[linux+nginx+tomcat负载均衡，实现session同步](http://www.blogjava.net/Alpha/archive/2011/06/21/352745.html)

花了一个上午的时间研究nginx+tomcat的负载均衡测试，集群环境搭建比较顺利，但是session同步的问题折腾了几个小时才搞定，现把我的过程贴上来，以备用。  
软件及环境是：  
虚拟机上装centos 5.5  
IP为：192.168.0.51 装上nginx和tomcat  6.0.32 命名为 Tomcat1  
一台win7上装tomcat  6.0.32  IP为：192.168.0.50  命名为 Tomcat2  
  
首先装nginx，我是参照<http://blog.s135.com/nginx_php_v6/> 配了一个Nginx + PHP（FastCGI）环境，然后再加上Tomcat的转发。  
我的nginx.conf 修改如下

http://www.blogjava.net/Images/OutliningIndicators/None.gif#######################################################################  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif# This is the main Nginx configuration file.    
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif# More information about the configuration options is available on   
http://www.blogjava.net/Images/OutliningIndicators/None.gif#   \* the English wiki - http://wiki.nginx.org/Main  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#   \* the Russian documentation - http://sysoev.ru/nginx/  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#######################################################################  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif# Main Module - directives that cover basic functionality  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#   http://wiki.nginx.org/NginxHttpMainModule  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gifuser              nginx;  
http://www.blogjava.net/Images/OutliningIndicators/None.gifworker\_processes  8;  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.giferror\_log  /var/log/nginx/error.log;  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#error\_log  /var/log/nginx/error.log  notice;  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#error\_log  /var/log/nginx/error.log  info;  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gifpid        /var/run/nginx.pid;  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif# Events Module   
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#   http://wiki.nginx.org/NginxHttpEventsModule  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedBlockStart.gifevents {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    worker\_connections  10240;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedBlockEnd.gif}  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif# HTTP Core Module  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#   http://wiki.nginx.org/NginxHttpCoreModule   
http://www.blogjava.net/Images/OutliningIndicators/None.gif#  
http://www.blogjava.net/Images/OutliningIndicators/None.gif#----------------------------------------------------------------------  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedBlockStart.gifhttp {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    include       /etc/nginx/mime.types;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    default\_type  application/octet-stream;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    log\_format  main  '$remote\_addr - $remote\_user [$time\_local] "$request" '  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif                      '$status $body\_bytes\_sent "$http\_referer" '  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif                      '"$http\_user\_agent" "$http\_x\_forwarded\_for"';  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    access\_log  /var/log/nginx/access.log  main;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifserver\_names\_hash\_bucket\_size  128;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifclient\_header\_buffer\_size  32k;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.giflarge\_client\_header\_buffers  4  32K;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifclient\_max\_body\_size 8m;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    sendfile        on;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    tcp\_nopush     on;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    #keepalive\_timeout  0;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    keepalive\_timeout  65;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    #gzip  on;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_min\_length 1k;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_buffers 4  16k;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_http\_version 1.1;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_comp\_level 2;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_types text/plain application/x-javascript text/css application/xml;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gifgzip\_vary  on;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gifupstream  tserver  {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        server   192.168.0.51:8080 weight=4;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        server   192.168.0.50:8080 weight=1;

