE_USER_KEY=[OLIVE_USER_KEY]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8105/ac
tuator/health || exit 1"]
  member:
    container name: member
    build:
      context: .
```

```
dockerfile: backend/member/Dockerfile
    ports:
      - "8101:8101"
    depends on:
      member-db:
        condition: service_started
      member-redis-db:
        condition: service started
      eureka:
        condition: service_started
      gateway:
        condition: service_started
    networks:
      - olivepay-net
    environment:
      - BACKEND SERVER=[BACKEND SERVER]
      - MYSQL_URL=[MYSQL_URL]
      - MYSQL USERNAME=[MYSQL USERNAME]
      - MYSQL_PASSWORD=[MYSQL_PASSWORD]
      - EUREKA PORT=8301
      - MEMBER PORT=8101
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      - FINTECH_SERVER=[FINTECH_SERVER]
      - REDIS HOST=[REDIS HOST]
      - REDIS_PASSWORD=[REDIS_PASSWORD]
      - REDIS PORT=6379
      apiKey=[apiKey]
      - USER_KEY_DUMMY=[USER_KEY_DUMMY]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8101/ac
tuator/health || exit 1"]
  franchise:
    container_name: franchise
    build:
      context: .
      dockerfile: backend/franchise/Dockerfile
    ports:
```

```
- "8104:8104"
    depends on:
      franchise-db:
        condition: service_started
      eureka:
        condition: service_started
      gateway:
        condition: service started
    networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
      - DB_URL=[DB_URL]
      - DB_USER=[DB_USER]
      - DB_PASSWORD=[DB_PASSWORD]
      - EUREKA PORT=8301
      - FRANCHISE PORT=8104
      - EUREKA_REGISTER=[EUREKA_REGISTER]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8104/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  payment:
    container_name: payment
    build:
      context: .
      dockerfile: backend/payment/Dockerfile
    ports:
      - "8103:8103"
    depends_on:
      payment-db:
        condition: service_started
      eureka:
        condition: service_started
      gateway:
```

```
condition: service_started
    networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
      - DB_URL=[DB_URL]
      - DB USER=[DB USER]
      - DB PASSWORD=[DB PASSWORD]
      - EUREKA PORT=8301
      - PAYMENT PORT=8103
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      - FINTECH_APP_NO=[FINTECH_APP_NO]
      - INSTITUTION CODE=[INSTITUTION CODE]
      - FINTECH_API_KEY=[FINTECH_API_KEY]
      - FINTECH URL=[FINTECH URL]
      - KAFKA_GROUP_ID_CONFIG=[KAFKA_GROUP_ID_CONFIG]
      - END_POINT=[END_POINT]
      - TOPIC PREFIX=[TOPIC PREFIX]
      - KAFKA_SERVER1=[KAFKA_SERVER1]
      - KAFKA SERVER2=[KAFKA SERVER2]
      - KAFKA SERVER3=[KAFKA SERVER3]
      - OLIVE_USER_KEY=[OLIVE_USER_KEY]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8103/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  transaction:
    container name: transaction
    build:
      context: .
      dockerfile: backend/transaction/Dockerfile
    ports:
      - "8302:8302"
    depends on:
      eureka:
```

```
condition: service_started
      kafka1:
        condition: service_started
      kafka2:
        condition: service_started
      kafka3:
        condition: service_started
      zookeeper:
        condition: service_started
      gateway:
        condition: service_started
    networks:
      - olivepay-net
    environment:
      - BACKEND_SERVER=[BACKEND_SERVER]
      - EUREKA PORT=8301
      - KAFKA_SERVER1=[KAFKA_SERVER1]
      - KAFKA_SERVER2=[KAFKA_SERVER2]
      - KAFKA_SERVER3=[KAFKA_SERVER3]
      - TRANSACTION PORT=8302
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8302/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  auth:
    container name: auth
    build:
      context: .
      dockerfile: backend/auth/Dockerfile
    ports:
      - "8102:8102"
    depends_on:
      member-db:
        condition: service started
      member-redis-db:
```

