빅데이터 저장시스템 개발

김은표

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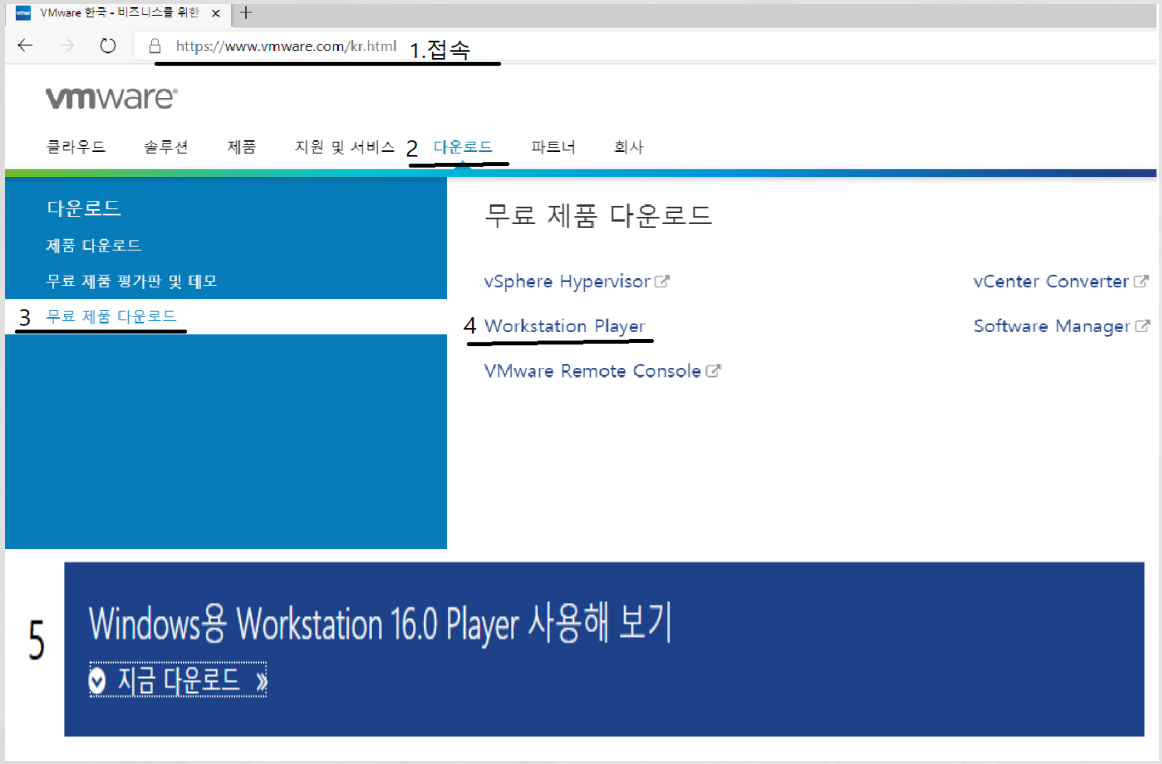
7. Sqoop Import/Export 실습하기

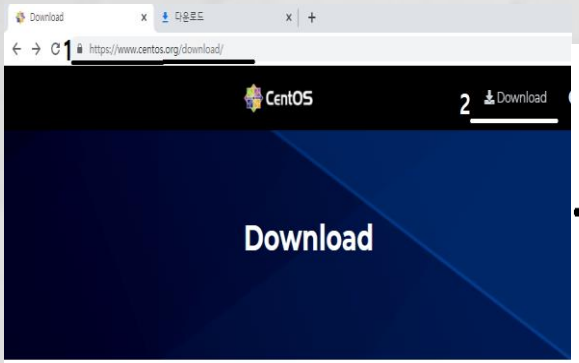
1.VMWARE 다운로드

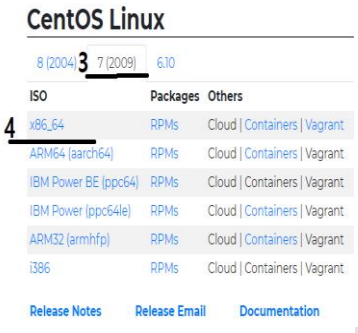
1. https://www.vmware.com/kr.html 접속
2. 무료제품 다운로드 클릭
3. Workstation Player 클릭
4. Windows용 Workstation 16.0 Player 클릭