jvm\_route $cookie\_JSESSIONID|sessionid reverse;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif      
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    #  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    # The default server  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    #  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif    server {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        listen       80;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        server\_name  \_;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #charset koi8-r;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #access\_log  logs/host.access.log  main;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         location ~ .\*\.(php|php5)?$  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif          root  /www/ROOT;        
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif          #fastcgi\_pass  unix:/tmp/php-cgi.sock;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         fastcgi\_pass  127.0.0.1:9000;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         fastcgi\_index index.php;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         include fcgi.conf;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        location ~ \.(jsp|jspx|do|htm)?$ {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_set\_header  Host $host;    
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_set\_header  X-Real-IP  $remote\_addr;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_pass http://tserver;#转向tomcat处理         
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        location ~ (/dwr/)? {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_set\_header  Host $host;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_set\_header  X-Real-IP  $remote\_addr;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif         proxy\_pass http://tserver;#转向tomcat处理  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        location / {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif            root   /www/ROOT;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif            index  index.html index.jsp default.jsp index.do default.do;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        error\_page  404              /404.html;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        location = /404.html {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif            root   /www/ROOT;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        # redirect server error pages to the static page /50x.html  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        error\_page   500 502 503 504  /50x.html;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        location = /50x.html {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif            root   /www/ROOT;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        # proxy the PHP scripts to Apache listening on 127.0.0.1:80  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        #location ~ \.php$ {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    proxy\_pass   http://127.0.0.1;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        #}  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        # pass the PHP scripts to FastCGI server listening on 127.0.0.1:9000  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        #location ~ \.php$ {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    root           html;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    fastcgi\_pass   127.0.0.1:9000;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    fastcgi\_index  index.php;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    fastcgi\_param  SCRIPT\_FILENAME  /scripts$fastcgi\_script\_name;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    include        fastcgi\_params;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        #}  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        # deny access to .htaccess files, if Apache's document root  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        # concurs with nginx's one  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif        #location ~ /\.ht {  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif        #    deny  all;  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif        #}  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockEnd.gif    }  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif    # Load config files from the /etc/nginx/conf.d directory  
http://www.blogjava.net/Images/OutliningIndicators/ExpandedSubBlockStart.gif    include /etc/nginx/conf.d/\*.conf;  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif}  
http://www.blogjava.net/Images/OutliningIndicators/InBlock.gif

下一步是配置Tomcat集群。分别打开tomcat1和tomcat2下conf中server.xml  
<Server port="8005" shutdown="SHUTDOWN">  
<!-- Define a non-SSL HTTP/1.1 Connector on port 8080 -->  
<Connector port="8080" maxHttpHeaderSize="8192"  
   maxThreads="150" minSpareThreads="25" maxSpareThreads="75"  
   enableLookups="false" redirectPort="8443" acceptCount="100"  
   connectionTimeout="20000" disableUploadTimeout="true" />  
<!-- Define an AJP 1.3 Connector on port 8009 -->  
<Connector port="8009" enableLookups="false" redirectPort="8443" protocol="AJP/1.3" />  
  
找到<Engine name="Catalina" defaultHost="localhost">  
Tomcat1下的修改为<Engine name="Catalina" defaultHost="localhost" jvmRoute="tomcat1">  
Tomcat2下的修改为<Engine name="Catalina" defaultHost="localhost" jvmRoute="tomcat2">  
  
tomcat1找到  
<Cluster className="org.apache.catalina.ha.tcp.SimpleTcpCluster"/>  
修改为

http://www.blogjava.net/Images/OutliningIndicators/None.gif<Cluster className="org.apache.catalina.ha.tcp.SimpleTcpCluster"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif            channelSendOptions="6">  
http://www.blogjava.net/Images/OutliningIndicators/None.gifhttp://www.blogjava.net/Images/OutliningIndicators/None.gif            <Manager className="org.apache.catalina.ha.session.DeltaManager"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                expireSessionsOnShutdown="false"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                notifyListenersOnReplication="true"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <!--  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Manager className="org.apache.catalina.ha.session.BackupManager"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                expireSessionsOnShutdown="false"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                notifyListenersOnReplication="true"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                mapSendOptions="6"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            -->  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Channel className="org.apache.catalina.tribes.group.GroupChannel">  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Membership className="org.apache.catalina.tribes.membership.McastService"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    address="228.0.0.5"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    bind="**192.168.0.51**"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    port="45564"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    frequency="500"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    dropTime="3000"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Receiver className="org.apache.catalina.tribes.transport.nio.NioReceiver"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    address="**192.168.0.51**"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    autoBind="100"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    port="4001"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    selectorTimeout="100"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    maxThreads="6"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Sender className="org.apache.catalina.tribes.transport.ReplicationTransmitter">  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    <Transport className="org.apache.catalina.tribes.transport.nio.PooledParallelSender"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                </Sender>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Interceptor className="org.apache.catalina.tribes.group.interceptors.TcpFailureDetector"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Interceptor className="org.apache.catalina.tribes.group.interceptors.MessageDispatch15Interceptor"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            </Channel>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Valve className="org.apache.catalina.ha.tcp.ReplicationValve" filter=".\*\.gif;.\*\.js;.\*\.jpg;.\*\.png;.\*\.htm;.\*\.html;.\*\.css;.\*\.txt;"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif              
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <ClusterListener className="org.apache.catalina.ha.session.JvmRouteSessionIDBinderListener"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <ClusterListener className="org.apache.catalina.ha.session.ClusterSessionListener"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif        </Cluster>