```
condition: service_started
      gateway:
        condition: service_started
      eureka:
        condition: service started
    networks:
      - olivepay-net
    environment:
      - AUTH PORT=8102
      - BACKEND_SERVER=[BACKEND_SERVER]
      - EUREKA_PORT=8301
      - FINTECH_SERVER=[FINTECH_SERVER]
      - MYSQL PASSWORD=[MYSQL PASSWORD]
      - MYSQL_URL=[MYSQL_URL]
      - MYSQL USERNAME=[MYSQL USERNAME]
      - REDIS HOST=[REDIS HOST]
      - REDIS_PASSWORD=[REDIS_PASSWORD]
      - REDIS PORT=6379
      - JWT_SECRET_KEY=[JWT_SECRET_KEY]
      - EUREKA_REGISTER=[EUREKA_REGISTER]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8102/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  common:
    container name: common
    build:
      context: .
      dockerfile: backend/common/Dockerfile
    ports:
      - "8201:8201"
      - "587:587"
    depends on:
      common-redis-db:
        condition: service_started
```

```
gateway:
        condition: service started
      eureka:
        condition: service_started
    networks:
      - olivepay-net
    environment:
      - COMMON PORT=8201
      - BACKEND_SERVER=[BACKEND_SERVER]
      - EUREKA PORT=8301
      - REDIS_HOST=[REDIS_HOST]
      - REDIS_PASSWORD=[REDIS_PASSWORD]
      - REDIS PORT=6379
      - EUREKA_REGISTER=[EUREKA_REGISTER]
      - SMS API KEY=[SMS API KEY]
      - SMS API SECRET=[SMS API SECRET]
      - SMS_SENDER=[SMS_SENDER]
      - SMS PROVIDER=[SMS PROVIDER]
      - CLOVA_SECRET=[CLOVA_SECRET]
      - CLOVA_URL=[CLOVA_URL]
      - MAIL USER=[MAIL USER]
      - MAIL_PASSWORD=[MAIL_PASSWORD]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8201/ac
tuator/health || exit 1"]
      interval: 10s
      timeout: 3s
      retries: 3
  gateway:
    container_name: gateway
    build:
      context: .
      dockerfile: backend/gateway/Dockerfile
    ports:
      - "8000:8000"
    depends on:
      eureka:
```

```
condition: service_started
    networks:
      - olivepay-net
    environment:
      - JWT SECRET KEY=[JWT SECRET KEY]
      - MEMBER_SERVER=[MEMBER_SERVER]
      - MEMBER_PATH=[MEMBER_PATH]
      - MEMBER PORT=8101
      - MEMBER SCHEME=http
      - REDIS HOST=[REDIS HOST]
      - REDIS_PASSWORD=[REDIS_PASSWORD]
      - REDIS PORT=6379
      - BACKEND SERVER=[BACKEND SERVER]
      - EUREKA PORT=8301
      - GATEWAY PORT=8000
      - GATEWAY USER=[GATEWAY USER]
      - GATEWAY_PASSWORD=[GATEWAY_PASSWORD]
    healthcheck:
      test: ["CMD-SHELL", "curl -f http://localhost:8000/ac
tuator/health || exit 1"]
  zookeeper:
    image: zookeeper:latest
    container_name: zookeeper
    ports:
      - "2181:2181"
    networks:
      - olivepay-net
  kafka1:
    image: wurstmeister/kafka:2.13-2.8.1
    container name: kafka1
    ports:
      - "9092:9092"
      - "29092:29092"
    environment:
      KAFKA BROKER ID: 1
      KAFKA_ADVERTISED_HOST_NAME=kafka1
```

