



Modify Node Name

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Procedure Overview

This procedure allows you to modify the node name that is associated with a IM and Presence node or group of nodes. This procedure modifies the node name as it appears in the Cluster Topology window in the IM and Presence Administration GUI.



Caution

This procedure is used only when changing the node name of an IM and Presence node where there are no network level changes required. If changes to the network IP address, hostname or domain name are required, complete the relevant procedure in this document instead.



Caution

Changing the node name on any node in an IM and Presence cluster will result in server restarts and interruptions to presence services and other system functions. Because of this impact to the system, you must perform this node name change procedure during a scheduled maintenance window.

This procedure supports the following node name change scenarios:

- IP address to hostname
- IP address to Fully Qualified Domain Name (FQDN)
- hostname to IP address
- hostname to FQDN
- FQDN to hostname
- FQDN to IP address

**Note**

See the *Configuration and Administration of IM and Presence Service on Cisco Unified Communications Manager* on Cisco.com for more information about node name recommendations.

Procedure Workflow

The following table contains the step-by-step instructions for modifying the node name that is associated with an IM and Presence node or group of nodes. The detailed instructions for this procedure specify the exact order of steps for performing the change.

If you are performing this procedure across multiple clusters you must complete the changes sequentially on one cluster at a time.

Table 5-1 Workflow to modify the node name

Step	Task
1	<p>Complete the Readiness Checklist on all nodes that are to be updated.</p> <ul style="list-style-type: none"> This procedure includes several prerequisite steps, including a list of services to shut down prior to making the change. Some of these steps may apply only to the publisher node and therefore you can skip them when you run through the procedure for subscriber nodes.
2	Update IM and Presence Node Name from the Cisco Unified CM IM and Presence Administration GUI.
3	<p>Verify Database Replication from the Administration CLI.</p> <p>After the node name updates are complete, you must verify database replication.</p>
4	<p>Verify Updates on Cisco Unified Communications Manager.</p> <p>You must ensure that the Application Server entries for the servers that have been updated reflect the new node name on the Cisco Unified Communications Manager Administration GUI.</p>
5	<p>Complete the Post-Change Task List on the updated node.</p> <p>Perform a series of steps to ensure the node is operational again.</p>

Update IM and Presence Node Name

If multiple servers within a cluster are being modified, you must complete the following procedure sequentially for each of these servers.

If the publisher node is being modified, you must complete this procedure for the subscriber nodes first, before completing the procedure on the publisher node.

Before You Begin

Complete the pre-change tasks. See [Readiness Checklist, page 1-1](#).

Procedure

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- Step 1** Sign in to the Cisco Unified CM IM and Presence Administration GUI on the server.
- Step 2** Navigate to **System > Cluster Topology**.
- Step 3** Choose the server from the tree-view on the left hand pane of the Cluster Topology page. On the right hand pane, you should see the **Node Configuration** section and the **Fully Qualified Domain Name/IP Address** field.
- Step 4** Update the **Fully Qualified Domain Name/IP Address** field with the new node name.
- Step 5** Select **Save**.
- Step 6** If multiple servers within a cluster are being modified, repeat this procedure for each server.
-

What To Do Next

[Verify Database Replication, page 5-3.](#)

Verify Database Replication

You must verify that the new node name has replicated across the cluster.

Before You Begin

Update the IM and Presence node name. See [Update IM and Presence Node Name, page 5-2.](#)



Note

Use the validation mechanisms listed below to verify that the new node name(s) have been replicated across the cluster and that database replication is operational.

Procedure

-
- Step 1** To validate that the new node name has been correctly replicated, run the following command from the Administration CLI on all nodes in the cluster:

```
run sql name from ProcessNode
```

The following example shows the command output:

```
admin:run sql select name from ProcessNode
name
=====
EnterpriseWideData
server1.example.com
server2.example.com
server3.example.com
server4.example.com
```

Verify that there is an entry for each node in the cluster that specifies the new node name. No old node name should appear in the output. Proceed as follows:

- a. If any new node names are missing or if there are references to old node names proceed to Step 2 to further validate database replication.

- b. If the output is as expected, the validation has passed and you can ignore the remaining steps in this procedure.

Step 2 If the new node name is not correctly listed in Step 1, verify that database replication is in a correct state in the cluster by running the following command from the Administration CLI on the publisher node:

```
utils dbreplication runtimestate
```

The following example output displays:

```
admin: utils dbreplication runtimestate
```

```
DDB and Replication Services: ALL RUNNING
```

```
DB CLI Status: No other dbreplication CLI is running...
```

```
Cluster Replication State: BROADCAST SYNC Completed on 1 servers at: 2012-09-26-15-18
  Last Sync Result: SYNC COMPLETED 257 tables sync'ed out of 257
  Sync Errors: NO ERRORS
```

```
DB Version: ccm9_0_1_10000_9000
Number of replicated tables: 257
Repltimeout set to: 300s
```

```
Cluster Detailed View from gwydlvm020105 (2 Servers):
```

SERVER-NAME	IP ADDRESS	PING (msec)	REPLICATION RPC?	REPL. STATUS	DBver& QUEUE	REPL. TABLES	REPLICATION LOOP?	SETUP (RTMT) & details
server1	192.168.10.201	0.038	Yes	Connected	0	match	Yes	(2) PUB Setup Completed
server2	192.168.10.202	0.248	Yes	Connected	0	match	Yes	(2) Setup Completed
server3	192.168.10.203	0.248	Yes	Connected	0	match	Yes	(2) Setup Completed
server4	192.168.10.204	0.248	Yes	Connected	0	match	Yes	(2) Setup Completed

Proceed as follows:

- a. Verify that the output shows a replication status of **Connected** and a replication setup value of **(2) Setup Complete** for each node. This means that the replication network within the cluster is up and you can proceed to Step 3 to repair any mismatches between nodes in the cluster.
- b. If the replication status and replication setup value are not as expected, then the replication network within the cluster is broken and you must proceed to Step 5 to attempt to reestablish replication.