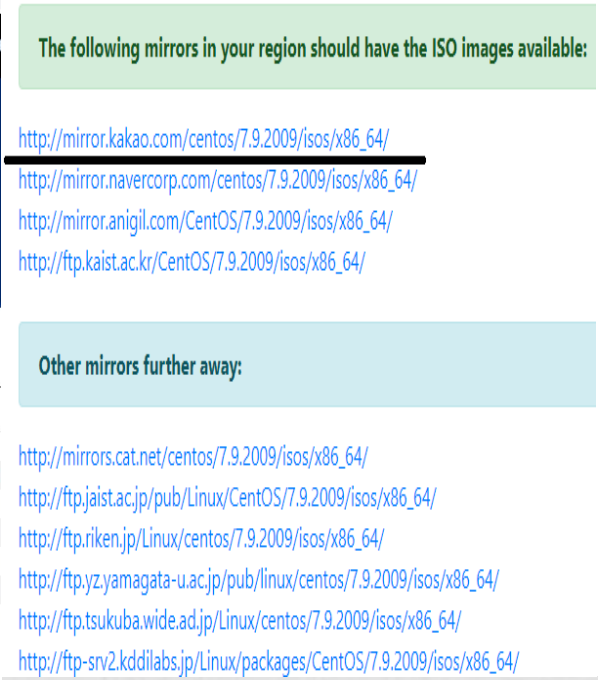


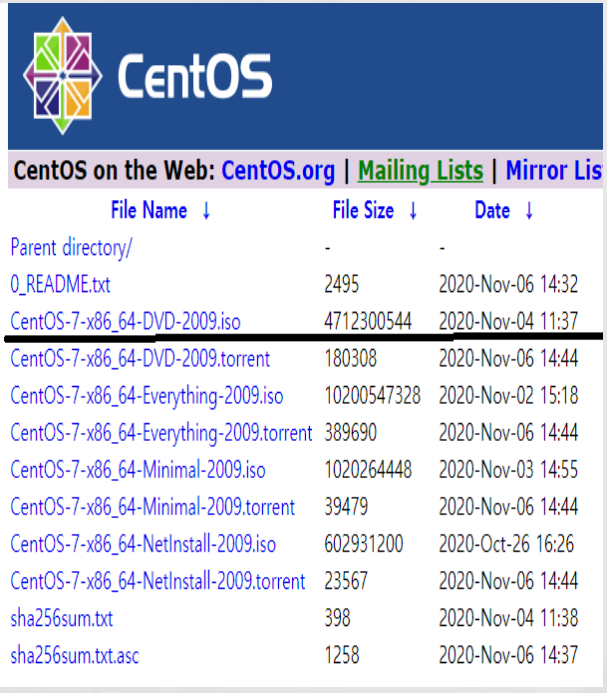
2.Centos 다운로드

1. https://www.centos.org/ 접속
2. Download 클릭
3. 버전 7(2009) 클릭
4. X86_64 버전 클릭
5. http://mirror.kakao.com/centos/7.9.2009/isos/x86_64/ 접속
6. CentOS-7-x86_64-DVD-2009.iso 다운로드



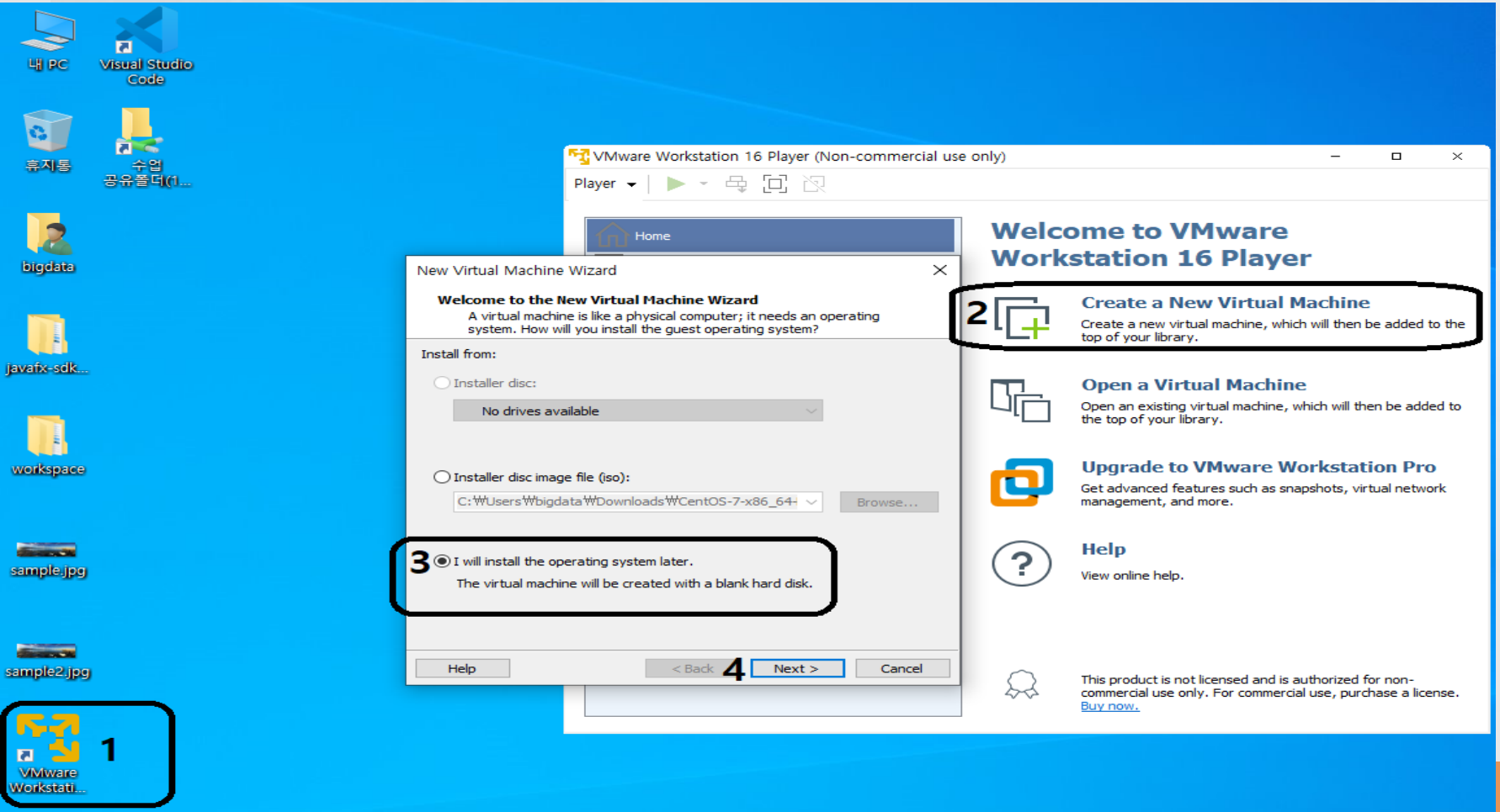






3.VMWARE 설치

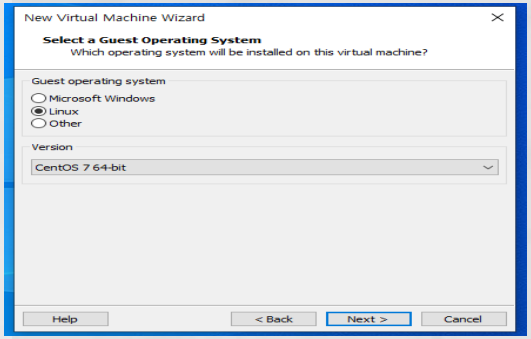
1. Vmware 실행
2. Create a New Virtual Machine 클릭
3. I will install the oper 클릭 후 Next

