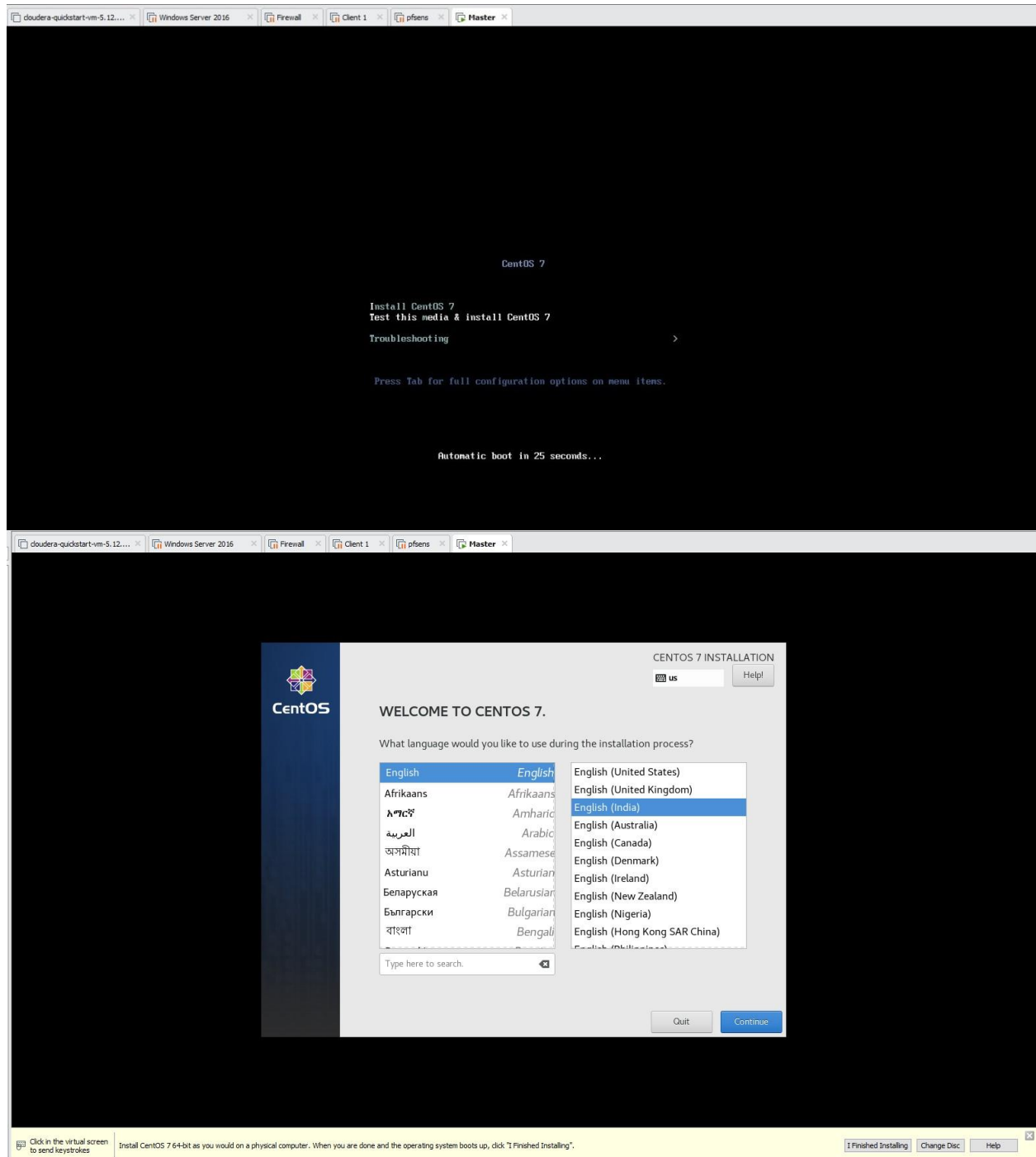
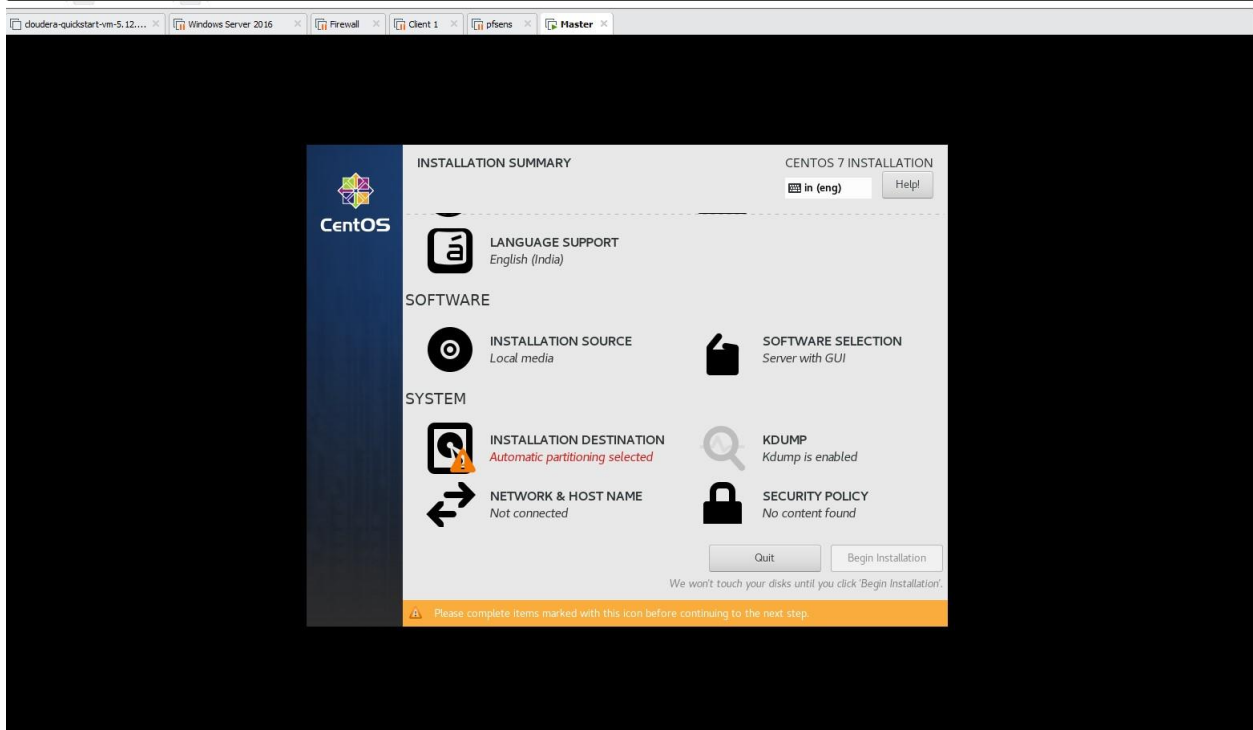
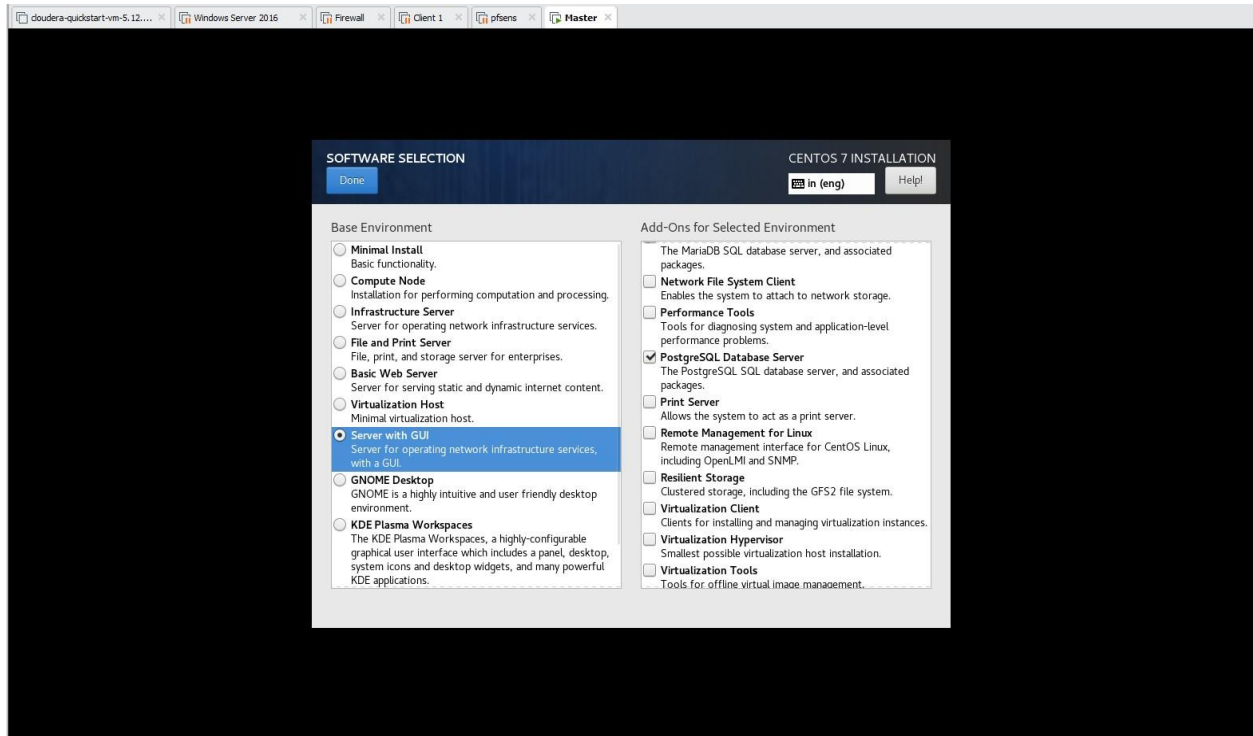


