

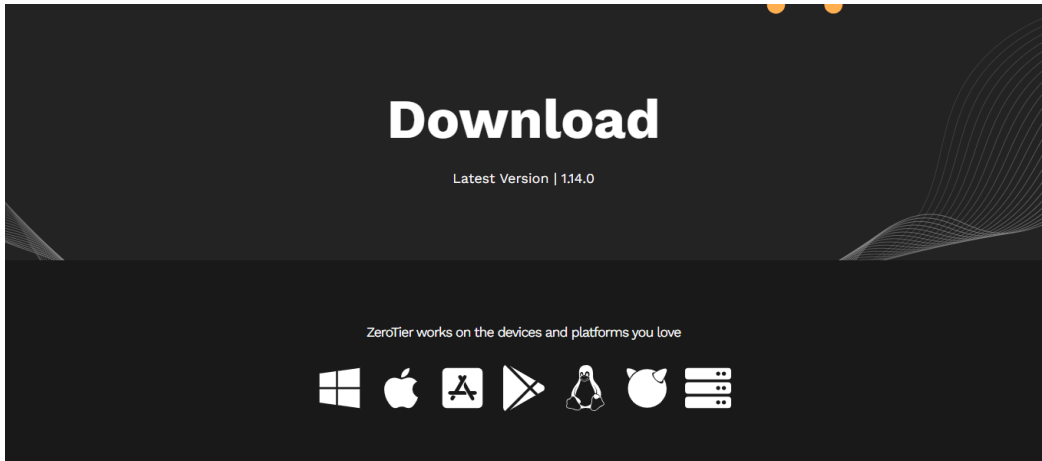


Mata Kuliah : Big Data
Program Studi : D4 – Sistem Informasi Bisnis
Semester : 6

Kelas : SIB-3E
NIM : 2241760141
Nama : Naufal Putra Azizi Rahman
Jobsheet Ke- : 1

Laporan Jobsheet

Praktikum Ke-1

Langkah	Jawaban/Deskripsi
1	<p>Install Zerotier VPN</p> 
2	<p>Mengkonfigurasi jaringan vpn ke server polinema_hadoop_cluster</p>

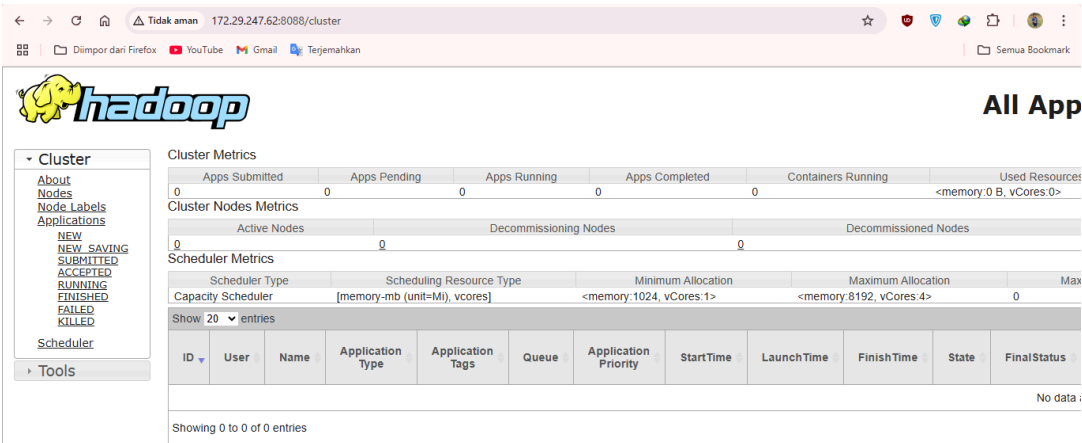
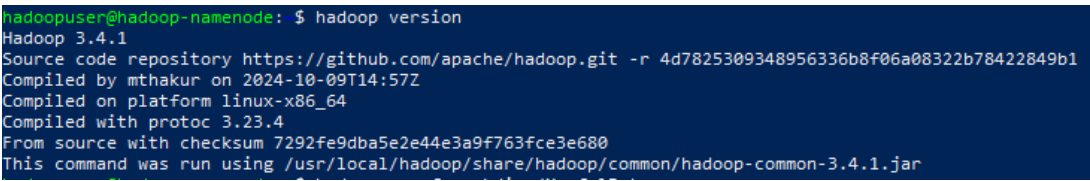