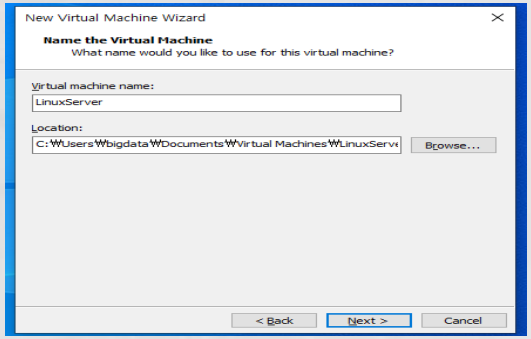


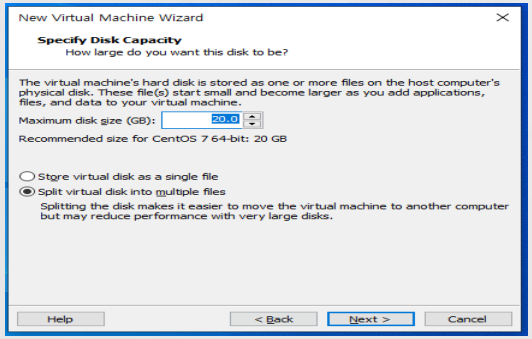
3.VMWARE 설치

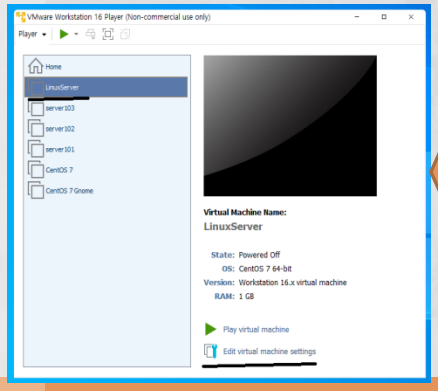
1. Linux 선택
2. Virtual machine name 이름 설정
3. 용량 선택 후 끝내기
4. 실행 할 폴더 클릭
5. Edit virtual machine settings 클릭
6. CD/DVD (IDS) 선택 Use ISO 설정하기

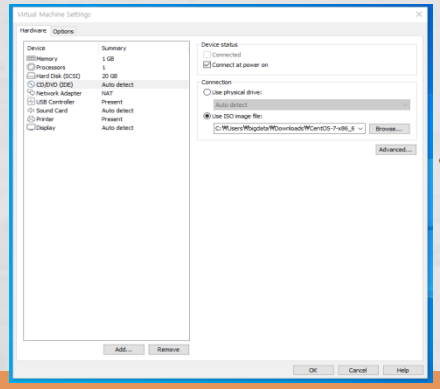
(다운받은 Centos ISO 파일)