```
KAFKA_ZOOKEEPER_CONNECT=zookeeper:2181
      KAFKA ADVERTISED LISTENERS: PLAINTEXT://kafka1:9092,E
XTERNAL://localhost:29092
      KAFKA LISTENER SECURITY PROTOCOL MAP: PLAINTEXT:PLAIN
TEXT, EXTERNAL: PLAINTEXT
      KAFKA_LISTENERS: PLAINTEXT://0.0.0.0:9092,EXTERNAL://
0.0.0.0:29092
      KAFKA OFFSETS TOPIC REPLICATION FACTOR: 2
    networks:
      - olivepay-net
  kafka2:
    image: wurstmeister/kafka:2.13-2.8.1
    container name: kafka2
    ports:
      - "9093:9093"
      - "29093:29093"
    environment:
      KAFKA BROKER ID: 2
      KAFKA ADVERTISED HOST NAME=kafka2
      KAFKA ZOOKEEPER CONNECT=zookeeper:2181
      KAFKA_ADVERTISED_LISTENERS: PLAINTEXT://kafka2:9093,E
XTERNAL://localhost:29093
      KAFKA LISTENER SECURITY PROTOCOL MAP: PLAINTEXT:PLAIN
TEXT, EXTERNAL: PLAINTEXT
      KAFKA LISTENERS: PLAINTEXT://0.0.0.0:9093,EXTERNAL://
0.0.0.0:29093
      KAFKA OFFSETS TOPIC REPLICATION FACTOR: 2
    networks:
      - olivepay-net
  kafka3:
    image: wurstmeister/kafka:2.13-2.8.1
    container name: kafka3
    ports:
      - "9094:9094"
      - "29094:29094"
    environment:
```

```
KAFKA BROKER ID: 3
      KAFKA ADVERTISED HOST NAME=kafka3
      KAFKA_ZOOKEEPER_CONNECT=zookeeper:2181
      KAFKA_ADVERTISED_LISTENERS: PLAINTEXT://kafka3:9094, E
XTERNAL://localhost:29094
      KAFKA_LISTENER_SECURITY_PROTOCOL_MAP: PLAINTEXT:PLAIN
TEXT, EXTERNAL: PLAINTEXT
      KAFKA LISTENERS: PLAINTEXT://0.0.0.0:9094,EXTERNAL://
0.0.0.0:29094
      KAFKA OFFSETS TOPIC REPLICATION FACTOR: 2
    networks:
      - olivepay-net
  donation-db:
    image: mysgl:latest
    container name: donation-db
    environment:
      MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
      MYSQL DATABASE=donation
      MYSQL USER=donation
      MYSQL_PASSWORD=[MYSQL_PASSWORD]
      TZ: Asia/Seoul
    ports:
      - "3107:3306"
    volumes:
      - donation_data:/var/lib/mysql
    networks:
      - olivepay-net
  member-db:
    image: mysql:latest
    container name: member-db
    environment:
      MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
      MYSQL DATABASE=member
      MYSQL USER=member
      MYSQL PASSWORD=[MYSQL PASSWORD]
      TZ: Asia/Seoul
```

```
ports:
    - "3101:3306"
  volumes:
    - member_data:/var/lib/mysql
  networks:
    - olivepay-net
card-db:
  image: mysql:latest
  container name: card-db
  environment:
    MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
    MYSQL DATABASE=card
    MYSQL USER=card
    MYSQL_PASSWORD=[MYSQL_PASSWORD]
    TZ: Asia/Seoul
  ports:
    - "3105:3306"
  volumes:
    - card_data:/var/lib/mysql
  networks:
    - olivepay-net
franchise-db:
  image: mysql:latest
  container name: franchise-db
  environment:
    MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
    MYSQL DATABASE=franchise
    MYSQL_USER=franchise
    MYSQL_PASSWORD=[MYSQL_PASSWORD]
    TZ: Asia/Seoul
  ports:
    - "3104:3306"
  volumes:
    - franchise_data:/var/lib/mysql
  networks:
    - olivepay-net
```

