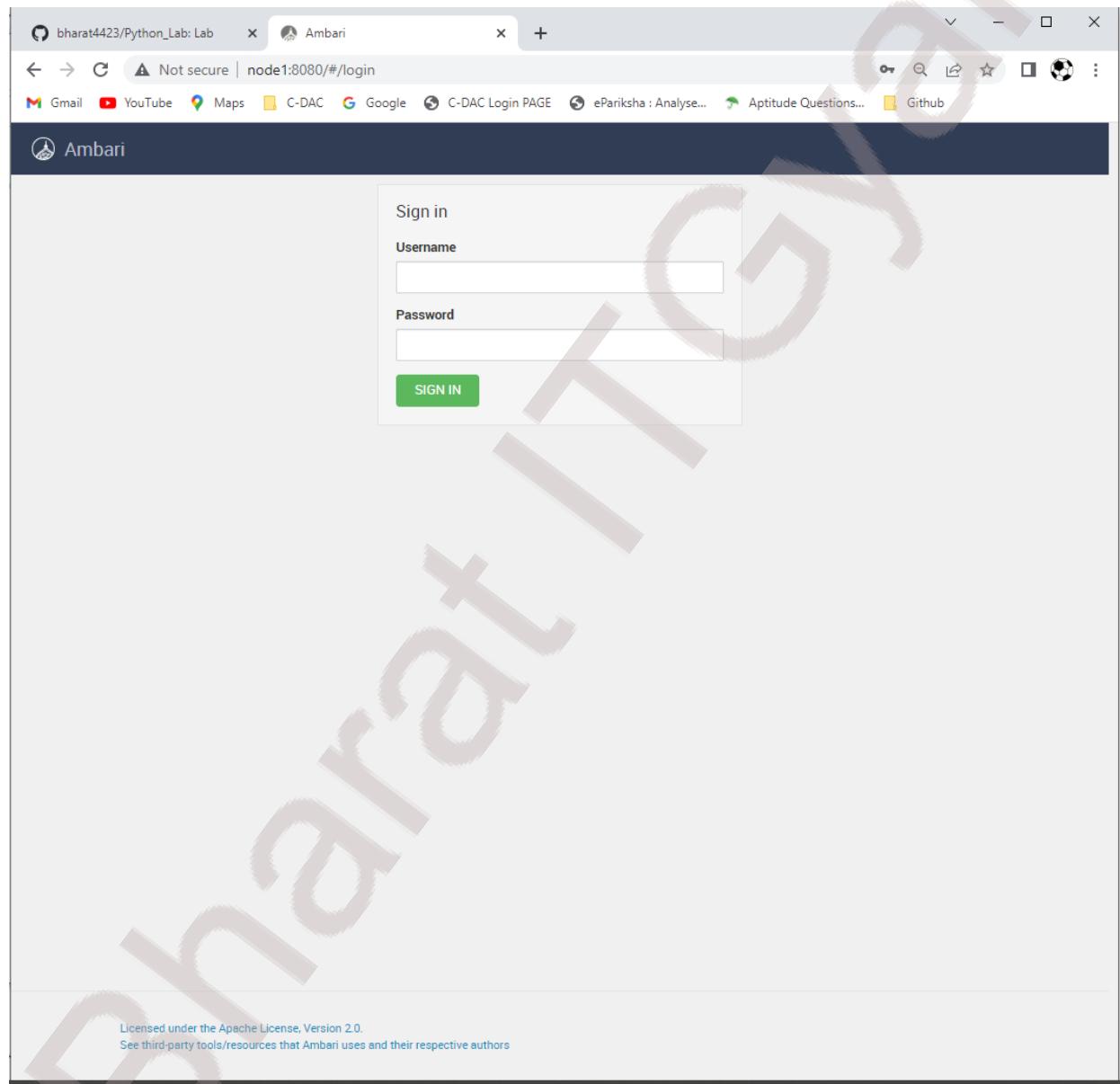


## Ambari Server installation and configuration

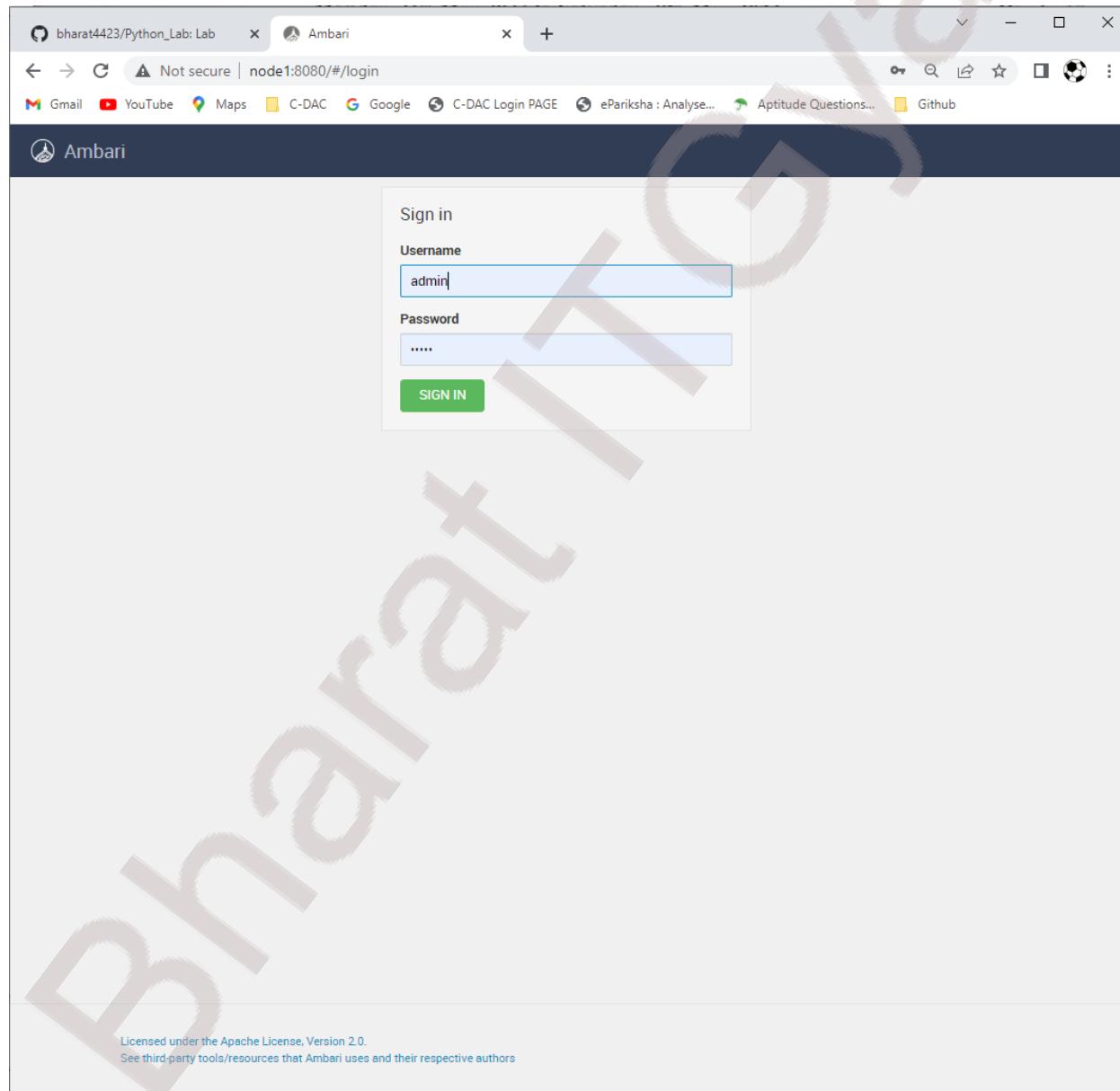
### Step 1: Login in Web Browser



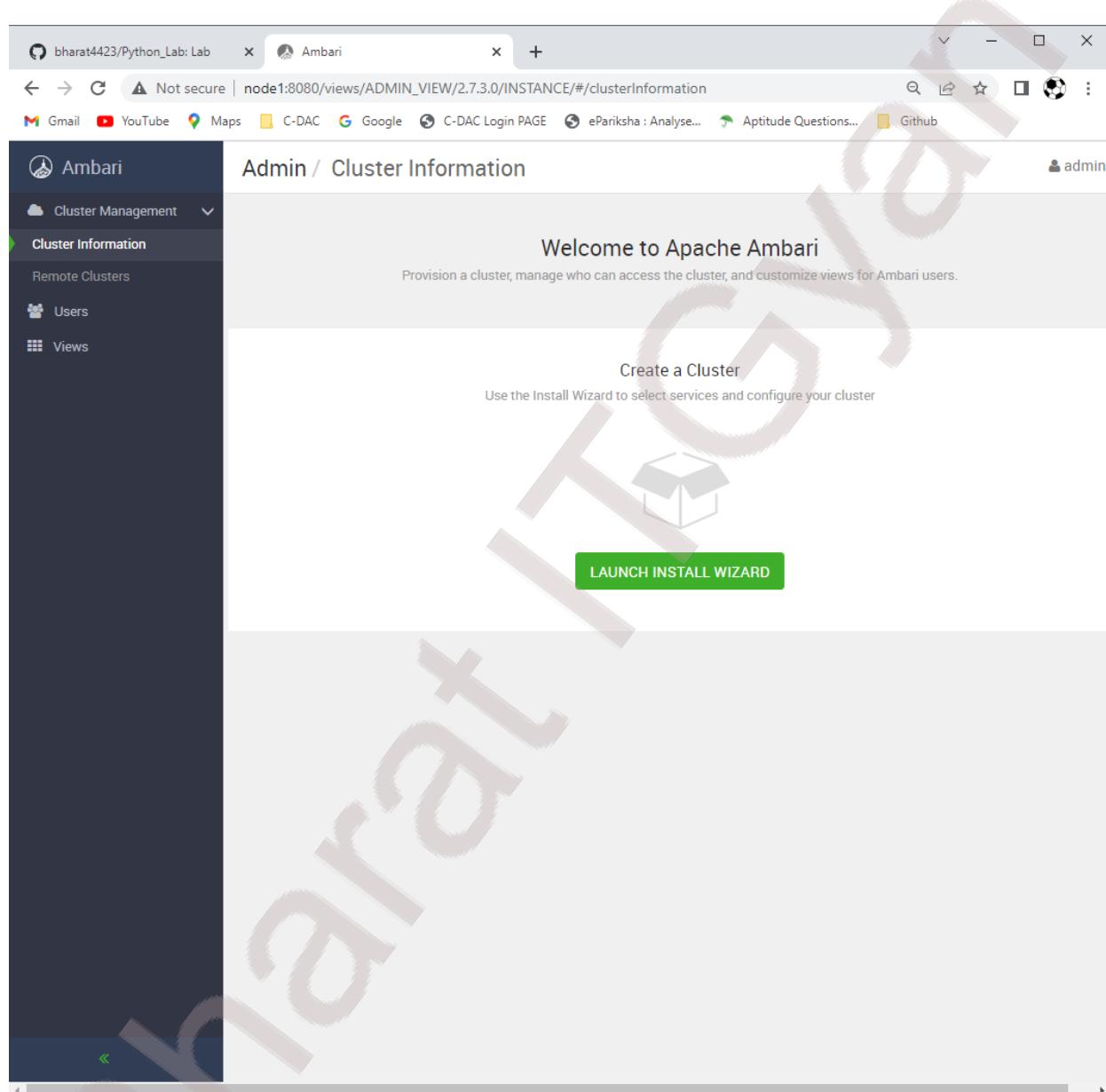
## Step 2:- Enter Login credentials

Username- admin

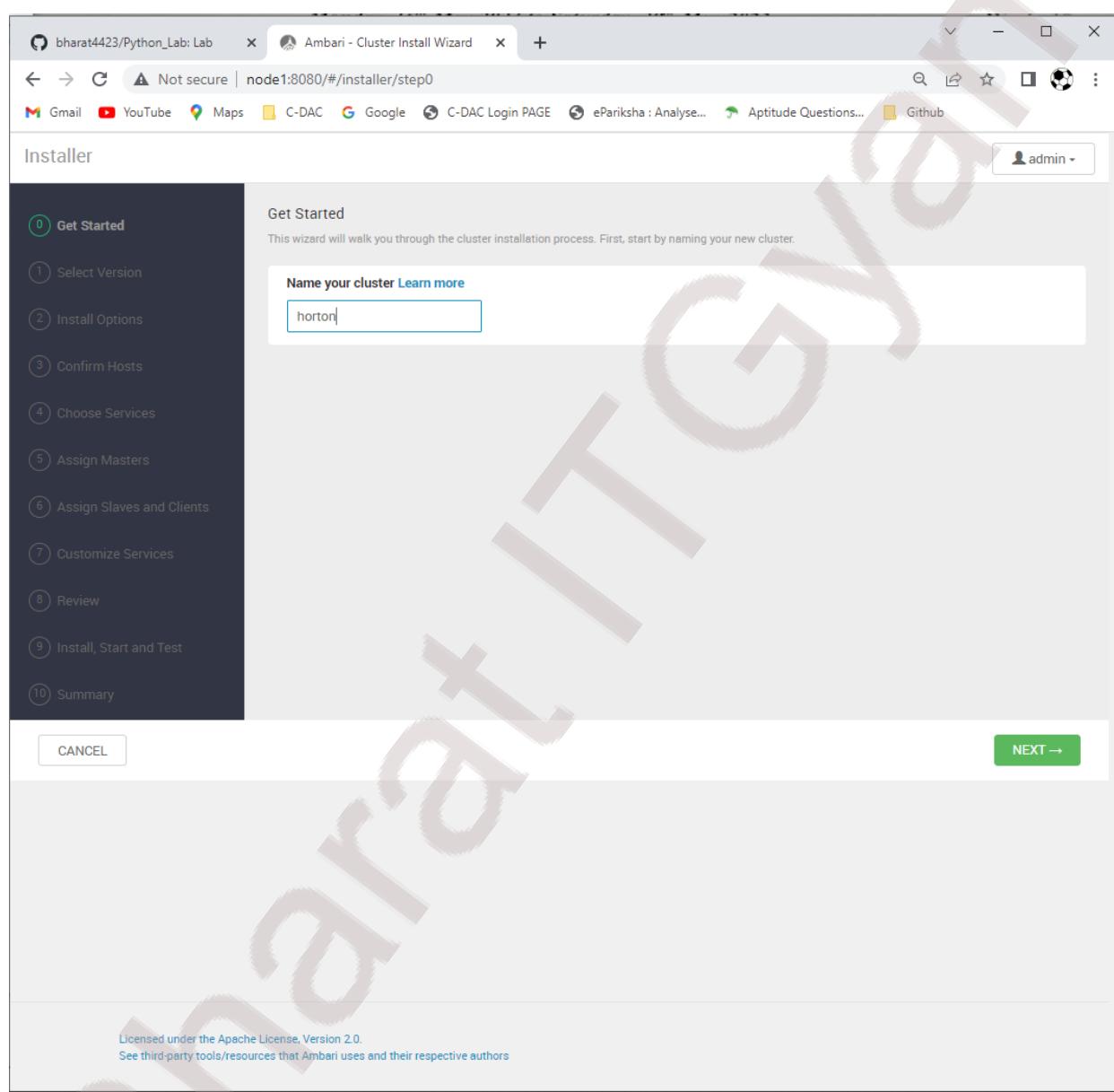
Password- admin



## Step 3: Launch install wizard



Step 4:- Click on that and Enter Cluster Name:- horton



## Step 5:- Keep only redhat7 Repositories, and Remove all other Repositories

The screenshot shows the Ambari Cluster Install Wizard interface. On the left, a sidebar lists steps from 1 to 10: Get Started, Select Version, Install Options, Confirm Hosts, Choose Services, Assign Masters, Assign Slaves and Clients, Customize Services, Review, Install, Start and Test, and Summary. Step 1 is completed (Get Started), and step 2 (Select Version) is currently active.

