Top of Form



Bottom of Form

* [Browse](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough)
  + [Pages](https://docs.jboss.org/author/pages/listpages.action?key=WFLY10)
  + [Blog](https://docs.jboss.org/author/pages/viewrecentblogposts.action?key=WFLY10)
  + [Labels](https://docs.jboss.org/author/labels/listlabels-heatmap.action?key=WFLY10)
  + [Attachments](https://docs.jboss.org/author/spaces/listattachmentsforspace.action?key=WFLY10)
  + [Mail](https://docs.jboss.org/author/spaces/viewmailarchive.action?key=WFLY10)
  + [Advanced](https://docs.jboss.org/author/spaces/viewspacesummary.action?key=WFLY10)
  + [Space Directory](https://docs.jboss.org/author/spacedirectory/view.action)
  + [Keyboard Shortcuts](https://docs.jboss.org/author)
  + [Confluence Gadgets](https://docs.jboss.org/author)
* [Log In](https://docs.jboss.org/author/login.action?os_destination=%2Fdisplay%2FWFLY10%2FClustering%2Band%2BDomain%2BSetup%2BWalkthrough)

1. [Project Documentation Editor](https://docs.jboss.org/author/dashboard.action)
2. [WildFly 10](https://docs.jboss.org/author/display/WFLY10)
3. **…**
4. [High Availability Guide](https://docs.jboss.org/author/display/WFLY10/High+Availability+Guide)
5. Clustering and Domain Setup Walkthrough

Top of Form



Bottom of Form

* + [Admin Guide](https://docs.jboss.org/author/display/WFLY10/Admin+Guide)
  + [Developer Guide](https://docs.jboss.org/author/display/WFLY10/Developer+Guide)
  + [High Availability Guide](https://docs.jboss.org/author/display/WFLY10/High+Availability+Guide)
    - [Introduction To High Availability Services](https://docs.jboss.org/author/display/WFLY10/Introduction+To+High+Availability+Services)
    - [Subsystem Support](https://docs.jboss.org/author/display/WFLY10/Subsystem+Support)
    - [HTTP Services](https://docs.jboss.org/author/display/WFLY10/HTTP+Services)
    - [EJB Services](https://docs.jboss.org/author/display/WFLY10/EJB+Services)
    - [HA Singleton Features](https://docs.jboss.org/author/display/WFLY10/HA+Singleton+Features)
    - [Hibernate](https://docs.jboss.org/author/display/WFLY10/Hibernate)
    - [**Clustering and Domain Setup Walkthrough**](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough)
    - [Changes From Previous Versions](https://docs.jboss.org/author/display/WFLY10/Changes+From+Previous+Versions)
    - [Related Topics](https://docs.jboss.org/author/display/WFLY10/Related+Topics)
  + [Getting Started Developing Applications Guide](https://docs.jboss.org/author/display/WFLY10/Getting+Started+Developing+Applications+Guide)
  + [Getting Started Guide](https://docs.jboss.org/author/display/WFLY10/Getting+Started+Guide)
  + [Glossary](https://docs.jboss.org/author/display/WFLY10/Glossary)
  + [Extending WildFly](https://docs.jboss.org/author/display/WFLY10/Extending+WildFly)
  + [Common](https://docs.jboss.org/author/display/WFLY10/Common)
  + [Testsuite](https://docs.jboss.org/author/display/WFLY10/Testsuite)
  + [Quickstarts](https://docs.jboss.org/author/display/WFLY10/Quickstarts)

[< Previous](https://docs.jboss.org/author/display/WFLY10/Hibernate) | [Front page](https://docs.jboss.org/author/display/WFLY10/High+Availability+Guide) | [Next >](https://docs.jboss.org/author/display/WFLY10/Changes+From+Previous+Versions)

* [Tools](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough)
  + [Attachments (14)](https://docs.jboss.org/author/pages/viewpageattachments.action?pageId=91947306)
  + [Page History](https://docs.jboss.org/author/pages/viewpreviousversions.action?pageId=91947306)
  + [Restrictions](https://docs.jboss.org/author/pages/viewinfo.action?pageId=91947306)
  + [Send to KindleSend to Kindle](https://docs.jboss.org/author/pages/viewpage.action?pageId=91947306)
  + [Info](https://docs.jboss.org/author/pages/viewinfo.action?pageId=91947306)
  + [Link to this Page…](https://docs.jboss.org/author/pages/viewinfo.action?pageId=91947306)
  + [View in Hierarchy](https://docs.jboss.org/author/pages/listpages-dirview.action?key=WFLY10&openId=91947306#selectedPageInHierarchy)
  + [View Wiki Markup](https://docs.jboss.org/author/pages/viewpagesrc.action?pageId=91947306)
  + [Export to HTML](https://docs.jboss.org/author/pages/viewpage.action?pageId=91947306)
  + [Export to EclipseHelp](https://docs.jboss.org/author/pages/viewpage.action?pageId=91947306)
  + [Export to EPUB](https://docs.jboss.org/author/pages/viewpage.action?pageId=91947306)
  + [Export to PDF](https://docs.jboss.org/author/pages/viewpage.action?pageId=91947306)
  + [Export to Word](https://docs.jboss.org/author/exportword?pageId=91947306)

**[](https://docs.jboss.org/author/display/WFLY10)**[**Clustering and Domain Setup Walkthrough**](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough)

[Skip to end of metadata](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough#page-metadata-end)

* [Attachments:14](https://docs.jboss.org/author/pages/viewpageattachments.action?pageId=91947306&metadataLink=true)
* Added by [Weinan Li](https://docs.jboss.org/author/display/~weinanli), last edited by [Jan Kalina](https://docs.jboss.org/author/display/~honza889) on Aug 02, 2017  ([view change](https://docs.jboss.org/author/pages/diffpages.action?pageId=91947306&originalId=119308536))

[Go to start of metadata](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough#page-metadata-start)

In this article, I'd like to show you how to setup WildFly 9 in domain mode and enable clustering so we could get HA and session replication among the nodes. It's a step to step guide so you can follow the instructions in this article and build the sandbox by yourself https://docs.jboss.org/author/images/icons/emoticons/smile.gif

**Preparation & Scenario**

**Preparation**

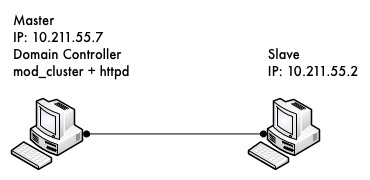
We need to prepare two hosts (or virtual hosts) to do the experiment. We will use these two hosts as following:

* Install Fedora 16 on them (Other linux version may also fine but I'll use Fedora 16 in this article)
* Make sure that they are in same local network
* Make sure that they can access each other via different TCP/UDP ports (better turn off firewall and disable SELinux during the experiment or they will cause network problems).

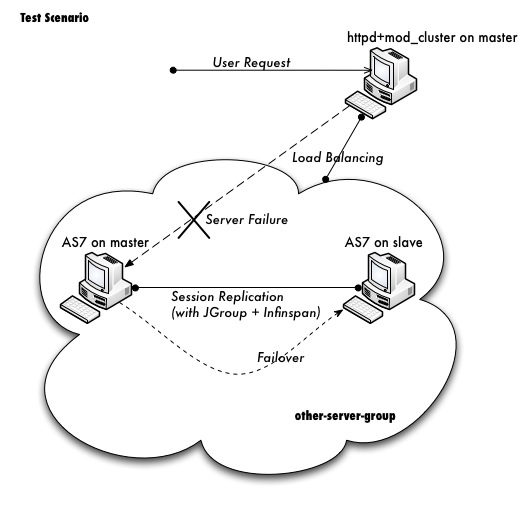
**Scenario**

Here are some details on what we are going to do:

* Let's call one host as 'master', the other one as 'slave'.
* Both master and slave will run WildFly 9, and master will run as domain controller, slave will under the domain management of master.
* Apache httpd will be run on master, and in httpd we will enable the mod\_cluster module. The WildFly 9 on master and slave will form a cluster and discovered by httpd.



* We will deploy a demo project into domain, and verify that the project is deployed into both master and slave by domain controller. Thus we could see that domain management provide us a single point to manage the deployments across multiple hosts in a single domain.
* We will access the cluster URL and verify that httpd has distributed the request to one of the WildFly host. So we could see the cluster is working properly.
* We will try to make a request on cluster, and if the request is forwarded to master, we then kill the WildFly process on master. After that we will go on requesting cluster and we should see the request is forwarded to slave, but the session is not lost. Our goal is to verify the HA is working and sessions are replicated.
* After previous step finished, we reconnect the master by restarting it. We should see the master is registered back into cluster, also we should see slave sees master as domain controller again and connect to it.



Please don't worry if you cannot digest so many details currently. Let's move on and you will get the points step by step.

**Download WildFly 9**

First we should download WildFly 9 from the website:

|  |
| --- |
| http://wildfly.org/downloads/ |

The version I downloaded is WildFly 9.0.0.Final.

After download finished, I got the zip file:

|  |
| --- |
| wildfly-9.0.0.Final.zip |

Note: The name of your archive will differ slightly due to version naming conventions.  
Then I unzipped the package to master and try to make a test run:

|  |
| --- |
| unzip wildfly-9.0.0.Final.zip  cd wildfly-9.0.0.Final/bin  ./domain.sh |

If everything ok we should see WildFly successfully startup in domain mode:

|  |
| --- |
| wildfly-9.0.0.Final/bin$ ./domain.sh  =========================================================================      JBoss Bootstrap Environment      JBOSS\_HOME: /Users/weli/Downloads/wildfly-9.0.0.Final      JAVA: /Library/Java/Home/bin/java      JAVA\_OPTS: -Xms64m -Xmx512m -XX:MaxPermSize=256m -Djava.net.preferIPv4Stack=true -Dorg.jboss.resolver.warning=true -Dsun.rmi.dgc.client.gcInterval=3600000 -Dsun.rmi.dgc.server.gcInterval=3600000 -Djboss.modules.system.pkgs=org.jboss.byteman -Djava.awt.headless=true    =========================================================================  ...    [Server:server-two] 14:46:12,375 INFO  [org.jboss.as] (Controller Boot Thread) JBAS015874: WildFly 9.0.0.Final "Kenny" started in 8860ms - Started 210 of 258 services (89 services are lazy, passive or on-demand) |

Now exit master and let's repeat the same steps on slave host. Finally we get WildFly 9 run on both master and slave, then we could move on to next step.

**Domain Configuration**

**Interface config on master**

In this section we'll setup both master and slave for them to run in domain mode. And we will configure master to be the domain controller.