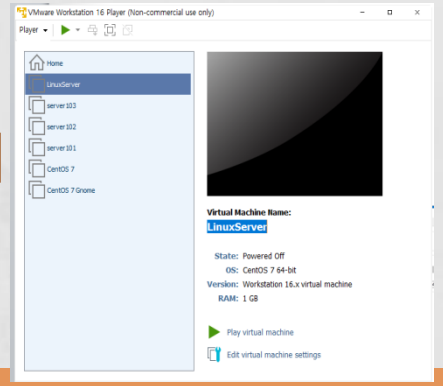


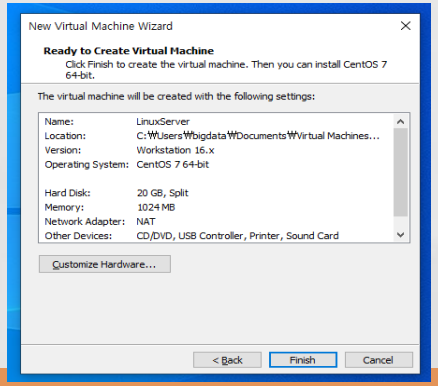






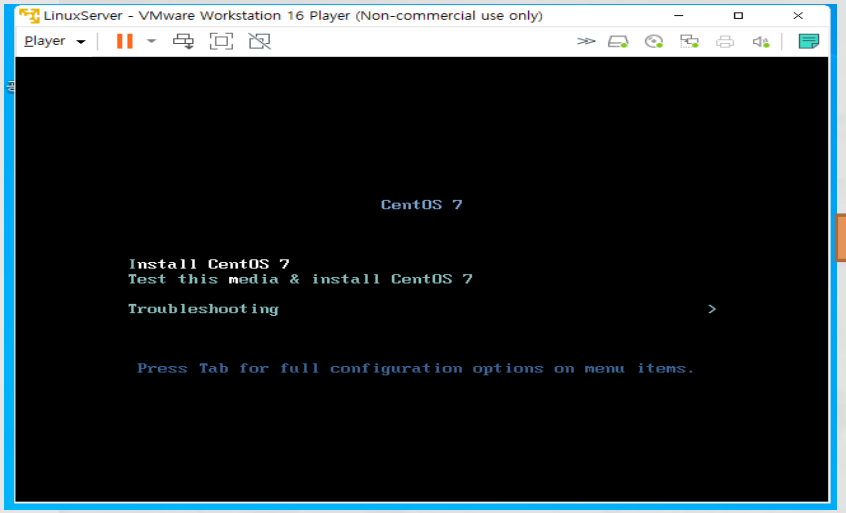




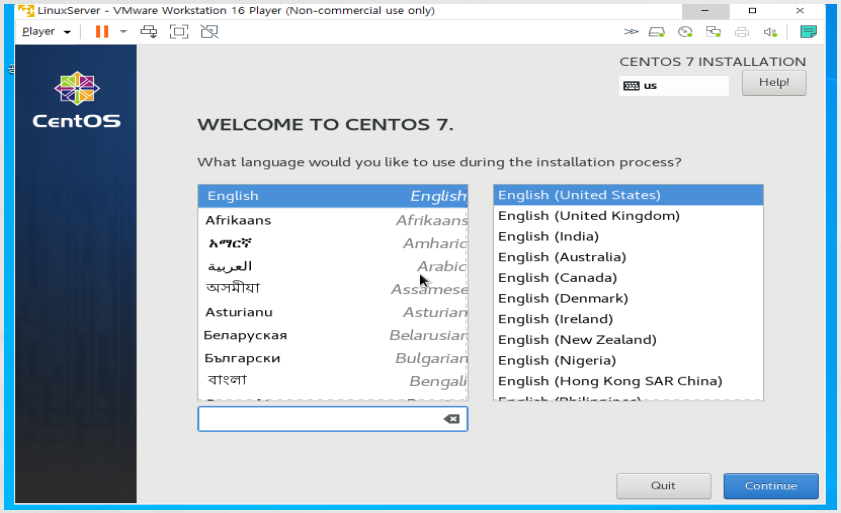


4.VMWARE 설정

1.Install



2.언어선택



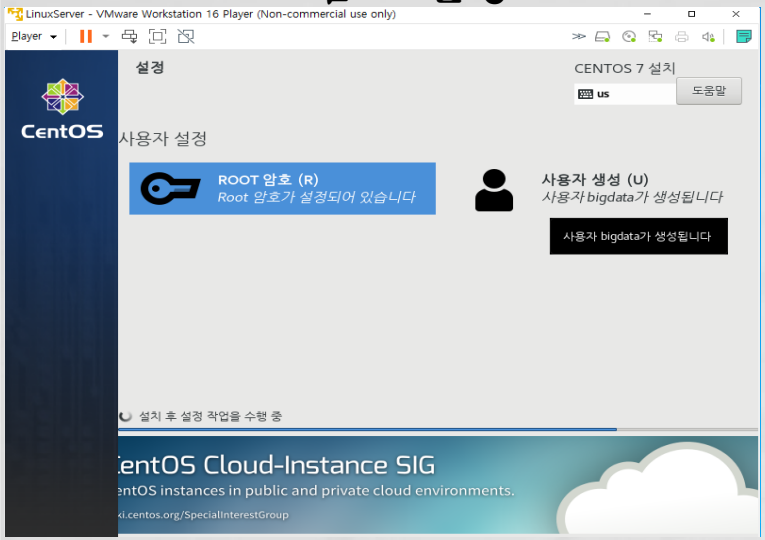
3.설정하기

① 키보드 영어(미국)우선순위
② KDUMP 비활성화
③ 네트워크 및 호스트 유선으로 설정

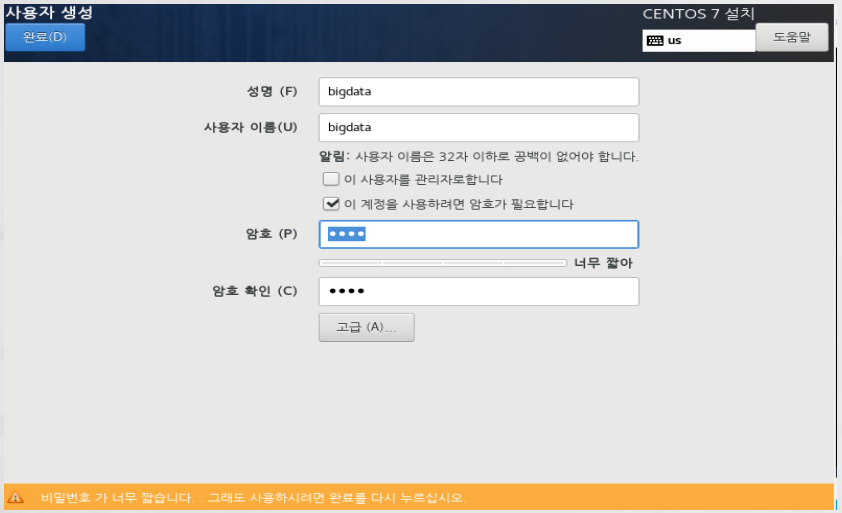
4. 설치시작

