



This PDF is generated from authoritative online content, and is provided for convenience only. This PDF cannot be used for legal purposes. For authoritative understanding of what is and is not supported, always use the online content. To copy code samples, always use the online content.

Genesys Interaction Recording Solution Guide

Installing and Configuring Cassandra

12/18/2025

Installing and Configuring Cassandra

Cassandra 4

Installing Cassandra4

Complete this procedure for each Cassandra node.

Prerequisites

- For new deployments, we recommend Cassandra 4.1.x. The procedures below are meant to serve as a quick guide on how to do this. For more detailed information, see the [Cassandra 4.1 documentation](#).
- You have installed the latest supported openJDK 8.

Start

1. [Download the latest 4.1.x version of Cassandra](#).
2. Copy the Cassandra archive to the installation directory. For example, **/usr/local**
3. Use a tar utility to extract the files. For example, `tar -zxvf apache-cassandra-4.1.9-bin.tar.gz`
4. Add directories for data, commitlog, and saved_caches. You can create these directories anywhere or in the default locations configured in the ***Cassandra_install_dir/conf/cassandra.yaml*** file. For example:
 - **/var/lib/cassandra/data**
 - **/var/lib/cassandra/commitlog**
 - **/var/lib/cassandra/saved_caches**

End

Configuring Cassandra4

The procedures below describe how to create the Cassandra keyspace for the following scenarios:

- Development: 1 Cassandra node (appropriate for a development or lab environment)
- Single Datacenter: 1 datacenter with a minimum of three Cassandra nodes
- Two Datacenters: 2 datacenters with a minimum of three Cassandra nodes

Important

For more complex Cassandra deployments, please consult with Genesys

Prerequisites

- [Installing Cassandra4](#)

Follow one of the procedures that matches your deployment scenario.

Important

The files modified in this procedure are typically found in the ***Cassandra_install_dir/conf*** directory.

Development

Configuring Cassandra (1 Cassandra node)

Start

1. Modify the **cassandra.yaml** file:
 - a. Set `cluster_name` to the desired name.
 - b. Set `seeds` to the list of host name of the node. For example: `- seeds: "127.0.0.1"`
 - c. Set `listen_address` and `broadcast_address` to the IP of the node.
 - d. Set `data_file_directories`, `commitlog_directory`, and `saved_caches_directory` to the directories you created in Step 4 of [Installing Cassandra4](#).
 - e. Set the `endpoint_snitch` parameter to `SimpleSnitch` (for development only).
6. Save your changes and close the file.

End

Single Datacenter

Configuring Cassandra (1 datacenter)

Start

1. Modify the **cassandra.yaml** file:
 - a. Set the `cluster_name`. It must be the same name on all nodes.
 - b. Set `seeds` to the list of host names of all nodes. For example: `- seeds: "node1, node2, node3"`

- c. Set `listen_address` and `broadcast_address` to the IP of the node.
 - d. Set `data_file_directories`, `commitlog_directory`, and `saved_caches_directory` to the directories you created in Step 4 of [Installing Cassandra4](#).
 - e. Set the `start_rpc` parameter to `true`.
 - f. Change `endpoint_snitch` to `GossipingPropertyFileSnitch`.
7. Save your changes and close the file.
 8. Open the **`cassandra-rackdc.properties`** file and update for your cluster topology. For each node in your cluster, add the following line:

```
dc=[datacenter] rack=[rackname]
```

Where:

- `[datacenter]` is the name of the datacenter for this node.
- `[rackname]` is the name of the rack for this node.