**Select Version**  
Select the software version and method of delivery for your cluster.

**HDP-3.1** (selected)    HDP-3.0

Accumulo 1.7.0  
Infra Solr 0.1.0  
Ambari Metrics 0.1.0  
Atlas 0.7.0.3.1  
Druid 0.12.1  
Liberator 0.0.2.3

**Repositories**  
Using a Public Repository requires Internet connectivity. Using a Local Repository requires you have configured the software in a repository available in your network.

Use Public Repository   [Why is this not selected?](#)    Use Local Repository

Provide Base URLs for the Operating Systems you are configuring.

Attention: Repository Base URLs of at least one OS are REQUIRED before you can proceed. Please make sure they are in correct format with its protocol.

OS	Name	Base URL
amazonlinux2	HDP-3.1	Enter Base URL or remove this OS
	HDP-UTILS-1.1.0.22	
debian9	HDP-3.1	Enter Base URL or remove this OS
	HDP-UTILS-1.1.0.22	
redhat-ppc7	HDP-3.1	Enter Base URL or remove this OS
	HDP-UTILS-1.1.0.22	
redhat7	HDP-3.1	Enter Base URL or remove this OS
	HDP-UTILS-1.1.0.22	

## Step 6:- Put there URL path

The screenshot shows the Ambari Cluster Install Wizard on a Windows desktop. The title bar says "bharat4423/Python\_Lab: Lab" and "Ambari - Cluster Install Wizard". The address bar shows "node1:8080/#/installer/step1". The sidebar on the left lists steps from "Get Started" to "Summary". The main content area is titled "Select Version" with the sub-instruction "Select the software version and method of delivery for your cluster." A dropdown menu shows "HDP-3.1" is selected. A table lists components and their versions: Accumulo 1.7.0, Infra Solr 0.1.0, Ambari Metrics 0.1.0, Atlas 0.7.0.3.1, Druid 0.12.1, and HDFS 2.0.2.1. Below this is a "Repositories" section with a note about connectivity. It shows two radio buttons: "Use Public Repository" (unchecked) and "Use Local Repository" (checked). A text input field "Provide Base URLs for the Operating Systems you are configuring." is present. A warning message states: "Attention: Repository Base URLs of at least one OS are REQUIRED before you can proceed. Please make sure they are in correct format with its protocol." A table for "OS" shows "redhat7" with "Name" "HDP-3.1" and "Base URL" fields. A "NEXT →" button is at the bottom right.

## Step 7: URL's

HDP-3.1:- <http://node1.bharat.com/HDP/centos7/3.1.0.0-78/>

HDP-UTILS: - <http://node1.bharat.com/HDP-UTILS/centos7/1.1.0.22/>

Installer

Select Version

Select the software version and method of delivery for your cluster.

HDP-3.1 HDP-3.0

HDP-3.1 ▾

Service	Version
Accumulo	1.7.0
Infra Solr	0.1.0
Ambari Metrics	0.1.0
Atlas	0.7.0.3.1
Druid	0.12.1
HBase	2.0.2.1

Repositories

Using a Public Repository requires internet connectivity. Using a Local Repository requires you have configured the software in a repository available in your network.

Use Public Repository  
 Use Local Repository  
Why is this not selected?

Provide Base URLs for the Operating Systems you are configuring.

+ ADD ▾

OS	Name	Base URL
redhat7	HDP-3.1	http://node1.bharat.com/HDP/centos7/3.1.0.0-78/
	HDP-UTILS-1.1.0.22	http://node1.bharat.com/HDP-UTILS/centos7/1.1.0.22/

Skip Repository Base URL validation (Advanced) ?  
 Use RedHat Satellite/Spacewalk ?

BACK CANCEL NEXT →

Licensed under the Apache License, Version 2.0.  
See third-party tools/resources that Ambari uses and their respective authors

## Step 8:- Select Target Hosts

node[1-2].bharat.com (bharat.com - Domain name)

The screenshot shows the Ambari Cluster Install Wizard at Step 2: Select Target Hosts. The left sidebar lists steps 1 through 10. Step 2 is highlighted with a green checkmark. The main area shows the following configuration:

- Target Hosts:** node[1-2].bharat.com
- Host Registration Information:** The "Provide your SSH Private Key to automatically register hosts" option is selected. A file input field shows "ssh private key".
- SSH User Account:** root
- SSH Port Number:** 22

At the bottom, there are "BACK", "CANCEL", and "REGISTER AND CONFIRM →" buttons. A license notice at the bottom states: "Licensed under the Apache License, Version 2.0. See third-party tools/resources that Ambari uses and their respective authors".

## Step 9:-Select Perform manual registration and click on REGISTER AND CONFIRM

The screenshot shows the Ambari Cluster Install Wizard in progress, specifically the 'Install Options' step (step 2). On the left, a vertical navigation bar lists steps 1 through 10. Step 2, 'Install Options', is currently selected. The main panel displays the configuration for the cluster installation.

**Target Hosts:** node[1-2].bharat.com

**Host Registration Information:**

- Provide your [SSH Private Key](#) to automatically register hosts
- Perform manual registration on hosts and do not use SSH

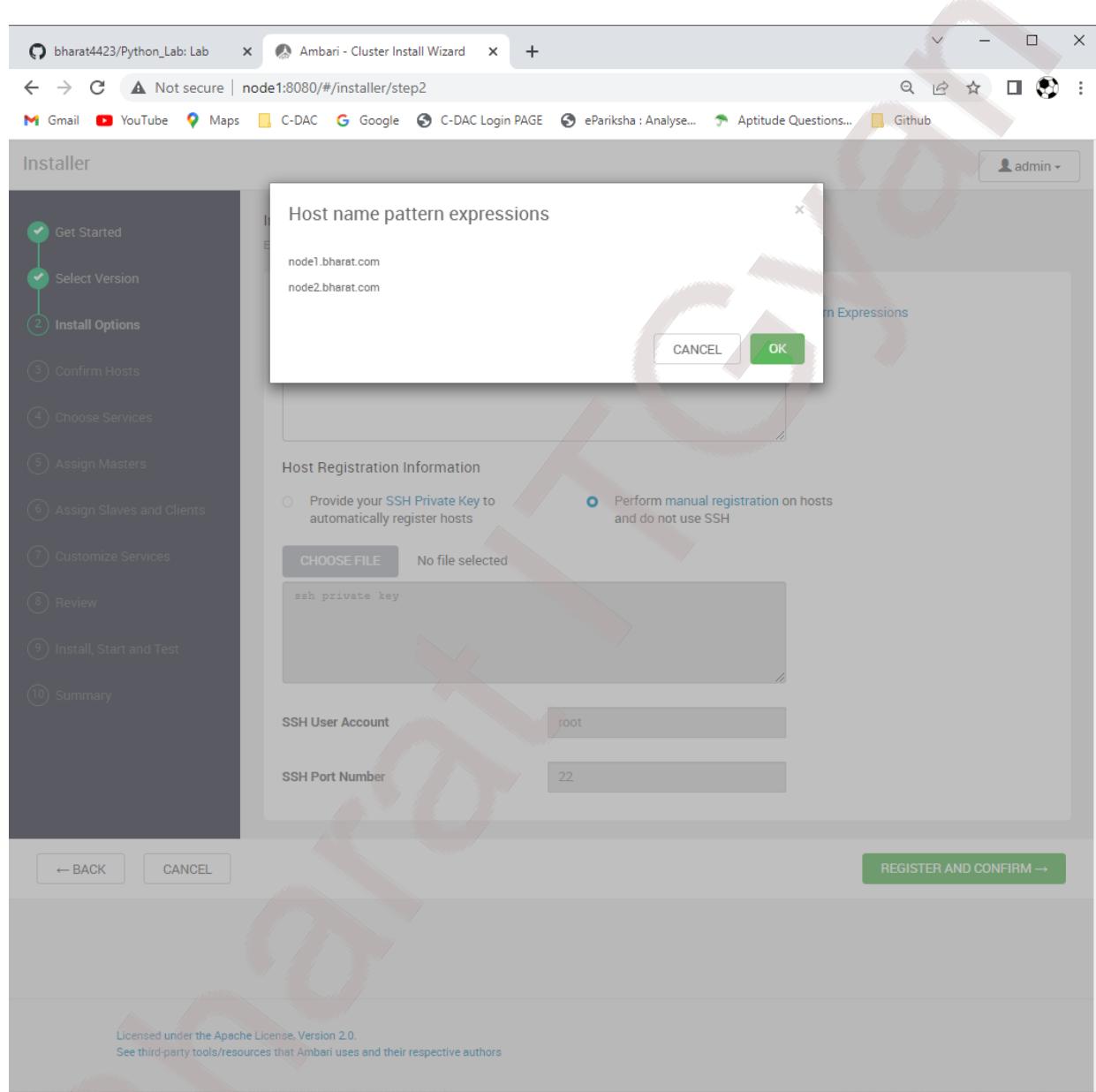
**SSH User Account:** root

**SSH Port Number:** 22

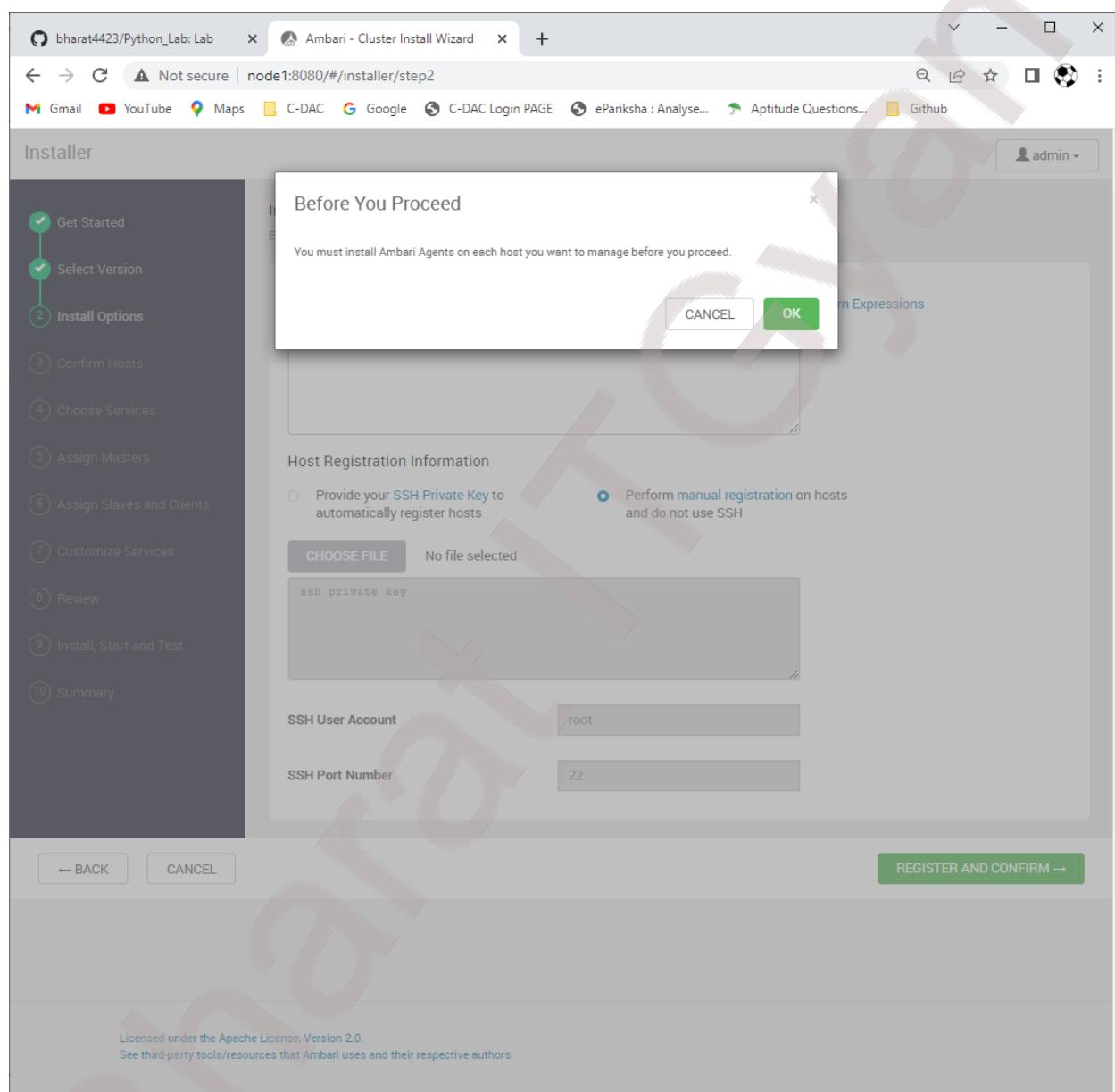
**Buttons:** ← BACK, CANCEL, REGISTER AND CONFIRM →

Licensed under the Apache License, Version 2.0.  
See [third-party tools/resources that Ambari uses and their respective authors](#)

## Step 10:- Select OK



## Step 11:- Again Click OK



Step 12:- Successfully registering our hosts. Then click NEXT

The screenshot shows the Ambari Cluster Install Wizard at Step 3: Confirm Hosts. On the left, a sidebar lists steps 1 through 10. Steps 1, 2, and 3 are completed (green checkmarks). The current step, 'Confirm Hosts', is highlighted with a green circle and the number 3. The main content area displays a table of registered hosts:

Host	Progress	Status	Action
node1.bharat.com	<div style="width: 100%; background-color: #2e6b2e; height: 10px;"></div>	Success	<span style="color: #2e6b2e;">trash</span>
node2.bharat.com	<div style="width: 100%; background-color: #2e6b2e; height: 10px;"></div>	Success	<span style="color: #2e6b2e;">trash</span>

Below the table, a message states: "All host checks passed on 2 registered hosts. Click here to see the check results." Navigation buttons at the bottom include 'BACK', 'CANCEL', and a large green 'NEXT →' button.

Step 13:- Then select the below selected checkbox and unchecked others.