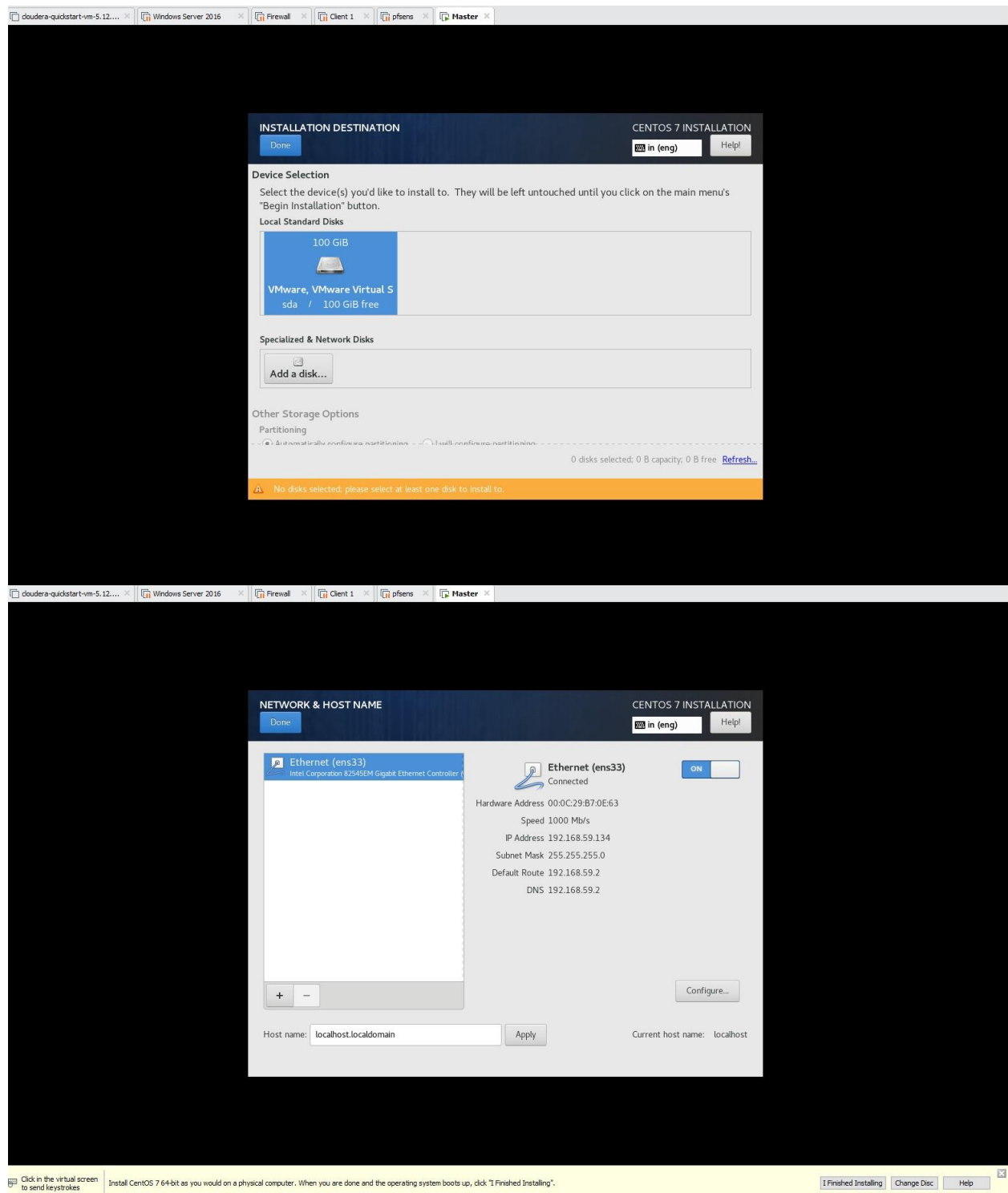
## Cluster Installation:-

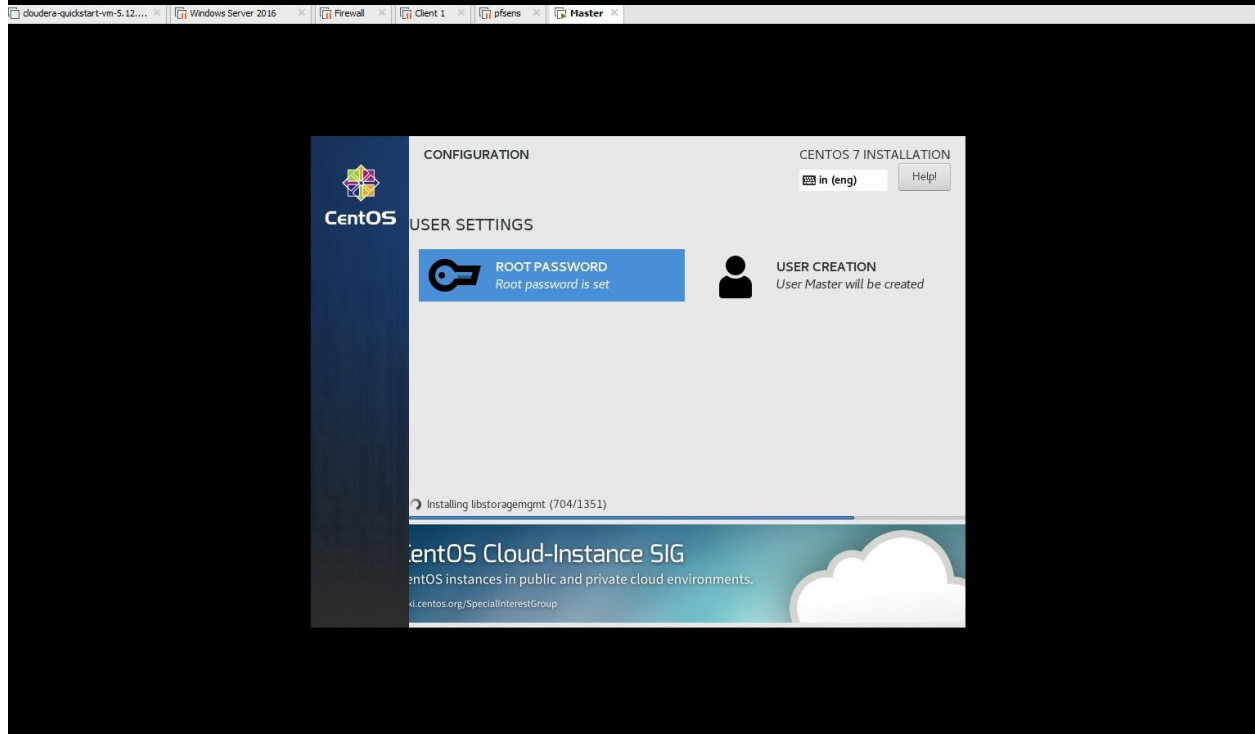
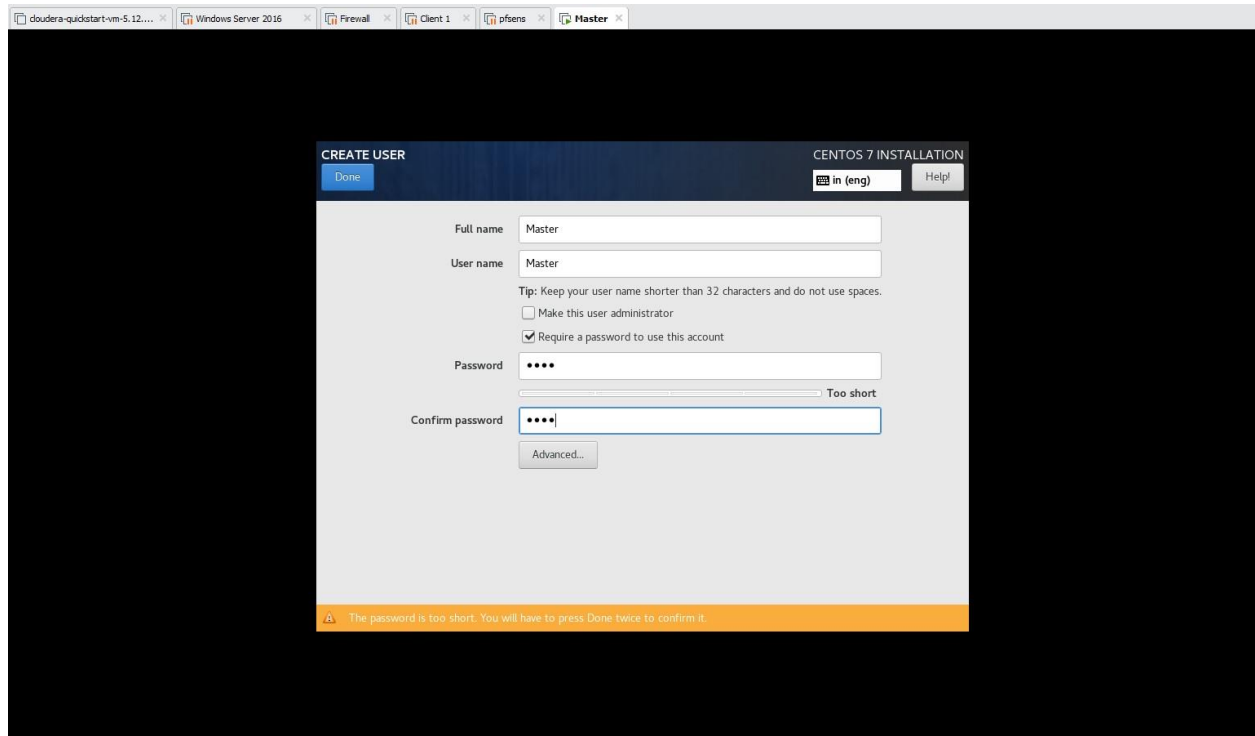
### Step1:- Vm installation

