

KUIS 1 BIG DATA

Disusun untuk Memenuhi Nilai Kuis Mata Kuliah Big Data

Yang dibina oleh Bapak Vipkas Al Hadid Firdaus, ST,.MT



Kelompok 4 SIB-3E:

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PROGRAM STUDI SISTEM INFORMASI BISNIS

JURUSAN TEKNOLOGI INFORMASI

POLITEKNIK NEGERI MALANG

2024

KUIS 1 BIG DATA

Terhubung dengan cluster

```
# Hadoop cluster nodes
192.168.10.158 hadoop-namenode
192.168.10.165 hadoop-datanode1
192.168.2.217 hadoop-datanode2
192.168.10.193 hadoop-datanode3
```

1. Hasil IP dalam satu network

```
hadoopuser@hadoop-namenode:~$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:fb:7a:fa brd ff:ff:ff:ff:ff:ff
    inet 192.168.10.158/24 metric 100 brd 192.168.10.255 scope global dynamic enp0s3
        valid_lft 2120sec preferred_lft 2120sec
    inet6 fe80::a00:27ff:fe7b:7afa/64 scope link
        valid_lft forever preferred_lft forever
3: ztnfacwri: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 2800 qdisc fq_codel state UNKNOWN group default qlen 1000
    link/ether 1e:4d:89:48:00:b1 brd ff:ff:ff:ff:ff:ff
    inet 172.29.247.62/16 brd 172.29.255.255 scope global ztnfacwri
        valid_lft forever preferred_lft forever
    inet6 fe80::1c4d:89ff:fe48:b1/64 scope link
        valid_lft forever preferred_lft forever
```

2. Hasil Setting IP (Namenode, datanode1, dan datanode3)

```
hadoopuser@hadoop-namenode:~$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 08:00:27:fb:7a:fa brd ff:ff:ff:ff:ff:ff
    inet 192.168.10.158/24 metric 100 brd 192.168.10.255 scope global dynamic enp0s3
        valid_lft 2120sec preferred_lft 2120sec
    inet6 fe80::a00:27ff:fe7b:7afa/64 scope link
        valid_lft forever preferred_lft forever
3: ztnfacwri: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 2800 qdisc fq_codel state UNKNOWN group default qlen 1000
    link/ether 1e:4d:89:48:00:b1 brd ff:ff:ff:ff:ff:ff
    inet 172.29.247.62/16 brd 172.29.255.255 scope global ztnfacwri
        valid_lft forever preferred_lft forever
    inet6 fe80::1c4d:89ff:fe48:b1/64 scope link
        valid_lft forever preferred_lft forever
```

3. Cek JPS dan buat file NoAbsn_NamaLengkap

```

hadoopuser@hadoop-namenode:~$ jps
1457 SecondaryNameNode
1218 NameNode
1942 Jps
1645 ResourceManager
hadoopuser@hadoop-namenode:~$ hdfs dfs -mkdir -p /user/hadoopuser/12_MochFikriSetiawan
hadoopuser@hadoop-namenode:~$ hdfs dfs -mv /user/hadoopuser/12_MochFikriSetiawan /user/hadoopuser/kelompok4
hadoopuser@hadoop-namenode:~$ hdfs dfs -ls
Found 1 items
drwxr-xr-x - hadoopuser supergroup 0 2025-03-20 05:50 kelompok4
hadoopuser@hadoop-namenode:~$ hdfs dfs -mv /user/hadoopuser/kelompok4 /user/hadoopuser/12_MochFikriSetiawan
hadoopuser@hadoop-namenode:~$ hdfs dfs -mkdir -p /user/hadoopuser/08_FidaCahya
hadoopuser@hadoop-namenode:~$ hdfs dfs -mkdir -p /user/hadoopuser/10_HertinNurHayati
hadoopuser@hadoop-namenode:~$