4.VMWARE 설정

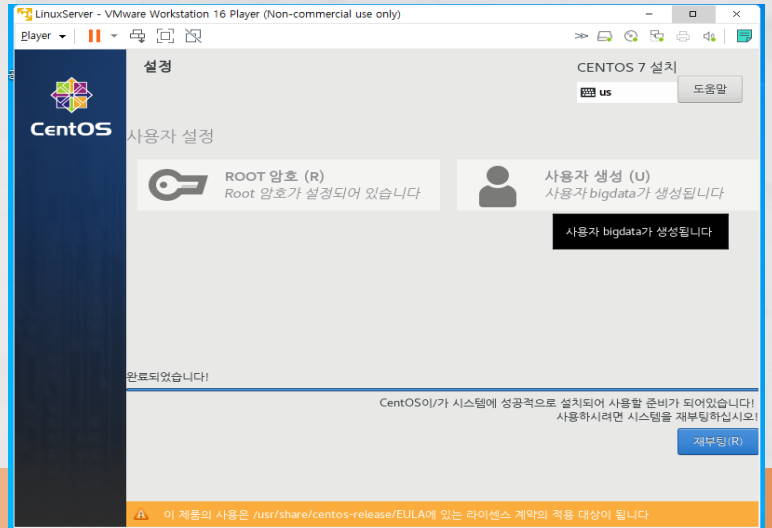
1. ROOT 암호 설정



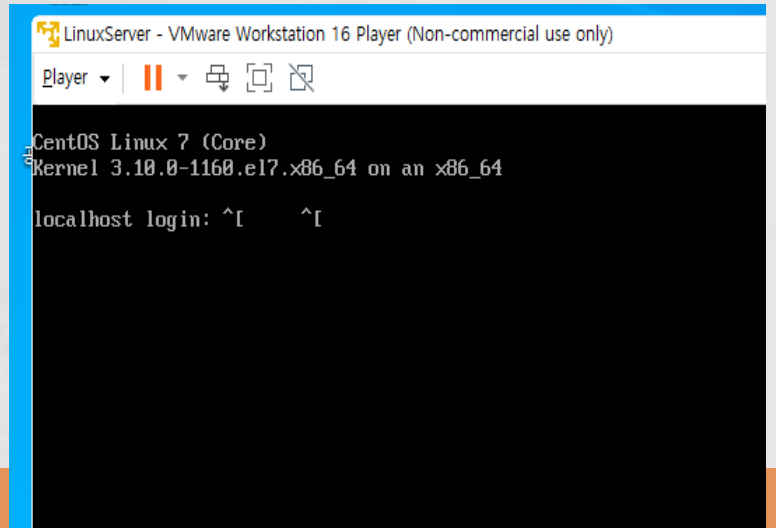
2.사용자 생성



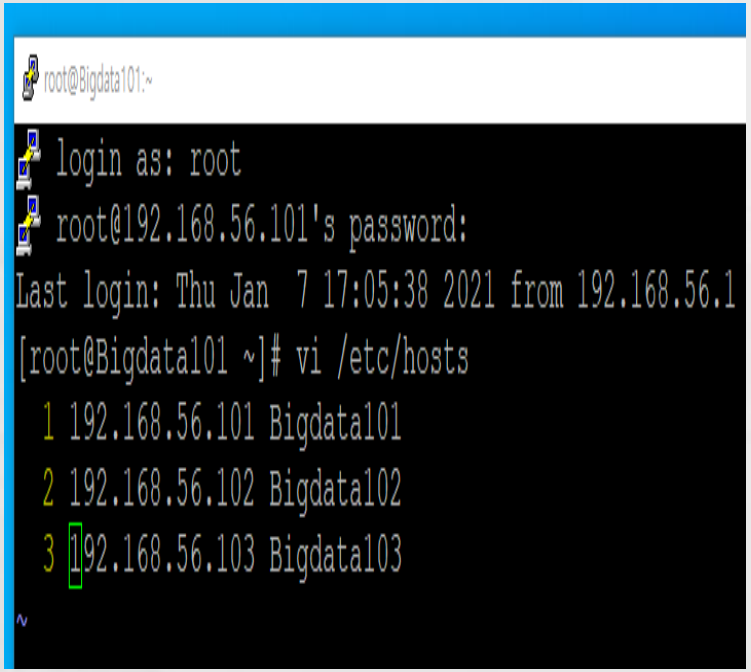
3.설치 완료 후 재부팅



4.로그인 하기



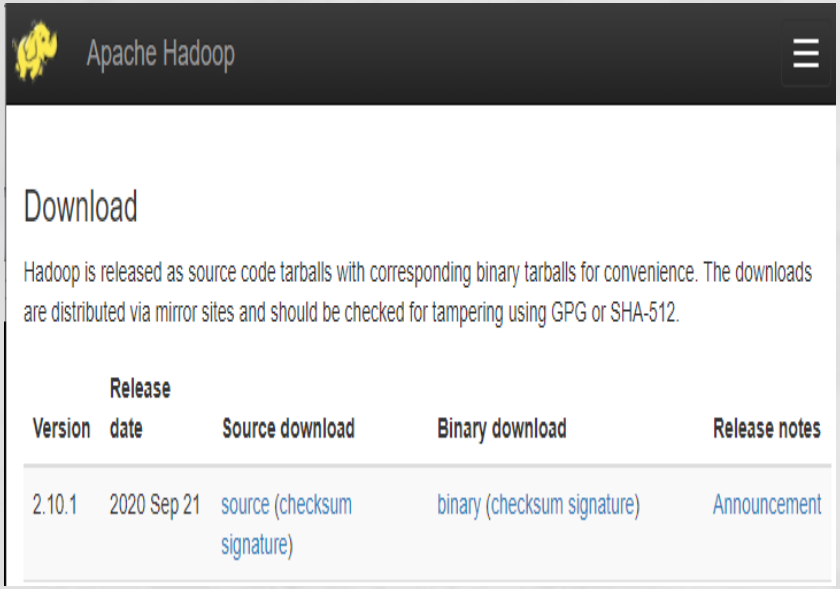
5.Hadoop 설치



하둡 시스템 가상 머신 최소 3대 생성,
가상 머신 사양 하드디스크 최소 8GB, 메모리 최소 2GB 구성
가상 머신 3대 CentOS7 최소 설치, ‘Bigdata’ 계정 생성
필수 애플리케이션 설치 및 설정