First open the host.xml in master for editing:

|  |
| --- |
| vi domain/configuration/host.xml |

The default settings for interface in this file is like:

|  |
| --- |
| <interfaces>      <interface name="management">          <inet-address value="${jboss.bind.address.management:127.0.0.1}"/>      </interface>      <interface name="public">         <inet-address value="${jboss.bind.address:127.0.0.1}"/>      </interface>      <interface name="unsecured">         <inet-address value="127.0.0.1" />      </interface>  </interfaces> |

We need to change the address to the management interface so slave could connect to master. The public interface allows the application to be accessed by non-local HTTP, and the unsecured interface allows remote RMI access. My master's ip address is 10.211.55.7, so I change the config to:

|  |
| --- |
| <interfaces>      <interface name="management"          <inet-address value="${jboss.bind.address.management:10.211.55.7}"/>      </interface>      <interface name="public">         <inet-address value="${jboss.bind.address:10.211.55.7}"/>      </interface>      <interface name="unsecured">         <inet-address value="10.211.55.7" />      </interface>  </interfaces> |

**Interface config on slave**

Now we will setup interfaces on slave. Let's edit host.xml. Similar to the steps on master, open host.xml first:

|  |
| --- |
| vi domain/configuration/host.xml |

The configuration we'll use on slave is a little bit different, because we need to let slave connect to master. First we need to set the hostname. We change the name property from:

|  |
| --- |
| <host name="master" xmlns="urn:jboss:domain:3.0"> |

to:

|  |
| --- |
| <host name="slave" xmlns="urn:jboss:domain:3.0"> |

Then we need to modify domain-controller section so slave can connect to master's management port:

|  |
| --- |
| <domain-controller>     <remote protocol="remote" host="10.211.55.7" port="9999" />  </domain-controller> |

As we know, 10.211.55.7 is the ip address of master.  
You may use discovery options to define multiple mechanisms to connect to the remote domain controller :

|  |
| --- |
| <domain-controller>  <remote security-realm="ManagementRealm">    <discovery-options>      <static-discovery name="master-native" protocol="remote"  host="10.211.55.7" port="9999" />      <static-discovery name="master-https" protocol="https-remoting" host="10.211.55.7" port="9993" security-realm="ManagementRealm"/>      <static-discovery name="master-http" protocol="http-remoting" host="10.211.55.7" port="9990" />    </discovery-options>      </remote>  </domain-controller> |

Finally, we also need to configure interfaces section and expose the management ports to public address:

|  |
| --- |
| <interfaces>      <interface name="management">          <inet-address value="${jboss.bind.address.management:10.211.55.2}"/>      </interface>      <interface name="public">         <inet-address value="${jboss.bind.address:10.211.55.2}"/>      </interface>      <interface name="unsecured">         <inet-address value="10.211.55.2" />      </interface>  </interfaces> |

10.211.55.2 is the IP address of the slave. Refer to the domain controller configuration above for an explanation of the management, public, and unsecured interfaces.

|  |  |
| --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | It is easier to turn off all firewalls for testing, but in production, you need to enable the firewall and allow access to the following ports: 9999. |

**Security Configuration**

If you start WildFly on both master and slave now, you will see the slave cannot be started with following error:

|  |
| --- |
| [Host Controller] 20:31:24,575 ERROR [org.jboss.remoting.remote] (Remoting "endpoint" read-1) JBREM000200: Remote connection failed: javax.security.sasl.SaslException: Authentication failed: all available authentication mechanisms failed  [Host Controller] 20:31:24,579 WARN  [org.jboss.as.host.controller] (Controller Boot Thread) JBAS010900: Could not connect to remote domain controller 10.211.55.7:9999  [Host Controller] 20:31:24,582 ERROR [org.jboss.as.host.controller] (Controller Boot Thread) JBAS010901: Could not connect to master. Aborting. Error was: java.lang.IllegalStateException: JBAS010942: Unable to connect due to authentication failure. |

Because we haven't properly set up the authentication between master and slave. Now let's work on it:

**Master**

In bin directory there is a script called add-user.sh, we'll use it to add new users to the properties file used for domain management authentication:

|  |
| --- |
| ./add-user.sh    Enter the details of the new user to add.  Realm (ManagementRealm) :  Username : admin  Password recommendations are listed below. To modify these restrictions edit the add-user.properties configuration file.   - The password should not be one of the following restricted values {root, admin, administrator}   - The password should contain at least 8 characters, 1 alphabetic character(s), 1 digit(s), 1 non-alphanumeric symbol(s)   - The password should be different from the username  Password : passw0rd!  Re-enter Password : passw0rd!  The username 'admin' is easy to guess  Are you sure you want to add user 'admin' yes/no? yes  About to add user 'admin' for realm 'ManagementRealm'  Is this correct yes/no? yes  Added user 'admin' to file '/home/weli/projs/wildfly-9.0.0.Final/standalone/configuration/mgmt-users.properties'  Added user 'admin' to file '/home/weli/projs/wildfly-9.0.0.Final/domain/configuration/mgmt-users.properties' |

As shown above, we have created a user named 'admin' and its password is 'passw0rd!'. Then we add another user called 'slave':

|  |
| --- |
| ./add-user.sh    Enter the details of the new user to add.  Realm (ManagementRealm) :  Username : slave  Password recommendations are listed below. To modify these restrictions edit the add-user.properties configuration file.   - The password should not be one of the following restricted values {root, admin, administrator}   - The password should contain at least 8 characters, 1 alphabetic character(s), 1 digit(s), 1 non-alphanumeric symbol(s)   - The password should be different from the username  Password : passw0rd!  Re-enter Password : passw0rd!  What groups do you want this user to belong to? (Please enter a comma separated list, or leave blank for none)[  ]:  About to add user 'slave' for realm 'ManagementRealm'  Is this correct yes/no? yes  Added user 'slave' to file '/home/weli/projs/wildfly-9.0.0.Final/standalone/configuration/mgmt-users.properties'  Added user 'slave' to file '/home/weli/projs/wildfly-9.0.0.Final/domain/configuration/mgmt-users.properties'  Added user 'slave' with groups  to file '/home/weli/projs/wildfly-9.0.0.Final/standalone/configuration/mgmt-groups.properties'  Added user 'slave' with groups  to file '/home/weli/projs/wildfly-9.0.0.Final/domain/configuration/mgmt-groups.properties'  Is this new user going to be used for one AS process to connect to another AS process?  e.g. for a slave host controller connecting to the master or for a Remoting connection for server to server EJB calls.  yes/no? yes  To represent the user add the following to the server-identities definition <secret value="cGFzc3cwcmQh" /> |

We will use this user for slave host to connect to master. The add-user.sh will let you choose the type of the user. Here we need to choose 'Management User' type for both 'admin' and 'slave' account.

**Slave**

In slave we need to configure host.xml for authentication. We should change the security-realms section as following:

|  |
| --- |
| <security-realms>     <security-realm name="ManagementRealm">         <server-identities>             <secret value="cGFzc3cwcmQh" />             <!-- This is required for SSL remoting -->             <ssl>               <keystore path="server.keystore" relative-to="jboss.domain.config.dir" keystore-password="jbossas" alias="jboss" key-password="jbossas"/>             </ssl>         </server-identities>         <authentication>             <properties path="mgmt-users.properties" relative-to="jboss.domain.config.dir"/>         </authentication>     </security-realm>  </security-realms> |

We've added server-identities into security-realm, which is used for authentication host when slave tries to connect to master. In secret value property we have 'cGFzc3cwcmQh', which is the base64 code for 'passw0rd!'. You can generate this value by using a base64 calculator such as the one at <http://www.webutils.pl/index.php?idx=base64>.

Then in domain controller section we also need to add security-realm property:

|  |
| --- |
| <domain-controller>     <remote protocol="remote" host="10.211.55.7" port="9999" username="slave" security-realm="ManagementRealm"  />  </domain-controller> |

So the slave host could use the authentication information we provided in 'ManagementRealm'.

**Dry Run**

Now everything is set for the two hosts to run in domain mode. Let's start them by running domain.sh on both hosts. If everything goes fine, we could see from the log on master:

|  |
| --- |
| [Host Controller] 21:30:52,042 INFO  [org.jboss.as.domain] (management-handler-threads - 1) JBAS010918: Registered remote slave host slave |

That means all the configurations are correct and two hosts are run in domain mode now as expected. Hurrah!

**Deployment**

Now we can deploy a demo project into the domain. I have created a simple project located at:

|  |
| --- |
| https://github.com/liweinan/cluster-demo |

We can use git command to fetch a copy of the demo:

|  |
| --- |
| git clone git://github.com/liweinan/cluster-demo.git |

In this demo project we have a very simple web application. In web.xml we've enabled session replication by adding following entry:

|  |
| --- |
| <distributable/> |

And it contains a jsp page called put.jsp which will put current time to a session entry called 'current.time':

|  |
| --- |
| <%      session.setAttribute("current.time", new java.util.Date());  %> |

Then we could fetch this value from get.jsp:

|  |
| --- |
| The time is <%= session.getAttribute("current.time") %> |

It's an extremely simple project but it could help us to test the cluster later: We will access put.jsp from cluster and see the request are distributed to master, then we disconnect master and access get.jsp. We should see the request is forwarded to slave but the 'current.time' value is held by session replication. We'll cover more details on this one later.

Let's go back to this demo project. Now we need to create a war from it. In the project directory, run the following command to get the war:

|  |
| --- |
| mvn package |

It will generate cluster-demo.war. Then we need to deploy the war into domain. First we should access the http management console on master(Because master is acting as domain controller):

|  |
| --- |
| http://10.211.55.7:9990 |

It will popup a windows ask you to input account name and password, we can use the 'admin' account we've added just now. After logging in we could see the 'Server Instances' window. By default there are three servers listed, which are:

* server-one
* server-two
* server-three

We could see server-one and server-two are in running status and they belong to main-server-group; server-three is in idle status, and it belongs to other-server-group.

All these servers and server groups are set in domain.xml on master as7. What we are interested in is the 'other-server-group' in domain.xml:

|  |
| --- |
| <server-group name="other-server-group" profile="ha">     <jvm name="default">         <heap size="64m" max-size="512m"/>     </jvm>     <socket-binding-group ref="ha-sockets"/>  </server-group> |

We could see this server-group is using 'ha' profile, which then uses 'ha-sockets' socket binding group. It enable all the modules we need to establish cluster later(including infinispan, jgroup and mod\_cluster modules). So we will deploy our demo project into a server that belongs to 'other-server-group', so 'server-three' is our choice.

|  |  |  |
| --- | --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | In newer version of WildFly, the profile 'ha' changes to 'full-ha':   |  | | --- | | <server-group name="other-server-group" profile="full-ha"> | |

Let's go back to domain controller's management console:

|  |
| --- |
| http://10.211.55.7:9990 |

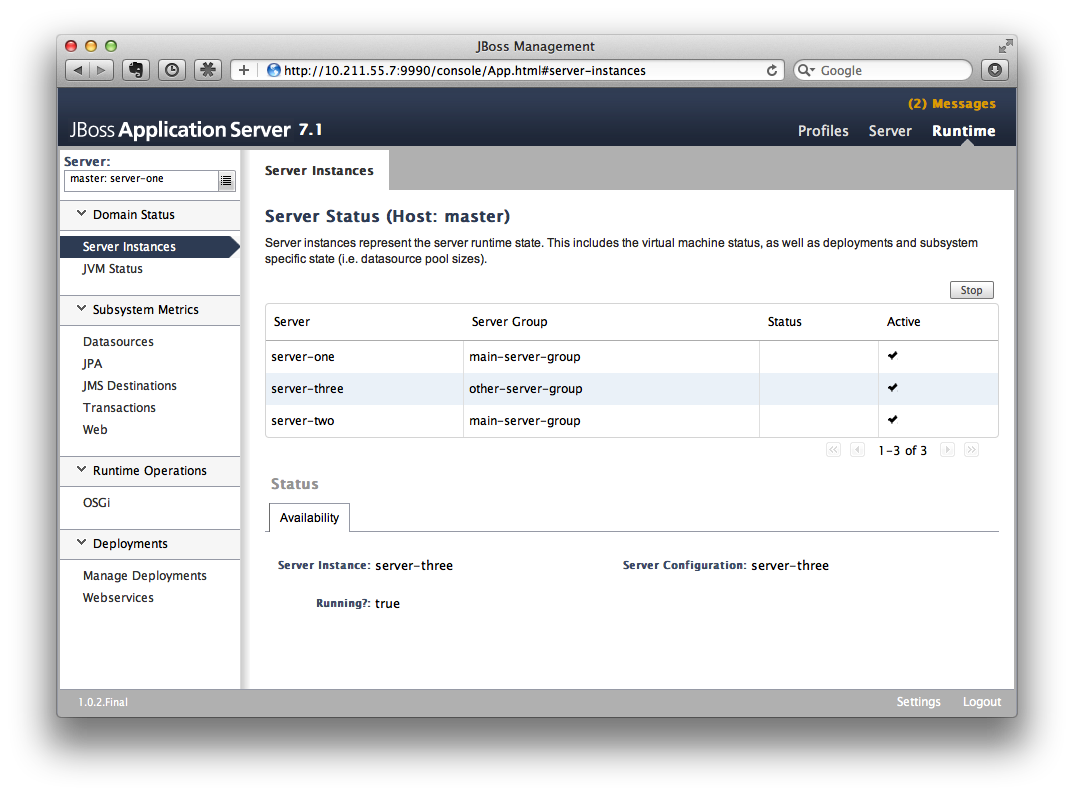
Now server-three is not running, so let's click on 'server-three' and then click the 'start' button at bottom right of the server list. Wait a moment and server-three should start now.

Now we should also enable 'server-three' on slave: From the top of menu list on left side of the page, we could see now we are managing master currently. Click on the list, and click 'slave', then choose 'server-three', and we are in slave host management page now.

