{JIRA Case: <http://jira.pentaho.com/browse/DOC-3058>}

The following sections from the 7.0 Help site contain references to “tomcat 6”:

From <https://help.pentaho.com/Documentation/7.0/0P0/Managing_the_Pentaho_Server/Change_the_PDI_Home_Directory_Location#Windows_service_modification>,

# Windows service modification

If you used the graphical utility to install the Pentaho Server, then you must modify the Java options flag that runs the Pentaho Server Tomcat service. Here is an example command that will change the value of KETTLE\_HOME to C:\<examplepath>\pdi\.kettle:

|  |  |
| --- | --- |
| 1 | tomcat8.exe //US//pentahoserver ++JvmOptions -DKETTLE\_HOME=C:\examplepath\pdi |

From <https://help.pentaho.com/Documentation/7.0/0P0/Setting_Up_User_Security/Securing_Pentaho_Server_and_Pentaho_User_Console_(PUC)_with_SSL/000/000>,

Enable SSL in the Pentaho Server with a Certificate Authority

If you already have an SSL certificate through a certificate authority such as Thawte or Verisign, you need to configure your application server to use the certificate. It can then be used by the Pentaho Server. Apache provides documentation for configuring Tomcat for CA-signed certificates: [http://tomcat.apache.org/tomcat-8.0-doc/ssl-howto.html](http://tomcat.apache.org/tomcat-8.0-doc/ssl-howto.html" \t "_blank). Just follow those procedures, and skip the sections below that deal with self-signed SSL certificates.

After the application server is configured to use your certificate, you must modify the base URL tokens for both the Pentaho Server and the User Console. Make sure you follow the directions for [changing the Pentaho Server Base URL](https://help.pentaho.com/Documentation/7.0/0P0/Setting_Up_User_Security/Securing_Pentaho_Server_and_Pentaho_User_Console_(PUC)_with_SSL/000/020). Without executing those changes, your server will not work over HTTPS.

From <https://help.pentaho.com/Documentation/7.0/0P0/100/090/000>,

Increase Memory Limits on Microsoft Windows with a Wizard Installation

By default, Tomcat has a relatively low memory allotment. This can cause out-of-memory errors in the Pentaho Server from time to time. The following instructions will explain how to increase the memory so this error does not occur. Instructions are also included for renaming the tomcat8 executable file so that Pentaho Server starts automatically.

***Note****: These instructions are for those who installed the Pentaho software graphically (as opposed to manually) and are Windows users.*

1. Go to the **Windows Search Box** and enter  pentaho\server\pentaho-server\tomcat\bin\shutdown.bat to shutdown the Pentaho Server.
2. Type services.msc into the **Windows Search Box**.
3. Find the **Pentaho Server** and open it so you can find the **service name**. The **service name** should appear at the top of the first tab (**General**). It will be **pentahoserver**.
4. Go into the bin file (pentaho\server\pentaho-server\tomcat\bin\) and rename the tomcat8w.exe file to match the **service name**(**pentahoserver**). This will ensure that the server starts with the software.
5. After you have renamed the file, open it by double-clicking on it. This will not open the file, it will allow you to edit it. You may need to right-click and select **Run as Administrator**. This depends on your user permission settings. The **Properties Window** will open.
6. Select the **Java** tab.
7. Set the memory setting to a minimum of **4096 M** and a maximum of **6144 M**, depending on your computer's memory capabilities.
8. Start the Tomcat server or service.

Your Tomcat server now has increased minimum and maximum memory limits.

You can adjust the JvmMx number (a parameter that specifies the maximum memory limit for the Java virtual machine) to a higher number, if you prefer. However, a problem occurs when not enough contiguous memory is available to assign to the Java virtual machine (JVM). If the JVM refuses to start with the increased limits, then you will have to add more RAM to your system, stop some memory-intensive services, or lower the maximum memory limit allocation.

From <https://help.pentaho.com/Documentation/7.0/0P0/100/090/020>,

Increase Memory Limits with a Manual Deployment

By default, Tomcat has a relatively low memory allotment. This can cause out-of-memory errors in the Pentaho Server from time to time. To increase the memory limit, follow the below process.