1)HDFS, 2)YARN+MapReduce2, 3)Hive, 4)Pig

The screenshot shows the Ambari Cluster Install Wizard at Step 4: Choose Services. On the left sidebar, steps 1 through 4 are completed, while steps 5 through 10 are listed. The main area displays two tables:

**Choose File System**

Service	Version	Description
<input checked="" type="checkbox"/> HDFS	3.1.1.3.1	Apache Hadoop Distributed File System

**Choose Services**

Service	Version	Description
<input type="checkbox"/> YARN + MapReduce2	3.1.0	Apache Hadoop NextGen MapReduce (YARN)
<input checked="" type="checkbox"/> Tez	0.9.0.3.1	Tez is the next generation Hadoop Query Processing framework written on top of YARN.
<input checked="" type="checkbox"/> Hive	3.0.0.3.1	Data warehouse system for ad-hoc queries & analysis of large datasets and table & storage management service
<input type="checkbox"/> HBase	2.0.0.3.1	Non-relational distributed database and centralized service for configuration management & synchronization
<input checked="" type="checkbox"/> Pig	0.16.1.3.1	Scripting platform for analyzing large datasets
<input type="checkbox"/> Sqoop	1.4.7	Tool for transferring bulk data between Apache Hadoop and structured data stores such as relational databases
<input type="checkbox"/> Oozie	4.4.0	System for workflow coordination and execution of

## Step 14:- Select here Zookeeper and Ambari

The screenshot shows a web browser window titled "Ambari - Cluster Install W" with the URL "node1:8080/#/installer/step4". The page displays a list of services to be installed, each with a checkbox, version number, and a brief description.

Service	Version	Description
Sqoop	1.4.7	Tool for transferring bulk data between Apache Hadoop and structured data stores such as relational databases
Oozie	4.4.0	System for workflow coordination and execution of Apache Hadoop jobs. This also includes the installation of the optional Oozie Web Console which relies on and will install the ExtJS Library.
<input checked="" type="checkbox"/> ZooKeeper	3.4.9.3.1	Centralized service which provides highly reliable distributed coordination
Storm	1.2.1	Apache Hadoop Stream processing framework
Accumulo	1.7.0	Robust, scalable, high performance distributed key/value store.
Infra Solr	0.1.0	Core shared service used by Ambari managed components.
<input checked="" type="checkbox"/> Ambari Metrics	0.1.0	A system for metrics collection that provides storage and retrieval capability for metrics collected from the cluster
Atlas	0.7.0.3.1	Atlas Metadata and Governance platform
Kafka	1.0.0.3.1	A high-throughput distributed messaging system
Knox	0.5.0.3.1	Provides a single point of authentication and access for Apache Hadoop services in a cluster
Log Search	0.5.0	Log aggregation, analysis, and visualization for Ambari managed services. This service is <b>Technical Preview</b> .
Ranger	1.2.0.3.1	Comprehensive security for Hadoop
Ranger KMS	1.2.0.3.1	Key Management Server
<input checked="" type="checkbox"/> SmartSense	1.5.1.2.7.3.0-139	SmartSense - Hortonworks SmartSense Tool (HST) helps quickly gather configuration, metrics, logs from common HDP services that aids to quickly

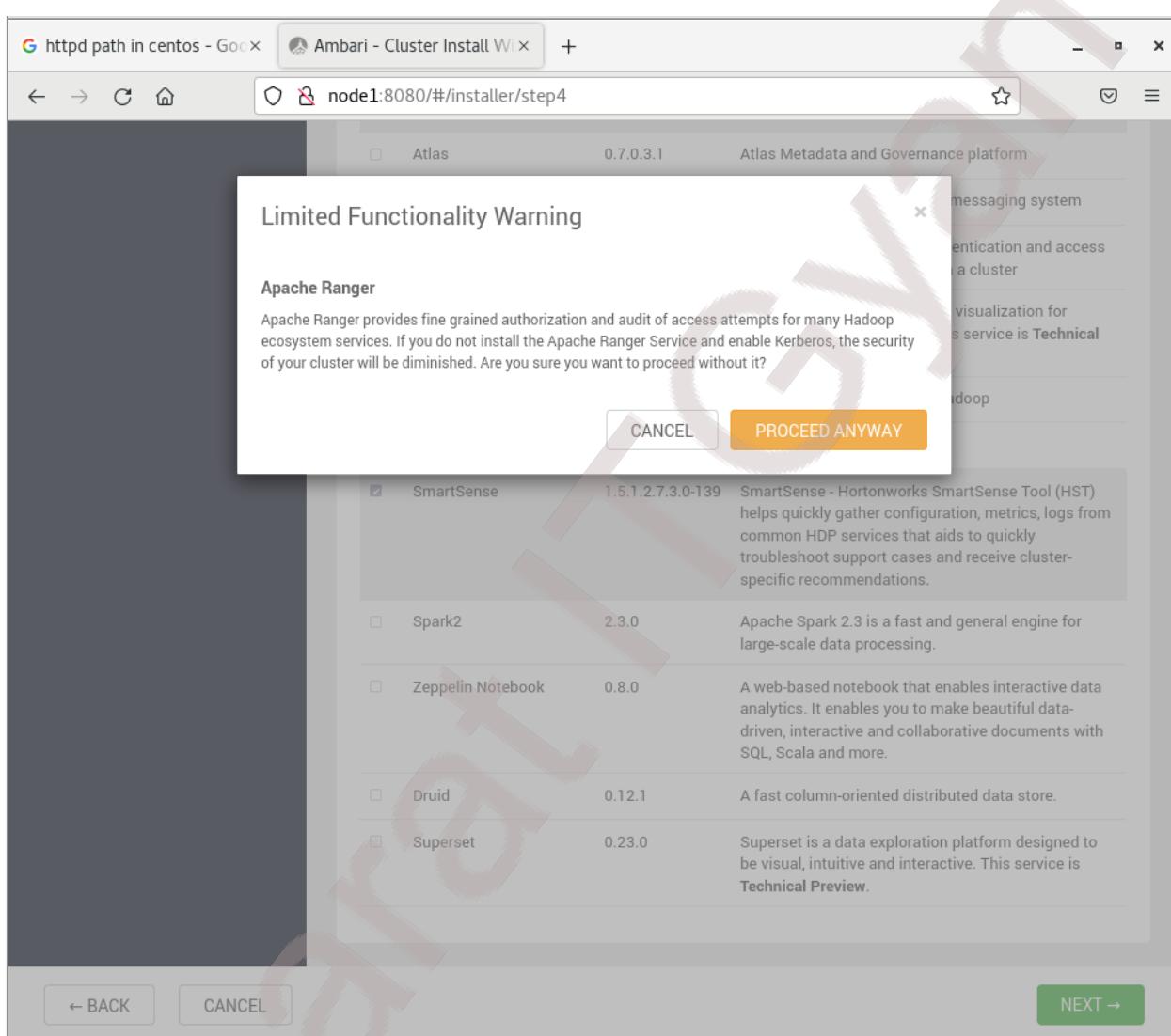
## Step 15:-Then Click on NEXT

The screenshot shows a Firefox browser window titled "Ambari - Cluster Install Wiz" with the URL "node1:8080/#/installer/step4". The page displays a list of services for selection:

Service	Version	Description
Atlas	0.7.0.3.1	Atlas Metadata and Governance platform
Kafka	1.0.0.3.1	A high-throughput distributed messaging system
Knox	0.5.0.3.1	Provides a single point of authentication and access for Apache Hadoop services in a cluster
Log Search	0.5.0	Log aggregation, analysis, and visualization for Ambari managed services. This service is <b>Technical Preview</b> .
Ranger	1.2.0.3.1	Comprehensive security for Hadoop
Ranger KMS	1.2.0.3.1	Key Management Server
<input checked="" type="checkbox"/> SmartSense	1.5.1.2.7.3.0-139	SmartSense - Hortonworks SmartSense Tool (HST) helps quickly gather configuration, metrics, logs from common HDP services that aids to quickly troubleshoot support cases and receive cluster-specific recommendations.
Spark2	2.3.0	Apache Spark 2.3 is a fast and general engine for large-scale data processing.
Zeppelin Notebook	0.8.0	A web-based notebook that enables interactive data analytics. It enables you to make beautiful data-driven, interactive and collaborative documents with SQL, Scala and more.
Druid	0.12.1	A fast column-oriented distributed data store.
<input type="checkbox"/> Superset	0.23.0	Superset is a data exploration platform designed to be visual, intuitive and interactive. This service is <b>Technical Preview</b> .

At the bottom, there are buttons for "BACK", "CANCEL", and a green "NEXT →" button.

## Step 16:- Click On PROCEED ANYWAY



Step 17:- Then see the configuration which is automatically taken.

httpd path in centos - Go x Ambari - Cluster Install W| x +

node1:8080/#/installer/step5

Installer

admin

Get Started  
Select Version  
Install Options  
Confirm Hosts  
Choose Services  
5 Assign Masters  
6 Assign Slaves and Clients  
7 Customize Services  
8 Review  
9 Install, Start and Test  
10 Summary

Assign Masters

Assign master components to hosts you want to run them on.

NameNode: node1.bharat.com (15.5 ...)  
SNameNode: node2.bharat.com (7.6 G...)  
ResourceManager: node1.bharat.com (15.5 ...)  
Timeline Service V2.0 Reader: node1.bharat.com (15.5 ...)  
YARN Registry DNS: node1.bharat.com (15.5 ...)  
Timeline Service V1.5: node2.bharat.com (7.6 G...)  
History Server: node2.bharat.com (7.6 G...)  
Hive Metastore: node2.bharat.com (7.6 G...)  
HiveServer2: node2.bharat.com (7.6 G...)  
ZooKeeper Server: node1.bharat.com (15.5 ...)

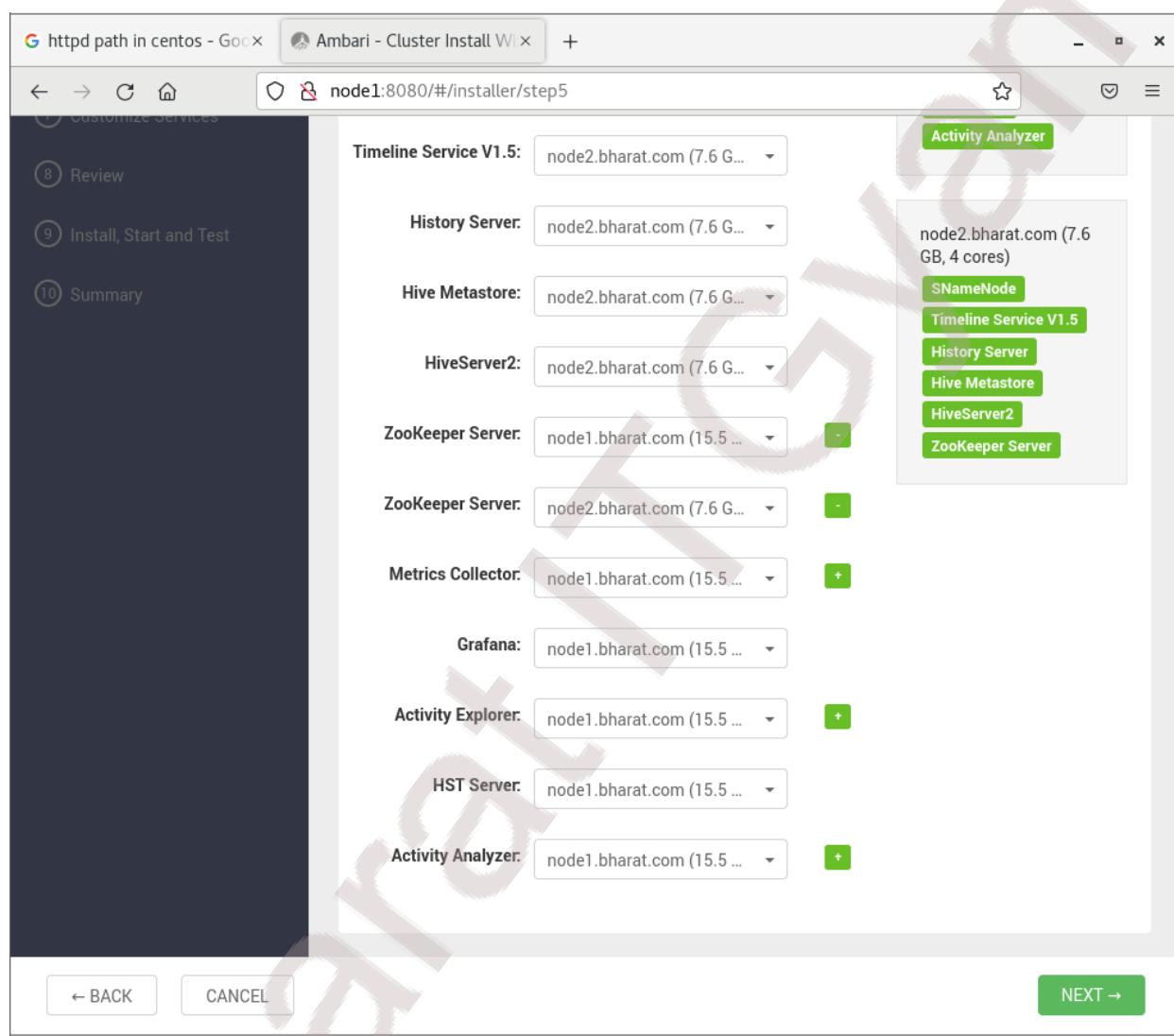
node1.bharat.com (15.5 GB, 4 cores)

NameNode  
ResourceManager  
Timeline Service V2.0 Reader  
YARN Registry DNS  
ZooKeeper Server  
Metrics Collector  
Grafana  
Activity Explorer  
HST Server  
Activity Analyzer

node2.bharat.com (7.6 GB, 4 cores)

SNameNode  
Timeline Service V1.5  
History Server  
Hive Metastore  
HiveServer2  
ZooKeeper Server

Step 18:- Then click NEXT



Step 19:- Then select all DataNode, all NodeManager and all Client.

And click NEXT.

Applications Places Firefox

Tue 22:17

httpd path in centos - Goox Ambari - Cluster Install W/ +

node1:8080/#/installer/step6

Installer admin

Get Started

Select Version

Install Options

Confirm Hosts

Choose Services

Assign Masters

Assign Slaves and Clients

Customize Services

Review

Install, Start and Test

Summary

Host all | none all | none all | none all | none

Host	all   none	all   none	all   none	all   none
node1.bharat.com*	<input checked="" type="checkbox"/> DataNode	<input type="checkbox"/> NFSGateway	<input checked="" type="checkbox"/> NodeManager	<input checked="" type="checkbox"/> Client
node2.bharat.com*	<input checked="" type="checkbox"/> DataNode	<input type="checkbox"/> NFSGateway	<input checked="" type="checkbox"/> NodeManager	<input checked="" type="checkbox"/> Client

Items per page: 25 1 - 2 of 2

← BACK CANCEL NEXT →

Licensed under the Apache License, Version 2.0.  
See third-party tools/resources that Ambari uses and their respective authors

bharat@node... Ambari - Clust... bharat@node... Documents root@node1:...

Step 20:- Then give the password.