5.Hadoop 설치

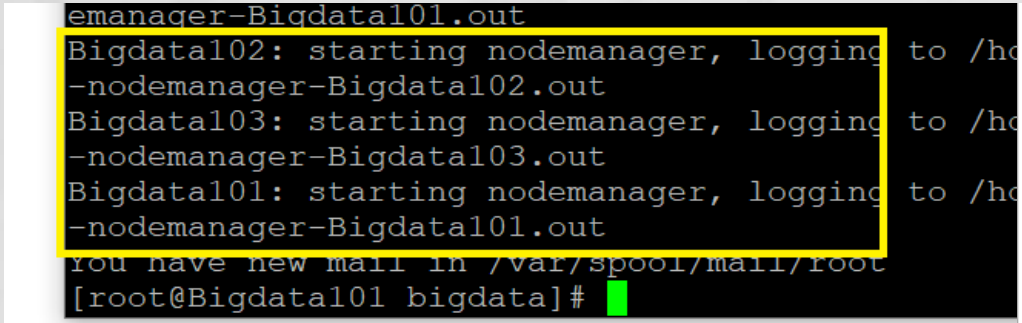
하둡 2.10.1 버전 다운로드/압축해제/이동/
링크생성(Bigdata101, Bigdata102, Bigdata103 동일)

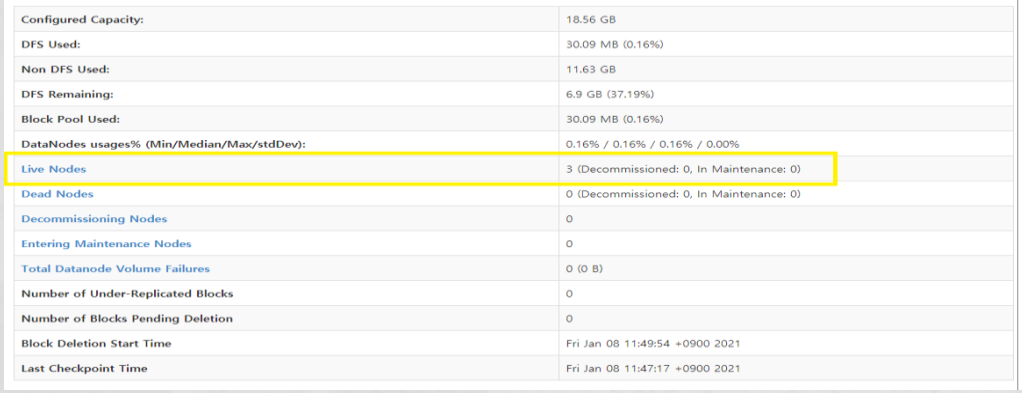


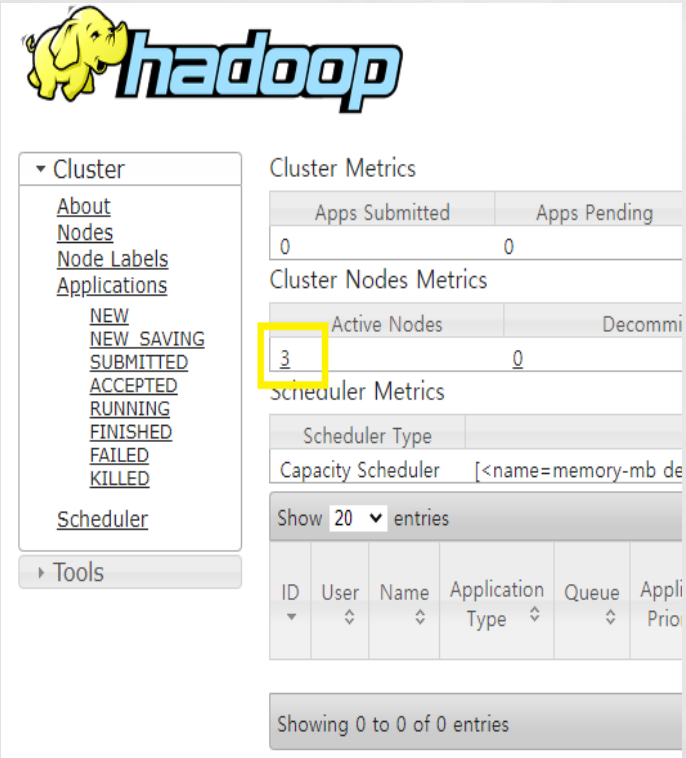

```
[root@Bigdata101 ~]# cd /home/bigdata/
[root@Bigdata101 bigdata]# ll
합계 4
drwxr-xr-x  8 root    root     200 1월   7 16:39 apache-flume-1.9.0-bin
lrwxrwxrwx  1 root    root      22 1월   7 15:17 flume -> apache-flume-1.9.0-bin
lrwxrwxrwx  1 root    root      14 1월   5 17:30 hadoop -> hadoop-2.10.1/
drwxr-xr-x 11 bigdata bigdata  204 1월   6 14:49 hadoop-2.10.1
drwxr-xr-x  8 root    root     114 1월   8 11:31 naver
lrwxrwxrwx  1 root    root      30 1월   6 17:24 sqoop -> sqoop-1.4.7.bin__hadoo
p-2.6.0/
drwxr-xr-x 10 bigdata bigdata 4096 1월   7 18:20 sqoop-1.4.7.bin__hadoop-2.6.0
drwxr-xr-x  6 root    root      97 1월   7 15:10 weather
```

5.Hadoop 설치

- Hadoop 상태 확인(bigdata101에서 #start-all.sh 실행)
- Hadoop 브라우저 확인
  - http://192.168.100.101:50070 → Hadoop Web UI
    http://192.168.100.101:8088 → Hadoop Resource Manager