tomcat2找到  
<Cluster className="org.apache.catalina.ha.tcp.SimpleTcpCluster"/>  
修改为

http://www.blogjava.net/Images/OutliningIndicators/None.gif<Cluster className="org.apache.catalina.ha.tcp.SimpleTcpCluster"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif            channelSendOptions="6">  
http://www.blogjava.net/Images/OutliningIndicators/None.gif  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Manager className="org.apache.catalina.ha.session.DeltaManager"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                expireSessionsOnShutdown="false"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                notifyListenersOnReplication="true"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <!--  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Manager className="org.apache.catalina.ha.session.BackupManager"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                expireSessionsOnShutdown="false"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                notifyListenersOnReplication="true"  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                mapSendOptions="6"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            -->  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Channel className="org.apache.catalina.tribes.group.GroupChannel">  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Membership className="org.apache.catalina.tribes.membership.McastService"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    address="228.0.0.5"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    bind="192.168.0.50"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    port="45564"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    frequency="500"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    dropTime="3000"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Receiver className="org.apache.catalina.tribes.transport.nio.NioReceiver"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    address="192.168.0.50"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    autoBind="100"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    port="4000"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    selectorTimeout="100"   
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    maxThreads="6"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Sender className="org.apache.catalina.tribes.transport.ReplicationTransmitter">  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                    <Transport className="org.apache.catalina.tribes.transport.nio.PooledParallelSender"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                </Sender>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Interceptor className="org.apache.catalina.tribes.group.interceptors.TcpFailureDetector"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif                <Interceptor className="org.apache.catalina.tribes.group.interceptors.MessageDispatch15Interceptor"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            </Channel>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <Valve className="org.apache.catalina.ha.tcp.ReplicationValve" filter=".\*\.gif;.\*\.js;.\*\.jpg;.\*\.png;.\*\.htm;.\*\.html;.\*\.css;.\*\.txt;"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif              
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <ClusterListener className="org.apache.catalina.ha.session.JvmRouteSessionIDBinderListener"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif            <ClusterListener className="org.apache.catalina.ha.session.ClusterSessionListener"/>  
http://www.blogjava.net/Images/OutliningIndicators/None.gif        </Cluster>

( 为了在Tomcat集群中实现会话复制，一定要在Web应用程序的web.xml文件中加入<distributable/>)  
还需要在程序的web.xml里面</web-app>前面加入以下这句话  
<distributable/>   
session同步到这里设置完毕  
  
服务器的启动顺序如下:   
tomcat1 --> |tomcat2 --> |nginx

先启动tocmat1,等tomcat1启动完全的时候再启动tomcat2，等两个tocmat全启动之后，再启动nginx  
  
负载的时候可以用APACHE或NGINX，如果什么都不用，两台一接防问了话，可能会出错极session不同步的问题，网上也很多人介意不要做seeeion同步，这样会降低机器的性能，有一个方法可以，就是NGINX的ip\_hash,这样至少可以保证客户端去防问同一台TOCMAT，除非那台TOCMAT挂了