```
funding-db:
  image: mysql:latest
  container_name: funding-db
  environment:
    MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
    MYSQL_DATABASE=funding
    MYSQL USER=funding
    MYSQL_PASSWORD=[MYSQL_PASSWORD]
    TZ: Asia/Seoul
  ports:
    - "3106:3306"
  volumes:
    funding_data:/var/lib/mysql
  networks:
    - olivepay-net
payment-db:
  image: mysql:latest
  container_name: payment-db
  environment:
    MYSQL_ROOT_PASSWORD=[MYSQL_ROOT_PASSWORD]
    MYSQL_DATABASE=payment
    MYSQL USER=payment
    MYSQL_PASSWORD=[MYSQL_PASSWORD]
    TZ: Asia/Seoul
  ports:
    - "3103:3306"
  volumes:
    - payment_data:/var/lib/mysql
  networks:
    - olivepay-net
member-redis-db:
  image: redis:latest
  command: redis-server --requirepass [REDIS_PASSWORD]
  environment:
    REDIS_PASSWORD=[REDIS_PASSWORD]
```

```
ports:
      - "6101:6379"
    volumes:
      - member_redis_data:/data
    networks:
      - olivepay-net
  common-redis-db:
    image: redis:latest
    command: redis-server --requirepass [REDIS_PASSWORD]
    environment:
      REDIS_PASSWORD=[REDIS_PASSWORD]
    ports:
      - "6201:6379"
    volumes:
      - common_redis_data:/data
    networks:
      - olivepay-net
networks:
  olivepay-net:
volumes:
  donation data:
  card_data:
  member data:
  member_redis_data:
  franchise_data:
  funding_data:
  payment_data:
  common_redis_data:
```

### 2. 서비스 포트 목록

서비스 이름	포트 번호
eureka	8301

donation	8107
funding	8106
card	8105
member	8101
franchise	8104
payment	8103
transaction	8302
auth	8102
common	8201
gateway	8000
zookeeper	2181
kafka1	9092 (내부), 29092 (외부)
kafka2	9093 (내부), 29093 (외부)
kafka3	9094 (내부), 29094 (외부)

#### 3. Backend 배포 및 실행 방법

#### 1. Docker 및 Docker Compose 설치

Docker와 Docker Compose가 설치되어 있는지 확인합니다. 설치되어 있지 않다면 아래 명령어로 설치할 수 있습니다:

```
# Docker 설치
sudo apt update
sudo apt install docker.io
# Docker Compose 설치
sudo apt install docker-compose
```

#### 2. 프로젝트 클론

olivepay 프로젝트를 클론하고 back/master 브랜치로 체크아웃 합니다.