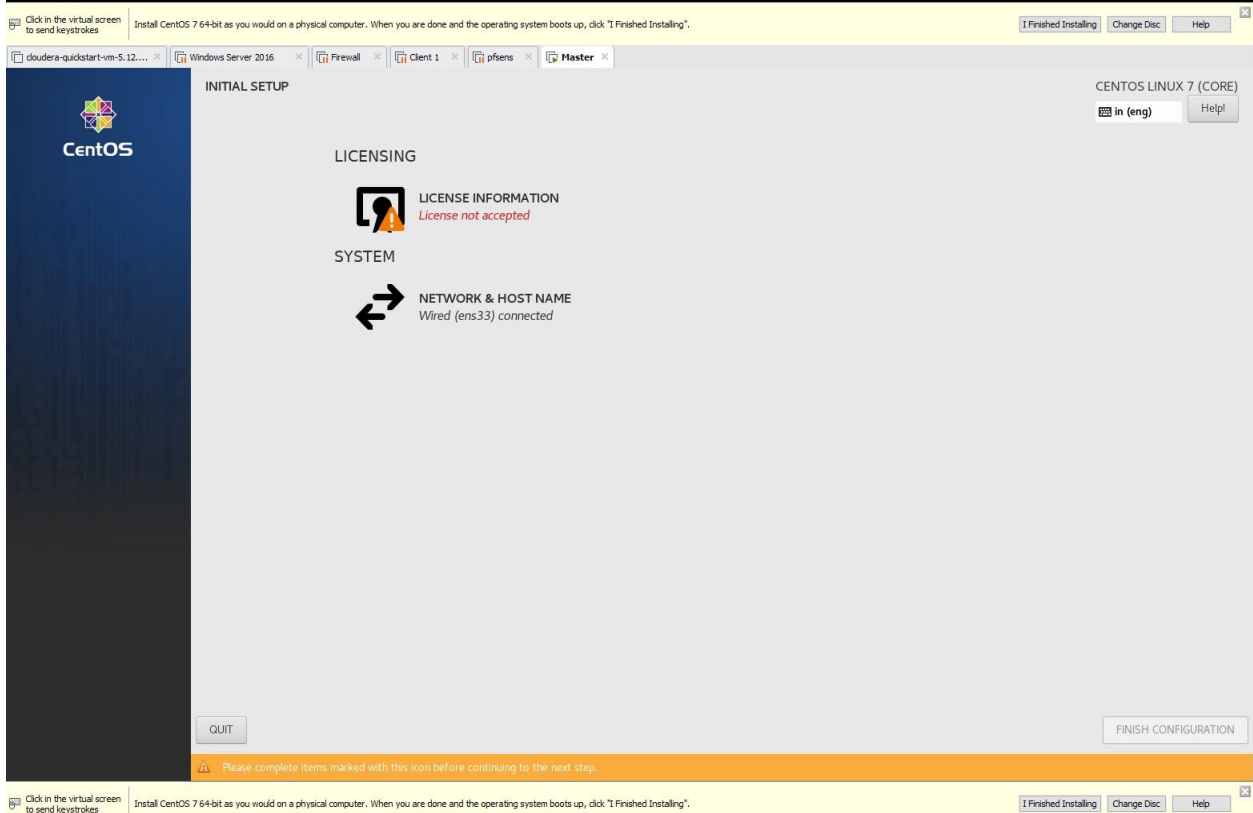
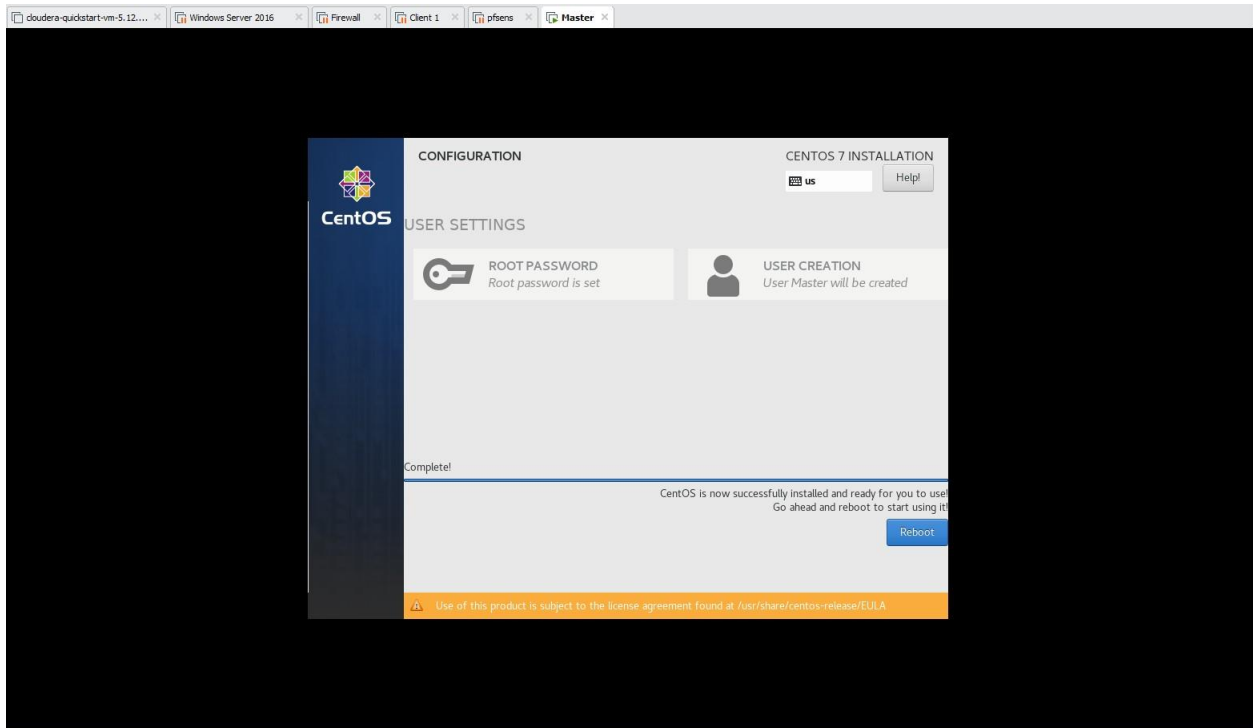
#### Create VM machine centos7.9











cloudera-quickstart-vm-5.12...Windows Server 2016FirewallClient 1pfensMaster

LICENSE INFORMATION

Done

CENTOS LINUX 7 (CORE)  
in (eng)Help

License Agreement:

CentOS 7 Linux EULA

CentOS 7 Linux comes with no guarantees or warranties of any sorts, either written or implied.

The Distribution is released as GPLv2. Individual packages in the distribution come with their own licences. A copy of the GPLv2 license is included with the distribution media.

☒ I accept the license agreement.

Click in the virtual screen to send keystrokes

Install CentOS 7 64-bit as you would on a physical computer. When you are done and the operating system boots up, click "I Finished Installing".