Step 3 Run the following command from the Administration CLI on the publisher node to attempt to repair replication:

```
utils dbreplication repair all
```

The following example shows the command output.

```
admin:utils dbreplication repair all
```

```
----- utils dbreplication repair -----
```

```
Replication Repair is now running in the background.
```

```
Use command 'utils dbreplication runtimestate' to check its progress
```

```
Output will be in file cm/trace/dbl/sdi/ReplicationRepair.2013_03_06_12_33_57.out
```

```
Please use "file view activelog cm/trace/dbl/sdi/ReplicationRepair.2013_03_06_12_33_57.out" command to see the output
```



Note Depending on the size of the database, it may take several minutes to repair database replication.

Proceed to Step 4 to monitor the progress of the replication repair.

- Step 4** Run the following command from the Administration CLI on the publisher node to check the progress of replication repair:

```
utils dbreplication runtimestate
```

The following example shows the output when replication is complete. The text in bold highlights the final status of the replication repair:

```
admin:utils dbreplication runtimestate
```

```
DB and Replication Services: ALL RUNNING
```

```
Cluster Replication State: Replication repair command started at: 2013-03-06-12-33
Replication repair command COMPLETED 269 tables processed out of 269
No Errors or Mismatches found.
```

Use 'file view activelog cm/trace/dbl/sdi/ReplicationRepair.2013_03_06_12_33_57.out' to see the details

```
DB Version: ccm8_6_4_98000_192
Number of replicated tables: 269
```

```
Cluster Detailed View from PUB (2 Servers):
```

SERVER-NAME	IP ADDRESS	PING (msec)	REPLICATIONRPC?	REPL.DBver& STATUS	REPL.REPLICATION QUEUE	REPL.REPLICATION LOOP?(RTMT) & details
server1	10.53.56.170	052	Yes	Connected0	match	Yes (2) PUB Setup Completed
server2	10.53.56.140	166	Yes	Connected0	match	Yes (2) Setup Completed

Proceed as follows:

- a. If replication repair runs to completion without any errors or mismatches, return to Step 1 to validate that the new node name is now correctly replicated.
- b. If errors or mismatches are found, there may be a transient mismatch between servers. Return to Step 3 to run the replication repair again.



Note If, after several attempts to repair replication, mismatches or errors are being reported, contact your Cisco Support Representative to resolve this issue.

- Step 5** Run the following command from the Administration CLI on the publisher node to attempt to reestablish replication:

```
utils dbreplication reset all
```

The following example shows the command output:

```
admin:utils dbreplication reset all
This command will try to start Replication reset and will return in 1-2 minutes.
Background repair of replication will continue after that for 1 hour.
Please watch RTMT replication state. It should go from 0 to 2. When all subs
have an RTMT Replicate State of 2, replication is complete.
If Sub replication state becomes 4 or 1, there is an error in replication setup.
Monitor the RTMT counters on all subs to determine when replication is complete.
Error details if found will be listed below
OK [10.53.56.14]
```



Note Depending on the size of the database, it may take several minutes to over an hour for replication to be fully reestablished.

Proceed to Step 6 to monitor the progress of the replication reestablishment.

- Step 6** Monitor the progress of the attempt to reestablish database replication in Step 5 by running the following command from the Administration CLI on the publisher node:

```
utils dbreplication runtimestate
```

The following example output displays:

```
admin: utils dbreplication runtimestate
```

```
DDB and Replication Services: ALL RUNNING
```

```
DB CLI Status: No other dbreplication CLI is running...
```

```
Cluster Replication State: BROADCAST SYNC Completed on 1 servers at: 2012-09-26-15-18
  Last Sync Result: SYNC COMPLETED 257 tables sync'ed out of 257
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```
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```

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Cluster Detailed View from gwydlvm020105 (2 Servers):
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server2	192.168.10.202	0.248	Yes	Connected	0	match	Yes (2) Setup Completed
server3	192.168.10.203	0.248	Yes	Connected	0	match	Yes (2) Setup Completed
server4	192.168.10.204	0.248	Yes	Connected	0	match	Yes (2) Setup Completed

Replication is considered to be reestablished when all nodes show a replication status of **Connected** and a replication setup value of **(2) Setup Complete**. Proceed as follows:

- If replication is reestablished, return to Step 1 to validate that the new node name is now correctly replicated.
- If replication does not recover, contact your Cisco Support Representative to resolve this issue.



Caution

Do not proceed beyond this point if database replication is broken.

What To Do Next

[Verify Updates on Cisco Unified Communications Manager, page 5-6](#)

Verify Updates on Cisco Unified Communications Manager

Verify that the Application Server entry for this server has been updated to reflect the new node name on the Cisco Unified Communications Manager Administration GUI.

You must complete this procedure for each node name that has been changed.

Before You Begin

Ensure that database replication is operational on all nodes. See [Verify Database Replication, page 5-3](#).

Procedure

- Step 1** Sign in to the Cisco Unified Communications Manager Administration GUI and Navigate to **System > Application Server**.
- Step 2** Click **Find**, if required, on the **Find and List Application Servers** page.
- Step 3** Ensure that an entry exists for the updated node name in the list of Application Servers. If there is no entry, add an entry for the new node name.
-

What To Do Next

Complete the post-change task list on all applicable nodes within the cluster. See [Post-Change Task List, page 7-1](#).

