

Configuring Multicast Clustering with Multihomed Servers

Clustering in Clearspace (as well as Forums) uses the Tangosol Coherence library. By default (and recommendation) Tangosol Coherence uses multicast to communicate between clustered nodes. If the servers in the cluster have multiple network interfaces, some specific configuration may be required.

If more than one network interface is present on the server, Tangosol Coherence picks one of the interfaces (probably eth0) to send out multicast packets from.

If that interface does not have multicast enabled and/or restricts multicast traffic through firewall rules, clustering will fail.

To force Coherence to use a specific interface to send multicast packets from, set JVM system property:

```
tangosol.coherence.localhost=<ip address of desired interface>
```

To force Coherence to use a particular port number for the multicast cluster, set JVM system property:

```
tangosol.coherence.clusterport=<port number>
```

For more information on setting Tangosol system properties via the java command line, please see tangosol's documentation on the subject here:

<http://wiki.tangosol.com/display/COH32UG/CommandLineSettingOverrideFeature>

If the system still isn't working after this configuration has been made, the following steps can be used to troubleshoot the system:

Caching issues are often related to networking. First ensure that the machines are on the same subnet. If they are, another common issue is with Multicast being disabled on a server. Tangosol includes a test to ensure that Multicast is allowed on the network. To run this test, do the following:

1. Navigate to a Jive Home application's installation directory /WEB-INF/lib folder.
2. execute: `java -cp tangosol.jar;tangosol-license.jar;tangosol-work-manager.jar;coherence.jar com.tangosol.net.MulticastTest <commands -- use -h to see a list of options>`
3. Complete the above steps on a second machine while the first is still running.
4. View the output from each machine. Make sure that each machine is receiving the other's packets.