I Finished InstallingChange DiscHelp

cloudera-quickstart-vm-5.12...Windows Server 2016FirewallClient 1pfensMaster

Wed 22:59

Master

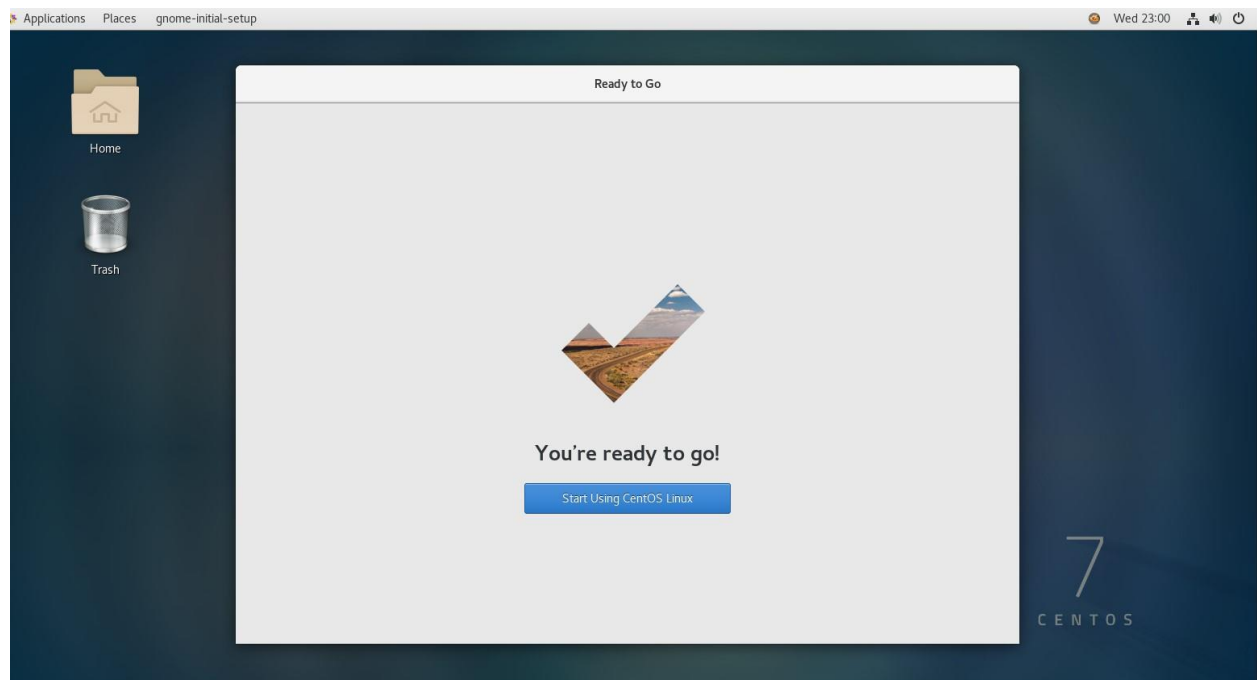
Not listed?

CentOS

Click in the virtual screen to send keystrokes

Install CentOS 7 64-bit as you would on a physical computer. When you are done and the operating system boots up, click "I Finished Installing".

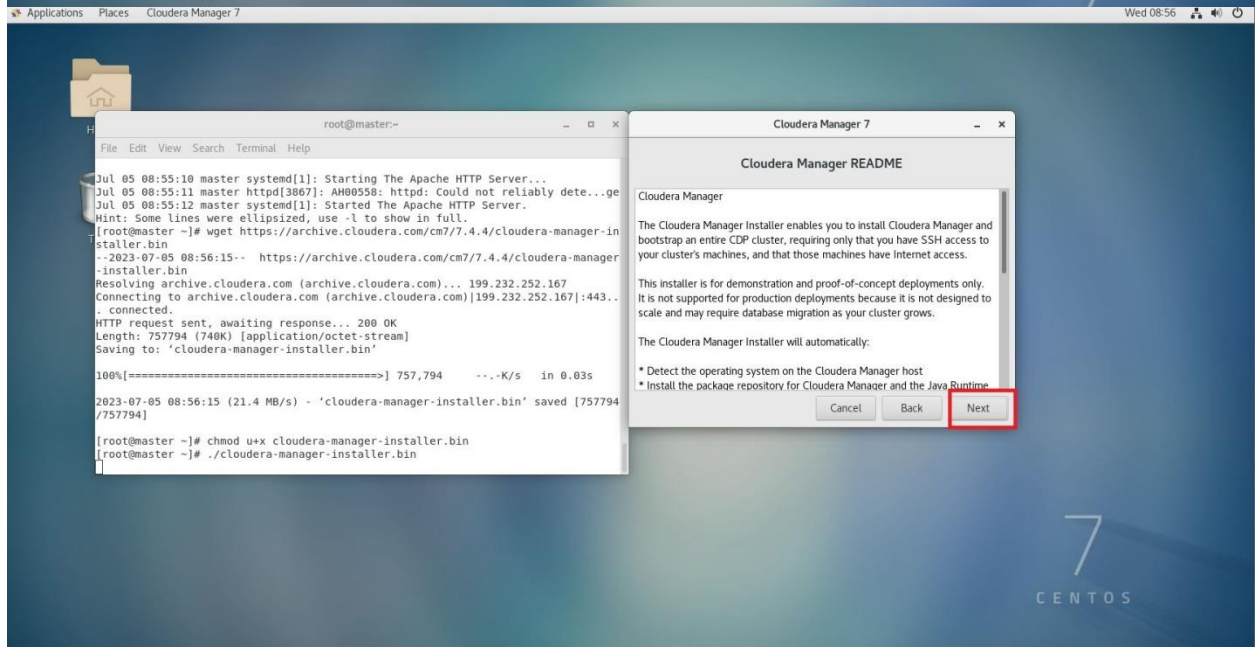
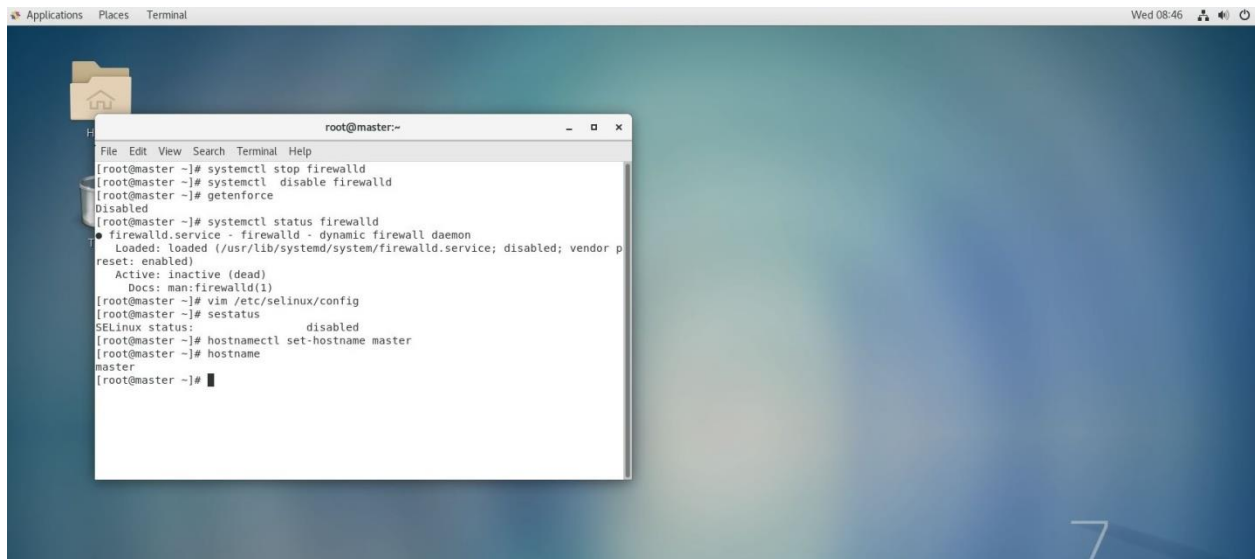
I Finished InstallingChange DiscHelp