Then repeat the steps we've done on master to start 'server-three' on slave.

|  |  |
| --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | server-three on master and slave are two different hosts, their names can be different. |

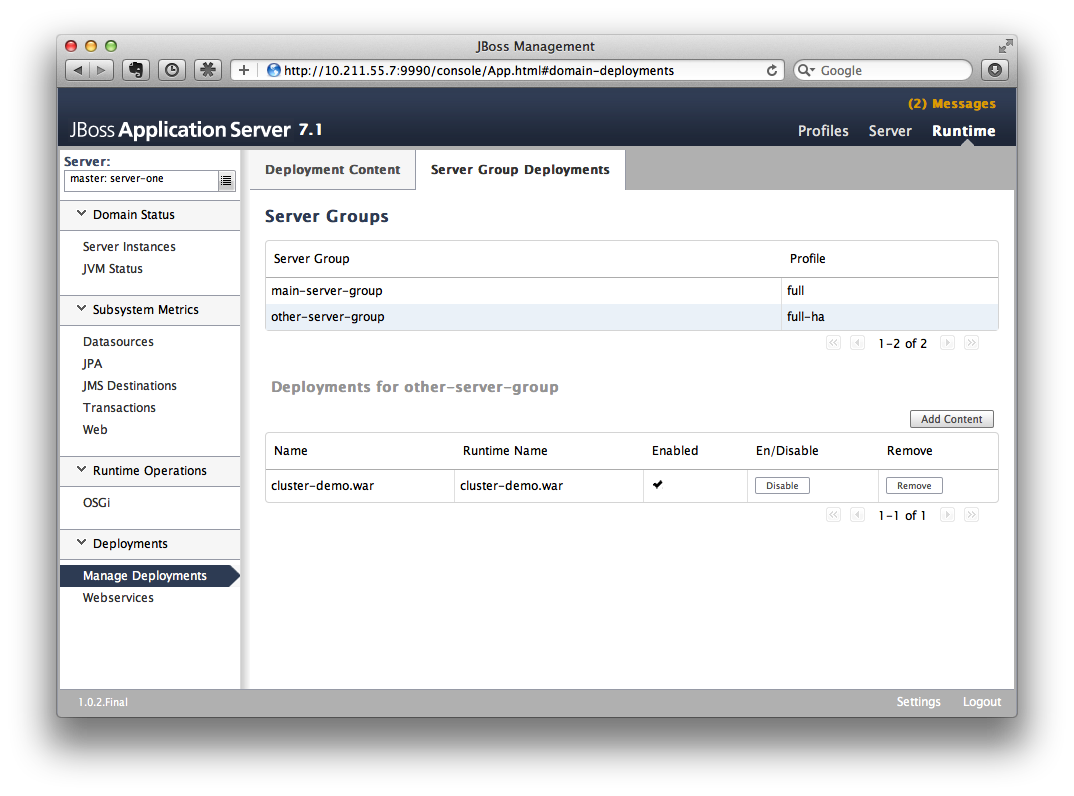
After server-three on both master and slave are started, we will add our cluster-demo.war for deployment. Click on the 'Manage Deployments' link at the bottom of left menu list.

  
(We should ensure the server-three should be started on both master and slave)

After enter 'Manage Deployments' page, click 'Add Content' at top right corner. Then we should choose our cluster-demo.war, and follow the instruction to add it into our content repository.

Now we can see cluster-demo.war is added. Next we click 'Add to Groups' button and add the war to 'other-server-group' and then click 'save'.

Wait a few seconds, management console will tell you that the project is deployed into 'other-server-group'.：



Please note we have two hosts participate in this server group, so the project should be deployed in both master and slave now - that's the power of domain management.

Now let's verify this, trying to access cluster-demo from both master and slave, and they should all work now:

|  |
| --- |
| http://10.211.55.7:8330/cluster-demo/ |



|  |
| --- |
| http://10.211.55.2:8330/cluster-demo/ |



Now that we have finished the project deployment and see the usages of domain controller, we will then head up for using these two hosts to establish a cluster https://docs.jboss.org/author/images/icons/emoticons/smile.gif

|  |  |  |
| --- | --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | Why is the port number 8330 instead of 8080? Please check the settings in host.xml on both master and slave:   |  | | --- | | <server name="server-three" group="other-server-group" auto-start="false">      <!-- server-three avoids port conflicts by incrementing the ports in           the default socket-group declared in the server-group -->      <socket-bindings port-offset="250"/>  </server> |   The port-offset is set to 250, so 8080 + 250 = 8330 |

Now we quit the WildFly process on both master and slave. We have some work left on host.xml configurations. Open the host.xml of master, and do some modifications the servers section from:

|  |
| --- |
| <server name="server-three" group="other-server-group" auto-start="false">      <!-- server-three avoids port conflicts by incrementing the ports in           the default socket-group declared in the server-group -->      <socket-bindings port-offset="250"/>  </server> |

to:

|  |
| --- |
| <server name="server-three" group="other-server-group" auto-start="true">      <!-- server-three avoids port conflicts by incrementing the ports in           the default socket-group declared in the server-group -->      <socket-bindings port-offset="250"/>  </server> |

We've set auto-start to true so we don't need to enable it in management console each time WildFly restart. Now open slave's host.xml, and modify the server-three section:

|  |
| --- |
| <server name="server-three-slave" group="other-server-group" auto-start="true">      <!-- server-three avoids port conflicts by incrementing the ports in           the default socket-group declared in the server-group -->      <socket-bindings port-offset="250"/>  </server> |

Besides setting auto-start to true, we've renamed the 'server-three' to 'server-three-slave'. We need to do this because mod\_cluster will fail to register the hosts with same name in a single server group. It will cause name conflict.

After finishing the above configuration, let's restart two as7 hosts and go on cluster configuration.

**Cluster Configuration**

We will use mod\_cluster + apache httpd on master as our cluster controller here. Because WildFly 8 has been configured to support mod\_cluster out of box so it's the easiest way.

|  |  |
| --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | The WildFly 8 domain controller and httpd are not necessary to be on same host. But in this article I just install them all on master for convenience. |

First we need to ensure that httpd is installed:

|  |
| --- |
| sudo yum install httpd |

And then we need to download newer version of mod\_cluster from its website:

|  |
| --- |
| http://www.jboss.org/mod\_cluster/downloads |

The version I downloaded is:

|  |  |
| --- | --- |
| http://downloads.jboss.org/mod\_cluster/1.1.3.Final/mod\_cluster-1.1.3.Final-linux2-x86-so.tar.gz | |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | Jean-Frederic has suggested to use mod\_cluster 1.2.x. Because 1.1.x it is affected by CVE-2011-4608  With mod\_cluster-1.2.0 you need to add EnableMCPMReceive in the VirtualHost. |

Then we extract it into:

|  |
| --- |
| /etc/httpd/modules |

Then we edit httpd.conf:

|  |
| --- |
| sudo vi /etc/httpd/conf/httpd.conf |

We should add the modules:

|  |
| --- |
| LoadModule slotmem\_module modules/mod\_slotmem.so  LoadModule manager\_module modules/mod\_manager.so  LoadModule proxy\_cluster\_module modules/mod\_proxy\_cluster.so  LoadModule advertise\_module modules/mod\_advertise.so |

Please note we should comment out:

|  |
| --- |
| #LoadModule proxy\_balancer\_module modules/mod\_proxy\_balancer.so |

This is conflicted with cluster module. And then we need to make httpd to listen to public address so we could do the testing. Because we installed httpd on master host so we know the ip address of it:

|  |
| --- |
| Listen 10.211.55.7:80 |

Then we do the necessary configuration at the bottom of httpd.conf:

|  |  |
| --- | --- |
| # This Listen port is for the mod\_cluster-manager, where you can see the status of mod\_cluster.  # Port 10001 is not a reserved port, so this prevents problems with SELinux.  Listen 10.211.55.7:10001  # This directive only applies to Red Hat Enterprise Linux. It prevents the temmporary  # files from being written to /etc/httpd/logs/ which is not an appropriate location.  MemManagerFile /var/cache/httpd    <VirtualHost 10.211.55.7:10001>      <Directory />      Order deny,allow      Deny from all      Allow from 10.211.55.    </Directory>        # This directive allows you to view mod\_cluster status at URL http://10.211.55.4:10001/mod\_cluster-manager    <Location /mod\_cluster-manager>     SetHandler mod\_cluster-manager     Order deny,allow     Deny from all     Allow from 10.211.55.    </Location>      KeepAliveTimeout 60    MaxKeepAliveRequests 0      ManagerBalancerName other-server-group    AdvertiseFrequency 5    </VirtualHost> | |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | | For more details on mod\_cluster configurations please see this document:   |  | | --- | | http://docs.jboss.org/mod\_cluster/1.1.0/html/Quick\_Start\_Guide.html | |

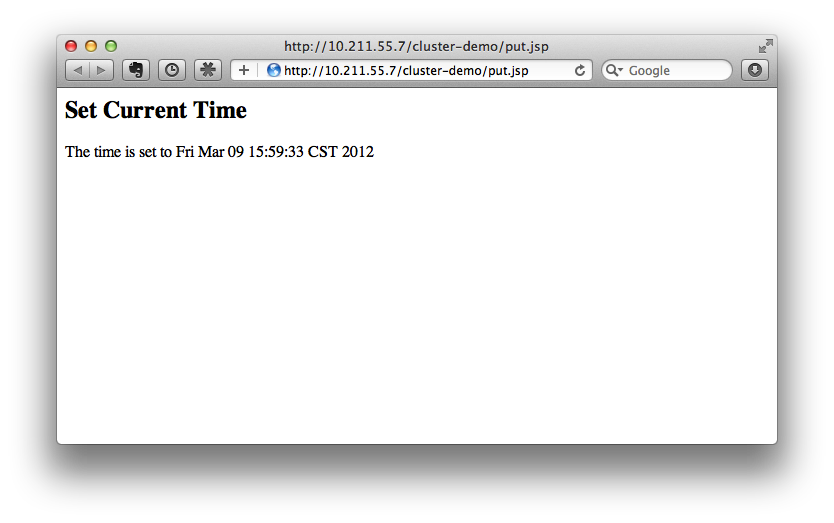
**Testing**

If everything goes fine we can start httpd service now:

|  |
| --- |
| service httpd start |

Now we access the cluster:

|  |
| --- |
| http://10.211.55.7/cluster-demo/put.jsp |



We should see the request is distributed to one of the hosts(master or slave) from the WildFly log. For me the request is sent to master:

|  |
| --- |
| [Server:server-three] 16:06:22,256 INFO  [stdout] (http-10.211.55.7-10.211.55.7-8330-4) Putting date now |

Now I disconnect master by using the management interface. Select 'runtime' and the server 'master' in the upper corners.

Select 'server-three' and kick the stop button, the active-icon should change.

Killing the server by using system commands will have the effect that the Host-Controller restart the instance imediately!

Then wait for a few seconds and access cluster:

|  |
| --- |
| http://10.211.55.7/cluster-demo/get.jsp |



Now the request should be served by slave and we should see the log from slave:

|  |
| --- |
| [Server:server-three-slave] 16:08:29,860 INFO  [stdout] (http-10.211.55.2-10.211.55.2-8330-1) Getting date now |

And from the get.jsp we should see that the time we get is the same we've put by 'put.jsp'. Thus it's proven that the session is correctly replicated to slave.

Now we restart master and should see the host is registered back to cluster.

|  |  |
| --- | --- |
| https://docs.jboss.org/author/images/icons/emoticons/warning.gif | It doesn't matter if you found the request is distributed to slave at first time. Then just disconnect slave and do the testing, the request should be sent to master instead. The point is we should see the request is redirect from one host to another and the session is held. |

**Special Thanks**

<VirtualHost 192.168.1.2:6666>  
<Location />  
Order deny,allow

Allow from all  
</Location>

 # This directive allows you to view mod\_cluster status at URL <http://192.168.1.2:6666/mod_cluster-manager>  
  <Location /mod\_cluster-manager>  
   SetHandler mod\_cluster-manager  
   Order deny,allow  
   Allow from 192.168.1.  
  </Location>

KeepAliveTimeout 60  
MaxKeepAliveRequests 0  
ManagerBalancerName other-server-group  
AdvertiseFrequency 5  
EnableMCPMReceive  
</VirtualHost>

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947347#comment-91947347)

User icon: ranga033

Apr 08, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

I feel the port of server three is overlapping with a different server, can u try by giving a different offset in host.xml ?