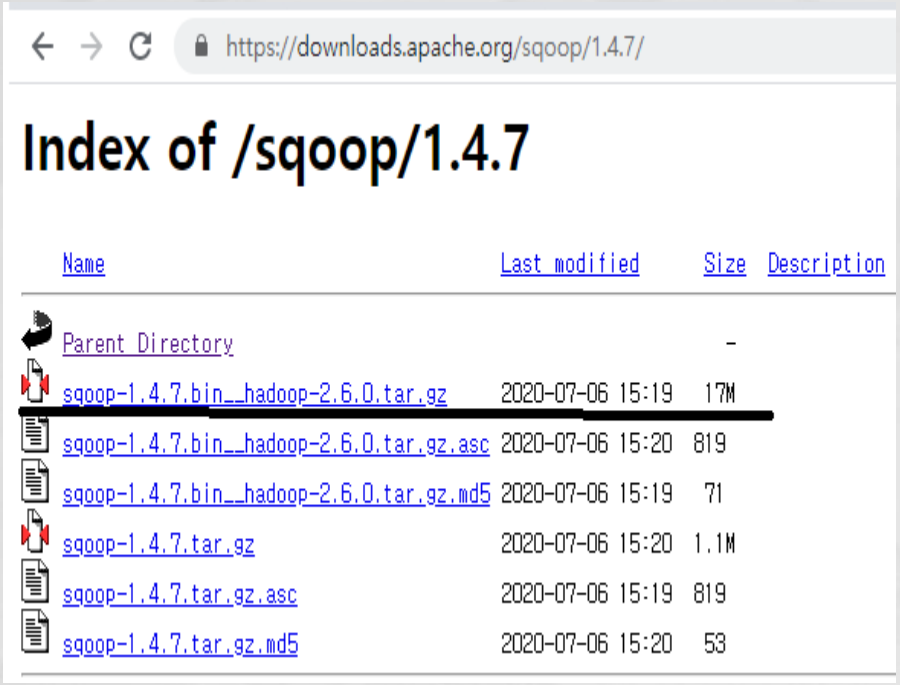


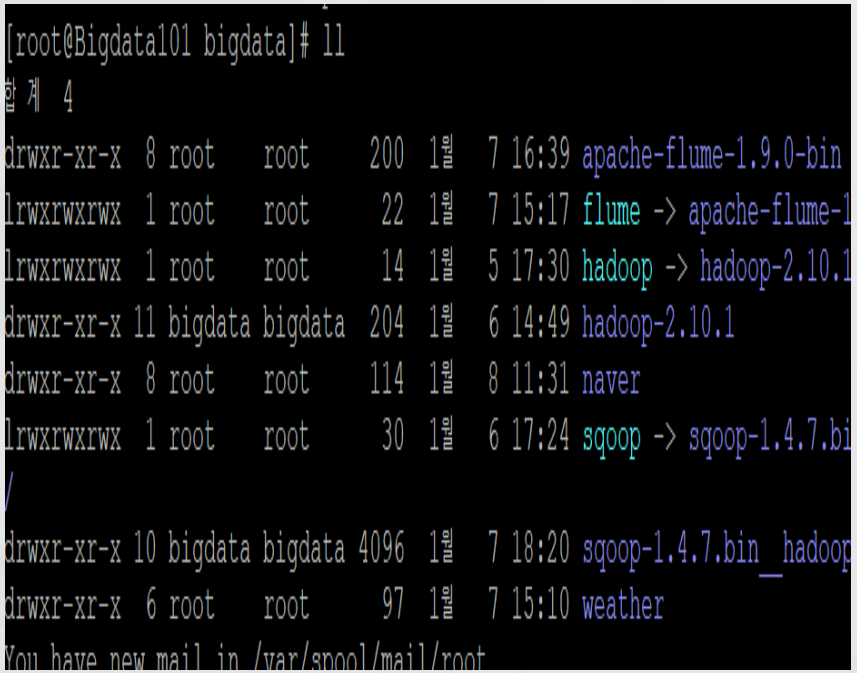




6.Sqoop 설치

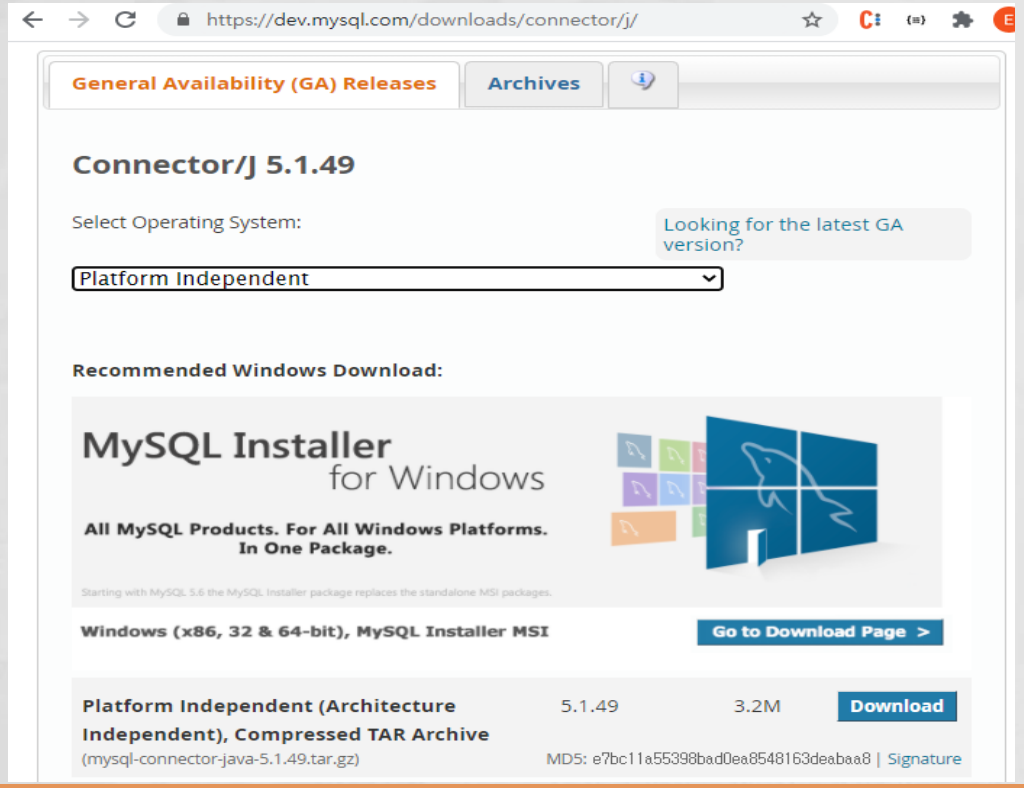
Sqoop-1.4.7.bin__hadoop-2.6.0.tar.gz 다운로드 해야됨
Sqoop 다운로드/압축해제/이동/링크 생성(Namenode 실행)