1. Stop the Tomcat server or service.
2. **Because you are modifying your own Tomcat instance** and have performed a manual deployment of the Pentaho Server WAR, edit the ~/.bashrc for the user account that starts the Tomcat service, or whatever configuration file or dialog box that contains global system variables on your Pentaho Server machine. Set or modify the CATALINA\_OPTS system variable to include reasonable minimum and maximum memory settings using the -Xms and -Xmx options. Ensure you customize these settings to fit the needs of your system.

export CATALINA\_OPTS="-Xms4096m -Xmx6144m"

1. **If you are using a Pentaho-supplied Tomcat instance** provided in Pentaho Server archive packages, edit the start-pentaho scripts (.bat for Windows, and .sh for Linux), and modify the CATALINA\_OPTS environment variable, adjusting the values of Xms and Xmx in the same manner as the previous step.

export CATALINA\_OPTS="-XMs4096m -Xmx6144m -XX:MaxPermSize=256m -Dsun.rmi.dgc.client.gcInterval=3600000 -Dsun.rmi.dgc.server.gcInterval=3600000"

1. If you are modifying a Windows service for Tomcat, you must use the tomcat8.exe command to reconfigure the service parameters within a command line window. You can access Windows Services by going to the **Windows Start Menu** and typing services in the **Search Programs and Files** box.

tomcat8 //US//Tomcat8 --JvmMs=4096m --JvmMx=6144m

1. Start the Tomcat server or service.

Your Tomcat server now has increased minimum and maximum memory limits. You can adjust the JvmMx number (this parameter specifies the maximum limit) to a higher number if you prefer. However, if the Java virtual machine refuses to start with increased limits, then you will have to add more RAM to your system, stop some memory-intensive services, or reduce the maximum memory limit to a lower number. This problem occurs when there is not enough contiguous memory available to assign to the JVM, and appears to happen on Windows at lower thresholds than on other operating systems.

From <https://help.pentaho.com/Documentation/7.0/0H0/Increase_the_Pentaho_Server_Memory_Limit#Increase_Pentaho_Server_Memory_Limit_for_Installations_on_Windows>

# Increase Pentaho Server Memory Limit for Installations on Windows

If you used the Pentaho Installation Wizard to install the Pentaho Server on a Windows machine, you can increase the server's memory limits by editing the Java memory settings for Tomcat. Tomcat is the web application server that the Pentaho Server runs on, and is installed by the Pentaho Installation Wizard. If you didn't use the installation wizard or you are not running PDI on a Windows machine, refer to the appropriate section below.

1. Stop the Pentaho Server if it is running.
2. Type services.msc into the **Windows Search Box**.
3. Find the Pentaho Server name and open it so you can find the **service name**. The **service name** should appear at the top of the first tab (**General**). It will be **pentahoserver**.
4. Go into the bin file (pentaho\server\pentaho-server\tomcat\bin\) and rename the **tomcat8w.exe** file to match the **service name** (**pentahoserverw.exe**). This will ensure that the server starts with the software.
5. After you have renamed the file, open it by double-clicking on it. This will not open the file, it will allow you to edit it. You may need to right-click and select **Run as Administrator**. This depends on your user permission settings. The **Properties Window** will open.
6. Select the **Java** tab.
7. Set the memory setting to a minimum of **4096 M** and a maximum of **6144 M**, depending on your computer's memory capabilities.
8. [Start the Tomcat server or service](https://help.pentaho.com/Documentation/7.0/0H0/060/010/000).

***Note****: Make sure to also*[*increase the Spoon memory limit*](https://help.pentaho.com/Documentation/7.0/0H0/070/020/010)*.*

Your Tomcat server now has increased minimum and maximum memory limits. You can adjust the JvmMx parameter to a higher number if you prefer. However, if the Java virtual machine refuses to start with increased limits, then you will have to add more RAM to your system, stop some memory-intensive services, or reduce the maximum memory limit. This problem occurs when there is not enough contiguous memory available to assign to the JVM.