**Troubleshooting clustering**

The clustering communication is carried out, by default, using UDP and multicasts information around the cluster. If there are problems, typically it is because of one of the following reasons:

1. The nodes are behind a firewall. If your nodes are on different machines then it is possible that the firewall is blocking the multicasts. you can test this by disabling the firewall for each node or adding the appropriate rules.
2. You are using a home network or are behind a gateway. Typically home networks will redirect any UDP traffic to the Internet Service Provider, which is then either dropped by the ISP or just lost. To fix this, you will need to add a route to the firewall/gateway that will redirect any multicast traffic back on to the local network instead.

Actually JGroups ships with two test programs that can be used to test multicast communication: McastReceiverTest and McastSenderTest. Start McastReceiverTest, for example:

**java –classpath jgroups-3.0.0.Final.jar org.jgroups.tests. McastReceiverTest -mcast\_addr 224.10.10.10 -port 5555**

Then, start McastSenderTest:

**java –classpath jgroups-3.0.0.Final.jar org.jgroups.tests.McastSenderTest -mcast\_addr 224.10.10.10 -port 5555**

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| The jgroups-3.0.0.Final.jar can be located in the JBOSS\_HOME/modules/org/jgroups/main path of your server distribution. |

If multicast works correctly, you should be able to type in the McastSenderTest window and see the output in the McastReceiverTest as shown in the following screenshot



you can change it at any time digging into the jgroups-udp socket binding:

<socket-binding name="jgroups-udp" port="55200" multicast-address="${jboss.default.multicast.address:230.0.0.4}" multicast-port="45688"/>

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| If you are upgrading from an earlier server release, this command is the equivalent of the AS 5/6 option: run.sh -c all -u 225.11.11.11 -m 45688 |