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947348#comment-91947348)

User icon: paul.chan

Apr 09, 2012

[**Paul Chan**](https://docs.jboss.org/author/display/~paul.chan)

i changed the port but getting the same error. please find attached file which contains config details

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947349#comment-91947349)

User icon: ranga033

Apr 08, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

From your config files I see you have the following :-

1.)  Master

server- one

server-two -> offset -150

server-three -> offset  ->250

2.) Slave

server- one

server-two -> offset -150

server-three -> offset  ->250

So are you starting 6 servers in total (3 in each machine ? ) ? To debug start each of the servers one after another (disable auto start =true in  host.xml of master and slave) and find out on start of which of the server causes this problem to be showing up in console continously?

Another simple test you can try if it is indeed caused by port - change  offset for server two and server three in Master to 151 and 251 and in slave as 101 and 201 (or some odd numbers) (This is just a guess )

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947350#comment-91947350)

User icon: paul.chan

Apr 08, 2012

[**Paul Chan**](https://docs.jboss.org/author/display/~paul.chan)

I followed what you said. first i started server three of master (it went fine, no errors) but when i started server three of

slave, getting error continuously

[Server:server-three] 22:42:03,808 ERROR [org.jboss.modcluster.mcmp.impl.Default  
MCMPHandler] (ContainerBackgroundProcessor[StandardEngine[jboss.web]]) Error [ME  
M: MEM: Old node still exist:

Unknown macro: {4}

] sending command CONFIG to proxy DivyaArvind/1  
92.168.1.2:6666, configuration will be reset

Even i tried changing port , but no use

* [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947351#comment-91947351)

1. User icon: ranga033

Apr 08, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

Ok, the ports are not the cause, this is an issue with AS7. To get this working you would need to add an instance id in web subsystem. you cannot hard-code this to master, instead you need to have:-

|  |
| --- |
| ${jboss.node.name} |

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947352#comment-91947352)
  + User icon: paul.chan

Apr 08, 2012

[**Paul Chan**](https://docs.jboss.org/author/display/~paul.chan)

thanks now the error has gone.... but nothing display when i test the deployed demo on browser.

Please help me, Do i need to change/add anything on http server CONFIG?

I am able to access mod\_cluster-manager.

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947353#comment-91947353)
    - User icon: ranga033

Apr 08, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

How are you testing it ? <http://192.168.1.2:6666/cluster-demo> ?

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947354#comment-91947354)
      * User icon: paul.chan

Apr 08, 2012

[**Paul Chan**](https://docs.jboss.org/author/display/~paul.chan)

finally i got everything ....

1) I made a call to put.jsp, it was directed to master machine and i stopped server three of

    master. made a call to get.jsp and it was directed to slave machine. everything fine.

2) Brought back server three of master, now again i made a call to put.jsp and it was

    failed 'service temporary unavailable'

3) the error on console when i brought back 'master'

[Server:server-three] 23:46:22,379 WARN  [org.hornetq.core.cluster.impl.Di  
scoveryGroupImpl] (hornetq-discovery-group-thread-dg-group1) There are more than  
 one servers on the network broadcasting the same node id. You will see this mes  
sage exactly once (per node) if a node is restarted, in which case it can be saf  
ely ignored. But if it is logged continuously it means you really do have more t  
han one node on the same network active concurrently with the same node id. This  
 could occur if you have a backup node active at the same time as its live node.  
 nodeID=6498e4cb-8061-11e1-a0d6-24b6fd012f2a

4) Error logs in HTTP server:

    [Sun Apr 08 23:46:59 2012] [error] proxy: CLUSTER: (balancer://other-server-group). All workers are in error state

* + - * + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947355#comment-91947355)
        + User icon: ranga033

Apr 08, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

Point 3 is not an error if you get it only once (during restart). I dont' have an idea of why you get this issue.

Some points you may want to check :-

1.) Hope you have <distributable/> in your web.xml.

2.) Any errors when you brought up the master , server three (related to cache) , also any errors in slave - master three.

Dont have a setup, I'll check this example again and get back to you later.

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947356#comment-91947356)

User icon: paul.chan

Apr 08, 2012

[**Paul Chan**](https://docs.jboss.org/author/display/~paul.chan)

message from management console. i sent you an email please check it.

i was not able to attach a file here.

Thanks for your co-operation

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947357#comment-91947357)

1. User icon: boanergesza11

Apr 17, 2012

[**Gerhard Visagie**](https://docs.jboss.org/author/display/~boanergesza11)

OK, so I decided to try using linux instead of windows XP. I used Virtualbox with two Ubuntu server installs. I used JBoss AS 7.1 and jdk 7.0.3. After configuration of the cluster I deploy the "cluster-demo.war". The deploy screen then gets stuck in "Please wait: Your request is being processed ...".

In the log I get this printout for master:

[Server:server-three] 10:02:53,654 INFO  [org.jboss.as.server] (host-controller-connection-threads - 2) JBAS015870: Deploy of deployment "cluster-demo.war" was rolled back with failure message JBAS014750: Operation handler failed to complete  
[Server:server-three] 10:02:53,664 INFO  [org.jboss.as.clustering.infinispan] (MSC service thread 1-1) JBAS010282: Stopped //default-host//cluster-demo cache from web container  
[Server:server-three] 10:02:53,778 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000029: Passivating all entries to disk  
[Server:server-three] 10:02:53,779 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000030: Passivated 0 entries in 0 milliseconds  
[Server:server-three] 10:02:53,783 INFO  [org.jboss.as.clustering.infinispan] (pool-14-thread-1) JBAS010282: Stopped repl cache from web container  
[Server:server-three] 10:02:53,794 INFO  [org.jboss.as.server.deployment] (MSC service thread 1-2) JBAS015877: Stopped deployment cluster-demo.war in 148ms  
[Server:server-three] 10:02:53,998 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-12-thread-1) ISPN000082: Stopping the RpcDispatcher  
[Server:server-three] 10:02:54,119 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (Incoming-7,null) ISPN000094: Received new cluster view: [master:server-three/web|2] [master:server-three/web]  
[Host Controller] 10:02:54,129 ERROR [org.jboss.as.controller.management-operation] (HttpManagementService-threads - 1) JBAS014612: Operation ("composite") failed - address: ([]): java.lang.IllegalArgumentException  
[Host Controller]       at org.jboss.dmr.ModelValue.getChild(ModelValue.java:108) [jboss-dmr-1.1.1.Final.jar:1.1.1.Final]  
[Host Controller]       at org.jboss.dmr.ModelNode.get(ModelNode.java:798) [jboss-dmr-1.1.1.Final.jar:1.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.controller.operations.coordination.DomainFinalResultHandler.collectHostFailures(DomainFinalResultHandler.java:158) [jboss-as-host-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.controller.operations.coordination.DomainFinalResultHandler.execute(DomainFinalResultHandler.java:80) [jboss-as-host-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.executeStep(AbstractOperationContext.java:385) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.doCompleteStep(AbstractOperationContext.java:272) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.completeStep(AbstractOperationContext.java:200) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.controller.operations.coordination.OperationCoordinatorStepHandler.executeTwoPhaseOperation(OperationCoordinatorStepHandler.java:225) [jboss-as-host-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.controller.operations.coordination.OperationCoordinatorStepHandler.execute(OperationCoordinatorStepHandler.java:118) [jboss-as-host-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.controller.operations.coordination.PrepareStepHandler.execute(PrepareStepHandler.java:85) [jboss-as-host-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.executeStep(AbstractOperationContext.java:385) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.doCompleteStep(AbstractOperationContext.java:272) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.AbstractOperationContext.completeStep(AbstractOperationContext.java:200) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.ModelControllerImpl.execute(ModelControllerImpl.java:121) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.ModelControllerImpl$1.execute(ModelControllerImpl.java:309) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.controller.ModelControllerImpl$1.execute(ModelControllerImpl.java:299) [jboss-as-controller-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.http.server.DomainApiHandler.processRequest(DomainApiHandler.java:294) [jboss-as-domain-http-interface-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.http.server.DomainApiHandler.doHandle(DomainApiHandler.java:201) [jboss-as-domain-http-interface-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.http.server.DomainApiHandler.handle(DomainApiHandler.java:208) [jboss-as-domain-http-interface-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.as.domain.http.server.security.SubjectAssociationHandler.handle(SubjectAssociationHandler.java:51) [jboss-as-domain-http-interface-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.com.sun.net.httpserver.Filter$Chain.doFilter(Filter.java:78)  
[Host Controller]       at org.jboss.sun.net.httpserver.AuthFilter.doFilter(AuthFilter.java:69)  
[Host Controller]       at org.jboss.com.sun.net.httpserver.Filter$Chain.doFilter(Filter.java:81)  
[Host Controller]       at org.jboss.sun.net.httpserver.ServerImpl$Exchange$LinkHandler.handle(ServerImpl.java:710)  
[Host Controller]       at org.jboss.com.sun.net.httpserver.Filter$Chain.doFilter(Filter.java:78)  
[Host Controller]       at org.jboss.as.domain.http.server.RealmReadinessFilter.doFilter(RealmReadinessFilter.java:54) [jboss-as-domain-http-interface-7.1.1.Final.jar:7.1.1.Final]  
[Host Controller]       at org.jboss.com.sun.net.httpserver.Filter$Chain.doFilter(Filter.java:81)  
[Host Controller]       at org.jboss.sun.net.httpserver.ServerImpl$Exchange.run(ServerImpl.java:682)  
[Host Controller]       at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1110) [rt.jar:1.7.0\_03]  
[Host Controller]       at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:603) [rt.jar:1.7.0\_03]  
[Host Controller]       at java.lang.Thread.run(Thread.java:722) [rt.jar:1.7.0\_03]  
[Host Controller]       at org.jboss.threads.JBossThread.run(JBossThread.java:122) [jboss-threads-2.0.0.GA.jar:2.0.0.GA]  
[Host Controller]

On the slave I see this:

