## Auto Store 외부 서비스 정리

## **Jenkins Pipeline**

## **Frontend**

```
pipeline {
    agent any
    environment {
        DOCKER_HUB_REPO = 'junhyeok302/wms-frontend' // Docker Hub에 저장되는 위
        DOCKER_CREDENTIALS_ID = 'DockerHub' // Docker Hub 인증 정보 ID
    }
    stages {
        stage('Clone') {
            steps {
                    git branch: 'dev/frontend/master', url: '<https://lab.ssafy.com/s11-ai-image-</pre>
sub1/S11P21A302.git>', credentialsId: 'Gitlab'
                }
            }
        }
        stage('Build') {
            steps {
                    dir('wms-front'){
                        sh 'npm install'
                        sh 'npm run build'
                }
            }
        }
        stage('Build Docker Image') {
            steps {
                script {
                    dir('wms-front') {
                        def imageTag = "${DOCKER_HUB_REPO}:${env.BUILD_ID}"
                        sh "docker build -t ${imageTag} -f Dockerfile ."
                        env.DOCKER IMAGE = imageTag
                    }
               }
            }
        }
        stage('Push Docker Image') {
            steps {
                script {
                    def imageTag = "${DOCKER_IMAGE}"
                    withCredentials([usernamePassword(credentialsId: DOCKER_CREDENTIALS_ID,
passwordVariable: 'DOCKER_PASSWORD', usernameVariable: 'DOCKER_USERNAME')]) {
                        sh """
                        echo "$DOCKER_PASSWORD" | docker login -u $DOCKER_USERNAME --password-stdin
                        docker push ${imageTag}
                        docker tag ${imageTag} ${DOCKER_HUB_REPO}:latest
                        docker push ${DOCKER_HUB_REPO}:latest
```

```
}
           }
       }
       stage('Deploy') {
           steps {
               script {
                   def isBlue = sh(script: "docker ps | grep blue-fe", returnStatus: true) == 0
                   def newPort = isBlue ? 3002 : 3001
                   def oldPort = isBlue ? 3001 : 3002
                   def newContainer = isBlue ? 'green-fe' : 'blue-fe'
                   def oldContainer = isBlue ? 'blue-fe' : 'green-fe'
                   // 새로운 컨테이너 시작
                   sh """
                       docker pull ${DOCKER_HUB_REPO}:latest
                       docker stop ${newContainer} || true
                       docker rm ${newContainer} || true
                       docker run -d --name ${newContainer} -p ${newPort}:3000 ${DOCKER IMAGE}
                   // NGINX 설정 파일 업데이트 (프론트엔드에 맞춰 포트 업데이트)
                   lock('nginx-config') { // NGINX 설정 파일에만 락 적용
                       sh """
                       sudo sed -i 's#server localhost:300[12]#server localhost:${newPort}#'
/etc/nginx/sites-available/default
                       sudo nginx -t && sudo systemctl reload nginx
                   }
                   // 이전 컨테이너 종료 및 제거
                       docker stop ${oldContainer} || true
                       docker rm ${oldContainer} || true
               }
           }
       }
   }
   post {
       success {
               script {
               def Author_ID = sh(script: "git show -s --pretty=%an", returnStdout: true).trim()
               def Author_Name = sh(script: "git show -s --pretty=%ae", returnStdout: true).trim()
               mattermostSend (color: 'good',
               message: "빌드 성공: ${env.JOB_NAME} #${env.BUILD_NUMBER} by ${Author_ID}
(${Author_Name})\\n(<${env.BUILD_URL}|Details>)",
               endpoint: '<https://meeting.ssafy.com/hooks/rt6i8ema3prg9nbckij1e4d8re>',
               channel: 'a302 jenkins'
       }
       failure {
               script {
               def Author_ID = sh(script: "git show -s --pretty=%an", returnStdout: true).trim()
               def Author_Name = sh(script: "git show -s --pretty=%ae", returnStdout: true).trim()
               mattermostSend (color: 'danger',
               message: "빌드 실패: ${env.JOB_NAME} #${env.BUILD_NUMBER} by ${Author_ID}
(${Author_Name})\\n(<${env.BUILD_URL}|Details>)",
```

## **Backend**

```
pipeline {
   agent any
    environment {
        DOCKER_HUB_REPO = 'junhyeok302/wms-backend'
        CURRENT SERVER FILE = '/var/lib/jenkins/current server file'
        DOCKER_CREDENTIALS_ID = 'DockerHub' // Docker Hub 인증 정보 ID