	Username	Password	Confirm Password
Grafana Admin-	admin	grafana	grafana
Hive Database	hive	hive	hive
Activity Explorer's	N/A	admin	admin

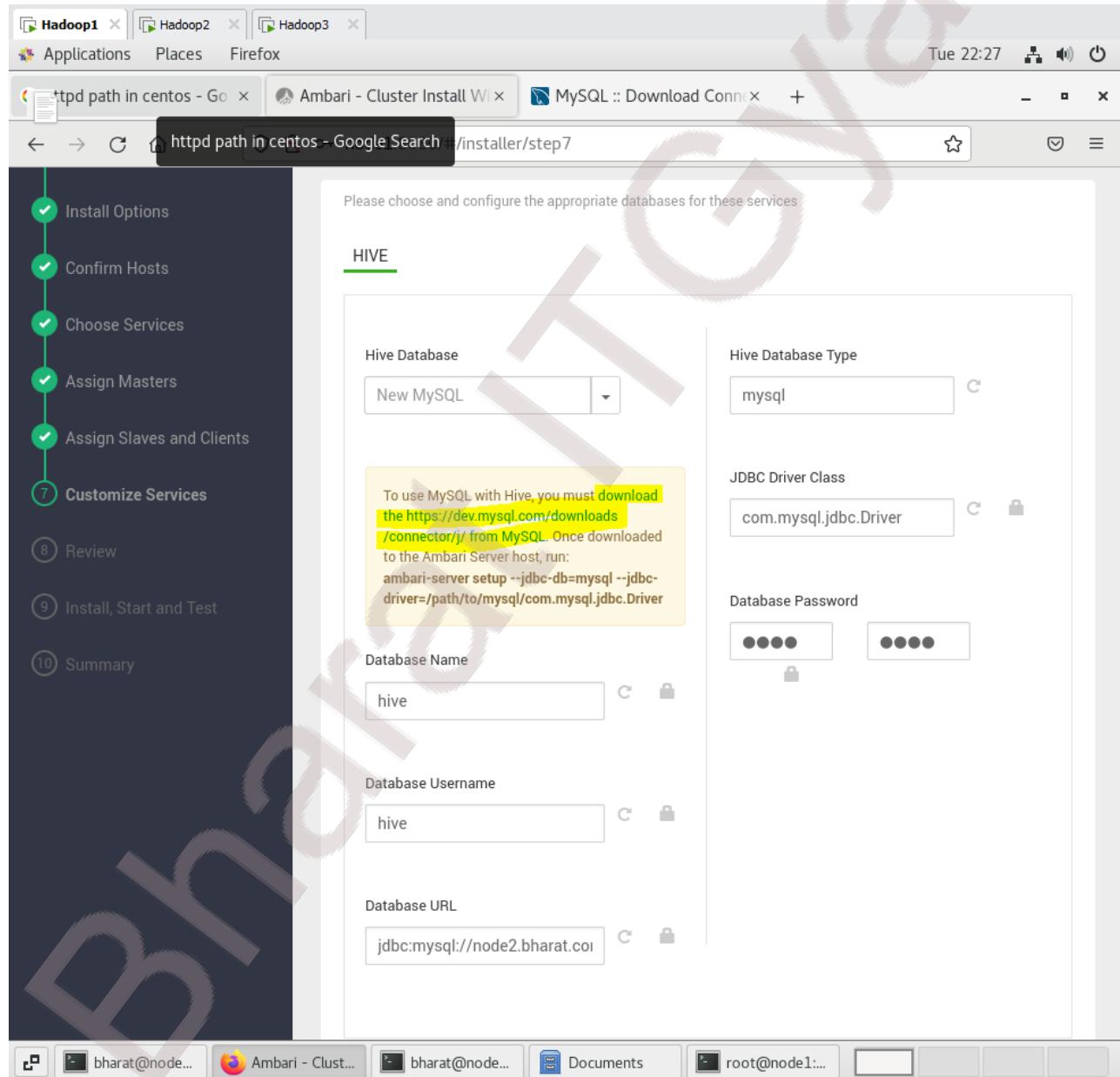
The screenshot shows the Ambari Cluster Install Wizard at step 7: Customize Services. The left sidebar lists steps 1 through 10, with steps 1-6 checked off. The main screen is titled 'CREDENTIALS' and shows configuration fields for three services:

- Grafana Admin:** Username: admin, Password: [REDACTED], Confirm Password: [REDACTED]
- Hive Database:** Username: hive, Password: [REDACTED], Confirm Password: [REDACTED]
- Activity Explorer's:** Username: N/A, Password: [REDACTED], Confirm Password: [REDACTED]

At the bottom, there is a note about Apache License Version 2.0 and a toolbar with icons for bharat@node..., Ambari - Clust..., bharat@node..., Documents, and root@node1:... .

Step 21:- Then copy this Path and paste on notepad for future installation.

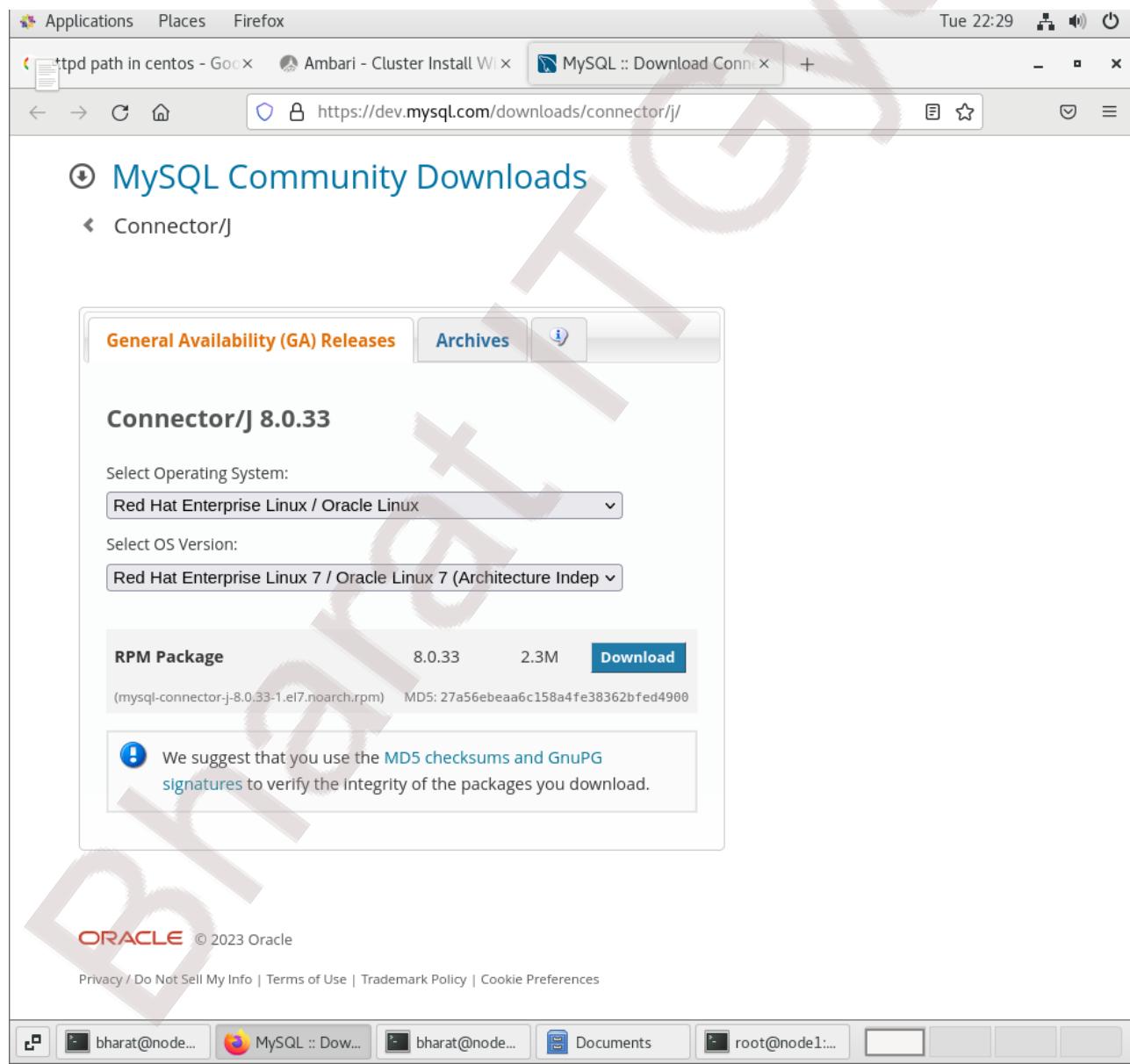
Copied Path :- ambari-server setup --jdbc-db=mysql --jdbc-driver=



Step22:-Then select below options.

Select OS: - **Red Hat Enterprise Linux/Oracle Linux**

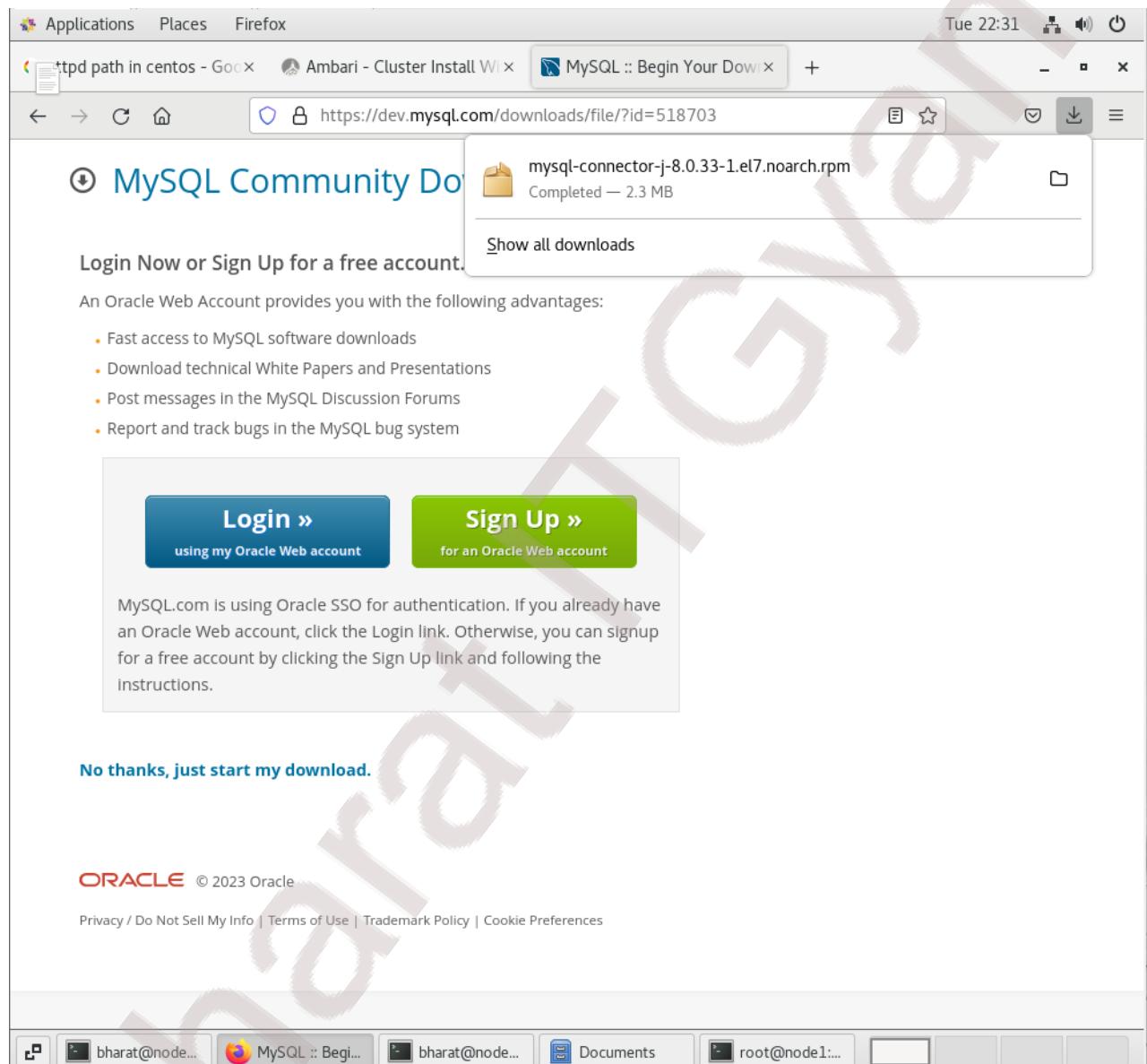
Select OS Version:- **Red Hat Enterprise Linux 7/Oracle Linux7(Architecture indep)**



## Step 24:-Click on No thanks, just start my download



## Step25:-Download mysql-connector



Step 26:-After that go to the terminal and execute below command.

Execute in root user only

1) rpm -i /home/bharat/Downloads/mysql-connector-j-8.0.33-1.el7.noarch.rpm

2) ambari-server setup --jdbc-db=mysql --jdbc-driver=/usr/share/java/mysql-connector-java.jar

Note:-

1) Copied this command in installation process please refer above screenshot .

ambari-server setup --jdbc-db=mysql --jdbc-driver=

2) This is jar file path.

/usr/share/java/mysql-connector-java.jar

Step 27:-Then see the next step.

The screenshot shows the Ambari Cluster Install Wizard interface. On the left, a vertical navigation bar lists steps from 1 to 10: 1. Install Options, 2. Confirm Hosts, 3. Choose Services, 4. Assign Masters, 5. Assign Slaves and Clients, 6. Customize Services (highlighted in green), 7. Review, 8. Install, Start and Test, and 9. Summary. The main panel title is "Please choose and configure the appropriate databases for these services". Under the "HIVE" section, it says "Hive Database" is set to "New MySQL". The "Hive Database Type" is "mysql". The "JDBC Driver Class" is "com.mysql.jdbc.Driver". The "Database Name" is "hive", and the "Database Username" is "hive". The "Database URL" is "jdbc:mysql://node2.bharat.co...". A note in a yellow box states: "To use MySQL with Hive, you must download the https://dev.mysql.com/downloads /connector/j/ from MySQL. Once downloaded to the Ambari Server host, run: ambari-server setup --jdbc-db=mysql --jdbc-driver=/path/to/mysql/com.mysql.jdbc.Driver". The bottom navigation bar includes links for [bharat@n...], Ambari - ..., bharat@n..., Documents, root@no..., Downloads, and several empty tabs.