[Server:server-three-slave] 10:02:53,943 INFO  [org.jboss.as.server] (host-controller-connection-threads - 1) JBAS015870: Deploy of deployment "cluster-demo.war" was rolled back with failure message JBAS014750: Operation handler failed to complete  
[Server:server-three-slave] 10:02:53,957 INFO  [org.infinispan.eviction.PassivationManagerImpl] (MSC service thread 1-1) ISPN000029: Passivating all entries to disk  
[Server:server-three-slave] 10:02:53,958 INFO  [org.infinispan.eviction.PassivationManagerImpl] (MSC service thread 1-1) ISPN000030: Passivated 0 entries in 0 milliseconds  
[Server:server-three-slave] 10:02:53,963 INFO  [org.jboss.as.clustering.infinispan] (MSC service thread 1-1) JBAS010282: Stopped //default-host//cluster-demo cache from web container  
[Server:server-three-slave] 10:02:54,031 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000029: Passivating all entries to disk  
[Server:server-three-slave] 10:02:54,033 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000030: Passivated 1 entries in 1 milliseconds  
[Server:server-three-slave] 10:02:54,045 INFO  [org.jboss.as.clustering.infinispan] (pool-14-thread-1) JBAS010282: Stopped repl cache from web container  
[Server:server-three-slave] 10:02:54,056 INFO  [org.jboss.as.server.deployment] (MSC service thread 1-1) JBAS015877: Stopped deployment cluster-demo.war in 108ms  
[Server:server-three-slave] 10:02:54,295 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-12-thread-1) ISPN000082: Stopping the RpcDispatcher  
[Server:server-three-slave] 10:02:54,300 WARN  [org.infinispan.remoting.transport.jgroups.CommandAwareRpcDispatcher] (Incoming-6,null) Problems unmarshalling remote command from byte buffer: org.infinispan.CacheException: Cache manager is either starting up and type (id=74) cannot be resolved (thread not interrupted)  
[Server:server-three-slave]     at org.infinispan.marshall.jboss.ExternalizerTable.readObject(ExternalizerTable.java:274) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.jboss.marshalling.river.RiverUnmarshaller.doReadObject(RiverUnmarshaller.java:351)  
[Server:server-three-slave]     at org.jboss.marshalling.river.RiverUnmarshaller.doReadObject(RiverUnmarshaller.java:209)  
[Server:server-three-slave]     at org.jboss.marshalling.AbstractObjectInput.readObject(AbstractObjectInput.java:37) [jboss-marshalling-1.3.11.GA.jar:1.3.11.GA]  
[Server:server-three-slave]     at org.infinispan.marshall.jboss.AbstractJBossMarshaller.objectFromObjectStream(AbstractJBossMarshaller.java:148) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.infinispan.marshall.VersionAwareMarshaller.objectFromByteBuffer(VersionAwareMarshaller.java:110) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.infinispan.marshall.AbstractDelegatingMarshaller.objectFromByteBuffer(AbstractDelegatingMarshaller.java:84) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.infinispan.remoting.transport.jgroups.MarshallerAdapter.objectFromBuffer(MarshallerAdapter.java:50) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.infinispan.remoting.transport.jgroups.CommandAwareRpcDispatcher.handle(CommandAwareRpcDispatcher.java:196) [infinispan-core-5.1.2.FINAL.jar:5.1.2.FINAL]  
[Server:server-three-slave]     at org.jgroups.blocks.RequestCorrelator.handleRequest(RequestCorrelator.java:456) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.blocks.RequestCorrelator.receiveMessage(RequestCorrelator.java:363) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.blocks.RequestCorrelator.receive(RequestCorrelator.java:238) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.blocks.MessageDispatcher$ProtocolAdapter.up(MessageDispatcher.java:543) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jboss.as.clustering.jgroups.ClassLoaderAwareUpHandler.up(ClassLoaderAwareUpHandler.java:56) [jboss-as-clustering-jgroups-7.1.1.Final.jar:7.1.1.Final]  
[Server:server-three-slave]     at org.jgroups.blocks.mux.MuxUpHandler.up(MuxUpHandler.java:130) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jboss.as.clustering.jgroups.MuxChannel$ClassLoaderAwareMuxUpHandler.up(MuxChannel.java:64) [jboss-as-clustering-jgroups-7.1.1.Final.jar:7.1.1.Final]  
[Server:server-three-slave]     at org.jgroups.JChannel.up(JChannel.java:716) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.stack.ProtocolStack.up(ProtocolStack.java:1026) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.FRAG2.up(FRAG2.java:181) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.FlowControl.up(FlowControl.java:418) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.FlowControl.up(FlowControl.java:400) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.pbcast.GMS.up(GMS.java:881) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.pbcast.STABLE.up(STABLE.java:244) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.UNICAST2.handleDataReceived(UNICAST2.java:793) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.UNICAST2.up(UNICAST2.java:365) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.pbcast.NAKACK.up(NAKACK.java:595) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.BARRIER.up(BARRIER.java:102) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.VERIFY\_SUSPECT.up(VERIFY\_SUSPECT.java:140) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.FD.up(FD.java:273) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.FD\_SOCK.up(FD\_SOCK.java:282) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.MERGE2.up(MERGE2.java:205) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.Discovery.up(Discovery.java:355) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.stack.Protocol.up(Protocol.java:358) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.TP.passMessageUp(TP.java:1174) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.TP$IncomingPacket.handleMyMessage(TP.java:1722) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at org.jgroups.protocols.TP$IncomingPacket.run(TP.java:1704) [jgroups-3.0.6.Final.jar:3.0.6.Final]  
[Server:server-three-slave]     at java.util.concurrent.ThreadPoolExecutor.runWorker(ThreadPoolExecutor.java:1110) [rt.jar:1.7.0\_03]  
[Server:server-three-slave]     at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:603) [rt.jar:1.7.0\_03]  
[Server:server-three-slave]     at java.lang.Thread.run(Thread.java:722) [rt.jar:1.7.0\_03]  
[Server:server-three-slave]

Any ideas On what im doing wrong?

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947358#comment-91947358)
  + User icon: boanergesza11

Apr 17, 2012

[**Gerhard Visagie**](https://docs.jboss.org/author/display/~boanergesza11)

I noticed in the top right hand corner at "Messages" there was an "Unknown Error" When I clocked it, this is what I saw:

"

**Unknown error  
Unexpected HTTP response: 500**

Request  
{  
"operation" => "composite",  
"address" => [],  
"steps" => [

Unknown macro: { "address" => [ ("server-group" => "other-server-group"), ("deployment" => "cluster-demo.war") ], "operation" => "add" }

,

Unknown macro: { "address" => [ ("server-group" => "other-server-group"), ("deployment" => "cluster-demo.war") ], "operation" => "deploy" }

]  
}

Response

Internal Server Error  
{  
"outcome" => "failed",  
"result" => {  
"step-1" =>

Unknown macro: { "outcome" => "failed", "rolled-back" => true }

,  
"step-2" =>

},  
"failure-description" => "JBAS014654: Composite operation was rolled back",  
"rolled-back" => true  
}  
"

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947359#comment-91947359)

1. User icon: rzhevskiy

Apr 19, 2012

[**Dmitry Rzhevskiy**](https://docs.jboss.org/author/display/~rzhevskiy)

Hi

I try create HA cluster, as described in thi aricle and as described in this comment

<https://docs.jboss.org/author/display/AS71/AS7+Cluster+Howto#comment-22872548>

But HA not work: I put date on master (i see from log) stop server on master, on slave "The time is null "

Session not replicated.

In logs I see"JBAS010206: Number of cluster members: 1"  
What I do wrong?  
config files and logs I post there: <https://gist.github.com/2419905>

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947360#comment-91947360)

1. User icon: dberkowicz

May 09, 2012

[**David Berkowicz**](https://docs.jboss.org/author/display/~dberkowicz)

Hi

I downloaded ver 7.1.1 and followed the instructions to create a master-slave set of servers. I am successfully able to remotely start a slave server, but I am unable to deploy the cluster-demo.war.

The sequence I follow is as detailed in the guide;

* + I start the master server-three
  + I start the slave server-three
  + I upload the cluster-demo.war
  + I attempt to deploy to the cluster group

There are no overt errors on the slave (and master) console when I start the default servers, but I do see the following on starting server-three:

[Server:server-three] JBAS014775:    New missing/unsatisfied dependencies:  
[Server:server-three]       service jboss.binding.jacorb (missing) dependents: [service jboss.jacorb.orb-service]   
[Server:server-three]       service jboss.binding.jacorb-ssl (missing) dependents: [service jboss.jacorb.orb-service]   
[Server:server-three]       service jboss.binding.messaging (missing) dependents: [service jboss.messaging.default]   
[Server:server-three]       service jboss.binding.messaging-throughput (missing) dependents: [service jboss.messaging.default]   
[Server:server-three]   
[Server:server-three] 17:25:20,392 ERROR [org.jboss.as] (Controller Boot Thread) JBAS015875: JBoss AS 7.1.1.Final "Brontes" started (with errors) in 5684ms - Started 146 of 280 services (12 services failed or missing dependencies, 121 services are passive or on-demand)  
[Server:server-three] 17:25:20,387 INFO  [org.jboss.as.controller] (Controller Boot Thread) JBAS014774: Service status report

[Server:server-three] JBAS014775:    New missing/unsatisfied dependencies:

[Server:server-three]       service jboss.binding.jacorb (missing) dependents: [service jboss.jacorb.orb-service]

[Server:server-three]       service jboss.binding.jacorb-ssl (missing) dependents: [service jboss.jacorb.orb-service]

[Server:server-three]       service jboss.binding.messaging (missing) dependents: [service jboss.messaging.default]

[Server:server-three]       service jboss.binding.messaging-throughput (missing) dependents: [service jboss.messaging.default]

[Server:server-three]

[Server:server-three] 17:25:20,392 ERROR [org.jboss.as] (Controller Boot Thread) JBAS015875: JBoss AS 7.1.1.Final "Brontes" started (with errors) in 5684ms - Started 146 of 280 services (12 services failed or missing dependencies, 121 services are passive or on-demand)

The remote deployment hangs and terminates with a 500 error in the master log. The slave console shows the following messages:

[Server:server-three] 16:33:08,859 INFO  [stdout] (pool-13-thread-1)   
[Server:server-three] 16:33:08,860 INFO  [stdout] (pool-13-thread-1) -------------------------------------------------------------------  
[Server:server-three] 16:33:08,861 INFO  [stdout] (pool-13-thread-1) GMS: address=slaveport:server-three/web, cluster=web, physical address=[10.16.221.102:55450](http://10.16.221.102:55450/)  
[Server:server-three] 16:33:08,861 INFO  [stdout] (pool-13-thread-1) -------------------------------------------------------------------  
[Server:server-three] 16:33:11,133 INFO  [org.infinispan.configuration.cache.EvictionConfigurationBuilder] (MSC service thread 1-2) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,135 INFO  [org.infinispan.configuration.cache.EvictionConfigurationBuilder] (MSC service thread 1-1) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,190 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-14-thread-1) ISPN000078: Starting JGroups Channel  
[Server:server-three] 16:33:11,195 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-14-thread-1) ISPN000094: Received new cluster view: [slaveport:server-three/web|0] [slaveport:server-three/web]  
[Server:server-three] 16:33:11,196 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-14-thread-1) ISPN000079: Cache local address is slaveport:server-three/web, physical addresses are [[10.16.221.102:55450](http://10.16.221.102:55450/)]  
[Server:server-three] 16:33:11,201 INFO  [org.infinispan.factories.GlobalComponentRegistry] (pool-14-thread-1) ISPN000128: Infinispan version: Infinispan 'Brahma' 5.1.2.FINAL  
[Server:server-three] 16:33:11,201 INFO  [org.infinispan.config.ConfigurationValidatingVisitor] (pool-14-thread-1) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,302 INFO  [org.infinispan.jmx.CacheJmxRegistration] (pool-14-thread-1) ISPN000031: MBeans were successfully registered to the platform mbean server.  
[Server:server-three] 16:33:11,314 INFO  [org.jboss.as.clustering.infinispan] (pool-14-thread-1) JBAS010281: Started repl cache from web container  
[Server:server-three] 16:33:11,323 INFO  [org.jboss.as.clustering.impl.CoreGroupCommunicationService.web] (MSC service thread 1-4) JBAS010206: Number of cluster members: 1  
[Server:server-three] 16:33:11,368 INFO  [org.infinispan.configuration.cache.EvictionConfigurationBuilder] (MSC service thread 1-3) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,388 INFO  [org.infinispan.config.ConfigurationValidatingVisitor] (MSC service thread 1-3) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,410 INFO  [org.infinispan.jmx.CacheJmxRegistration] (MSC service thread 1-3) ISPN000031: MBeans were successfully registered to the platform mbean server.  
[Server:server-three] 16:33:11,412 INFO  [org.jboss.as.clustering.infinispan] (MSC service thread 1-3) JBAS010281: Started //default-host//cluster-demo cache from web container  
[Server:server-three] 16:33:11,427 INFO  [org.infinispan.configuration.cache.EvictionConfigurationBuilder] (MSC service thread 1-3) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,429 INFO  [org.infinispan.configuration.cache.EvictionConfigurationBuilder] (MSC service thread 1-3) ISPN000152: Passivation configured without an eviction policy being selected. Only manually evicted entities will be pasivated.  
[Server:server-three] 16:33:11,541 INFO  [org.jboss.web] (MSC service thread 1-3) JBAS018210: Registering web context: /cluster-demo  
[Server:server-three] 16:33:11,748 INFO  [org.jboss.as.server] (host-controller-connection-threads - 1) JBAS015870: Deploy of deployment "cluster-demo.war" was rolled back with failure message JBAS014750: Operation handler failed to complete  
[Server:server-three] 16:33:11,768 INFO  [org.infinispan.eviction.PassivationManagerImpl] (MSC service thread 1-2) ISPN000029: Passivating all entries to disk  
[Server:server-three] 16:33:11,769 INFO  [org.infinispan.eviction.PassivationManagerImpl] (MSC service thread 1-2) ISPN000030: Passivated 0 entries in 1 milliseconds  
[Server:server-three] 16:33:11,772 INFO  [org.jboss.as.clustering.infinispan] (MSC service thread 1-2) JBAS010282: Stopped //default-host//cluster-demo cache from web container  
[Server:server-three] 16:33:11,802 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000029: Passivating all entries to disk  
[Server:server-three] 16:33:11,803 INFO  [org.infinispan.eviction.PassivationManagerImpl] (pool-14-thread-1) ISPN000030: Passivated 0 entries in 0 milliseconds  
[Server:server-three] 16:33:11,806 INFO  [org.jboss.as.clustering.infinispan] (pool-14-thread-1) JBAS010282: Stopped repl cache from web container  
[Server:server-three] 16:33:11,831 INFO  [org.jboss.as.server.deployment] (MSC service thread 1-2) JBAS015877: Stopped deployment cluster-demo.war in 81ms  
[Server:server-three] 16:33:11,935 INFO  [org.infinispan.remoting.transport.jgroups.JGroupsTransport] (pool-12-thread-1) ISPN000082: Stopping the RpcDispatcher  
I'm running this on os X (Lion) and java version "1.6.0\_31"

Java(TM) SE Runtime Environment (build 1.6.0\_31-b04-415-11M3635)

Java HotSpot(TM) 64-Bit Server VM (build 20.6-b01-415, mixed mode)

Any help will be greatly appreciated.