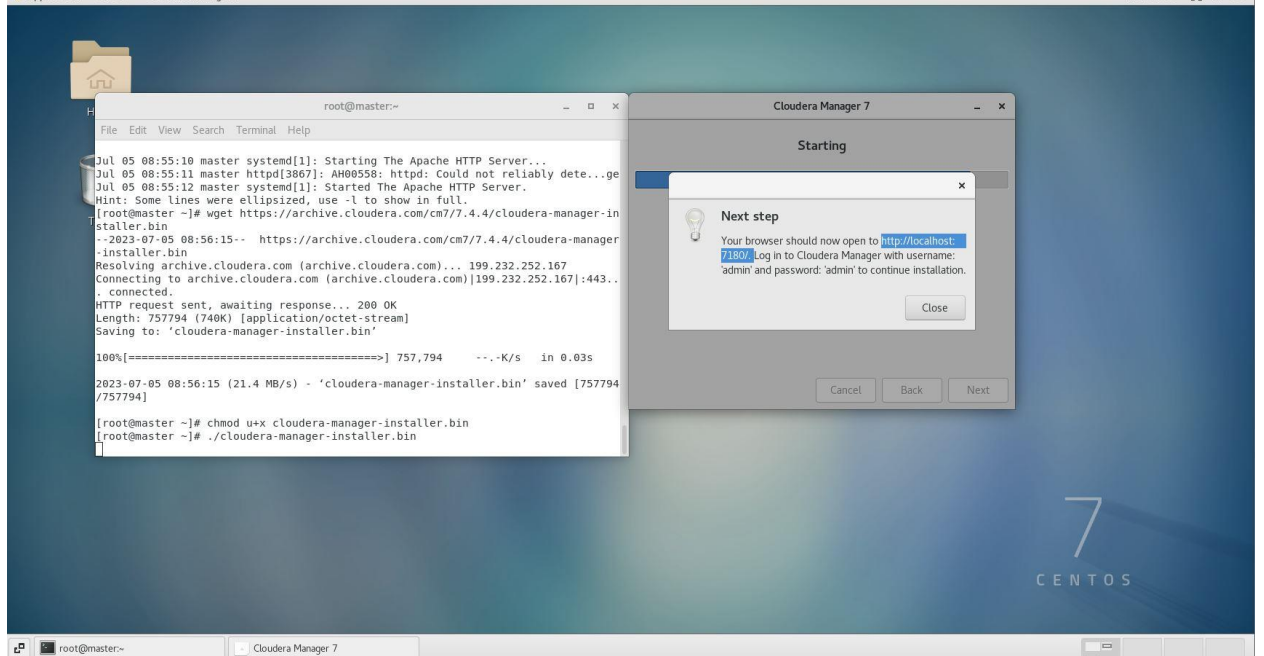
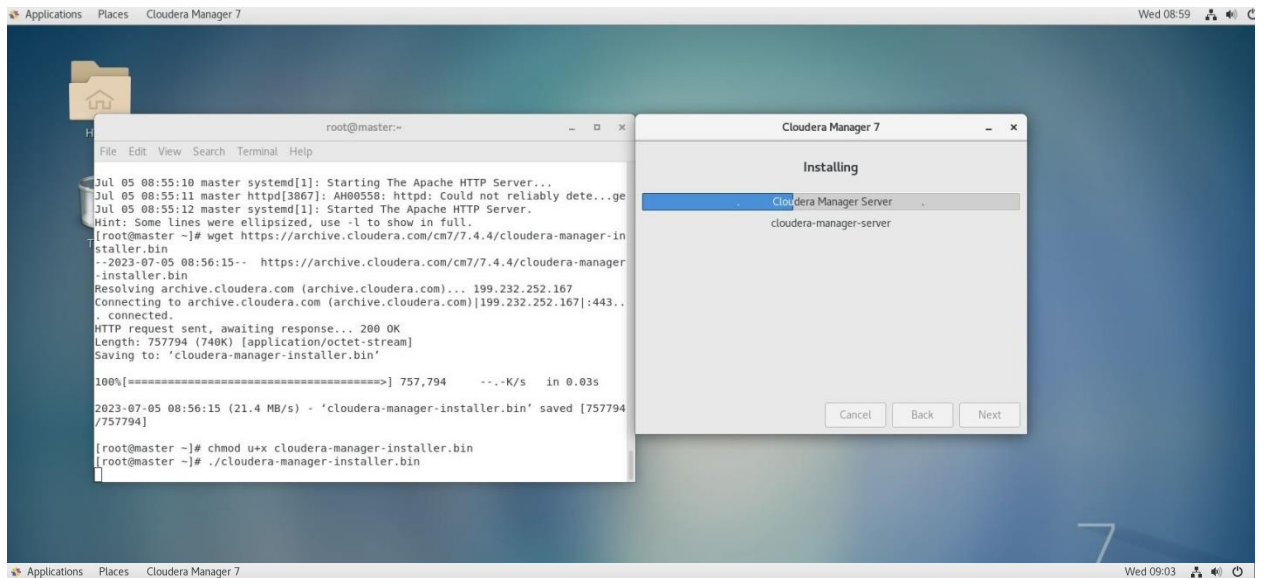
## Step 2: Create cluster: -

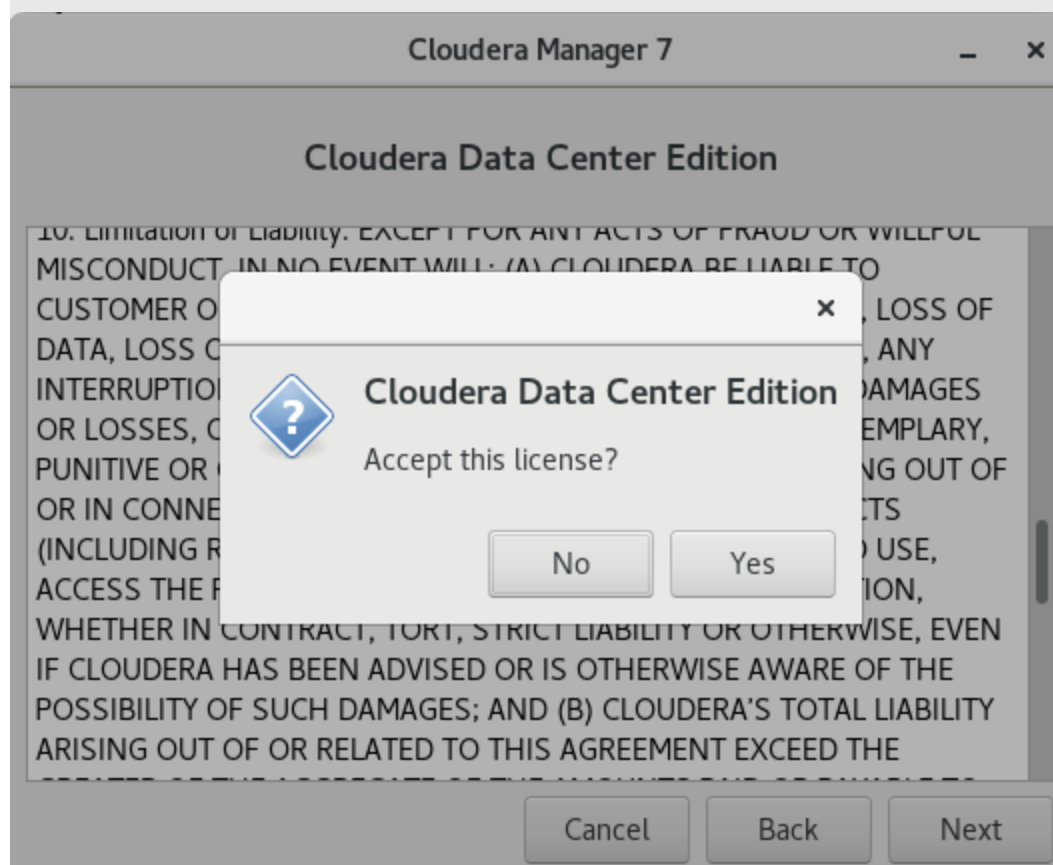
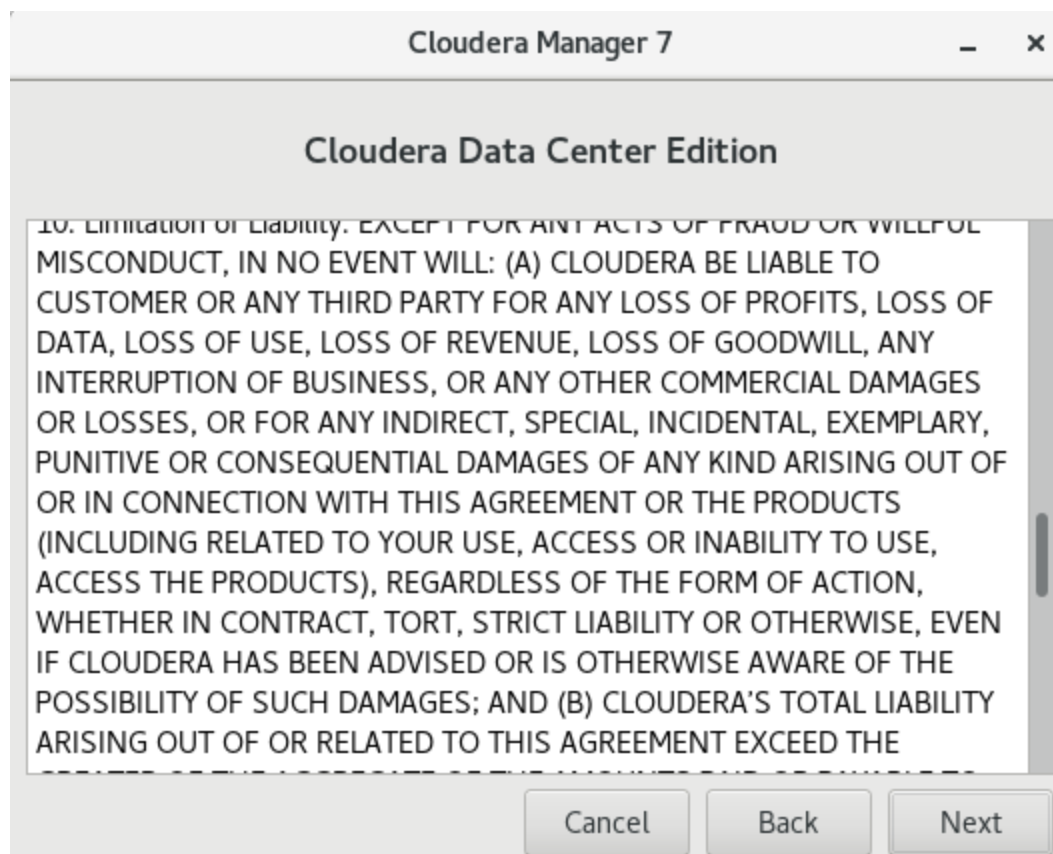
### We have to disable firewall and selinux