The following is a sample **`cassandra-rackdc.properties`** file for a Single Datacenter scenario:

```
dc=datacenter1 rack=rack1
```

9. Save your changes and close the file.

End

Two Datacenters

Configuring Cassandra (2 datacenters)

Start

1. Modify the **`cassandra.yaml`** file:
 - a. Set the `cluster_name`. It must be the same name on all nodes.
 - b. Set `seeds` to the list of host names of all nodes. For example: `- seeds: "node1, node2, node3, node4, node5, node6"`
 - c. Set `listen_address` and `broadcast_address` to the host name.
 - d. Set `data_file_directories`, `commitlog_directory`, and `saved_caches_directory` to the directories you created in Step 4 of [Installing Cassandra4](#).
 - e. Change `endpoint_snitch` to `GossipingPropertyFileSnitch`.
6. Save your changes and close the file.
7. Open the **`cassandra-rackdc.properties`** file and update for your cluster topology. For each node in your cluster, add the following line:

```
dc=[datacenter] rack=[rackname]
```

Where:

- `[datacenter]` is the name of the datacenter for this node.

- `[rackname]` is the name of the rack for this node.

The following is a sample **cassandra-rackdc.properties** file for a Two Datacenter scenario:

For datacenter1 nodes:

```
dc=datacenter1 rack=rack1
```

For datacenter2 nodes:

```
dc=datacenter2 rack=rack1
```

8. Save your changes and close the file.

End

Verifying the Cassandra4 installation

Prerequisites

- [Configuring Cassandra](#)

Start

1. Start all Cassandra nodes using the following command: `Cassandra_install_dir/bin/cassandra -R`
2. Use the `nodetool` utility to verify that all nodes are connected by entering the following command: `Cassandra_install_dir/bin/nodetool status`

The following is sample output for a Single Datacenter scenario with three Cassandra nodes:

```
/genesys/apache-cassandra-4.1.4/bin$ ./nodetool status
Address      DC           Rack  Status  State  Load      Owns      Token
192.0.2.10   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   -9223372036854775808
192.0.2.11   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   -3074457345618258603
192.0.2.12   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   3074457345618258602
```

The following is sample output for a Development scenario with a single Cassandra node:

```
/genesys/apache-cassandra-4.1.4/bin$ ./nodetool status
Address      DC           Rack  Status  State  Load      Effective-
Ownership Token
127.0.0.1    datacenter1 rack1  Up      Normal 1.89 MB
100.00%      76880863635469966884037445232169973201
```

End

Cassandra 2

Installing Cassandra2

Complete this procedure for each Cassandra node.

Prerequisites

- For new deployments, we recommend Cassandra 2.2. The procedures below are meant to serve as a quick guide on how to do this. For more detailed information, see the [Cassandra 2.2 documentation](#).
- You have installed the latest [Java SE Development Toolkit 8](#). For more information, refer to the [Java documentation](#).

Start

1. [Download the latest 2.2.x version of Cassandra](#).
2. Copy the Cassandra archive to the installation directory. For example, **/usr/local**
3. Use a tar utility to extract the files. For example, `tar -zxvf apache-cassandra-2.2.7-bin.tar.gz`
4. Add directories for data, commitlog, and saved_caches. You can create these directories anywhere or in the default locations configured in the ***Cassandra_install_dir/conf/cassandra.yaml*** file. For example:
 - **/var/lib/cassandra/data**
 - **/var/lib/cassandra/commitlog**
 - **/var/lib/cassandra/saved_caches**

End

Configuring Cassandra2

The procedures below describe how to create the Cassandra keyspace for the following scenarios:

- Development: 1 Cassandra node (appropriate for a development or lab environment)
- Single Datacenter: 1 datacenter with a minimum of three Cassandra nodes
- Two Datacenters: 2 datacenters with a minimum of three Cassandra nodes

Important

For more complex Cassandra deployments, please consult with Genesys

Prerequisites

- [Installing Cassandra4](#)

Follow one of the procedures that matches your deployment scenario.

Important

The files modified in this procedure are typically found in the ***Cassandra_install_dir/conf*** directory.

Development

Configuring Cassandra (1 Cassandra node)

Start

1. Modify the **cassandra.yaml** file:
 - a. Set seeds to the list of host name of the node. For example: -seeds: "127.0.0.1"
 - b. Set listen_address and rpc_address to the host name.
 - c. Set data_file_directories, commitlog_directory, and saved_caches_directory to the directories you created in Step 4 of [Installing Cassandra](#).
 - d. Set the start_rpc parameter to true.
5. Save your changes and close the file.