	
3	<p>Menguji di windows powershell apakah sudah terhubung dengan jaringan vpn</p> <pre>PS C:\Users\NOVAL> ping 172.29.253.67 Pinging 172.29.253.67 with 32 bytes of data: Reply from 172.29.253.67: bytes=32 time=215ms TTL=64 Reply from 172.29.253.67: bytes=32 time=47ms TTL=64 Reply from 172.29.253.67: bytes=32 time=4ms TTL=64 Reply from 172.29.253.67: bytes=32 time=24ms TTL=64 Ping statistics for 172.29.253.67: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 4ms, Maximum = 215ms, Average = 72ms</pre>
4	<p>Mengakses cluster hadoop dengan memasukan namenode</p> <pre>PS C:\Users\NOVAL> ssh hadoopuser@172.29.247.62 The authenticity of host '172.29.247.62 (172.29.247.62)' can't be established. ED25519 key fingerprint is SHA256:BjHVtsH6B+jEGxXCmJXyg4N7pbcIvsSS+Eih0qkHOE. This key is not known by any other names. Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Warning: Permanently added '172.29.247.62' (ED25519) to the list of known hosts. hadoopuser@172.29.247.62's password: Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-54-generic x86_64) * Documentation: https://help.ubuntu.com * Management: https://landscape.canonical.com * Support: https://ubuntu.com/pro System information as of Tue Mar 11 04:31:40 AM UTC 2025 System load: 0.0 Processes: 139 Usage of /: 76.0% of 9.74GB Users logged in: 1 Memory usage: 47% IPv4 address for enp0s3: 192.168.2.203 Swap usage: 0% Expanded Security Maintenance for Applications is not enabled. 26 updates can be applied immediately. To see these additional updates run: apt list --upgradable Enable ESM Apps to receive additional future security updates. See https://ubuntu.com/esm or run: sudo pro status *** System restart required *** Last login: Tue Mar 11 04:31:42 2025 from 172.29.81.170</pre>



