Below configuration will be added in the setenv.sh file.

CATALINA\_OPTS="$CATALINA\_OPTS -Dfile.encoding=UTF-8 -Djava.locale.providers=JRE,COMPAT,CLDR -Djava.net.preferIPv4Stack=true -Duser.timezone=GMT -xms8192m -xmx8192m -XX:MaxNewSize=1536m -XX:MaxMetaspaceSize=768m -XX:MetaspaceSize=768m -XX:NewSize=1536m --XX:SurvivorRatio=7 -server -XX:TargetSurvivorRatio=90 -XX:MaxTenuringThreshold=15

-XX:+UseParNewGC -XX:ParallelGCThreads=16 -XX:+UseConcMarkSweepGC -XX:+CMSParallelRemarkEnabled -XX:+CMSCompactWhenClearAllSoftRefs -XX:CMSInitiatingOccupancyFraction=85 -XX:+CMSScavengeBeforeRemark"

CATALINA\_OPTS="$CATALINA\_OPTS -Djgroups.bind\_addr=HOST\_IP -Djgroups.tcpping.initial\_hosts=NODE1\_IP[7800],NODE1\_IP[7801],NODE2\_IP[7800],NODE2\_IP[7801]"

Below are Properties to be added in the portal-ext.properties

cluster.link.enabled=true

cluster.link.autodetect.address=db address

cluster.link.channel.properties.control=tcp.xml

cluster.link.channel.properties.transport.0=tcp.xml

Development mode needs to be false in Web.xml

Comment include-and-override=portal-developer.properties

//tcp.xml from market place

##############################################################

Here is a list of activities that will be performed during the clustering setup process.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. #** | **Activity** | **Description** | **Time** | **Status** |
| 1 | Checking the sync | Create a file in mount location of Node 1 and check in Node 2 also do a vice versa and check |  |  |
| 2 | Disable Internet Connectivity in the Production Environment |  |  |  |
| 3 | Open Liferay Logs of both nodes | Logs will be monitored while migrating the data |  |  |
| 4 | Migrating data from Simple File Storage to Advanced File storage | Migrating from simple file storage to advance file storage using UI - time to be taken max 2 hrs 1. Export the storage configurations  2. Put the configurations in osgi/configs in Node 1 and Node 2 3. Add the property in portal-ext.properties in Node 1 and Node 2 dl.store.impl=com.liferay.portal.store.file.system.AdvancedFileSystemStore |  |  |
| 3 | Restart Node 1 and Node 2 | Check logs |  |  |
| 5 | Start Node 1 and then Node 2 | Do a check by uploading document in node 1 and check in node 2 and vice versa |  |  |
|  |  |  |  |  |
| **Sr. #** | **Activity** | **Description** |  | **Status** |
| Shared File Storage | | | | |
| 1 | Checking Shared file storage working | Open both nodes in browser and Check by inserting data in node 1 and check in node 2 and do vice versa |  |  |
|  |  |  |  |  |
| Configuring Clustering | | | | |
| 1 | Stop Liferay App 1 and App 2 |  |  |  |
| Perform the below activities in Node 1 | | | | |
| 2 | Check Ports | Check the port opening on both the nodes by doing telnet |  |  |
| 3 | Adding the tcp.xml | Adding the tcp.xml file in Liferay\_Home folder |  |  |
| 4 | Adding properties in portal-ext.properties | Add the cluster link property |  |  |
| 5 | Commenting the developer property | Comment **include-and-override=portal-developer.properties** |  |  |
| 6 | Adding properties in [setenv.sh](http://setenv.sh/) for clustering | Add the Catalina Opts property |  |  |
| 7 | Check Connectors in lib folder | check the jar files present or not |  |  |
| 8 | Check the activation key |  |  |  |
| 9 | Start Liferay App 1 | Start liferay and monitor the logs do sanity check |  |  |
| 10 | Stop Liferay App 1 |  |  |  |
|  |  |  |  |  |
| Perform the below activities in Node 2 | | | | |
| 2 | Check Ports | Check the port opening on both the nodes by doing telnet |  |  |
| 3 | Adding the tcp.xml | Adding the tcp.xml file in Liferay\_Home folder |  |  |
| 4 | Adding properties in portal-ext.properties | Add the cluster link property |  |  |
| 5 | Commenting the developer property | Comment **include-and-override=portal-developer.properties** |  |  |
| 6 | Adding properties in [setenv.sh](http://setenv.sh/) for clustering | Add the Catalina Opts property |  |  |
| 7 | Check Connectors in lib folder | check the jar files present or not |  |  |
| 8 | Check the activation key |  |  |  |
| 9 | Start Liferay App 2 | Start liferay and monitor the logs and do some sanity check |  |  |
|  |  |  |  |  |
| If everything is successfull start the App server 1 and do the clustering sanity check by editing Web Content on Node 1 and checking it in Node 2 and vice versa | | | | |

Below Properties to be added in the portal-ext.properties  
cluster.link.enabled=true  
cluster.link.autodetect.address=db address  
cluster.link.channel.properties.control=tcp.xml  
cluster.link.channel.properties.transport.0=tcp.xml