- 1) `systemctl stop firewalld`
- 2) `systemctl disable firewalld`  
Removed symlink `/etc/systemd/system/multi-user.target.wants/firewalld.service.`  
Removed symlink `/etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service.`
- 3) `getenforce`
- 4) `systemctl status firewalld`
- 5) `vim /etc/selinux/config`
- 6) `sestatus`
- 7) `hostnamectl set-hostname master`
- 8) `hostname`
- 9) `init 6`
- 10) `yum install java* httpd* webserver*`
- 11) `systemctl start httpd`
- 12) `systemctl enable httpd`
- 13) `systemctl status httpd`
- 14) `$ wget https://archive.cloudera.com/cm7/7.4.4/cloudera-manager-installer.bin`
- 15)
- 16) `$ chmod u+x cloudera-manager-installer.bin`
- 17) `$ sudo ./cloudera-manager-installer.bin`







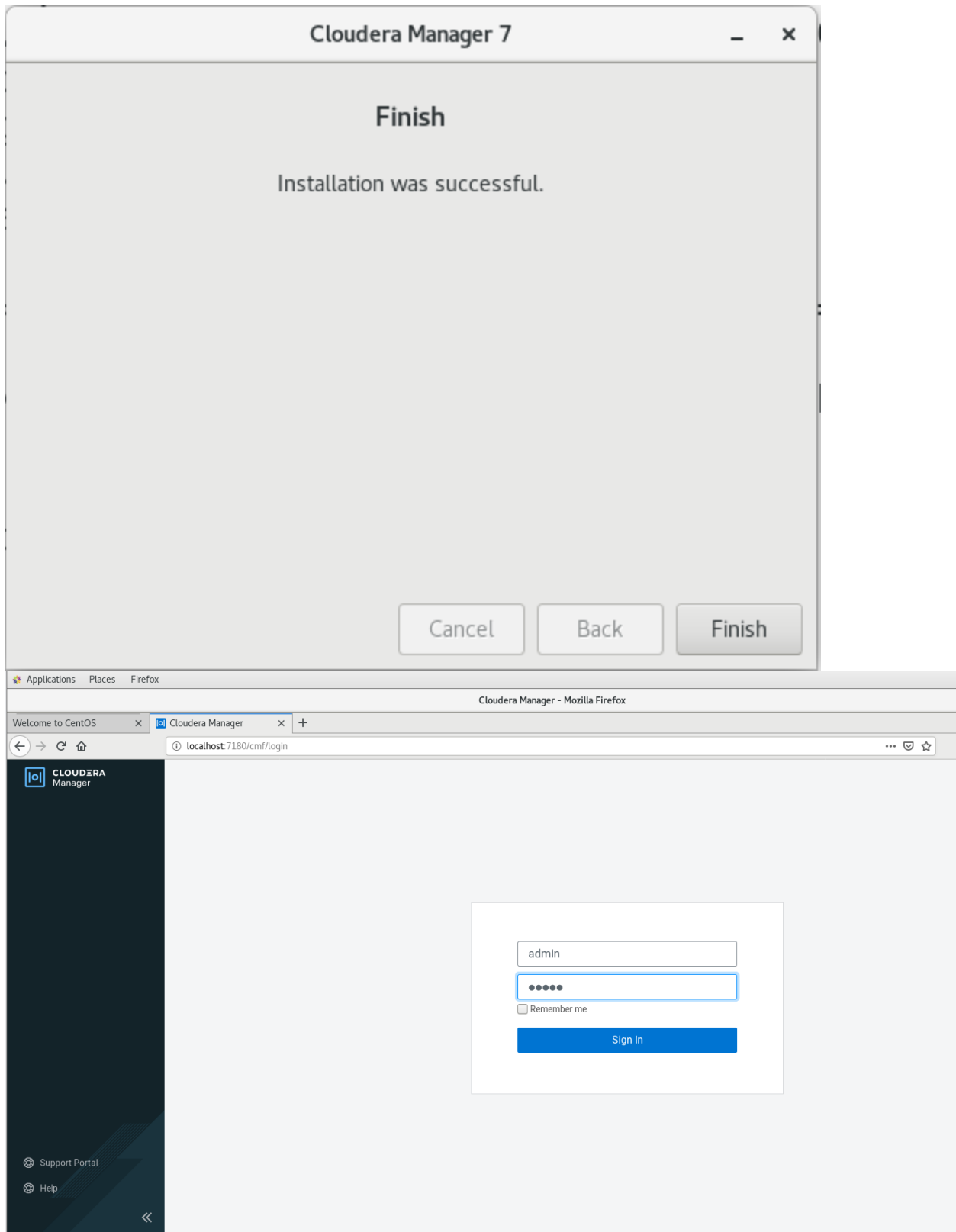


## Starting

**Next step**

Your browser should now open to <http://localhost:7180/>. Log in to Cloudera Manager with username: 'admin' and password: 'admin' to continue installation.

[Close](#)[Cancel](#)[Back](#)[Next](#)



Welcome to Cloudera Manager 7.4.4 - Cloudera Manager - Mozilla Firefox

Welcome to CentOS x Welcome to Cloudera Manager x +

localhost:7180/cm/flicense/settings?returnUrl=%2Fcm%2Fexpress-wizard%2Fselect-cluster-type%3FclusterType%3DBASE\_CLUSTER

## Welcome to Cloudera Manager 7.4.4

### Upload License File

☐ Upload Cloudera Data Platform License

Cloudera Data Platform provides important features that help you manage and monitor your Hadoop clusters in mission-critical environments. Cloudera Data Platform is a subscription service with enhanced capabilities and support. [Contact Cloudera Sales](#)

[Click here to download](#) (Accept .txt or .zip)

☒ Try Cloudera Data Platform for 60 days

After the trial period, you will need a valid Cloudera Data Platform license to access the Cloudera Manager Admin Console. Your cluster and data will remain unaffected.

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☒ Yes, I accept the Cloudera Standard License Terms and Conditions.

Continue

Add Traditional Bare Metal Cluster - Cloudera Manager - Mozilla Firefox

Welcome to CentOS x Add Traditional Bare Metal Cluster x +

localhost:7180/cm/fexpress-wizard/select-cluster-type?clusterType=BASE\_CLUSTER

## Add Traditional Bare Metal Cluster

☐ AutoTLS is currently not enabled. This means the over-the-wire communication is insecure. [Click here to setup Enable AutoTLS.](#)

☐ A KDC is currently not configured. This means you cannot create Kerberized clusters. Kerberized clusters are required for Ranger, Atlas, and services that depend on them. [Click here to setup a KDC.](#)

Adding a cluster in Cloudera Manager consists of two steps.

1. Add a set of hosts to form a cluster and install Cloudera Runtime and the Cloudera Manager Agent software.
2. Select and configure the services to run on this cluster.

**Quick Links**

- [Installation Guide](#)
- [Operating System Requirements](#)
- [Database Requirements](#)
- [JDK Requirements](#)

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Add Traditional Bare Metal Cluster - Cloudera Manager - Mozilla Firefox

Welcome to CentOSAdd Traditional Bare Metal Cluster

localhost:7180/cmf/express-wizard/wizard?allowResume=false&clusterType=BASE\_CLUSTER

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1 Cluster Basics

2 Specify Hosts

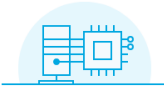
3 Select Repository

4 Install Parcels

5 Inspect Cluster

Cluster Basics

Cluster NameAkshay\_230340127035



Base Cluster

A Base Cluster contains storage nodes, compute nodes, and other services such as metadata and security collocated in a single cluster.


CancelBackContinue

ApplicationsPlacesFirefox

Add Traditional Bare Metal Cluster - Cloudera Manager - Mozilla Firefox

Welcome to CentOSAdd Traditional Bare Metal Cluster

localhost:7180/cmf/express-wizard/wizard?allowResume=false&clusterType=BASE\_CLUSTER

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1 Cluster Basics

2 Specify Hosts


3 Select Repository

4 Install Parcels

5 Inspect Cluster

Cluster Basics

Cluster NameAkshay\_230340127035



Base Cluster

A Base Cluster contains storage nodes, compute nodes, and other services such as metadata and security collocated in a single cluster.