## Step28:-Then click NEXT

To use MySQL with Hive, you must download the <https://dev.mysql.com/downloads/connector/j/> from MySQL. Once downloaded to the Ambari Server host, run:  
ambari-server setup --jdbc-db=mysql --jdbc-driver=/path/to/mysql/com.mysql.jdbc.Driver

JDBC Driver Class: com.mysql.jdbc.Driver

Database Name: hive

Database Username: hive

Database URL: jdbc:mysql://node2.bharat.co

NEXT →

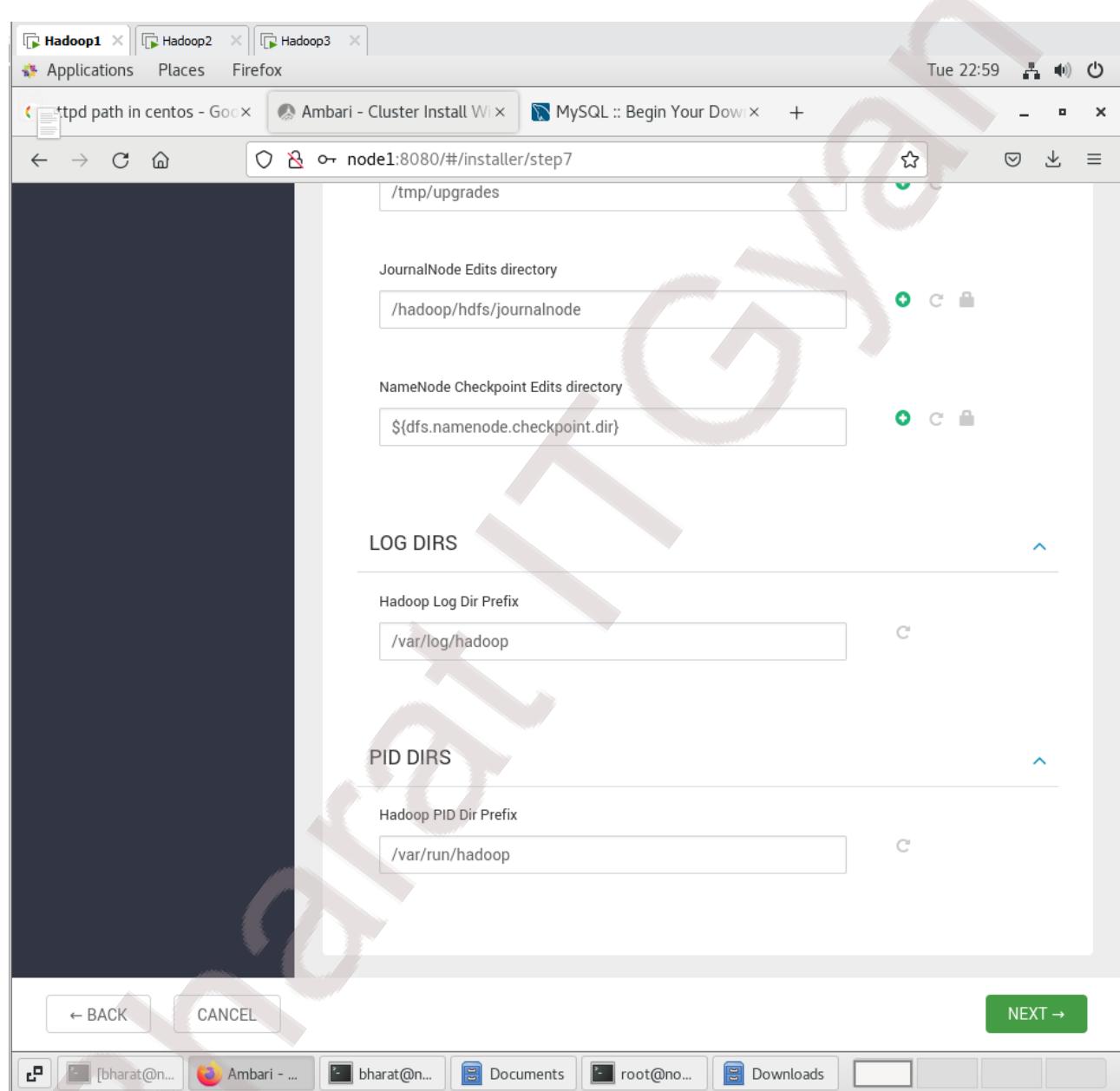
## Step29:- See Next Step

The screenshot shows a Firefox browser window displaying the Ambari Cluster Install Wizard. The title bar indicates it's running on a CentOS system. The main interface is titled 'Installer' and shows a progress bar with 10 steps completed. The current step is 'DIRECTORIES' under the 'ALL CONFIGURATIONS' section. The 'HDFS' tab is selected. The 'DATA DIRS' section contains three entries:

- DataNode directories: /hadoop/hdfs/data (with edit and lock icons)
- NameNode directories: /hadoop/hdfs/namenode (with edit and lock icons)
- SecondaryNameNode Checkpoint directories: /hadoop/hdfs/namesecondary (with edit and lock icons)

Below these, there is a note about the 'NESGateway dump directory'. The bottom of the screen shows the Linux desktop taskbar with various application icons.

Step30:-Then click NEXT.



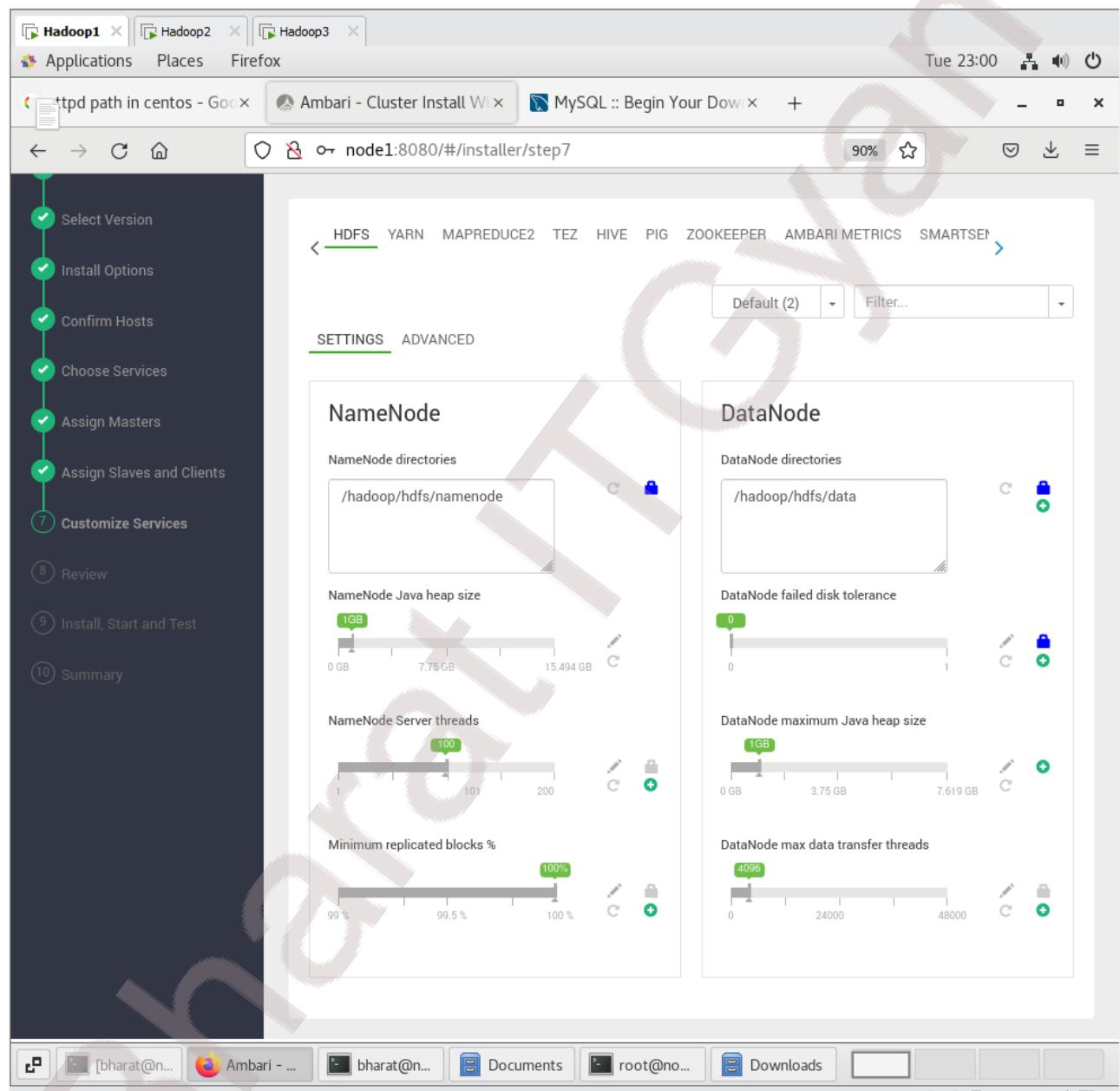
Step31:- Then again click NEXT.

The screenshot shows a Firefox browser window with the URL `node1:8080/#/installer/step7`. The page displays the Ambari Cluster Install Wizard, specifically Step 7: Service Accounts. On the left, a vertical list of steps is shown, with steps 1 through 6 completed (indicated by green checkmarks) and steps 7 through 10 listed below. Step 7 is currently selected. At the bottom of the list, there are buttons for 'BACK', 'CANCEL', and 'NEXT →'. The main content area contains a table mapping service accounts to usernames:

Users/Groups	Usernames
Smoke User	ambari-qa
Hadoop Group	hadoop
Ambari Metrics User	ams
HDFS User	hdfs
Proxy User Group	users
Hive User	hive
Mapreduce User	mapred
Tez User	tez
Yarn ATS User	yarn-ats
Yarn User	yarn
ZooKeeper User	zookeeper

At the top of the page, there are tabs for Hadoop1, Hadoop2, and Hadoop3, and a status bar showing the date as Tue 22:59.

## Step32:- Scroll Down



Step33:- Then click NEXT.

The screenshot shows the Ambari Cluster Install Wizard at Step 7: HDFS Settings. The left sidebar lists the following steps:

- Install Options (Completed)
- Confirm Hosts (Completed)
- Choose Services (Completed)
- Assign Masters (Completed)
- Assign Slaves and Clients (Completed)
- Customize Services (Selected)
- Review
- Install, Start and Test
- Summary

The main content area is titled "HDFS" and shows two sections: "NameNode" and "DataNode".

**NameNode Settings:**

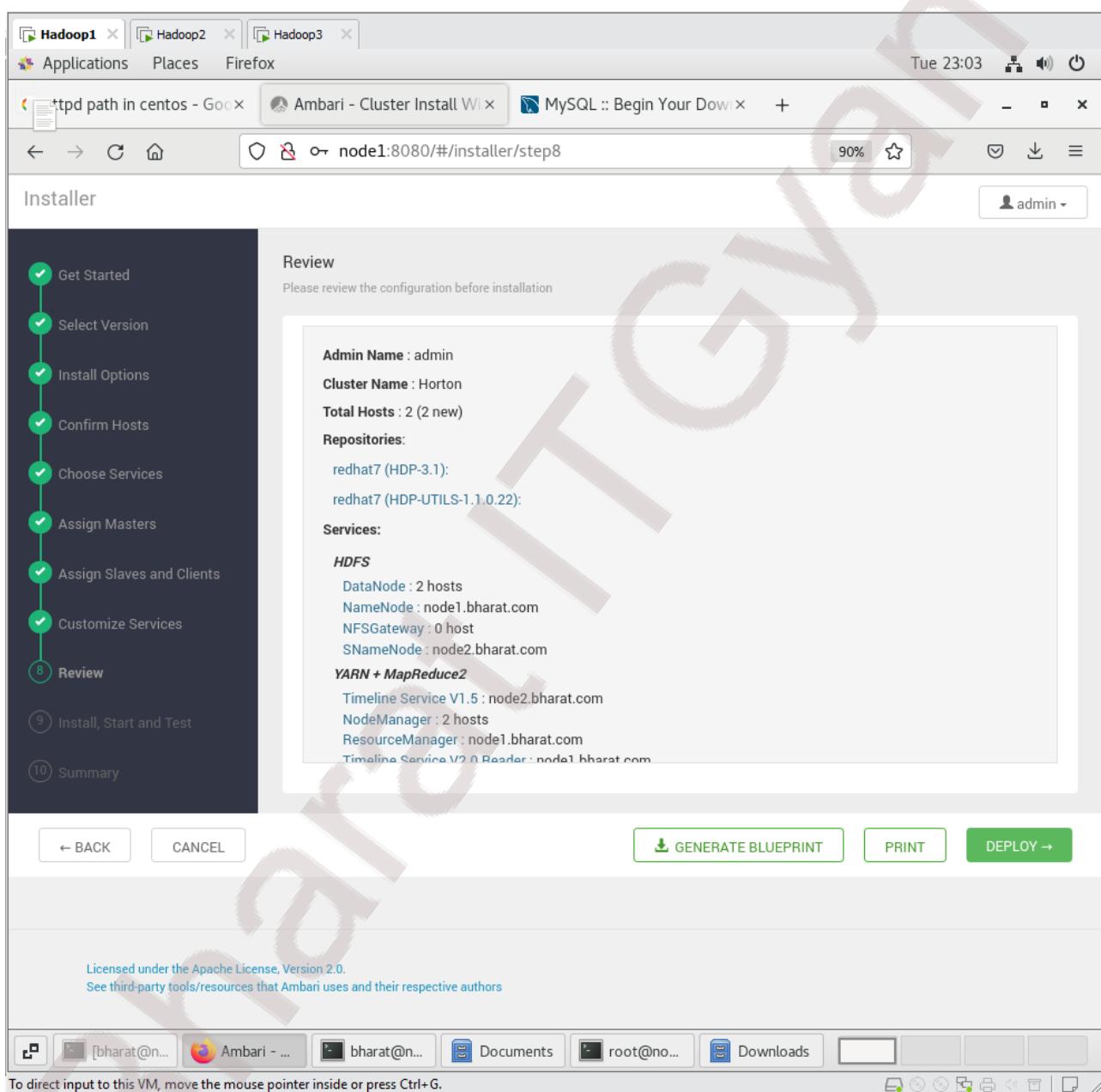
- NameNode directories: /hadoop/hdfs/namenode
- NameNode Java heap size: 1GB (Slider value: 1GB, Range: 0 GB to 15.494 GB)
- NameNode Server threads: 100 (Slider value: 100, Range: 1 to 200)
- Minimum replicated blocks %: 100% (Slider value: 100%, Range: 99 % to 100 %)