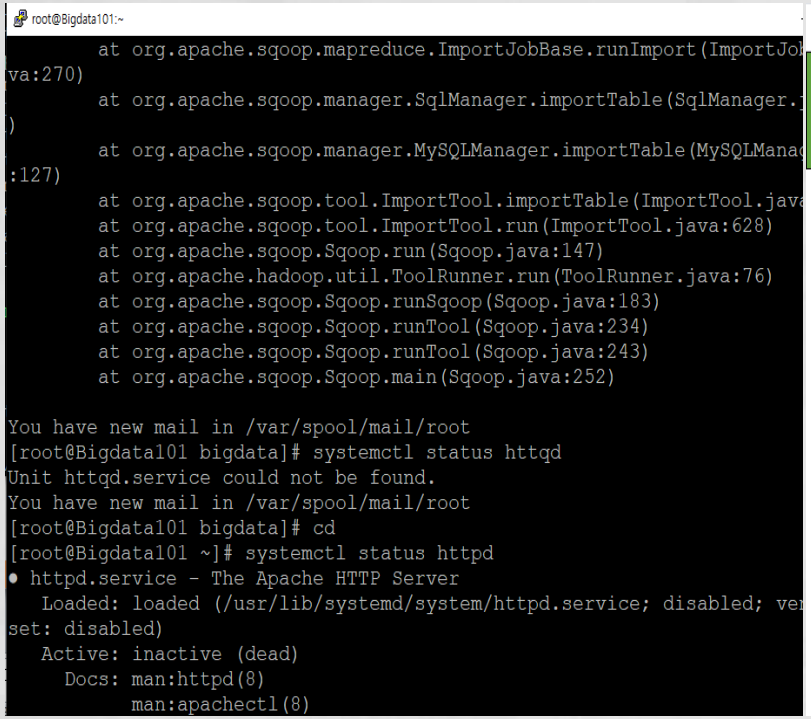
6.Sqoop 설치

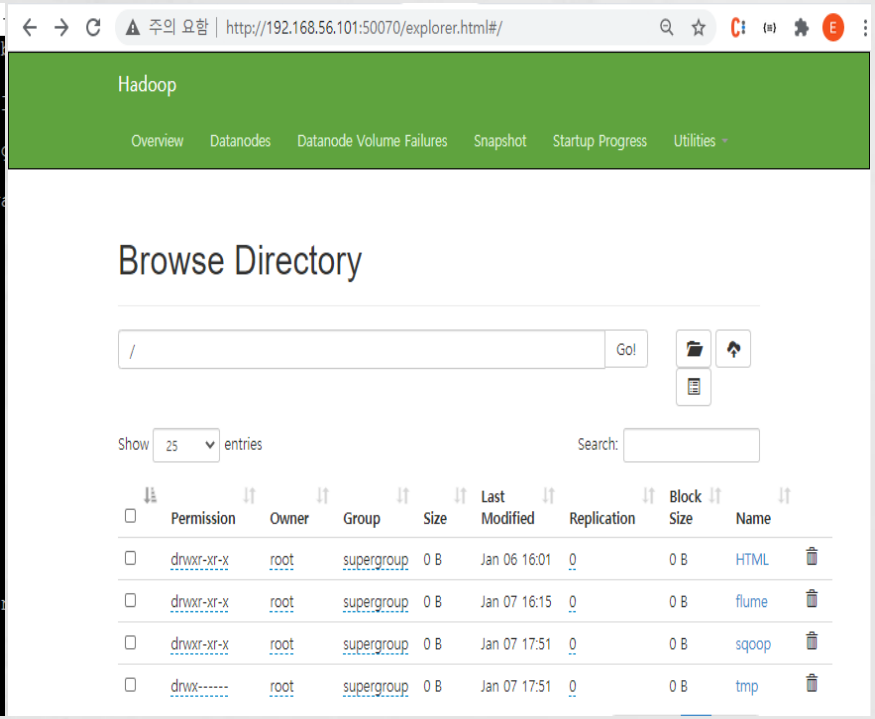
- RDBMS 드라이버 설치(Namenode 실행)
  http://dev.mysql.com/downloads/connector/j/에서
  리눅스용 mysql-connector-java-5.1.49.tar.gz 파일 다운로드
- FileZilla FTP로 mysql-connector-java-5.1.49.tar.gz 파일을 /root 경로에 업로드
- mysql-connector-java-5.1.49.tar.gz 압축해제/라이브러리 복사



7.Sqoop Import 실습하기

- Hadoop 실행후, Sqoop import 실행
- HDFS 확인
  http://192.168.xxx.101:50070 브라우저 확인
  Utilities – Browse the file system - /sqoop/User1 확인 및 파일 내용 확인





7.Sqoop Export 실습하기

- Hadoop 실행후, Sqoop Export 실행
- HeidiSQL 접속 – sqoop 데이터베이스 – User2 테이블 데이터 확인

```
[root@Bigdata101 ~]# sqoop export -- connect jdbc:mysql:
//192.168.56.101:3306/sqoop --table User2 --export-dir /
sqoop/User1 --username sqoop --password 1234 -m
```