   }
    stages {
       stage('Clone') {
           steps {
               script {
                    git branch: 'dev/backend/master', url: '<https://lab.ssafy.com/s11-ai-image-
sub1/S11P21A302.git>', credentialsId: 'Gitlab'
           }
        stage('Prepare Info Properties') {
           steps {
               withCredentials([
                    string(credentialsId: 'dbUsername', variable: 'DB_USERNAME'),
                    string(credentialsId: 'dbPassword', variable: 'DB_PASSWORD'),
                    // string(credentialsId: 'datasourceUrl', variable: 'DB_URL'),
                    string(credentialsId: 'mySqlDocker', variable: 'DB_URL'),
                    string(credentialsId: 'KakaoClientId', variable: 'KAKAO_CLIENT_ID'),
                    string(credentialsId: 'kakaoClientSecret', variable: 'KAKAO_CLIENT_SECRET'),
                    string(credentialsId: 'naverClientId', variable: 'NAVER_CLIENT_ID'),
                    string(credentialsId: 'naverClientSecret', variable: 'NAVER CLIENT SECRET'),
                    string(credentialsId: 'redisHost', variable: 'REDIS_HOST'),
                    string(credentialsId: 'redisPort', variable: 'REDIS_PORT'),
                    string(credentialsId: 'redisPassword', variable: 'REDIS_PASSWORD'),
                    string(credentialsId: 'redisUsername', variable: 'REDIS_USERNAME'),
                    string(credentialsId: 'awsAccessKeyId', variable: 'AWS ACCESS KEY ID'),
                    string(credentialsId: 'awsSecretKey', variable: 'AWS_SECRET_KEY'),
                ]) {
                    script {
                        dir('wms_backend/src/main/resources') { // info.properties 파일을 생성할 디렉토리
                           writeFile file: 'info.properties', text: """
                                spring.datasource.url=${DB_URL}
                                spring.datasource.username=${DB_USERNAME}
                                spring.datasource.password=${DB_PASSWORD}
                                spring.datasource.driver-class-name=com.mysql.cj.jdbc.Driver
                                spring.jpa.hibernate.ddl-auto=update
                                spring.jpa.database-platform=org.hibernate.dialect.MySQLDialect
                                spring.jpa.show-sql=true
                                spring.data.redis.host=${REDIS_HOST}
```

```
spring.data.redis.port=${REDIS_PORT}
                               spring.data.redis.password=${REDIS_PASSWORD}
                               spring.data.redis.username=${REDIS_USERNAME}
                               spring.security.oauth2.client.registration.kakao.client-
id=${KAKAO CLIENT ID}
                               spring.security.oauth2.client.registration.kakao.client-
secret=${KAKAO_CLIENT_SECRET}
                               spring.security.oauth2.client.registration.naver.client-
id=${NAVER CLIENT ID}
                               spring.security.oauth2.client.registration.naver.client-
secret=${NAVER CLIENT SECRET}
                               aws.accessKeyId=${AWS ACCESS KEY ID}
                               aws.secretKey=${AWS_SECRET_KEY}
                               aws.s3.bucket=a302
                               aws.region=ap-northeast-2
                           .....
                       }
                   }
               }
           }
       stage('Build') {
           steps {
               script {
                   dir('wms_backend') { // 프로젝트의 루트 디렉토리로 이동
                       sh 'chmod +x ./gradlew' // gradlew 파일에 실행 권한 부여
                       sh './gradlew clean build'
               }
           }
       }
       stage('Verify Build Artifacts') {
           steps {
               script {
                   dir('wms_backend') {
                       sh 'ls -la build/libs' // build/libs 디렉토리 확인
               }
           }
       }
       stage('Build Docker Image') {
           steps {
               script {
                   dir('wms_backend') { // 프로젝트의 Dockerfile이 있는 디렉토리로 이동
                       def imageTag = "${DOCKER_HUB_REPO}:${env.BUILD_ID}"
                       sh "ls -la build/libs" // Docker 빌드 전에 build/libs 디렉토리 확인
                       sh "docker build -t ${imageTag} -f Dockerfile ."