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Welcome to CentOS

Add Traditional Bare Metal Cluster

localhost:7180/cmf/express-wizard/wizard?allowResume=false&clusterType=BASE\_CLUSTER

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Add Traditional Bare Metal Cluster

Cluster Basics

Specify Hosts

Select Repository

Select JDK

Enter Login Credentials

**Install Agents**

Install Parcels

Inspect Cluster

Install Agents

Installation in progress.

1 of 2 host(s) completed successfully. [Abort Installation](#)

Hostname	IP Address	Progress	Status	
master	192.168.20.174	<div></div>	✓ Installation completed successfully.	<a href="#">Details</a>
node1	192.168.20.173	<div></div>	⌚ Installing cloudera-manager-agent package...	<a href="#">Details</a>

1 - 2 of 2

Cancel

Back

Continue

Welcome to CentOS

Add Traditional Bare Metal Cluster

localhost:7180/cmf/express-wizard/wizard?allowResume=false&clusterType=BASE\_CLUSTER

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Add Traditional Bare Metal Cluster

Cluster Basics

Specify Hosts

Select Repository

Select JDK

Enter Login Credentials

**Install Agents**

Install Parcels

Inspect Cluster

Install Agents

Installation completed successfully.

2 of 2 host(s) completed successfully.

Hostname	IP Address	Progress	Status	
master	192.168.20.174	<div></div>	✓ Installation completed successfully.	<a href="#">Details</a>
node1	192.168.20.173	<div></div>	✓ Installation completed successfully.	<a href="#">Details</a>

1 - 2 of 2

Cancel

Back

Continue

MASTER - VMware Workstation

File Edit View VM Help

Library

My Computer

- Ubuntu 64-bit (3)
- jit1
- Node2
- Node3
- vm1
- Nagios\_Master
- nagios\_client
- master
- node1
- MASTER
- Shared VMs

Home Applications Places Firefox

Add Traditional Bare Metal Cluster - Cloudera Manager - Mozilla Firefox

Welcome to CentOS x Add Traditional Bare Metal Cluster x

localhost:7180/cmf/express-wizard/wizard?allowResume=false&clusterType=BASE\_CLUSTER

### Add Traditional Bare Metal Cluster

Cluster Basics

Specify Hosts

Select Repository

Select JDK

Enter Login Credentials

Install Agents

Install Parcels

8 Inspect Cluster

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7.4.4

#### Inspect Cluster

You have created a new empty cluster. Cloudera recommends that you run the following inspections. For accurate measurements, Cloudera recommends that they are performed sequentially.

Inspect Network Performance

Once the inspection is complete, review the inspector results before proceeding.

Advanced Options

Inspect Network Performance

Inspect Hosts

Once the inspection is complete, review the inspector results before proceeding.

Inspect Hosts

Fix the issues and run the inspection tools again.

Quit the wizard and Cloudera Manager will delete the temporarily created cluster.

I understand the risks of not running the inspections or the detected issues, let me continue with cluster setup.

Cancel

Back Finish

root@master~

Cloudera Manager 7

Add Traditional Bare Metal Cluster - ...

### Add Cluster - Configuration - Cloudera Manager - Mozilla Firefox

Welcome to CentOS x Add Cluster - Configuration x

localhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

### Add Cluster - Configuration

1 Select Services

2 Assign Roles

3 Setup Database

4 Enter Required Parameters

5 Review Changes

6 Command Details

7 Summary

#### Select Services

Choose a combination of services to install.

Data Engineering

Process, develop, and serve predictive models.

Services: HDFS, YARN, YARN Queue Manager, Ranger, Atlas, Hive, Hive on Tez, Spark, Oozie, Hue, and Data Analytics Studio

Data Mart

Browse, query, and explore your data in an interactive way.

Services: HDFS, Ranger, Atlas, Hive, Hive on Tez, Impala, and Hue

Operational Database

Real-time insights for modern data-driven business.

Services: HDFS, Ranger, Atlas, and HBase

Custom Services

Choose your own services. Services required by chosen services will automatically be included.

Service Type	Description
--------------	-------------

Back Continue



Welcome to CentOS

Add Cluster - Configuration

localhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

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☐

Solr

Apache Solr is a highly scalable, distributed service for indexing and relevance-based exploring of all forms of data.

☐

Spark

Apache Spark is an open source cluster computing system. This service runs Spark as an application on YARN.

☐

Streams Messaging Manager

Streams Messaging Manager (SMM) is an operations monitoring and management tool that provides end-to-end visibility in an enterprise Apache Kafka environment.

☐

Streams Replication Manager

Streams Replication Manager (SRM) is an enterprise-grade replication solution that enables fault tolerant, scalable, and robust cross-cluster Kafka topic replication.

☒

Tez

Apache Tez is the next generation Hadoop Query Processing framework written on top of YARN.

☒

YARN

Apache Hadoop MapReduce 2.0 (MRv2), or YARN, is a data computation framework that supports MapReduce applications (requires HDFS).

☒

YARN Queue Manager

YARN Queue Manager is the queue management user interface for Apache Hadoop YARN Capacity Scheduler.

☐

Zeppelin

Apache Zeppelin is a web-based notebook that enables data-driven, interactive data analytics and collaborative documents with SQL, Scala and more.

☒

ZooKeeper

Apache ZooKeeper is a centralized service for maintaining and synchronizing configuration data.

Rows per page: 1001 - 31 of 31<<<>>>

This wizard will also install the **Cloudera Management Service**. These are a set of components that enable monitoring, reporting, events, and alerts; these components require databases to store information, which will be configured on the next page.

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Continue

Welcome to CentOS

Add Cluster - Configuration

localhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

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7.4.4

1 Select Services

2 Assign Roles

3 Setup Database

4 Enter Required Parameters

5 Review Changes

6 Command Details

7 Summary

Assign Roles

You can customize the role assignments for your new cluster here, but if assignments are made incorrectly, such as assigning too many roles to a single host, this can impact the performance of your services. Cloudera does not recommend altering assignments unless you have specific requirements, such as having pre-selected a specific host for a specific role.

You can also view the role assignments by host. [View By Host](#)

HDFS

NameNode × 1 New

master

SecondaryNameNode × 1 New

master

Balancer × 1 New

master

HttpFS

Select hosts

NFS Gateway

Select hosts

DataNode × 1 New

node1

Hive

Gateway × 2 New

master; node1

Metastore Server × 1 New

master

WebHCat Server

Select hosts

HiveServer2

Select hosts

Back

Continue

ApplicationsPlacesFirefox

Add Cluster - Configuration - Cloudera Manager - Mozilla Firefox

3/11 23:19

Welcome to CentOSAdd Cluster - ConfigurationAdd Cluster - Configuration - Cloudera Manager - Mozilla Firefoxlocalhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

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Telemetry Publisher

Select a host

YARN Queue Manager

Webapp × 1 New

node1

Tez

Gateway × 2 New

master,node1

YARN

ResourceManager × 1 New

master

JobHistory Server × 1 New

master

NodeManager × 1 New

Same as DataNode

ZooKeeper

Server × 1 New

master

Back

Continue

Welcome to CentOSAdd Cluster - ConfigurationAdd Cluster - Configuration - Cloudera Manager - Mozilla Firefoxlocalhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

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Select Services

Assign Roles

Setup Database

Enter Required Parameters

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Summary

Setup Database

Configure and test database connections. Create the databases first according to the Installing and Configuring an External Database section of the Installation Guide.

Use Custom Databases

Use Embedded Database

The embedded PostgreSQL database is not supported for use in production environments. When using the embedded database, passwords are automatically generated. Please copy them down.

Hive

Skipped. Cloudera Manager will create this database in a later step.

Type

Database Hostname

Database Name

Username

Password

hive

master:7432

hive

Reports Manager

Successfully

Currently assigned to run on master.