David.

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947361#comment-91947361)
  + User icon: ranga033

May 10, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

Try using full-ha-sockets in other-server-group, ? Have a look at this thread if you encounter a different error after trying this ...

<https://community.jboss.org/message/727190#727190>

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947362#comment-91947362)
    - User icon: dberkowicz

May 10, 2012

[**David Berkowicz**](https://docs.jboss.org/author/display/~dberkowicz)

Thank you that fixed the problem.

The issue I run into now relates to configuring httpd - I am attempting to include the cluster modules into the bundled apache 2.2 installation on a Mac (Lion).

I get the following error:

sudo apachectl -k restart  
httpd: Syntax error on line 116 of /private/etc/apache2/httpd.conf: Cannot load /usr/libexec/apache2/mod\_slotmem.so into server: dlopen(/usr/libexec/apache2/mod\_slotmem.so, 10): no suitable image found.  Did find:\n\t/usr/libexec/apache2/mod\_slotmem.so: mach-o, but wrong architecture  
sudo apachectl -k restart

httpd: Syntax error on line 116 of /private/etc/apache2/httpd.conf: Cannot load /usr/libexec/apache2/mod\_slotmem.so into server: dlopen(/usr/libexec/apache2/mod\_slotmem.so, 10): no suitable image found.  Did find:\n\t/usr/libexec/apache2/mod\_slotmem.so: mach-o, but wrong architecture

Anybody have any success with this, or should I just go ahead and try the httpd bundle from jboss directly?

Thanks.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947363#comment-91947363)

1. User icon: dberkowicz

May 10, 2012

[**David Berkowicz**](https://docs.jboss.org/author/display/~dberkowicz)

I have progressed to the point where everything but clustering seems to be working.

I have a master and a slave.

I installed the httpd binary from jboss and configured it according to the instructions given in the main document.

I am able to see the mod\_cluster\_manager page (but none of the links show anything).

I can invoke the put.jsp method in cluster-demo when I go directly to port 8330, but I get an page not found error when I try navigate using port number 10001.

The relevant portion of my httpd.conf file is below. The error log show

File does not exist: /opt/jboss/httpd/htdocs/htdocs/cluster-demo

As usual, any help will be greatly appreciated!

# MOD\_CLUSTER\_ADDS

# Adjust to you hostname and subnet.

<IfModule manager\_module>

# This Listen port is for the mod\_cluster-manager, where you can see the status of mod\_cluster.

# Port 10001 is not a reserved port, so this prevents problems with SELinux.

Listen 172.16.129.148:10001 <VirtualHost 172.16.129.148:10001>

<Directory />

   Order deny,allow

   Deny from all

   Allow from all

 </Directory>  # This directive allows you to view mod\_cluster status at URL <http://10.211.55.4:10001/mod_cluster-manager>

 <Location /mod\_cluster-manager>  
  SetHandler mod\_cluster-manager

  Order deny,allow

  Deny from all

    Allow from all  
 </Location>

 KeepAliveTimeout 60

 MaxKeepAliveRequests 0

 ManagerBalancerName other-server-group

 AdvertiseFrequency 5

 EnableMCPMReceive

</VirtualHost>

</IfModule>

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947364#comment-91947364)
  + User icon: inspector

May 10, 2012

[**I. Smis**](https://docs.jboss.org/author/display/~inspector)

Hi,

if mod\_cluster-manager only shows a heading like "mod\_cluster/1.2.0.Final" and some links (showing nothing like you say) your nodes have not been registered on the apache-side of mod\_cluster. This would also explain that you get a 404 when you try to access the cluster-demo through mod\_cluster (port 10001) but it works if you go directly on a JBoss instance.

I had this problem by myself and it stinks like [JBPAPP-7516](https://issues.jboss.org/browse/JBPAPP-7516?page=com.atlassian.jira.plugin.system.issuetabpanels:comment-tabpanel) because it works fine with the latest EAP6 beta and the JBoss AS7.1.2 (you can get a nightly build [here](https://ci.jboss.org/jenkins/job/JBoss-AS-7.x-latest/)).

Also watch your JBoss for any error-messages on the terminal. Sometimes the error-messages are hard to see between all the other messages.

Maybe you should give the latest working nightly-build a try, But be warned, just copying your actual configuration files to the new JBoss installation won't work, because the JBoss makes changes to these files during deployment.

Greetings from Berlin!

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947365#comment-91947365)
    - User icon: dberkowicz

May 10, 2012

[**David Berkowicz**](https://docs.jboss.org/author/display/~dberkowicz)

Immanuel,

Thanks for the prompt response. I agree with your conclusion that the cluster is not being registered on the Apache side as this explains all I see. There are no errors in my JBoss console and I will try the nightly build next. I don't understand your point about configuration files though - why will JBoss overwrite my config files (domain.xml and host.xml) or did I misunderstand you?

I think we will probably end up running a number of JBoss instances behind a hardware balancer so httpd may be moot, but I still need to prove this works in our dev environment.

Danke for your help

David.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947366#comment-91947366)
      * User icon: inspector

May 10, 2012

[**I. Smis**](https://docs.jboss.org/author/display/~inspector)

Hi,

the point with the configuration files (I think it was just the host.xml) is that if you deploy something into the JBoss it will write that (with some hash-values and so on) into the host.xml so the deployment is not lost after a restart of the JBoss. Maybe this behaviour does only occur when you deploy over the management-console. But after trying different JBoss 7 versions (including 7.1.0 which refuses to deploy SFSBs annotated with @Clustered) I ran into this problem a couple of times. Just copying the configuration files won't work: The JBoss you copied your configuration to doesn't find the deployments of the old JBoss you copied from and maybe some more issues.

I don't think it's the most efficient way but to solve the issue, but I alway ended up setting up a fresh configuration (so I'm quite fit in setting up the cluster described in this howto https://docs.jboss.org/author/images/icons/emoticons/wink.gif). After all this issue isn't really a big deal. I just wanted give a little hint if you run into a problem that looks like this.

Greetings from Berlin!

* + - * + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947367#comment-91947367)
    - User icon: dberkowicz

May 11, 2012

[**David Berkowicz**](https://docs.jboss.org/author/display/~dberkowicz)

Hi

Thanks for your help, you saved me a lot of head-banging!

I finally got everything to work with one caveat and one small issue.

First the caveat: it seems all nodes in a cluster need to run the same version of JBoss 7.

Second: I was unable to suppress this message:

[Server:server-three] 13:36:29,732 WARN  [org.hornetq.core.cluster.impl.DiscoveryGroupImpl] (hornetq-discovery-group-thread-dg-group1) There are more than one servers on the network broadcasting the same node id. You will see this message exactly once (per node) if a node is restarted, in which case it can be safely ignored. But if it is logged continuously it means you really do have more than one node on the same network active concurrently with the same node id. This could occur if you have a backup node active at the same time as its live node. nodeID=5b2e186c-9af8-11e1-9675-e3f2a1f44414[Server:server-three] 13:36:29,732 WARN  [org.hornetq.core.cluster.impl.DiscoveryGroupImpl] (hornetq-discovery-group-thread-dg-group1) There are more than one servers on the network broadcasting the same node id. You will see this message exactly once (per node) if a node is restarted, in which case it can be safely ignored. But if it is logged continuously it means you really do have more than one node on the same network active concurrently with the same node id. This could occur if you have a backup node active at the same time as its live node. nodeID=5b2e186c-9af8-11e1-9675-e3f2a1f44414

Again, any suggestion about killing this would be great. I'm running on os X (Lion) so the comments about NFS don't really help me much.

Thanks David.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947368#comment-91947368)
      * User icon: inspector

May 24, 2012

[**I. Smis**](https://docs.jboss.org/author/display/~inspector)

Hi David,

ok, maybe I'm a bit late but: Have you created the slave by copying the master? Then try to delete the contents of domain/data and/or domain/servers/yourserver/data . I by myself didn't experience this problem.

* + - * + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947369#comment-91947369)

1. User icon: nelique2003

Jun 12, 2012

[**Ioana Oprea**](https://docs.jboss.org/author/display/~nelique2003)

Hi everybody,

I have a question: can I use the capabilities of AS7 clustering & HA configurations in order to use other protocols

than http? We need to use **telnet** (this is the application requirement)

Thank you

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947370#comment-91947370)

1. User icon: blackbeltdev

Jun 18, 2012

[**Kirk Rasmussen**](https://docs.jboss.org/author/display/~blackbeltdev)

I followed these directions and comments by others very carefully and I got everything working \*except\* for session replication. I tried adding the <cluster-user> and <cluster-password> as was suggested. I tried both 7.1.1-Final and yesterdays latest 7.1.x build (really 7.2.0 Alpha-1). I made the minimal changes required and everything else is stock settings.

Once the other-server-group (server three) begins running I start getting errors on both master/slave as others have reported.

|  |
| --- |
| [Server:server-three] 00:33:37,845 ERROR [org.hornetq.core.protocol.core.impl.HornetQPacketHandler] (Old I/O server worker (parentId: 1750434101, [id: 0x68558135, /192.168.150.100:5695])) Failed to create session : HornetQException[errorCode=105 message=Unable to validate user: HORNETQ.CLUSTER.ADMIN.USER]  [Server:server-three]     at org.hornetq.core.security.impl.SecurityStoreImpl.authenticate(SecurityStoreImpl.java:126) [hornetq-core-2.2.18.Final.jar:2.2.18.Final (HQ\_2\_2\_18\_FINAL, 122)]  [Server:server-three]     at org.hornetq.core.server.impl.HornetQServerImpl.createSession(HornetQServerImpl.java:807) [hornetq-core-2.2.18.Final.jar:2.2.18.Final (HQ\_2\_2\_18\_FINAL, 122)] |

As was suggested in a number of forums postings I tried adding cluster-password. It wasn't clear if you were supposed to add <cluster-name> and <cluster-password> to both master and slave so I added it to both but to no avail (still doesn't work).

|  |
| --- |
| <subsystem xmlns="urn:jboss:domain:messaging:1.2">                  <hornetq-server>                      <cluster-user>admin</cluster-user>                      <cluster-password>admin1</cluster-password> |

There is NO jboss user named this but according to the directions there doesn't seem to need to be one. It's interesting that the exception says 'HORNETQ.CLUSTER.ADMIN.USER' even though I specified to use 'admin'

This is how I start both master and slave:

master:

$ sudo -u jboss bin/domain.sh  -b 192.168.150.100 -bmanagement 192.168.150.100

slave:

$ sudo -u jboss bin/domain.sh  -b 192.168.150.200 -bmanagement 192.168.150.200 -Djboss.domain.master.address=192.168.150.100 -Djboss.domain.master.port=9999

I disabled selinx and the firewall on both nodes. Everything else works great: deployments to nodes, mod\_cluster but not replication. :(

Any ideas?

Thanks

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947371#comment-91947371)
  + User icon: ranga033

Jun 15, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

It should be a valid username and the right password.

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947372#comment-91947372)
    - User icon: blackbeltdev

Jun 15, 2012

[**Kirk Rasmussen**](https://docs.jboss.org/author/display/~blackbeltdev)

I should have been more clear but I already tried using a valid user from the ManagementRealm previously (added via add-user.sh) and that didn't help. Like I said based on the error message it doesn't appear like it was honoring the <cluster-user> tag since the exception referred to 'HORNETQ.CLUSTER.ADMIN.USER'

I also tried adding 'HORNETQ.CLUSTER.ADMIN.USER'  as a valid user to the ManagementRealm and ran into the same problem.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947373#comment-91947373)
      * User icon: ranga033

Jun 16, 2012

[**rang s**](https://docs.jboss.org/author/display/~ranga033)

Could you confirm if you added the username and password in both master and slave ?

* + - * + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947380#comment-91947380)
        + User icon: blackbeltdev

Jun 18, 2012

[**Kirk Rasmussen**](https://docs.jboss.org/author/display/~blackbeltdev)

Yes I added the same username/password to both master and slave.

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947383#comment-91947383)

* + - User icon: weimeilin

Jul 30, 2012

[**Christina Lin**](https://docs.jboss.org/author/display/~weimeilin)

Is there anyway that we can encrypt this password?

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947385#comment-91947385)

1. User icon: lumia

Jun 18, 2012

[**Deep Shah**](https://docs.jboss.org/author/display/~lumia)

How to configure the clustering for standalone server. I tried with standalone-ha.xml configuration file with

two different ip address, but if i shutdown one node it will not redirect request to other node automatically.

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947374#comment-91947374)

1. User icon: askrajk

Jun 16, 2012

[**Raj Kumar**](https://docs.jboss.org/author/display/~askrajk)

I have only one laptop, please let me know how I can setup Jboss AS7 clustering on single machine, I want to test some of my project stuff on clustered environment.

Thanks in Advance!

Raj

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947375#comment-91947375)
  + User icon: lumia

Jun 16, 2012

[**Deep Shah**](https://docs.jboss.org/author/display/~lumia)

Do u want to apply it in standalone server or domain server?

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947376#comment-91947376)
    - User icon: askrajk

Jun 16, 2012

[**Raj Kumar**](https://docs.jboss.org/author/display/~askrajk)

I do not know the difference between standalone and domain, please explain.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947377#comment-91947377)
      * User icon: lumia

Jun 16, 2012

[**Deep Shah**](https://docs.jboss.org/author/display/~lumia)

See in standalone server there is only one server running,either in one machine with two

different i.p or on two different machine with two different machine. And in domain server there

will be a group of server. So,if u deploy an application in one server it will be automatically

available on another servers. in domain server on one i.p address it will be running group of

servers with different port number.

* + - * + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947378#comment-91947378)
        + User icon: askrajk

Jun 16, 2012

[**Raj Kumar**](https://docs.jboss.org/author/display/~askrajk)

Got it.so as I have only one machine then I can only run in standalone mode, right?

Can you share me the steps to setup on one machine then please?

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947379#comment-91947379)

User icon: lumia

Jun 18, 2012

[**Deep Shah**](https://docs.jboss.org/author/display/~lumia)

No you can run domain configuration in one machine for that you have to just

change the port offset for different server. So, if you run one server on

127.0.0.1:8080,then you have to run other server on 127.0.0.1:8230 port or any

other. So you can run domain server on your laptop too. So you have to decide

as per your need. And even you can also run two standalone server on one

machine with either different i.p or different port. And i will share you the steps

very soon. Thanks

[Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947381#comment-91947381)

1. User icon: modiliany

Jul 20, 2012

[**xf li**](https://docs.jboss.org/author/display/~modiliany)

Hello, Weinan.Li, I need help when I follow the steps in article: <https://docs.jboss.org/author/display/AS71/AS7+Cluster+Howto>  
server-one and server-two can start up successfully on domain master,  
but it failed to start server-three at : <http://128.128.86.222:9990/console/App.html#server-instances>

server-one and server-two log content is as bellow:  
----------------  
[Server:server-two] 10:59:46,003 INFO  [org.jboss.as] (Controller Boot Thread) JBoss AS 7.1.0.CR1b "Flux Capacitor" started in 30718ms - Started 148 of 215 services (65 services are passive or on-demand)  
[Server:server-one] 10:59:46,021 INFO  [org.jboss.as] (Controller Boot Thread) JBoss AS 7.1.0.CR1b "Flux Capacitor" started in 31217ms - Started 148 of 215 services (65 services are passive or on-demand)  
----------------  
when I click "start" button at administration console page, the console log is like this:  
----------------  
[Host Controller] 11:04:37,394 INFO  [org.jboss.as.host.controller] (HttpManagementService-threads - 6) JBAS010922: Starting server server-three  
11:04:40,969 INFO  [org.jboss.as.process.Server:server-three.status] (ProcessController-threads - 6) JBAS012017: Starting process 'Server:server-three'  
[Server:server-three] 11:04:46,925 信息    [org.jboss.modules] (main) JBoss Modules version 1.1.0.CR6  
[Server:server-three] 11:04:50,392 INFO  [org.jboss.msc] (main) JBoss MSC version 1.0.1.GA  
[Server:server-three] 11:04:50,567 INFO  [org.jboss.as] (MSC service thread 1-1) JBoss AS 7.1.0.CR1b "Flux Capacitor" starting  
[Server:server-three] 11:04:52,017 INFO  [org.xnio] (MSC service thread 1-2) XNIO Version 3.0.0.CR7  
[Server:server-three] 11:04:52,110 INFO  [org.xnio.nio] (MSC service thread 1-2) XNIO NIO Implementation Version 3.0.0.CR7  
[Server:server-three] 11:04:52,232 INFO  [org.jboss.remoting] (MSC service thread 1-2) JBoss Remoting version 3.2.0.CR8  
[Server:server-three] 11:05:00,410 ERROR [org.jboss.msc.service.fail] (MSC service thread 1-2) MSC00001: Failed to start service jboss.host.controller.channel: org.jboss.msc.service.StartException in service jboss.host.controller.channel: java.net.ConnectException: JBAS012144: Could not connect to remote://128.128.86.222:9999. The connection timed out  
[Server:server-three]     at org.jboss.as.server.mgmt.domain.HostControllerConnectionService.start(HostControllerConnectionService.java:101) [jboss-as-server-7.1.0.CR1b.jar:7.1.0.CR1b]  
[Server:server-three]     at org.jboss.msc.service.ServiceControllerImpl$StartTask.startService(ServiceControllerImpl.java:1824) [jboss-msc-1.0.1.GA.jar:1.0.1.GA]  
[Server:server-three]     at org.jboss.msc.service.ServiceControllerImpl$StartTask.run(ServiceControllerImpl.java:1759) [jboss-msc-1.0.1.GA.jar:1.0.1.GA]  
[Server:server-three]     at java.util.concurrent.ThreadPoolExecutor$Worker.runTask(ThreadPoolExecutor.java:886) [:1.6.0\_12]  
[Server:server-three]     at java.util.concurrent.ThreadPoolExecutor$Worker.run(ThreadPoolExecutor.java:908) [:1.6.0\_12]  
[Server:server-three]     at java.lang.Thread.run(Thread.java:619) [:1.6.0\_12]  
[Server:server-three] Caused by: java.net.ConnectException: JBAS012144: Could not connect to remote://128.128.86.222:9999. The connection timed out  
[Server:server-three]     at org.jboss.as.protocol.ProtocolChannelClient.connectSync(ProtocolChannelClient.java:166) [jboss-as-protocol-7.1.0.CR1b.jar:7.1.0.CR1b]  
[Server:server-three]     at org.jboss.as.protocol.ProtocolChannelClient.connectSync(ProtocolChannelClient.java:129) [jboss-as-protocol-7.1.0.CR1b.jar:7.1.0.CR1b]  
[Server:server-three]     at org.jboss.as.server.mgmt.domain.HostControllerConnectionService.start(HostControllerConnectionService.java:98) [jboss-as-server-7.1.0.CR1b.jar:7.1.0.CR1b]  
[Server:server-three]     ... 5 more  
[Server:server-three]  
[Server:server-three] 11:05:08,973 INFO  [org.jboss.as.logging] (MSC service thread 1-1) JBAS011502: Removing bootstrap log handlers  
[Server:server-three] 11:05:09,046 INFO  [org.jboss.as.clustering] (ServerService Thread Pool -- 55) JBAS010360: Activating JGroups subsystem.  
[Server:server-three] 11:05:09,099 INFO  [org.jboss.as.osgi] (ServerService Thread Pool -- 48) JBAS011910: Activating OSGi Subsystem  
[Server:server-three] 11:05:09,270 INFO  [org.jboss.as.clustering] (ServerService Thread Pool -- 60) JBAS010300: Activating Infinispan subsystem.  
[Server:server-three] 11:05:09,537 INFO  [org.jboss.as.naming] (ServerService Thread Pool -- 49) JBAS011800: Activating Naming Subsystem  
[Server:server-three] 11:05:12,976 INFO  [org.jboss.as.connector.subsystems.datasources] (ServerService Thread Pool -- 63) JBAS010403: Deploying JDBC-compliant driver class org.h2.Driver (version 1.3)  
[Server:server-three] 11:05:12,978 INFO  [org.jboss.as.security] (MSC service thread 1-1) Picketbox version=4.0.6.Beta2  
[Server:server-three] 11:05:13,618 INFO  [org.jboss.as.connector] (MSC service thread 1-2) JBAS010408: Starting JCA Subsystem (JBoss IronJacamar 1.0.6.Final)  
[Server:server-three] 11:05:19,011 INFO  [org.jboss.as.naming] (MSC service thread 1-2) JBAS011802: Starting Naming Service  
[Server:server-three] 11:05:19,651 INFO  [org.jboss.ws.common.management.AbstractServerConfig] (MSC service thread 1-1) JBoss Web Services - Stack CXF Server 4.0.0.GA  
[Server:server-three] 11:05:21,271 INFO  [org.jboss.as.modcluster] (MSC service thread 1-1) JBAS011704: Mod\_cluster uses default load balancer provider  
[Server:server-three] 11:05:21,349 INFO  [org.jboss.as.remoting] (MSC service thread 1-2) Listening on /128.128.86.222:4697  
[Server:server-three] 11:05:21,645 INFO  [org.jboss.modcluster.ModClusterService] (MSC service thread 1-1) Initializing mod\_cluster 1.2.0.Beta2  
[Server:server-three] 11:05:22,205 INFO  [org.jboss.modcluster.advertise.impl.AdvertiseListenerImpl] (MSC service thread 1-1) Listening to proxy advertisements on 224.0.1.105:23364  
[Server:server-three] 11:05:22,726 INFO  [org.apache.coyote.http11.Http11AprProtocol] (MSC service thread 1-1) Starting Coyote HTTP/1.1 on http-128.128.86.222-128.128.86.222-8330  
[Server:server-three] 11:05:22,919 INFO  [org.jboss.as.mail.extension] (MSC service thread 1-1) JBAS015400: Bound mail session [java:jboss/mail/Default]  
[Server:server-three] 11:05:26,128 INFO  [org.jboss.as.jacorb] (MSC service thread 1-1) CORBA ORB Service Started  
[Server:server-three] 11:05:26,385 信息    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-1) live server is starting with configuration HornetQ Configuration (clustered=false,backup=false,sharedStore=true,journalDirectory=/usr/jboss-as-7.1.0.CR1b/domain/servers/server-three/data/messagingjournal,bindingsDirectory=/usr/jboss-as-7.1.0.CR1b/domain/servers/server-three/data/messagingbindings,largeMessagesDirectory=/usr/jboss-as-7.1.0.CR1b/domain/servers/server-three/data/messaginglargemessages,pagingDirectory=/usr/jboss-as-7.1.0.CR1b/domain/servers/server-three/data/messagingpaging)  
[Server:server-three] 11:05:26,546 警告    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-1) Security risk! It has been detected that the cluster admin user and password have not been changed from the installation default. Please see the HornetQ user guide, cluster chapter, for instructions on how to do this.  
[Server:server-three] 11:05:27,646 INFO  [org.hornetq.core.remoting.impl.netty.NettyAcceptor] (MSC service thread 1-1) Started Netty Acceptor version 3.2.3.Final-r$

Unknown macro: {buildNumber}

128.128.86.222:5695 for CORE protocol  
[Server:server-three] 11:05:27,649 INFO  [org.hornetq.core.remoting.impl.netty.NettyAcceptor] (MSC service thread 1-1) Started Netty Acceptor version 3.2.3.Final-r$

