## Creating Two Tomcat Instances and Configuring Them for a Client-Server Model To create an instance of tomcat Creating Tomcat Instances

**Step 1: Copy the Tomcat Directory**

1. Copy the folder located at C:\Program Files\Apache Software Foundation\Tomcat 9.0.
2. Paste it in C:\Tomcat1.

**Step 2: Modify Configuration in server.xml**

1. Open C:\Tomcat1\conf\server.xml.
2. Make the following changes:  
     
   change the port number 8080 to say 8081 in connector tag  
     
   <Connector connectionTimeout="20000" maxParameterCount="1000" port="8080" protocol="HTTP/1.1" redirectPort="8443"/> <Server port="8700" shutdown="SHUTDOWN">  
     
   <Connector connectionTimeout="20000" maxParameterCount="1000" port="8081" protocol="HTTP/1.1" redirectPort="8443"/> <Server port="8700" shutdown="SHUTDOWN">  
     
   change the port number 8100 to say 8200 in server tag  
     
   <Server port="8100" shutdown="SHUTDOWN"> to <Server port="8200" shutdown="SHUTDOWN">
3. Create a Shutdown.bat & startup.bat in Tomcat1 folder  
     
   paste the following commands in startup.bat  
    @echo off   
    set CATALINA\_BASE=C:\Tomcat1   
    cd "C:\Program Files\Apache Software Foundation\Tomcat 9.0\bin"   
    set TITLE=Tomcat1 call startup.bat %TITLE%  
     
   paste the following commands in shutdown.bat  
    @echo off   
    set CATALINA\_BASE=C:\Tomcat1  
    cd "C:\Program Files\Apache Software Foundation\Tomcat 9.0\bin"   
    call shutdown.bat

### Start Tomcat

Run startup.bat by double-clicking it.

5. Verify Configuration  
  
 Open a browser and navigate to http://localhost:8081 to check if Tomcat1 is correctly configured.  
  
  
**Registering Tomcat Instance as a Windows Service  
open command terminal in administrative mode**   
   
Step 1: Open Command Prompt in Administrative Mode  
  
Step 2: Change the directory to C:\Tomcat1\bin

cd C:\Tomcat1\bin  
  
Step 3: Run the following command to install Tomcat1 as a service:  
  
service.bat install Tomcat1  
  
Step 4: Verify Service Installation:

Search for "Services" in the taskbar search bar.

Open services.msc.  
 Locate Tomcat1 in the list to verify it is correctly installed.  
  
Step 5: Change Startup Type:   
 In services.msc, right-click on Tomcat1.  
 Select Properties.  
 Change the startup type to Automatic.