```
git clone https://lab.ssafy.com/s11-fintech-finance-sub
1/S11P21A601
git checkout back/master
```

- 3. Docker Compose yml을 프로젝트의 최상단에 복사합니다.
- 4. Docker Compose 실행

모든 컨테이너를 동시에 실행하기 위해 Docker Compose 명령어를 사용합니다:

docker-compose up --build

#### 4. Frontend 배포 및 실행 방법

#### 1. 프로젝트 클론

olivepay 프로젝트를 클론하고 back/master 브랜치로 체크아웃 합니다.

git clone https://lab.ssafy.com/s11-fintech-finance-sub1/S11P git checkout back/master

#### 2. Vite 빌드

frontend 폴더로 이동하고, 빌드합니다.

npm install
npm run build

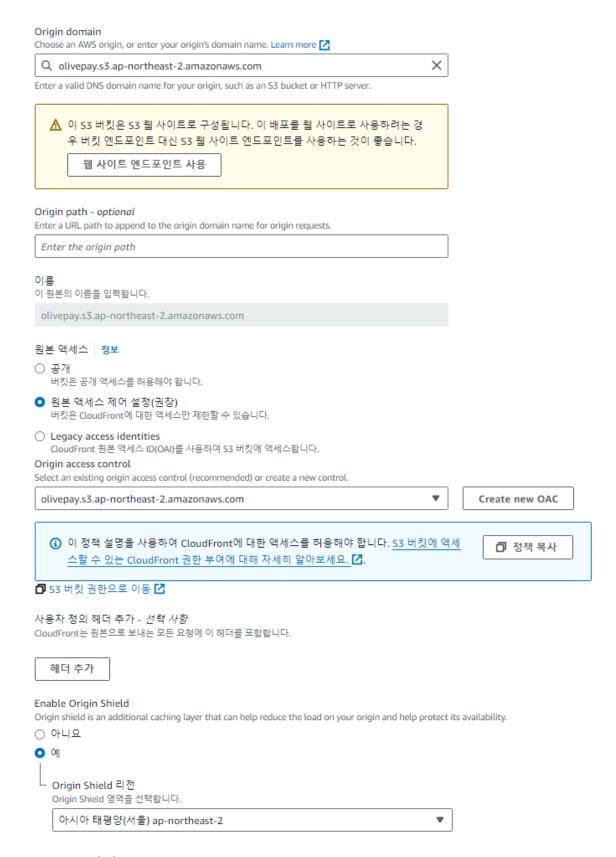
#### 3. S3 업로드

- AWS S3 bucket에 dist 플더를 업로드 합니다.
- bucket의 경우, 퍼블릭 액세스를 차단합니다.

# 퍼블릭 액세스 차단(버킷 설정) 퍼블릭 액세스는 ACL(액세스 제어 목록), 버킷 정책, 액세스 지점 정책 또는 모두를 통해 버킷 및 객체에 부여됩니다. 모든 S3 버킷 및 객체에 대한 퍼블릭 액세스가 차단되었는지 확인하려면 [모든 퍼블릭 액세스 차단]을 활성화합니다. 이 설정은 이 버킷 및 해당 액세스 지점에만 적용됩니다. AWS에서는 [모든 퍼블릭 액세스 차단]을 활성화하도록 권장하지만, 이 설정을 작용하기 점에 퍼블릭 액세스가 없어로 애플리케이션이 올바르게 작동하는지 확인합니다. 버킷 또는 내부 객체에 어느 정도 수준의 퍼블릭 액세스가 필요한 경우 특정 스토리지 사용 사례에 맞게 아래 개별 설정을 사용자 지정할 수 있습니다. 자세히 알아보기 【】 모든 퍼블릭 액세스 차단 ② 활성화

#### 4. CloudFront의 CDN 활성화

▶ 이 버킷의 개별 퍼블릭 액세스 차단 설정



#### 5. CNAME 설정

• 구매한 도메인의 CNAME을 설정합니다.

Price class 정보
Choose the price class associated with the maximum price that you want to pay.  Use all edge locations (best performance)
Use only North America and Europe
Use North America, Europe, Asia, Middle East, and Africa
<u> </u>
Alternative domain name (CNAMEs) - optional
Add the custom domain names that you use in URLs for the files served by this distribution.
olivepay.co.kr 제거
항목 추가
③ 항목 목록을 추가하려면 대량 편집기을(클) 사용하세요.
Custom SSL certificate - optional Associate a certificate from AWS Certificate Manager. The certificate must be in the US East (N. Virginia) Region (us-east-1).
olivepay.co.kr (33074b6e-083d-46ea-9b53-83f61ce0f9c2) ▼
⊘ olivepay.co.kr ☑ Request certificate ☑
Legacy clients support - \$600/month prorated charge applies. Most customers do
not need this.
CloudFront allocates dedicated IP addresses at each CloudFront edge location to serve your content over HTTPS.
_ Security policy
The security policy determines the SSL or TLS protocol and the specific ciphers that CloudFront uses for HTTPS connections with viewers (clients).
● TLSv1.2_2021(권장)
○ TLSv1.2_2019
O TLSv1.2_2018
O TLSv1.1_2016
○ TLSv1_2016
○ TLSv1
Supported HTTP versions
Add support for additional HTTP versions. HTTP/1.0 and HTTP/1.1 are supported by default
✓ HTTP/2
□ HTTP/3
Default root object - optional  The object (file name) to return when a viewer requests the root URL (/) instead of a specific object.
The object (the name) to retain when a request the root one () instead of a specific object.
Standard logging
Get logs of viewer requests delivered to an Amazon S3 bucket.
■ 117
○ 켜기
IPv6
① 型7J
● 켜기
Description - optional

Settings