128.128.86.222:5705 for CORE protocol  
[Server:server-three] 11:05:27,651 信息    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-1) Server is now live  
[Server:server-three] 11:05:27,651 信息    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-1) HornetQ Server version 2.2.7.Final (HQ\_2\_2\_7\_FINAL\_AS7, 121) [ff1f011e-d17b-11e1-b314-000c29eaa811] started  
[Server:server-three] 11:05:27,982 INFO  [org.jboss.as.jacorb] (MSC service thread 1-1) CORBA Naming Service Started  
[Server:server-three] 11:05:28,024 WARN  [com.arjuna.ats.arjuna] (Transaction Expired Entry Monitor) ARJUNA012210: Unable to use InetAddress.getLocalHost() to resolve address.  
[Server:server-three] 11:05:28,438 INFO  [org.jboss.as.messaging] (MSC service thread 1-1) JBAS011601: Bound messaging object to jndi name java:/ConnectionFactory  
[Server:server-three] 11:05:28,441 信息    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-1) trying to deploy queue jms.topic.testTopic  
[Server:server-three] 11:05:29,034 INFO  [org.jboss.as.messaging] (MSC service thread 1-1) JBAS011601: Bound messaging object to jndi name java:/topic/test  
[Server:server-three] 11:05:29,038 INFO  [org.jboss.as.messaging] (MSC service thread 1-2) JBAS011601: Bound messaging object to jndi name java:/RemoteConnectionFactory  
[Server:server-three] 11:05:29,039 信息    [org.hornetq.core.server.impl.HornetQServerImpl] (MSC service thread 1-2) trying to deploy queue jms.queue.testQueue  
[Server:server-three] 11:05:29,407 INFO  [org.jboss.as.messaging] (MSC service thread 1-2) JBAS011601: Bound messaging object to jndi name java:/queue/test  
[Server:server-three] 11:05:30,218 INFO  [org.jboss.as.deployment.connector] (MSC service thread 1-2) JBAS010406: Registered connection factory java:/JmsXA  
[Server:server-three] 11:05:30,275 INFO  [org.hornetq.ra.HornetQResourceAdapter] (MSC service thread 1-2) HornetQ resource adaptor started  
[Server:server-three] 11:05:30,276 INFO  [org.jboss.as.connector.services.ResourceAdapterActivatorService$ResourceAdapterActivator] (MSC service thread 1-2) IJ020002: Deployed: [file://RaActivatorhornetq-ra](file:///\\RaActivatorhornetq-ra)  
[Server:server-three] 11:05:30,284 INFO  [org.jboss.as.deployment.connector] (MSC service thread 1-2) JBAS010401: Bound JCA ConnectionFactory [java:/JmsXA]  
[Server:server-three] 11:05:30,315 INFO  [org.jboss.as.connector.subsystems.datasources] (MSC service thread 1-1) JBAS010400: Bound data source [java:jboss/datasources/ExampleDS]  
[Server:server-three] 11:05:30,379 ERROR [org.jboss.as] (Controller Boot Thread) JBoss AS 7.1.0.CR1b "Flux Capacitor" started (with errors) in 46986ms - Started 146 of 254 services (2 services failed or missing dependencies, 101 services are passive or on-demand)  
----------------  
It seems that when I start process 'Server:server-three', it tried to connect to remote://128.128.86.222:9999, and then it caused "connection timed out".  
Should I modify the "domain-controller" property in host.xml on domain master host?

P.s. domain master IP: 128.128.86.222; OS: CentOs 5.4; Memery Size: 256M; Run mode: linux text.  
and my master host config file "host.xml":  
----------------  
<host name="master" xmlns="urn:jboss:domain:1.1">

    <management>  
        <security-realms>  
            <security-realm name="ManagementRealm">  
                <authentication>  
                    <properties path="mgmt-users.properties" relative-to="jboss.domain.config.dir"/>  
                </authentication>  
            </security-realm>  
        </security-realms>  
        <management-interfaces>  
            <native-interface security-realm="ManagementRealm">  
                <socket interface="management" port="$

Unknown macro: {jboss.management.native.port}

"/>  
            </native-interface>  
            <http-interface security-realm="ManagementRealm">  
                <socket interface="management" port="$

Unknown macro: {jboss.management.http.port}

"/>  
            </http-interface>  
        </management-interfaces>  
    </management>

    <domain-controller>  
       <local />  
       <!>  
       <!-- <remote host="$

Unknown macro: {jboss.domain.master.address}

" port="$

Unknown macro: {jboss.domain.master.port}

"/> -->  
    </domain-controller>

    <interfaces>  
        <interface name="management">  
            <inet-address value="128.128.86.222"/>  
        </interface>  
    <interface name="public">  
           <inet-address value="128.128.86.222"/>  
        </interface>  
        <interface name="unsecured">  
           <inet-address value="128.128.86.222"/>  
        </interface>  
    </interfaces>

        <jvms>  
           <jvm name="default">  
          <heap size="64m" max-size="256m"/>  
       </jvm>  
        </jvms>

    <servers>  
        <server name="server-one" group="main-server-group">  
            <!-- Remote JPDA debugging for a specific server  
            <jvm name="default">  
              <jvm-options>  
                <option value="-Xrunjdwp:transport=dt\_socket,address=8787,server=y,suspend=n"/>  
              </jvm-options>  
           </jvm>  
           -->  
        </server>  
        <server name="server-two" group="main-server-group" auto-start="true">  
    <!-- server-two avoids port conflicts by incrementing the ports in  
                 the default socket-group declared in the server-group -->  
            <socket-bindings port-offset="150"/>  
        </server>  
        <server name="server-three" group="other-server-group" auto-start="false">  
            <!-- server-three avoids port conflicts by incrementing the ports in  
                 the default socket-group declared in the server-group -->  
            <socket-bindings port-offset="250"/>  
        </server>  
    </servers>  
</host>

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947384#comment-91947384)

1. User icon: sudeepbatra

Aug 09, 2012

[**Sudeep Batra**](https://docs.jboss.org/author/display/~sudeepbatra)

Hi,

        I was able to setup till the last step but the request is **not getting forwarded from Apache Http server to AS7 servers**. Both my Apache Http Server and AS7 master are running on a Windows7 machine and the slave AS7 is running on Window 7 laptop. Both the main-server-group and other-server-group (full-ha) are up and running correctly. I am able to access the deployed app on port 8330. Also the Http server is up and running on port 80 so when I put my master ip address I get "It Works!" message. Also, able to access the mod\_cluster\_manager on port 8000 correctly. Not sure what I am missing currently as the logs are not pointing me to any errors that might be happening.

The current **httpd.conf** is as below:

# MOD\_CLUSTER\_ADDS  
# Adjust to you hostname and subnet.  
<IfModule manager\_module>  
  Listen 172.20.201.24:10001  
  ManagerBalancerName other-server-group  
  <VirtualHost 172.20.201.24:10001>  
    <Location />  
     Order deny,allow  
     Allow from all  
    </Location>  
    ErrorLog "logs/chatter\_log"  
    LogLevel debug  
    KeepAliveTimeout 300  
    MaxKeepAliveRequests 0  
    #ServerAdvertise on <http://127.0.0.1:10001>  
    AdvertiseFrequency 5  
    #AdvertiseSecurityKey secret  
    #AdvertiseGroup 224.0.1.105:23364  
    EnableMCPMReceive  
    #<Location /mod\_cluster\_manager>  
    #   SetHandler mod\_cluster-manager  
    #   Order deny,allow  
    #   Allow from all  
    #</Location>  
  </VirtualHost>  
</IfModule>  
NameVirtualHost 172.20.201.24:8000  
Listen 172.20.201.24:8000  
<VirtualHost 172.20.201.24:8000>  
    ServerAdmin sudeep.batra@synechron.com  
    ServerName 172.20.201.24  
    ErrorLog "logs/cluster\_log"  
    LogLevel debug  
    EnableMCPMReceive  
    ProxyPass '/beans/XMLTranServiceBean/XMLTranServiceBean' balancer://other-server-group stickysession=JSESSIONID|jsessionid nofailover=On  
    ProxyPassReverse / balancer://other-server-group  
    ProxyPreserveHost On  
    <Location />  
        Order deny,allow  
        Allow from All  
    </Location>  
    <Location /mod\_cluster\_manager>  
        SetHandler mod\_cluster-manager  
        Order deny,allow  
        Deny from all  
        Allow from all  
    </Location>  
</VirtualHost>  
# MOD\_CLUSTER\_ADDS

# Adjust to you hostname and subnet.

<IfModule manager\_module>

  Listen 172.20.201.24:10001

  ManagerBalancerName other-server-group

  <VirtualHost 172.20.201.24:10001>

    <Location />

     Order deny,allow

     Allow from all

    </Location>

    ErrorLog "logs/chatter\_log"

    LogLevel debug

    KeepAliveTimeout 300

    MaxKeepAliveRequests 0

    #ServerAdvertise on <http://127.0.0.1:10001>

    AdvertiseFrequency 5

    #AdvertiseSecurityKey secret

    #AdvertiseGroup 224.0.1.105:23364

    EnableMCPMReceive

    #<Location /mod\_cluster\_manager>

    #   SetHandler mod\_cluster-manager

    #   Order deny,allow

    #   Allow from all

    #</Location>

  </VirtualHost>

</IfModule>

NameVirtualHost 172.20.201.24:8000

Listen 172.20.201.24:8000

<VirtualHost 172.20.201.24:8000>

    ServerAdmin sudeep.batra@synechron.com

    ServerName 172.20.201.24

    ErrorLog "logs/cluster\_log"

    LogLevel debug

    EnableMCPMReceive

    ProxyPass '/beans/XMLTranServiceBean/XMLTranServiceBean' balancer://other-server-group stickysession=JSESSIONID|jsessionid nofailover=On

    ProxyPassReverse / balancer://other-server-group

    ProxyPreserveHost On

    <Location />

        Order deny,allow

        Allow from All

    </Location>

    <Location /mod\_cluster\_manager>

        SetHandler mod\_cluster-manager

        Order deny,allow

        Deny from all

        Allow from all

    </Location>

</VirtualHost>

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947386#comment-91947386)

1. User icon: christian.bauer

Feb 08, 2014

[**Christian Bauer**](https://docs.jboss.org/author/display/~christian.bauer)

With Wildfly CR1 you'll run into this bug: <https://issues.jboss.org/browse/WFLY-2288>

The multicast advertisements from the httpd will be silently ignored by the Wildfly nodes. This might be fixed in Wildfly final.

Change your domain.xml on all nodes:

|  |
| --- |
| <mod-cluster-config advertise-socket="modcluster" connector="ajp" advertise-security-key="secret"> |

and add this to your Apache config in the virtual host:

|  |
| --- |
| AdvertiseSecurityKey secret |

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947388#comment-91947388)
  + User icon: rhusar

Feb 14, 2014

[**Radoslav Husar**](https://docs.jboss.org/author/display/~rhusar)

Right, resoved in 8.0.0.Final. Nevertheless, it's a good practice to use security key.

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=91947389#comment-91947389)

1. User icon: haducloc

Jul 15, 2016

[**Loc Ha**](https://docs.jboss.org/author/display/~haducloc)

Anyone knows does this tutorial still work for Wildfly 10.x? This tutorial using Wildfly 9.x. Thank you!

* + [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=107479557#comment-107479557)
  + User icon: jbossbhaskar

Feb 04, 2019

[**Bhaskara Undi**](https://docs.jboss.org/author/display/~jbossbhaskar)

Yes, It worked for Wildfly 10.0.1

* + - [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=128712707#comment-128712707)
    - User icon: rhusar

Feb 12, 2019

[**Radoslav Husar**](https://docs.jboss.org/author/display/~rhusar)

The docs are moved to <http://docs.wildfly.org/> and this is deprecated.

* + - * [Permalink](https://docs.jboss.org/author/display/WFLY10/Clustering+and+Domain+Setup+Walkthrough?focusedCommentId=128581647#comment-128581647)

[< Previous](https://docs.jboss.org/author/display/WFLY10/Hibernate) | [Front page](https://docs.jboss.org/author/display/WFLY10/High+Availability+Guide) | [Next >](https://docs.jboss.org/author/display/WFLY10/Changes+From+Previous+Versions)

Powered by a free **Atlassian Confluence Open Source Project License** granted to Red Hat, Inc.. [Evaluate Confluence today](http://www.atlassian.com/c/conf/11461).

This Confluence installation runs a Free Gliffy License - [Evaluate Gliffy](http://www.gliffy.com/products/confluence-plugin/) for your Wiki!

* Powered by [Atlassian Confluence](http://www.atlassian.com/software/confluence) 3.5.16, the [Enterprise Wiki](http://www.atlassian.com/software/confluence/tour/enterprise-wiki.jsp)
* |  [Report a bug](http://jira.atlassian.com/secure/BrowseProject.jspa?id=10470)
* |  [Atlassian News](http://www.atlassian.com/about/connected.jsp?s_kwcid=Confluence-stayintouch)