**DataNode Settings:**

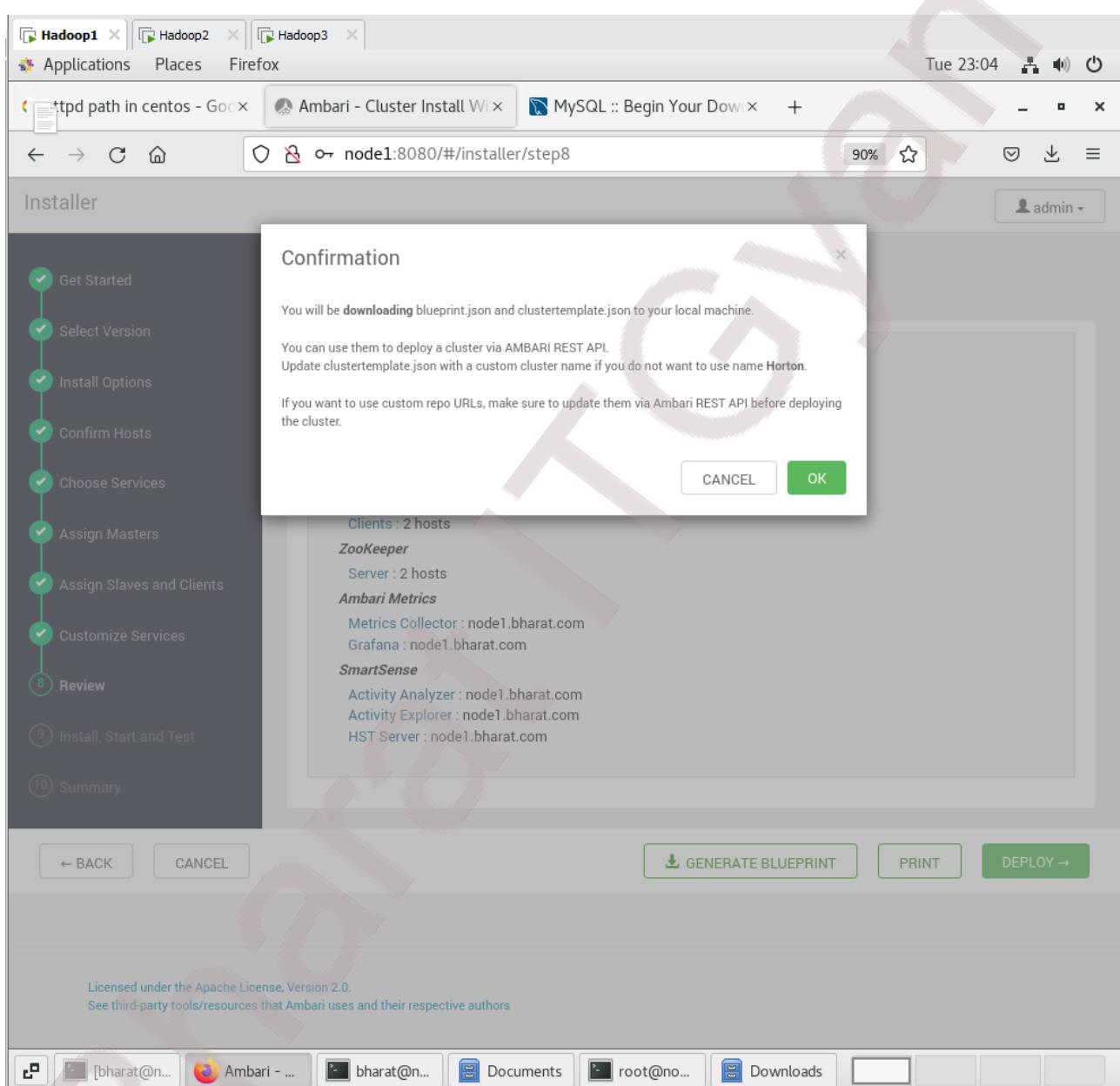
- DataNode directories: /hadoop/hdfs/data
- DataNode failed disk tolerance: 0 (Slider value: 0, Range: 0 to 1)
- DataNode maximum Java heap size: 1GB (Slider value: 1GB, Range: 0 GB to 7.619 GB)
- DataNode max data transfer threads: 4096 (Slider value: 4096, Range: 0 to 48000)

At the bottom of the page are "BACK", "CANCEL", and "NEXT →" buttons. The "NEXT →" button is highlighted in green.

## Step34:- Click on DEPLOY.



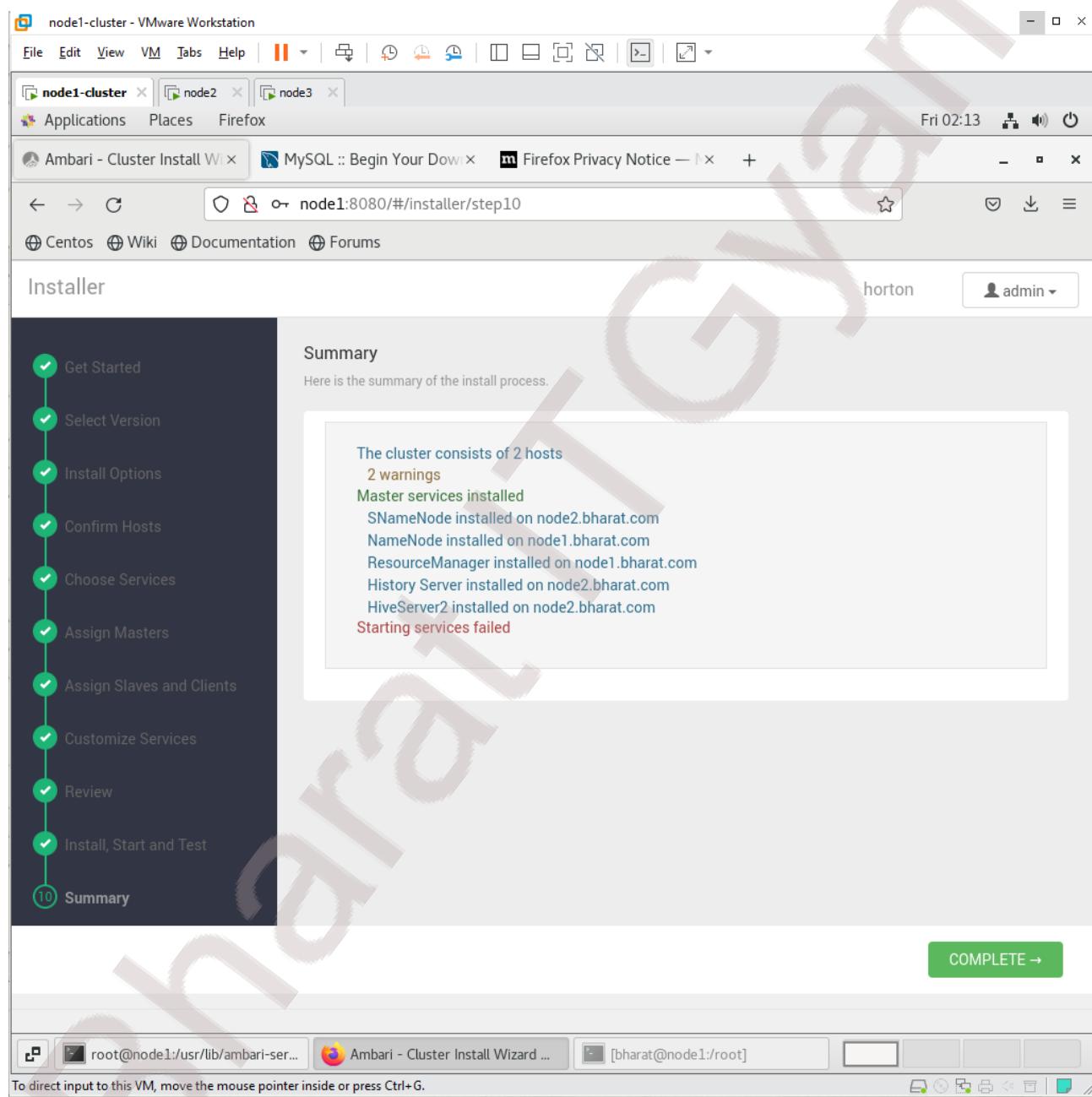
## Step35: Click on OK.



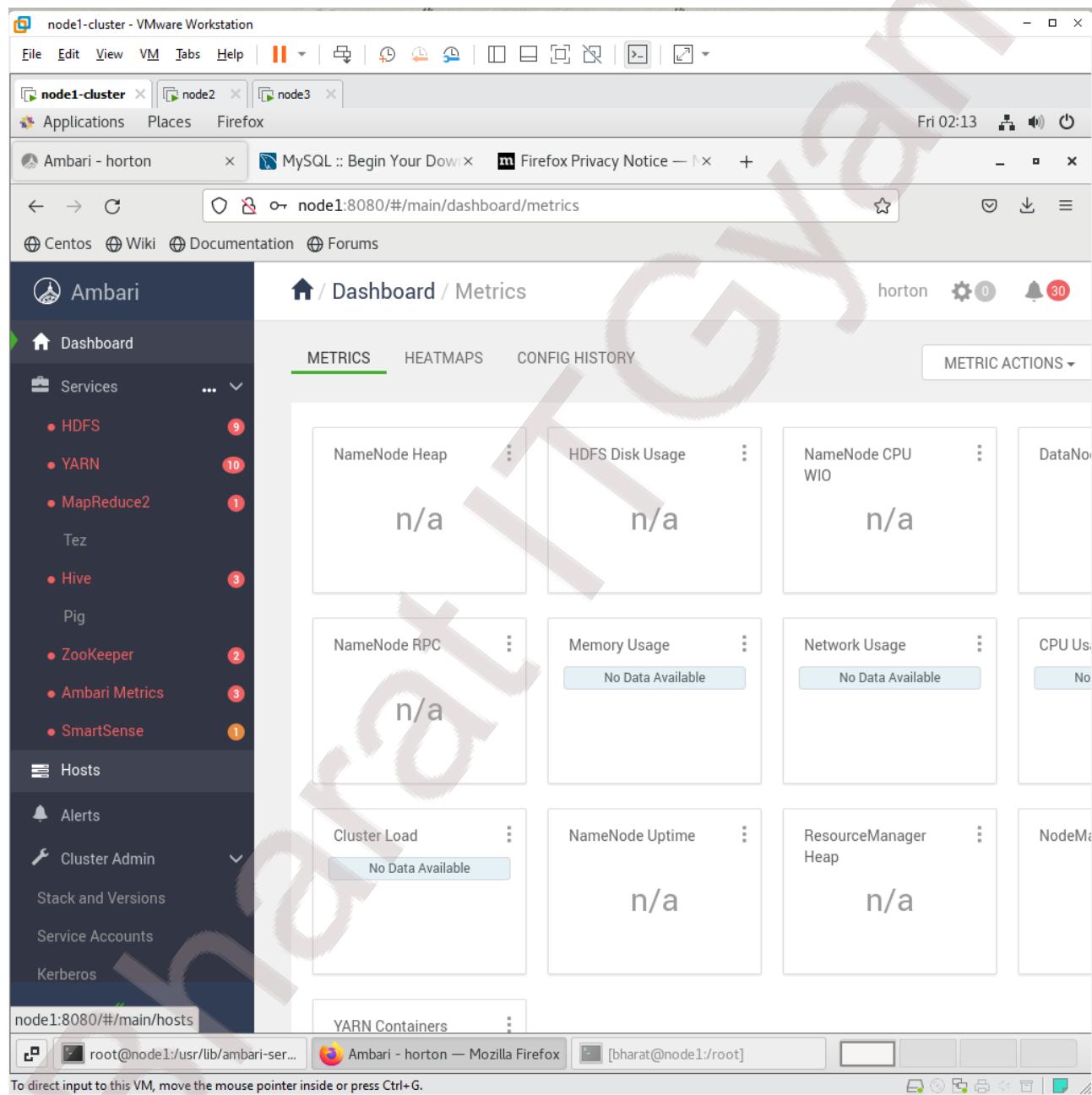
## Step36: Click on NEXT.

The screenshot shows a VMware Workstation window titled "node1-cluster - VMware Workstation". Inside, a Firefox browser is open to the "Ambari - Cluster Install Wizard" at "node1:8080/#/installer/step9". The left sidebar lists steps 1 through 10, with steps 1-8 checked and step 9 highlighted. The main content area is titled "Install, Start and Test" and displays a progress bar at 100% overall. It shows two hosts: "node1.bharat.com" and "node2.bharat.com", both with 100% status and "Warnings encountered" messages. A message box at the bottom states "Installed and started the services with some warnings." A green "NEXT →" button is visible at the bottom right. The bottom of the screen shows the VMware interface with tabs for "root@node1:/usr/lib/ambari-ser...", "Ambari - Cluster Install Wizard ...", and "[bharat@node1:/root]".

Step37:- Click on COMPLETE.



## Step38:- See the Dashboard.



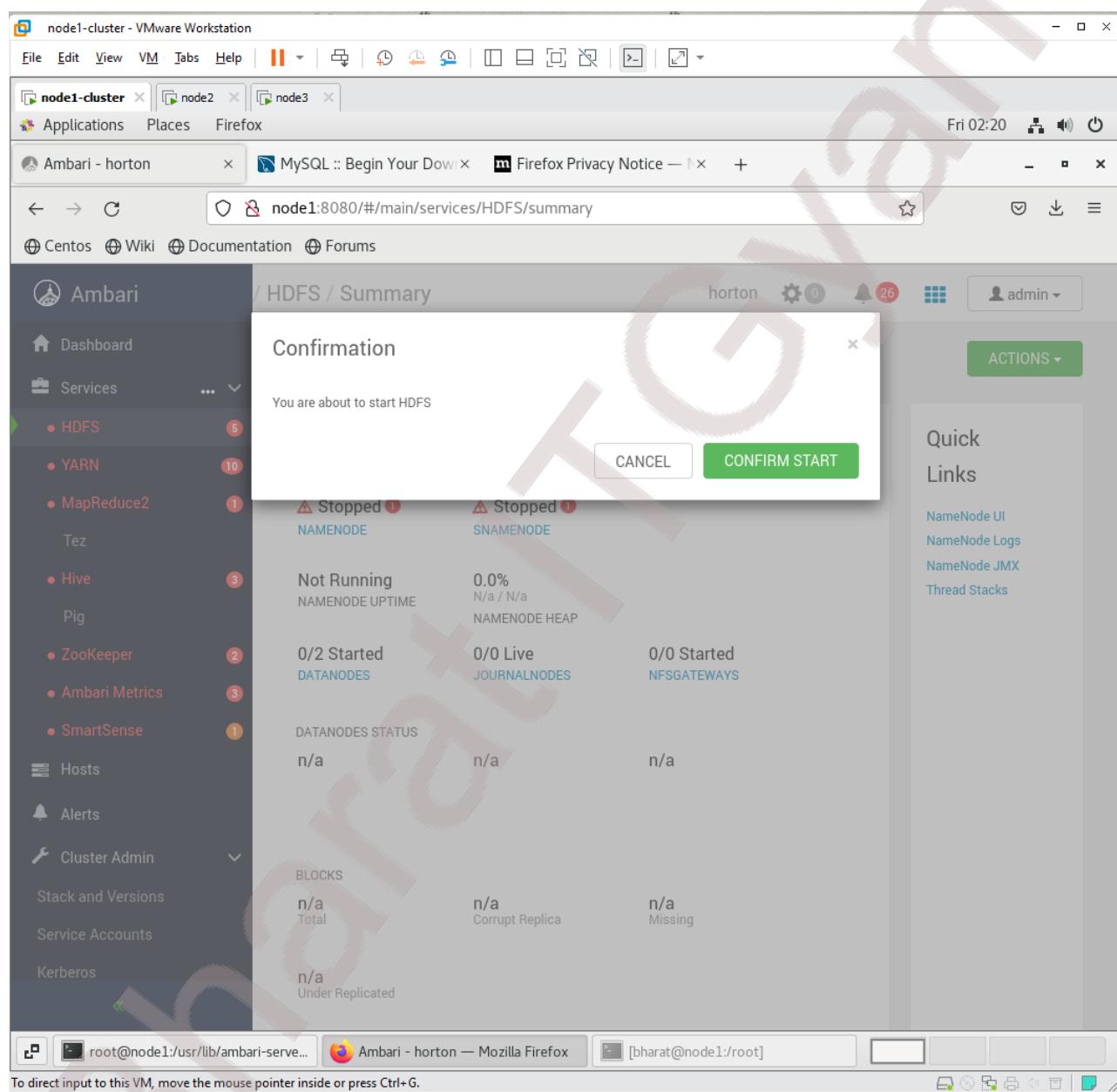
Step39:-Select HDFS and click on action button then start the services

The screenshot shows the Ambari web interface for a Hadoop cluster. The left sidebar lists services: HDFS (5 issues), YARN (10 issues), MapReduce2 (1 issue), Tez, Hive (3 issues), Pig, ZooKeeper (2 issues), Ambari Metrics (3 issues), SmartSense (1 issue), Hosts, Alerts, Cluster Admin, Stack and Versions, Service Accounts, and Kerberos. The main panel is titled '/ HDFS / Summary' and displays the following metrics:

- NAMENODE:** Status: Stopped (1 issue), Uptime: Not Running, Uptime: 0.0%, Heap: N/a / N/a.
- DATANODES:** Status: 0/2 Started.
- JOURNALNODES:** Status: 0/0 Live.
- NFSGATEWAYS:** Status: 0/0 Started.
- BLOCKS:** Total: n/a, Corrupt Replica: n/a, Missing: n/a.
- DATANODES STATUS:** n/a.
- DATASTORES:** Under Replicated: n/a.

