

SOLUCION TAREA 4

1. Configurar core-site.xml

```
GNU nano 8.6 /home/kali/Desktop/hadoop/etc/hadoop/core-site.xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
!—
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WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
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→
!— Put site-specific property overrides in this file. →

<configuration>
  <property>
    <name>fs.defaultFS</name>
    <value>hdfs://localhost:9000</value>
  </property>
</configuration>
```

2. Configurar hdfs-site.xml

```
Session Actions Edit View Help
GNU nano 8.6 /home/kali/Desktop/hadoop/etc/hadoop/hdfs-site.xml
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
  <!-- directorios locales para NameNode y DataNode -->
  <property>
    <name>dfs.namenode.name.dir</name>
    <value>file:///datos/hadoop/namenode</value>
  </property>

  <property>
    <name>dfs.datanode.data.dir</name>
    <value>file:///datos/hadoop/datanode</value>
  </property>

  <!-- en pseudocluster: replicación 1 -->
  <property>
    <name>dfs.replication</name>
    <value>1</value>
  </property>
</configuration>
```

3. Configuración yarn-site.xml

```
root@kali: ~
Session Actions Edit View Help
GNU nano 8.6 /home/kali/Desktop/hadoop/etc/hadoop/yarn-site.xml
<?xml version="1.0"?>
<!--
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-->
<configuration>
  <property>
    <name>yarn.nodemanager.aux-services</name>
    <value>mapreduce_shuffle</value>
  </property>

  <property>
    <name>yarn.resourcemanager.hostname</name>
    <value>localhost</value>
  </property>
</configuration>
```

4. Configuramos mapres-site.xml

```
Session Actions Edit View Help
GNU nano 8.6 /home/kali/Desktop/hadoop/etc/hadoop/mapred-site.xml *
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>
<!--
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limitations under the License. See accompanying LICENSE file.
-->

<!-- Put site-specific property overrides in this file. -->

<configuration>
  <property>
    <name>mapreduce.framework.name</name>
    <value>yarn</value>
  </property>
</configuration>
```

5. Creamos los directorios locales para HDFS

```
(root@kali)-[~]  
# sudo mkdir -p /datos/hadoop/namenode  
  
(root@kali)-[~]  
# sudo mkdir -p /datos/hadoop/datanode  
  
(root@kali)-[~]  
# sudo chown -R kali:kali /datos/hadoop  
  
(root@kali)-[~]  
# chmod -R 700 /datos/hadoop  
  
(root@kali)-[~]  
#
```

6. Configurar SSH sin contraseña

```
Session  Actions  Edit  View  Help

(root@kali)-[~]
# ssh-keygen -t rsa -P "" -f ~/.ssh/id_rsa
Generating public/private rsa key pair.
Your identification has been saved in /root/.ssh/id_rsa
Your public key has been saved in /root/.ssh/id_rsa.pub
The key fingerprint is:
SHA256:Bhfy/SoFRvSaJUN0mP1XU0xlIi+/nmW9VZxtF3/lgcI root@kali
The key's randomart image is:
+--[RSA 3072]--+
|      .=*      . .+*|
|    oB.+      o+o.|
|      . O.+E.o.+.|
|      + B..oo oB|
|      S  ... ..X|
|      . . .   o=|
|      . . .   =|
|      . . . +o|
|      o. |
+--[SHA256]--+

(root@kali)-[~]
# cat ~/.ssh/id_rsa.pub >> ~/.ssh/authorized_keys

(root@kali)-[~]
# chmod 600 ~/.ssh/authorized_keys

(root@kali)-[~]
#
```

7. Formatear el NameNode

```
root@kali: ~  
Session Actions Edit View Help  
  
(root@kali)-[~]  
# hdfs namenode -format  
Unknown command: namenode  
Usage: hdfs COMMAND  
The flags available are a subset of the POSIX ones, but should behave similarly.  
  
Valid commands:  
ls [-lah] [FILE] ...  
rm [-rf] FILE ...  
mv [-nT] SOURCE ... DEST  
mkdir [-p] FILE ...  
touch [-c] FILE ...  
chmod [-R] OCTAL-MODE FILE ...  
chown [-R] OWNER[:GROUP] FILE ...  
cat SOURCE ...  
head [-n LINES | -c BYTES] SOURCE ...  
tail [-n LINES | -c BYTES] SOURCE ...  
du [-sh] FILE ...  
checksum FILE ...  
get SOURCE [DEST]  
getmerge SOURCE DEST  
put SOURCE DEST  
df [-h]  
truncate SIZE FILE  
  
(root@kali)-[~]  
#
```

8. Iniciar hadoop (hdfs)

```
\[e]0;u@h: w[a]\[\033[;94m]└─(\[\033[1;31m\]u@h\[\033[;94m\])-\[\033[0;1m\]w\[\033[;94m\]]n\[\033[;94m\]
]└─\[\033[1;31m\]$ \[\033[0m\] /home/kali/Desktop/hadoop/sbin/start-dfs.sh

Starting namenodes on [localhost]
ERROR: Attempting to operate on hdfs namenode as root
ERROR: but there is no HDFS_NAMENODE_USER defined. Aborting operation.
Starting datanodes
ERROR: Attempting to operate on hdfs datanode as root
ERROR: but there is no HDFS_DATANODE_USER defined. Aborting operation.
Starting secondary namenodes [kali]
ERROR: Attempting to operate on hdfs secondarynamenode as root
ERROR: but there is no HDFS_SECONDARYNAMENODE_USER defined. Aborting operation.
```

```
\[e]0;u@h: w[a]\[\033[;94m]└─
]└─\[\033[1;31m\]$ \[\033[0m\] jps
16880 Jps
```


9. Iniciamos YARN

```
(kali㉿kali)-[~]  
$ /home/kali/Desktop/hadoop/sbin/start-yarn.sh  
Starting resourcemanager  
Starting nodemanagers  
localhost: kali@localhost: Permission denied (publickey,password).
```

10. Probamos comandos básicos de hadoop

```
(kali㉿kali)-[~]  
$ /home/kali/Desktop/hadoop/bin/hdfs dfs -mkdir -p /user/kali/pruebas
```