Type

Database Hostname

Database Name

Username

Password

rman

master:7432

rman

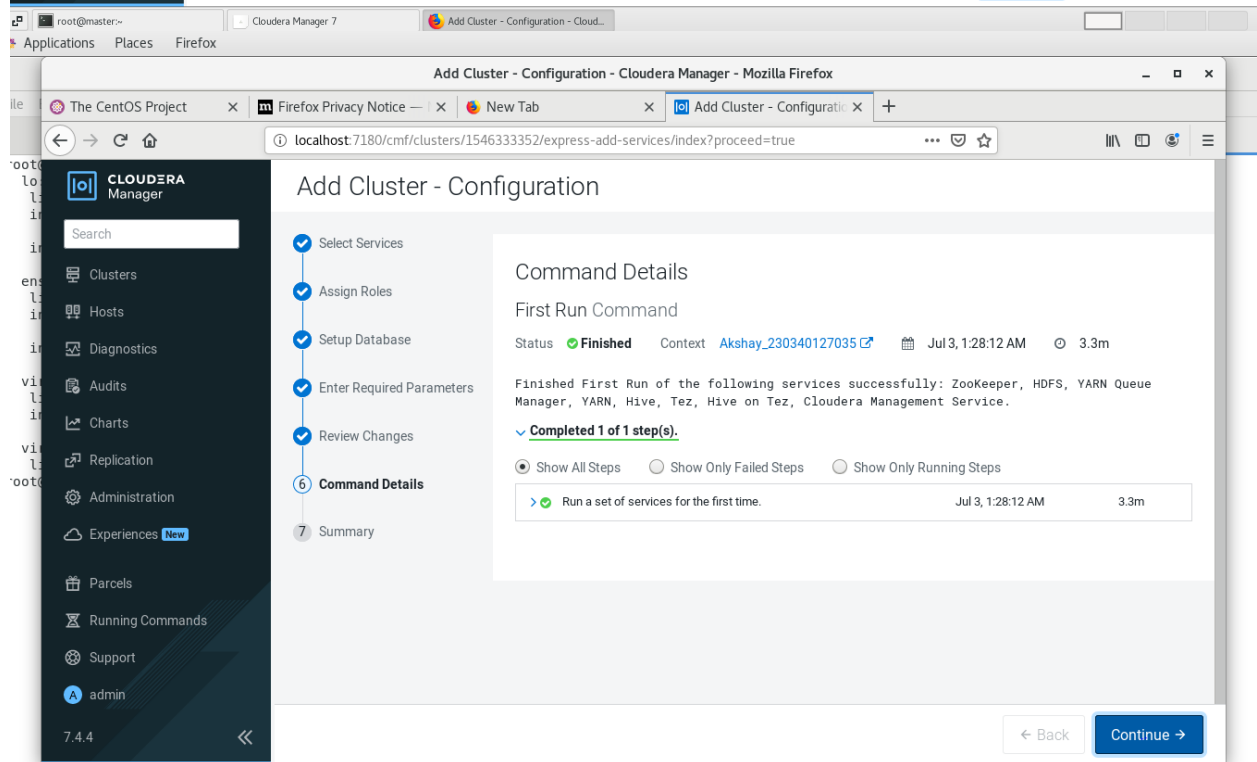
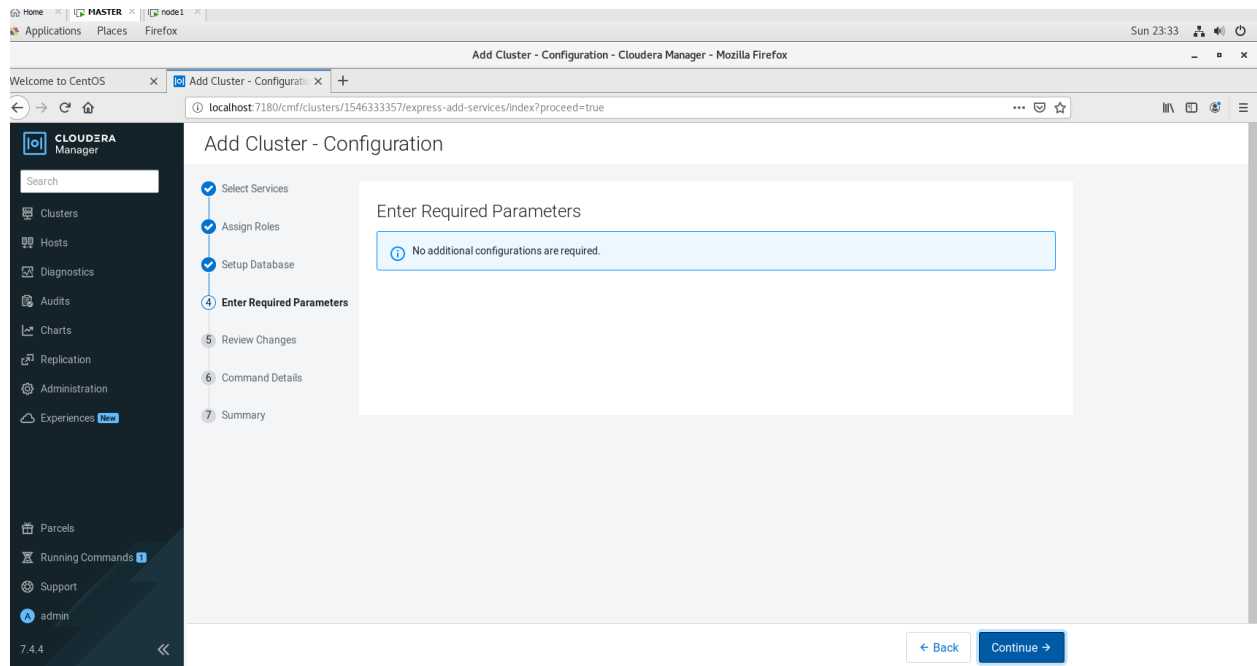
Back

Continue

root@master~

Cloudera Manager 7

Add Cluster - Configuration - Cloud...



HomeMASTERnode1ApplicationsPlacesFirefox

Sun 23:34

Add Cluster - Configuration - Cloudera Manager - Mozilla Firefox

Welcome to CentOSAdd Cluster - Configurati...

localhost:7180/cmf/clusters/1546333357/express-add-services/index?proceed=true

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Service Monitor Storage Directory

firehose.storage.base.directory

firehose.storage.dir

Service Monitor Default Group

/var/lib/cloudera-service-monitor

Enable Kerberos Authentication

kerberos.auth.enabled

kerberos.auth.enabled

Location for config-service DB

config\_service\_db\_loc

config\_service\_db\_loc

YARN Queue Manager Dynamic Configuration Tech Preview

queuemanager\_setting\_techpreview\_dynamicconfig

queuemanager\_setting\_techpreview\_dynamicconfig

YARN Queue Manager Webapp Port

queuemanager\_webapp\_port

queuemanager\_webapp\_port

Enable TLS/SSL for YARN Queue Manager Store

queuemanager\_store\_ssl\_enabled

queuemanager\_store\_ssl\_enabled

YARN Queue Manager Store TLS/SSL Server JKS

queuemanager\_store\_keystore\_file

queuemanager\_store\_keystore\_file

Akshay\_230340127035 > YARN Queue Manager (Service-Wide)

Akshay\_230340127035 > YARN Queue Manager Store Default Group

Akshay\_230340127035 > YARN Queue Manager Webapp Default Group

Akshay\_230340127035 > YARN Queue Manager Store Default Group

Akshay\_230340127035 > YARN Queue Manager Store Default Group

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root@master:~Cloudera Manager 7Add Cluster - Configuration - Cloud...

Welcome to CentOSAdd Cluster - Configurati...

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Add Cluster - Configuration

Select Services

Assign Roles

Setup Database

Enter Required Parameters

Review Changes

Command Details

Summary

Summary

The services are installed, configured, and running on your cluster.

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Finish

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ApplicationsPlacesFirefox

Mon 01:39

Status - Akshay\_230340127035 - Cloudera Manager - Mozilla Firefox

The CentOS ProjectFirefox Privacy NoticeNew TabStatus - Akshay\_230340127035

localhost:7180/cmf/clusters/1546333352/status

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Akshay\_230340127035

StatusHealth IssuesConfiguration

You are running Cloudera Manager in non-production mode, which uses an embedded PostgreSQL database. Switch to using a supported external database before moving into production. More Details

Status

Cloudera Runtime 7.1.7 (Parcels)

1 Hosts

HDFS

Hive

Hive on Tez

Tez

YARN

YARN Queue Manager

ZooKeeper

Data Contexts

Create

No Data Contexts have been created. Click the Create button to define metadata, and security services that are part of the Data

Charts

30m1h2h6h12h1d7d30d

HDFS IO

bytes / second

9.5M/s4.8M/s

01:1501:30

Total Bytes Read ... 1b/sTotal Bytes Wr... 0.93b/s

Cluster Network IO

bytes / second

400b/s200b/s

01:1501:30

Total Bytes Re... 468b/sTotal Bytes Tra... 370b/s

Cluster Disk IO

bytes / second

208.6M/s

01:1501:30

Total Bytes Re... 408b/sTotal Bytes Tra... 264b/s

Cluster CPU

100%

The CentOS ProjectFirefox Privacy NoticeStatus - Home - Cloudera

localhost:7180/cmf/home

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Cloudera Runtime 7.1.7 (Parcels)

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Hive

Hive on Tez

Tez

YARN

YARN Queue Manager

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YARN Queue Manager UI

Static Service Pools

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Cloudera Management Service

YARN Queue Manager

ZooKeeper

Cloudera Management Service

Cloudera Management Ser...

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30m1h2h6h12h1d7d30d

HDFS IO

bytes / second

9.5M/s4.8M/s

01:1501:30

Total Bytes Read ... 1b/sTotal Bytes Wr... 1.7K/s

Cluster Network IO

bytes / second

400b/s200b/s

01:1501:30

Total Bytes Re... 408b/sTotal Bytes Tra... 264b/s

Cluster Disk IO

bytes / second

208.6M/s9.5M/s

01:1501:30

Total Disk Byte... 2.2M/sTotal Disk Byte... 501K/s

Cluster CPU

100%