A context menu is open on the right side under the 'ACTIONS' dropdown, listing options: Start, Stop, Restart All, Restart DataNodes, Move NameNode, Move SNameNode, Enable NameNode HA, Add New HDFS Namespace, Run Service Check, Turn On Maintenance Mode, Rebalance HDFS, Refresh Nodes, Download Client Configs, and Delete Service. The browser tabs at the top show 'Ambari - horton', 'MySQL :: Begin Your Down...', and 'Firefox Privacy Notice'.

## Step40:- Click on CONFIRM START.



## Step41:- See Only.

The screenshot shows the Ambari HDFS Summary page. At the top, there are tabs for node1-cluster, node2, and node3. Below the tabs, the URL is node1:8080/#/main/services/HDFS/summary. The page title is "Background Operations". A table lists six background operations:

Operations	Status	User	Start Time	Duration
Start HDFS	46%	admin	Today 02:21	2s
Stop HDFS	100%	admin	Today 02:20	3s
Start HDFS	100%	admin	Today 02:17	2m 2s
Start YARN	100%	admin	Today 02:16	5s
Start Services	100%	admin	Today 02:10	35s
Install Services	100%	admin	Today 02:05	5m 8s

Below the table, there is a checkbox for "Do not show this dialog again when starting a background operation" and an "OK" button. At the bottom of the page, there are sections for Stack and Versions, Service Accounts, and Kerberos, each showing "n/a". The status bar at the bottom indicates "root@node1:/usr/lib/ambari-server..." and "[bharat@node1:root]".

Step42:- Select YARN and click on ACTION button and start services.

The screenshot shows the Ambari interface for the YARN service. The left sidebar lists various services, with 'YARN' selected. The main panel displays service status: 'TIMELINE SERVICE V1.5' and 'RESOURCEMANAGER' are stopped (red), while 'YARN REGISTRY DNS' is also stopped. There are 2 installed YARN clients. The 'ACTIONS' dropdown menu is open, showing options like 'Start', 'Stop', and various 'Move' and 'Restart' commands for the listed services.

YARN / Summary

horton admin

ACTIONS ▾

- Start
- Stop
- Refresh YARN Capacity Scheduler
- Restart All
- Restart NodeManagers
- Move Timeline Service V1.5
- Move ResourceManager
- Move Timeline Service V2.0 Reader
- Move YARN Registry DNS
- Enable ResourceManager HA
- Run Service Check
- Turn On Maintenance Mode
- Download Client Configs
- Delete Service

HEATMAPS CONFIGS METRICS

YARN / Summary

horton admin

ACTIONS ▾

Stopped 1 TIMELINE SERVICE V1.5 Stopped 1 RESOURCEMANAGER Stopped 2 TIMELINE SERVICE V2.0 READER

Stopped 1 YARN REGISTRY DNS

0/2 Started NODEMANAGERS 2 Installed YARN CLIENTS

Not Running RESOURCEMANAGER UPTIME

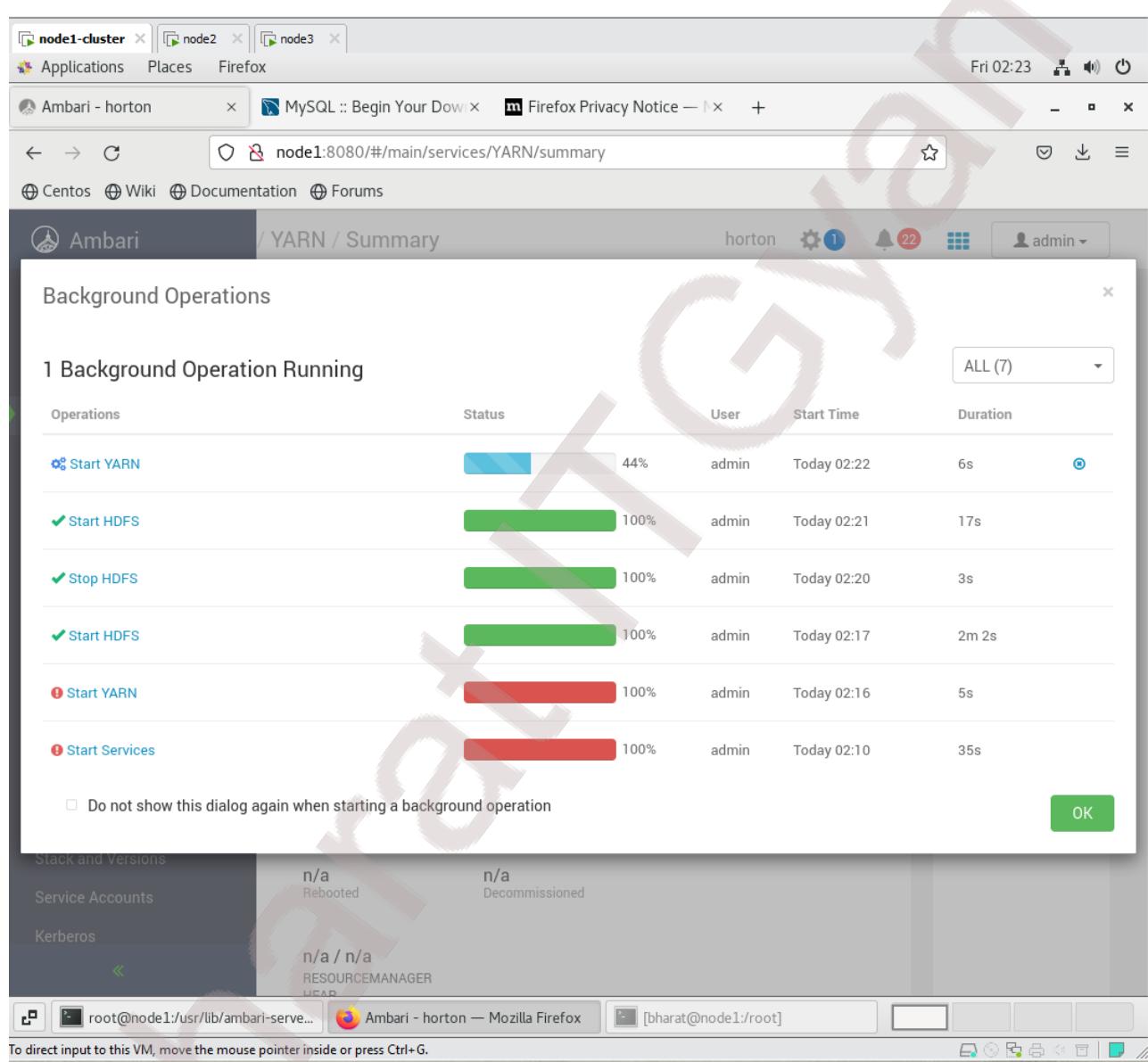
NODEMANAGERS STATUS

Active	Lost	Unhealthy
n/a	n/a	n/a
Rebooted	Decommissioned	

RESOURCEMANAGER HEAD

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Step43:-YARN→ Click on OK.



After that do the all reaming process same for all module.

## Step44:- MapReduce2

The screenshot shows the Ambari web interface running in a Firefox browser on a Linux desktop. The title bar indicates the system is a 'Centos' host named 'horton'. The main content area displays a 'Background Operations' dialog. The dialog lists six background operations:

Operations	Status	User	Start Time	Duration
Start MapReduce2	78% (blue progress bar)	admin	Today 02:29	2s
Start YARN	100% (red progress bar)	admin	Today 02:22	6m 44s
Start HDFS	100% (green progress bar)	admin	Today 02:21	17s
Stop HDFS	100% (green progress bar)	admin	Today 02:20	3s
Start HDFS	100% (green progress bar)	admin	Today 02:17	2m 2s
Start YARN	100% (red progress bar)	admin	Today 02:16	5s

Below the table, there is a checkbox labeled 'Do not show this dialog again when starting a background operation' and a green 'OK' button.

The Ambari sidebar on the left shows 'node1-cluster' selected, along with links for Applications, Places, and Firefox. The bottom of the screen shows the Linux desktop environment with icons for root terminal, file manager, and system tray.

## Step45:-Hive

The screenshot shows the Ambari web interface running in a Firefox browser. The title bar indicates the browser is on a MySQL page. The main content area displays a 'Background Operations' dialog box. The dialog lists six operations under '1 Background Operation Running':

Operations	Status	User	Start Time	Duration
Start Hive	58%	admin	Today 02:31	4s
Start MapReduce2	100%	admin	Today 02:29	1m 21s
Start YARN	100%	admin	Today 02:22	6m 44s
Start HDFS	100%	admin	Today 02:21	17s
Stop HDFS	100%	admin	Today 02:20	3s
Start HDFS	100%	admin	Today 02:17	2m 2s

Below the table, there is a checkbox for 'Do not show this dialog again when starting a background operation' and an 'OK' button. The Ambari sidebar on the left shows 'Stack and Versions', 'Service Accounts', and 'Kerberos'. The bottom of the screen shows the Linux terminal prompt 'root@node1:/usr/lib/ambari-server...' and the Firefox status bar.

## Step46:-ZooKeeper

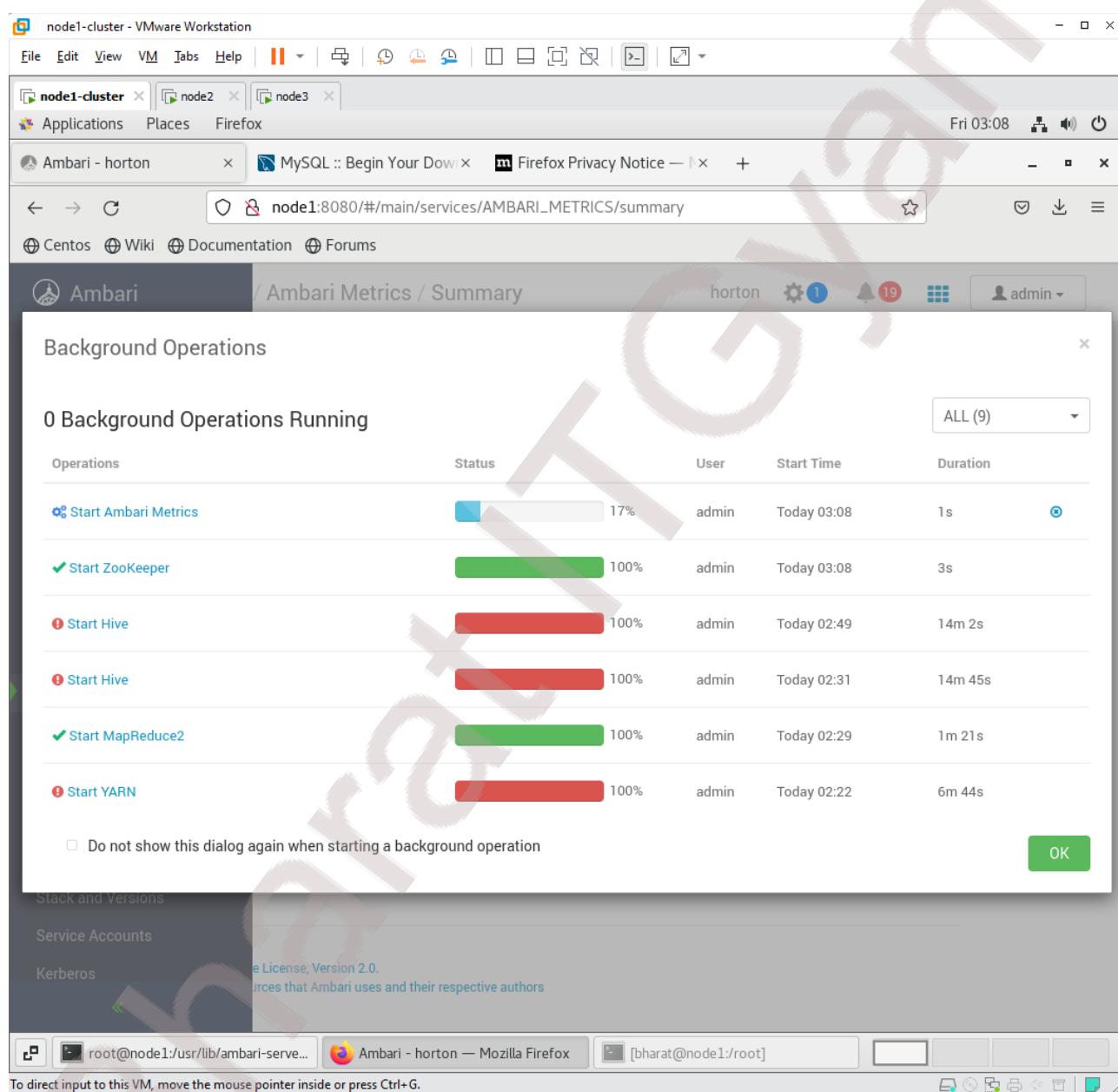
The screenshot shows the Ambari web interface running in a Firefox browser window titled "node1-cluster - VMware Workstation". The URL in the address bar is "node1:8080/#/main/services/ZOOKEEPER/summary". The main content area displays a "Background Operations" dialog box. The dialog lists six operations under "1 Background Operation Running":

Operations	Status	User	Start Time	Duration
✓ Start ZooKeeper	100% (green)	admin	Today 03:08	3s
⚠ Start Hive	100% (red)	admin	Today 02:49	14m 2s
⚠ Start Hive	100% (red)	admin	Today 02:31	14m 45s
✓ Start MapReduce2	100% (green)	admin	Today 02:29	1m 21s
⚠ Start YARN	100% (red)	admin	Today 02:22	6m 44s
✓ Start HDFS	100% (green)	admin	Today 02:21	17s

Below the table, there is a checkbox labeled "Do not show this dialog again when starting a background operation" and a green "OK" button.

