Configuring Cassandra on multiple nodes.

**Prerequisites**

Each node must be correctly configured before starting the cluster. You must determine or perform the following before starting the cluster:

* A good understanding of how Cassandra works. At minimum, be sure to read [Understanding the architecture](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archTOC.html), especially the Data replication section, and [Cassandra's rack feature](https://docs.datastax.com/en/landing_page/doc/landing_page/planning/planningAntiPatterns.html#AntiPatRack).
* Install Cassandra on each node.
* Choose a name for the cluster.
* Get the IP address of each node.
* Determine which nodes will be seed nodes. **Do not make all nodes seed nodes.** Please read [Internode communications (gossip)](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archGossipAbout.html).
* Determine the [snitch](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archSnitchesAbout.html) and [replication strategy](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archDataDistributeAbout.html). The [GossipingPropertyFileSnitch](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archsnitchGossipPF.html) and [NetworkTopologyStrategy](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archDataDistributeAbout.html) are recommended for production environments.
* Determine a naming convention for each rack. For example, good names are RAC1, RAC2 or R101, R102.
* The [cassandra.yaml](https://docs.datastax.com/en/cassandra/3.0/cassandra/configuration/configCassandra_yaml.html) configuration file, and property files such as cassandra-rackdc.properties, give you more configuration options. See the [Configuration section](https://docs.datastax.com/en/cassandra/3.0/cassandra/configuration/configTOC.html#configTOC__configTOC) for more information.

This example describes installing a 6 node cluster spanning 2 racks in a single datacenter. Each node is already configured to use the [GossipingPropertyFileSnitch](https://docs.datastax.com/en/cassandra/3.0/cassandra/architecture/archsnitchGossipPF.html) and 256 virtual nodes (vnodes).

In Cassandra, "datacenter" is synonymous with "replication group". Both terms refer to a set of nodes configured as a group for replication purposes.

Make sure firewall is not stopping in accessing the service from the node. Disable firewall or contact administrator to write a rule to allow the access between nodes.

1. Install Cassandra(DataStax) on multiple machines/nodes.
2. Edit Cassandra.yaml from the path Cassandra home/conf as below,
3. Node 1(110.82.155.0)

cluster\_name: 'Test Cluster'

num\_tokens: 256

seed\_provider:

- class\_name: org.apache.cassandra.locator.SimpleSeedProvider

parameters:

- seeds: "110.82.155.0,110.82.155.3"

listen\_address: 110.82.155.0

rpc\_address: 110.82.155.0

endpoint\_snitch: GossipingPropertyFileSnitch

1. Node 2(110.82.155.3)

cluster\_name: 'Test Cluster'

num\_tokens: 256

seed\_provider:

- class\_name: org.apache.cassandra.locator.SimpleSeedProvider

parameters:

- seeds: "110.82.155.0,110.82.155.3"

listen\_address: 110.82.155.3

rpc\_address: 110.82.155.3

endpoint\_snitch: GossipingPropertyFileSnitch

1. Edit cassandra-rackdc.properties from the path Cassandra home/conf as below

dc=datacenter1

rack=rack1

1. The GossipingPropertyFileSnitch always loads cassandra-topology.properties when that file is present. Remove the file from each node on any new cluster or any cluster migrated from the PropertyFileSnitch.