5	<div>Cek status name node</div> <div><pre>hadoopuser@hadoop-namenode:~\$ jps 1699 SecondaryNameNode 1878 ResourceManager 36823 Jps 1455 NameNode</pre></div>												
6	<div>Melihat status data node</div> <div><div><div>Tidak aman172.29.247.62:9870/dfshealth.html#tab-overview</div><div>Diimpor dari FirefoxYouTubeGmailTerjemahkan</div><div>HadoopOverviewDatanodesDatanode Volume FailuresSnapshotStartup ProgressUtilities</div></div><div><div>Overview'hadoop-namenode:9000'(✓active)</div><div><table><tr><td>Started:</td><td>Fri Mar 07 08:51:43 +0700 2025</td></tr><tr><td>Version:</td><td>3.4.1, r4d7825309348956336b8f06a08322b78422849b1</td></tr><tr><td>Compiled:</td><td>Wed Oct 09 21:57:00 +0700 2024 by mthakur from branch-3.4.1</td></tr><tr><td>Cluster ID:</td><td>CID-3e28bd4b-1e31-47c4-9300-979d5967571b</td></tr><tr><td>Block Pool ID:</td><td>BP-1878800960-192.168.2.204-1739979975544</td></tr></table></div></div></div>	Started:	Fri Mar 07 08:51:43 +0700 2025	Version:	3.4.1, r4d7825309348956336b8f06a08322b78422849b1	Compiled:	Wed Oct 09 21:57:00 +0700 2024 by mthakur from branch-3.4.1	Cluster ID:	CID-3e28bd4b-1e31-47c4-9300-979d5967571b	Block Pool ID:	BP-1878800960-192.168.2.204-1739979975544		
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7	<div>Melihat informasi data data nodes</div> <div><div><div>In operation</div><div><div>DataNode StateAllSh</div><div><div></div><div></div><div></div></div><div><table><tr><th>Node</th><th>Http Address</th><th>Last contact</th></tr><tr><td>✓/default-rack/hadoop-datanode1:9866 (192.168.2.204:9866)</td><td>http://hadoop-datanode1:9864</td><td>0s</td></tr><tr><td>✓/default-rack/hadoop-datanode2:9866 (192.168.2.205:9866)</td><td>http://hadoop-datanode2:9864</td><td>0s</td></tr><tr><td>✓/default-rack/hadoop-datanode3:9866 (192.168.2.206:9866)</td><td>http://hadoop-datanode3:9864</td><td>0s</td></tr></table></div></div></div></div>	Node	Http Address	Last contact	✓/default-rack/hadoop-datanode1:9866 (192.168.2.204:9866)	http://hadoop-datanode1:9864	0s	✓/default-rack/hadoop-datanode2:9866 (192.168.2.205:9866)	http://hadoop-datanode2:9864	0s	✓/default-rack/hadoop-datanode3:9866 (192.168.2.206:9866)	http://hadoop-datanode3:9864	0s
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8	Melihat pemrosesan map reduce 
9	Mengecek versi hadoop 
10	Membuat folder 
11	Mengecek apa folder kita sudah tersedia atau belum



```
hadoopuser@hadoop-namenode: $ hadoop fs -ls /
Found 47 items
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:50 /03_AgtaFadjrInAminullah
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:38 /04_AgungNugroho
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:38 /05_Al bani
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 07:33 /05_FebbyMathelda
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:58 /06_AngeliaAnna
drwxr-xr-x - hadoopuser supergroup      0 2025-03-07 16:30 /07_HafizhMuhammadRabbani
drwxr-xr-x - hadoopuser supergroup      0 2025-03-08 14:24 /08_HilmiIrfanN
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:53 /09_FitriaNurSholikah
drwxr-xr-x - hadoopuser supergroup      0 2025-02-28 10:25 /09_MayaMelanesia
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 08:04 /10_MochammadZakaroAlFajri
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:41 /11_hilmy
drwxr-xr-x - hadoopuser supergroup      0 2025-03-07 19:10 /11_muhammadiqbalmuhtaram
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 08:58 /12_MuhammadIrsyadDany
drwxr-xr-x - hadoopuser supergroup      0 2025-02-27 01:59 /13_Fifi
drwxr-xr-x - hadoopuser supergroup      0 2025-02-26 03:32 /13_Hanief
drwxr-xr-x - hadoopuser supergroup      0 2025-02-26 03:33 /13_HaniefMochsin
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 08:58 /14NurhalizaAnindyaPutri
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:59 /15_NaufalPutra
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 08:56 /15_RhanilhamFadlillatulRamadhan
drwxr-xr-x - hadoopuser supergroup      0 2025-02-26 08:05 /18_MulkiHakim
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 07:53 /18_ShasiaSasaSalsabyLa
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:58 /18_SyavaApriliaP
drwxr-xr-x - hadoopuser supergroup      0 2025-02-26 07:44 /19_Rendy
drwxr-xr-x - hadoopuser supergroup      0 2025-03-01 09:04 /20_SukmaBagusWahasdwika
drwxr-xr-x - hadoopuser supergroup      0 2025-02-25 07:40 /21_TriyanaDewiFatmawati
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:37 /AgungNugroho
drwxr-xr-x - hadoopuser supergroup      0 2025-03-10 09:12 /BimoCahyoKusumo_4K-RPL
drwxr-xr-x - hadoopuser supergroup      0 2025-03-08 14:19 /EkaKrisnaFerian
drwxr-xr-x - hadoopuser supergroup      0 2025-03-02 20:30 /EntFladda
drwxr-xr-x - hadoopuser supergroup      0 2025-03-10 09:10 /Frankie-Steinlie_4K-RPL
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:44 /HertinNurhayati
drwxr-xr-x - hadoopuser supergroup      0 2025-03-08 14:16 /MuhammadRifky
drwxr-xr-x - hadoopuser supergroup      0 2025-03-11 04:39 /NaufalPutra
```