The Ambari sidebar on the left includes links for "Stack and Versions", "Service Accounts", and "Kerberos". The bottom of the screen shows the terminal prompt "root@node1:/usr/lib/ambari-server/" and the Firefox status bar indicating "[bharat@node1:/root]".

## Step47:-Ambari Metrics



## Step48:-SmartSense

The screenshot shows a Firefox browser window running on a VMware Workstation. The title bar says "node1-cluster - VMware Workstation". The address bar shows "node1:8080/#/main/services/SMARTSENSE/summary". The main content is a "Background Operations" dialog box.

**Background Operations**

**1 Background Operation Running**

Operations	Status	User	Start Time	Duration
Start SmartSense	38%	admin	Today 03:10	4s
Start Ambari Metrics	100%	admin	Today 03:08	1m 6s
Start ZooKeeper	100%	admin	Today 03:08	3s
Start Hive	100%	admin	Today 02:49	14m 2s
Start Hive	100%	admin	Today 02:31	14m 45s
Start MapReduce2	100%	admin	Today 02:29	1m 21s

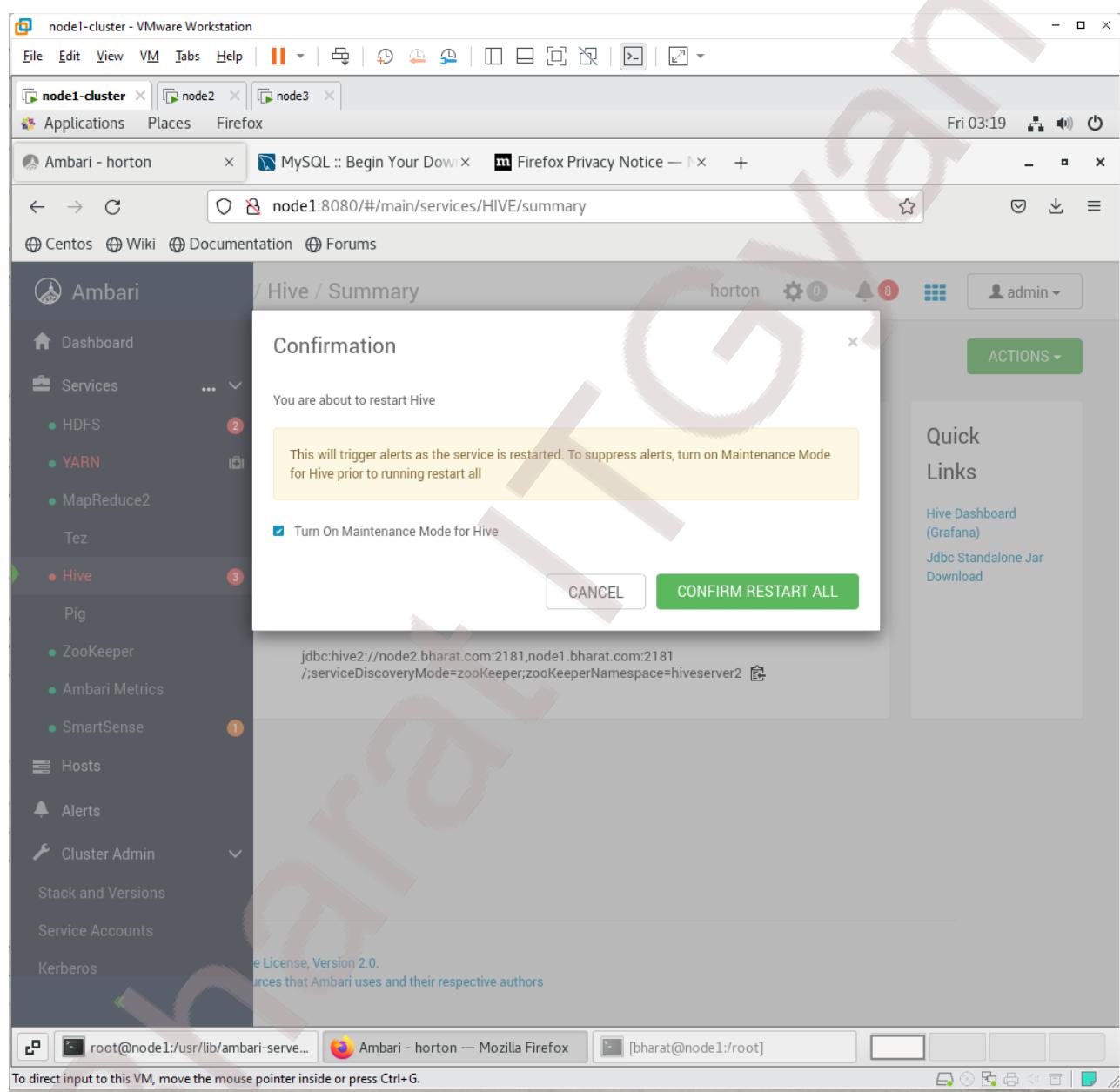
Do not show this dialog again when starting a background operation OK

Stack and Versions  
Service Accounts  
Kerberos  
Apache License, Version 2.0.  
Sources that Ambari uses and their respective authors

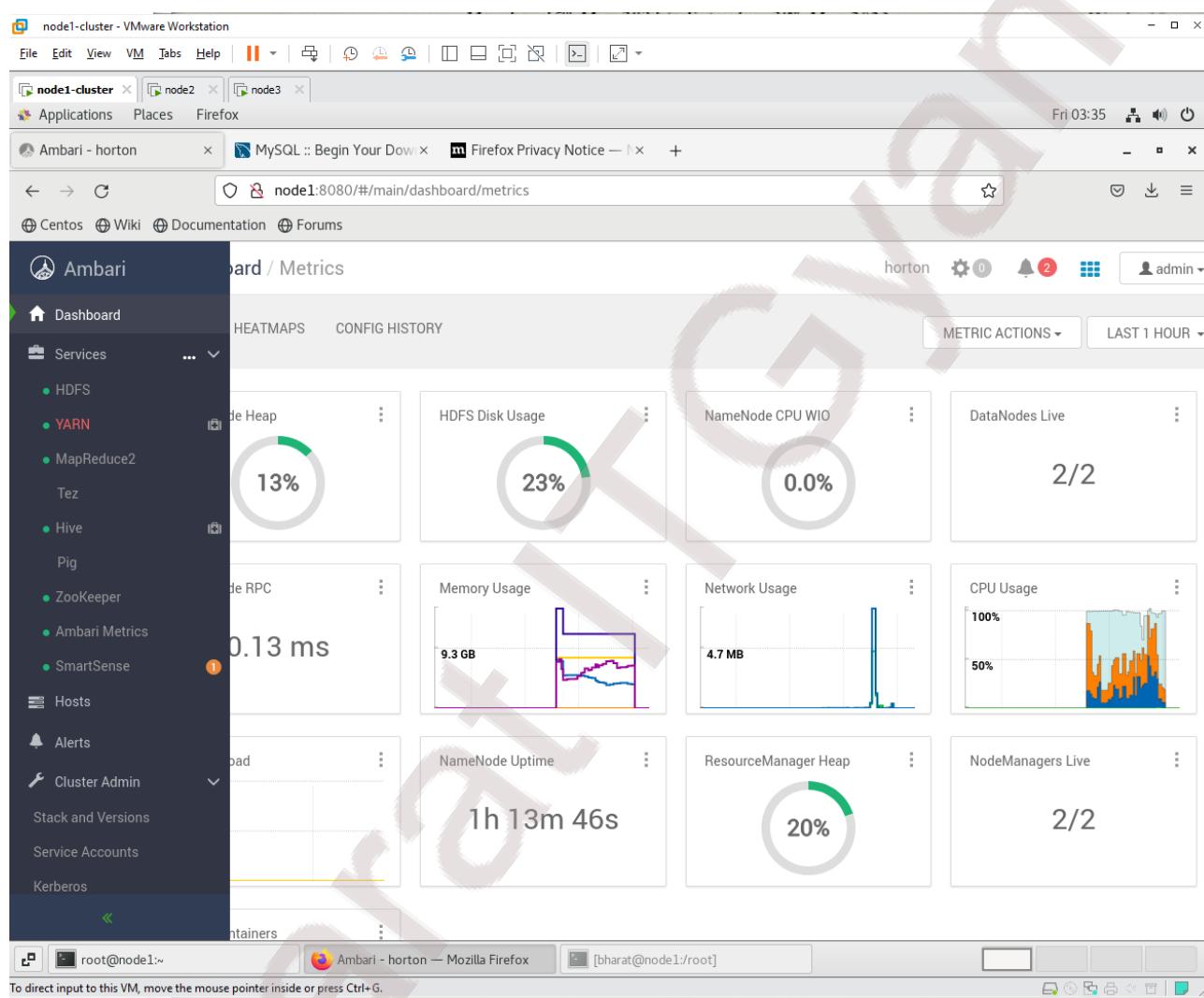
root@node1:/usr/lib/ambari-server... Ambari - horton — Mozilla Firefox [bharat@node1:/root]

To direct input to this VM, move the mouse pointer inside or press Ctrl+G.

Step49:- Then click on CONFIRM RESTART ALL.



## Step50:- Successfully Completed Ambari installation.



## Installation process step by step.

## Node1-(cluster server)

```
yum update -y
yum upgrade -y
hostnamectl set-hostname node1.bharat.com
init 6
yum -y install httpd
systemctl status httpd
systemctl start httpd
systemctl enable httpd
systemctl status httpd
yum -y install repolist*
systemctl stop firewalld.service
systemctl disable firewalld.service
getenforce
vim /etc/selinux/config
getenforce
init 6
vim /etc/hosts
    192.168.20.158 node1 node1.bharat.com
    192.168.20.159 node2 node2.bharat.com
    192.168.20.160 node3 node3.bharat.com
:wq
rsync /etc/hosts root@node2:/etc/hosts
rsync /etc/hosts root@node3:/etc/hosts

cd /var/www/html
ls
tar -xvf /root/hdp3.1.0/ambari-2.7.3.0-centos7.tar.gz
ls
cd ambari/
ls
cd centos7/2.7.3.0-139
ls
ls -al
cp ambari.repo /etc/yum.repos.d/
ll /etc/yum.repos.d/
cd /var/www/html/
ls
vim /etc/yum.repos.d/ambari.repo
baseurl=http://node1.bharat.com/ambari/centos7/2.7.3.0-139/
gpgcheck=0
:wq
createrepo ambari/
yum repolist
```

```
yum update
yum -y install ambari-server.x86_64
cd
ambari-server setup -s
ambari-server start
rsync /etc/yum.repos.d/ambari.repo root@node2:/etc/yum.repos.d
rsync /etc/yum.repos.d/ambari.repo root@node3:/etc/yum.repos.d
ambari-server status
ambari-server start
yum -y install ambari-agent.x86_64
ambari-agent status
ambari-agent start
vim /etc/ambari-agent/conf/ambari-agent.ini
[server]
hostname=node1.bharat.com
ambari-agent status
After that we can go to the webserver and put there
InChrome: node1:8080
username- admin
password- admin
then tar another 2 packages
HDP-3.1.0.0
HDP-UTILS-1.1.0
tar -xvf /root/hdp3.1.0/HDP-3.1.0.0-centos7-rpm.tar.gz
tar -xvf /root/hdp3.1.0/HDP-UTILS-1.1.0.22-centos7.tar.gz
createrepo HDP
createrepo HDP-UTILS
cp HDP/centos7/3.1.0.0-78/hdp.repo /etc/yum.repos.d/
yum repolist
vim /etc/yum.repos.d/hdp.repo
[HDP-3.1.0.0]
name=HDP Version - HDP-3.1.0.0
baseurl=http://node1.bharat.com/HDP/centos7/3.1.0.0-78/
gpgcheck=0

[HDP-UTILS-1.1.0.22]
name=HDP-UTILS Version - HDP-UTILS-1.1.0.22
baseurl=http://node1.bharat.com/HDP-UTILS/centos7/1.1.0.22/
gpgcheck=0

rsync /etc/yum.repos.d/ambari.repo root@node2:/etc/yum.repos.d
rsync /etc/yum.repos.d/ambari.repo root@node3:/etc/yum.repos.d
```

```
[root@node1 ~]# cd /usr/lib/ambari-server/web/javascripts/
[root@node1 javascripts]# rpm -i /root/Downloads/mysql-connector-j-8.0.33-1.el7.noarch.rpm
```

then copy the ambari path on

```
ambari-server setup --jdbc-db=mysql --jdbc-driver=/usr/share/java/mysql-connector-java.jar
```

## troubleleshooting

go to the below path

```
cd /usr/lib/ambari-server/web/javascripts
```

and take backup app.js file

```
cp app.js app.js_backup
```

```
*****  
39889  /**  
39890  * Use Local Repo if some network issues exist  
39891  */  
39892  onNetworkIssuesExist: function () {  
39893    if (this.get('networkIssuesExist')) {  
39894      this.get('content.stacks').forEach(function (stack) {  
39895        stack.setProperties({  
39896          usePublicRepo: false,  
39897          useLocalRepo: true  
39898        });  
39899        stack.cleanReposBaseUrls();  
39900      });  
39901    }  
39902  }.observes('networkIssuesExist'),
```

Replace the above stanzas with the following:

```
/**  
 * Use Local Repo if some network issues exist  
 */  
onNetworkIssuesExist: function () {  
  if (this.get('networkIssuesExist')) {  
    this.get('content.stacks').forEach(function (stack) {  
      if(stack.get('useLocalRepo') != true){  
        stack.setProperties({  
          usePublicRepo: false,  
          useLocalRepo: true  
        });  
        stack.cleanReposBaseUrls();  
      }  
    });  
  }  
}.observes('networkIssuesExist'),
```

```
*****
```

Reset the Ambari Server:

```
ambari-server stop  
ambari-server reset  
ambari-server start
```

## Node2:- Installation Process

```
yum update -y  
yum upgrade -y  
hostnamectl set-hostname node2.bharat.com  
init 6  
systemctl stop firewalld.service  
systemctl disable firewalld.service  
vim /etc/selinux/config  
    Selinux=disabled  
    :wq  
init 6  
yum install -y ambari-agent.x86_64  
ambari-agent status  
ambari-agent start  
ambari-agent status  
vim /etc/ambari-agent/conf/ambari-agent.ini  
[server]  
hostname=node1.bharat.com  
ambari-agent status
```

## Node3:- Installation Process

```
yum update -y  
yum upgrade -y  
hostnamectl set-hostname node3.bharat.com  
init 6  
systemctl disable firewalld.service  
vi /etc/selinux/config  
getenforce  
init 6  
systemctl stop firewalld.service  
systemctl disable firewalld.service  
systemctl status firewalld.service  
cat /etc/hosts  
yum install -y ambari-agent.x86_64  
vim /etc/ambari-agent/conf/ambari-agent.ini  
[server]  
hostname=node1.bharat.com  
ambari-agent status  
ambari-agent start  
ambari-agent status
```