End

Single Datacenter

Configuring Cassandra (1 datacenter)

Start

1. Modify the **cassandra.yaml** file:
 - a. Set the cluster_name. It must be the same name on all nodes.
 - b. Set seeds to the list of host names of all nodes. For example: -seeds: "node1, node2, node3"
 - c. Set listen_address and rpc_address to the host name.
 - d. Set data_file_directories, commitlog_directory, and saved_caches_directory to the directories you created in Step 4 of [Installing Cassandra](#).
 - e. Set the start_rpc parameter to true.
 - f. Change endpoint_snitch to PropertyFileSnitch.
7. Save your changes and close the file.
8. Open the **cassandra-topology.properties** file and update for your cluster topology. For each node in your cluster, add the following line:

```
[node]=[datacenter]:[rack]
```

Where:

- *[node]* is the IP address of the node.
- *[datacenter]* is the name of the datacenter for this node.
- *[rack]* is the name of the rack for this node.

The following is a sample **cassandra-topology.properties** file for a Single Datacenter scenario:

```
192.0.2.10=datacenter1:rack1
192.0.2.11=datacenter1:rack1
192.0.2.12=datacenter1:rack1
```

9. Save your changes and close the file.

End

Two Datacenters

Configuring Cassandra (2 datacenters)

Start

1. Modify the **cassandra.yaml** file:
 - a. Set the `cluster_name`. It must be the same name on all nodes.
 - b. Set seeds to the list of host names of all nodes. For example: `-seeds: "node1, node2, node3, node4, node5, node6"`
 - c. Set `listen_address` and `rpc_address` to the host name.
 - d. Set `data_file_directories`, `commitlog_directory`, and `saved_caches_directory` to the directories you created in Step 4 of [Installing Cassandra](#).
 - e. Set the `start_rpc` parameter to `true`.
 - f. Change `endpoint_snitch` to `PropertyFileSnitch`.
7. Save your changes and close the file.
8. Open the **cassandra-topology.properties** file and update for your cluster topology. For each node in your cluster, add the following line:

```
[node]=[datacenter]:[rack]
```

Where:

- *[node]* is the IP address of the node.
- *[datacenter]* is the name of the datacenter for this node.
- *[rack]* is the name of the rack for this node.

The following is a sample **cassandra-topology.properties** file for a Two Datacenter scenario:

```
192.0.2.10=datacenter1:rack1
192.0.2.11=datacenter1:rack1
192.0.2.12=datacenter1:rack1
```



```
198.51.100.10=datacenter2:rack1
198.51.100.11=datacenter2:rack1
198.51.100.12=datacenter2:rack1
```

9. Save your changes and close the file.

End

Verifying the Cassandra2 installation

Prerequisites

- [Configuring Cassandra](#)

Start

1. Start all Cassandra nodes using the following command: `Cassandra_install_dir/bin/cassandra`
2. Use the `nodetool` utility to verify that all nodes are connected by entering the following command: `Cassandra_install_dir/bin/nodetool -h Cassandra_host ring`

The following is sample output for a Single Datacenter scenario with three Cassandra nodes:

```
/genesys/apache-cassandra-2.2/bin$ ./nodetool ring
Address      DC           Rack  Status  State  Load      Owns      Token
192.0.2.10   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   -9223372036854775808
192.0.2.11   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   -3074457345618258603
192.0.2.12   datacenter1 rack1  Up      Normal 14.97 MB  100.00%   3074457345618258602
```

The following is sample output for a Development scenario with a single Cassandra node:

```
/genesys/apache-cassandra-2.2/bin$ ./nodetool ring
Address      DC           Rack  Status  State  Load      Effective-
Ownership Token
127.0.0.1    datacenter1 rack1  Up      Normal 1.89 MB
100.00%      76880863635469966884037445232169973201
```

End