```

4. Impor file txt ke hadoop

```

PS C:\Users\gamin> scp "C:\Users\gamin\Downloads>Nama Moch Fikri Setiawan.txt" hadoopuser@192.168.10.165:~/fikri.txt
The authenticity of host '192.168.10.165 (192.168.10.165)' can't be established.
ED25519 key fingerprint is SHA256:BjHVtsH6B+jEGxXCmJXyg4N7pbcsIvsSS+Eih0qkHOE.
This host key is known by the following other names/addresses:
  C:\Users\gamin\.ssh\known_hosts:1: 172.29.247.62
Are you sure you want to continue connecting (yes/no/[fingerprint])?
Warning: Permanently added '192.168.10.165' (ED25519) to the list of known hosts.
hadoopuser@192.168.10.165's password:
Nama Moch Fikri Setiawan.txt 100% 41 1.9KB/s 00:00
PS C:\Users\gamin> scp "C:\Users\gamin\Downloads\Fida Cahya.txt" hadoopuser@192.168.10.165:~/fida.txt
hadoopuser@192.168.10.165's password:
Fida Cahya.txt 100% 32 2.8KB/s 00:00
PS C:\Users\gamin> scp "C:\Users\gamin\Downloads\Hertin Nur hayati.txt" hadoopuser@192.168.10.165:~/hertin.txt
hadoopuser@192.168.10.165's password:
Hertin Nur hayati.txt 100% 39 3.5KB/s 00:00
PS C:\Users\gamin>

```

5. Mengunggah file ke direktori menggunakan metode put dan membaca file menggunakan metode cat

```

fida.txt fikri.txt hertin.txt profil-jti-polinema.mp4 smp
hadoopuser@hadoop-namenode:~$ hdfs dfs -put fida.txt /user/hadoopuser/08_FidaCahya
hadoopuser@hadoop-namenode:~$ hdfs dfs -put hertin.txt /user/hadoopuser/10_HertinNurHayati
hadoopuser@hadoop-namenode:~$ hdfs dfs -cat /user/hadoopuser/12_MochFikriSetiawan/fikri.txt
Nama : Fida Cahya
No Absen : 08hadoopuser@hadoop-namenode:cat /user/hadoopuser/08_FidaCahya/fida.txt
Nama : Fida Cahya
No Absen : 08hadoopuser@hadoop-namenode:~$
hadoopuser@hadoop-namenode:~$ hdfs dfs -rm /user/hadoopuser/12_MochFikriSetiawan/fikri.txt
Deleted /user/hadoopuser/12_MochFikriSetiawan/fikri.txt
hadoopuser@hadoop-namenode:~$ hdfs dfs -put fikri.txt /user/hadoopuser/12_MochFikriSetiawan/
hadoopuser@hadoop-namenode:~$ hdfs dfs -cat /user/hadoopuser/12_MochFikriSetiawan/fikri.txt
Nama : Moch Fikri Setiawan
No Absen : 12hadoopuser@hadoop-namenode:~$ hdfs dfs -cat /user/hadoopuser/10_HertinNurHayati/hertin.txt
Nama : Hertin Nur Hayati
No Absen : 10hadoopuser@hadoop-namenode:~$

```

6. Hasil di browser hadoop

Browse Directory

Show 25 entries

Search:

<input type="checkbox"/>	Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name	
<input type="checkbox"/>	drwxr-xr-x	hadoopuser	supergroup	0 B	Mar 20 13:21	0	0 B	08_FidaCahya	
<input type="checkbox"/>	drwxr-xr-x	hadoopuser	supergroup	0 B	Mar 20 13:22	0	0 B	10_HertinNurHayati	
<input type="checkbox"/>	drwxr-xr-x	hadoopuser	supergroup	0 B	Mar 20 13:28	0	0 B	12_MochFikriSetiawan	

Showing 1 to 3 of 3 entries

Hadoop, 2024.

7. Hasil Upload file

Browse Directory

Show 25 entries

Search:

<input type="checkbox"/>	Permission	Owner	Group	Size	Last Modified	Replication	Block Size	Name	
<input type="checkbox"/>	-rw-r--r--	hadoopuser	supergroup	32 B	Mar 20 13:21	3	128 MB	fida.txt	

Showing 1 to 1 of 1 entries

Hadoop, 2024.