               }
       stage('Push Docker Image') {
           steps {
               script {
                   def imageTag = "${DOCKER_HUB_REPO}:${env.BUILD_ID}"
                   withCredentials([usernamePassword(credentialsId: DOCKER_CREDENTIALS_ID,
passwordVariable: 'DOCKER_PASSWORD', usernameVariable: 'DOCKER_USERNAME')]) {
                       sh """
```

```
echo "$DOCKER_PASSWORD" | docker login -u $DOCKER_USERNAME --password-stdin
                       docker push ${imageTag}
                       docker tag ${imageTag} ${DOCKER_HUB_REPO}:latest
                       docker push ${DOCKER_HUB_REPO}:latest
                   }
               }
           }
        }
        stage('Check and Create Current Server File') {
           steps {
               script {
                    // 파일이 없으면 'blue' 서버로 초기화
                   if (!fileExists(CURRENT SERVER FILE)) {
                       sh "echo 'blue' > ${CURRENT_SERVER_FILE}"
               }
           }
        }
        stage('Deploy') {
           steps {
                script {
                   def currentServer = sh(script: "cat ${CURRENT_SERVER_FILE}", returnStdout:
true).trim()
                   def nextServer = currentServer == 'blue' ? 'green' : 'blue'
                   // Define ports for blue and green instances
                   def nextPort = nextServer == 'blue' ? '8081' : '8082'
                   // Start the new instance on a different port
                   docker pull ${DOCKER_HUB_REPO}:latest
                   docker stop ${nextServer}-be || true
                   docker rm ${nextServer}-be || true
                    docker run -d --name ${nextServer}-be --network backend-network -p ${nextPort}:8080
${DOCKER_HUB_REPO}:latest
                    echo ${nextServer} > ${CURRENT_SERVER_FILE}
                    // NGINX 설정 파일 업데이트에만 잠금 설정
                    lock('nginx-config') { // NGINX 설정 파일에만 락을 걸어 동시 접근 방지
                       sh """
                       sudo sed -i 's#server localhost:808[12]#server localhost:${nextPort}#'
/etc/nginx/sites-available/default
                       sudo nginx -t && sudo systemctl reload nginx
                   }
                   // Stop and remove the current server
                   def currentPort = currentServer == 'blue' ? '8081' : '8082'
                   sh """
                   docker stop ${currentServer}-be || true
                   docker rm ${currentServer}-be || true
               }
           }
        }
    }
    post {
```

```
success {
                script {
                def Author_ID = sh(script: "git show -s --pretty=%an", returnStdout: true).trim()
                def Author_Name = sh(script: "git show -s --pretty=%ae", returnStdout: true).trim()
                mattermostSend (color: 'good',
                message: "빌드 성공: ${env.JOB_NAME} #${env.BUILD_NUMBER} by ${Author_ID}
(${Author_Name})\\n(<${env.BUILD_URL}|Details>)",
                endpoint: '<https://meeting.ssafy.com/hooks/rt6i8ema3prg9nbckij1e4d8re>',
                channel: 'a302_jenkins'
        }
        failure {
                script {
                def Author_ID = sh(script: "git show -s --pretty=%an", returnStdout: true).trim()
                def Author_Name = sh(script: "git show -s --pretty=%ae", returnStdout: true).trim()
                mattermostSend (color: 'danger',
                message: "빌드 실패: ${env.JOB_NAME} #${env.BUILD_NUMBER} by ${Author_ID}
(${Author_Name})\\n(<${env.BUILD_URL}|Details>)",
                endpoint: '<https://meeting.ssafy.com/hooks/rt6i8ema3prg9nbckij1e4d8re>',
                channel: 'a302_jenkins'
                )
       }
    }
}
```