# Configuring Java heap space for Cassandra, TWCloud and WebApp

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This page provides instructions for changing the Java heap space (Xmx) for both Cassandra and Teamwork Cloud on Linux and Windows, respectively.

# Configuring Java heap space for Cassandra

#### On Linux

To configure Java heap space for Cassandra on Linux, you must set the variables MAX\_HEAP\_SIZE and HEAP\_NEWSIZE which are commented by default in the file cassandra-env.sh. The location of the file cassandra-env.sh depends on the type of Cassandra installation.

- · Package installation: /etc/cassandra/conf/cassandra-env.sh
- Tarball installation: < Cassandra install folder > /conf/cassandra-env.sh

Uncomment MAX\_HEAP\_SIZE, HEAP\_NEWSIZE variables and adjust MAX\_HEAP\_SIZE manually. Otherwise, Cassandra will calculate the heap size based on the system's memory using the following formula:

### Calculating Java heap size

 $\max(\min (1/2 \text{ ram}), 1024MB), \min(1/4 \text{ ram}, 8GB))$ 

The formula details are outlined below:

- For the system memory 0-2 GB: use half of it.
- For the system memory 2-4 GB: use 1 GB.
- For the system memory 4-32 GB: use a quarter of it.
- For the system memory more than 32 GB: use 8 GB.

## On Windows (only for Cassandra 3.x)

We recommend setting the min (-Xmx) and max (-Xmx) heap to the same value in the Cassandra document to avoid pausing the GC during resizing.

To change the value using the Registry Editor

- 1. Run regedit from the command line
- 2. Browse for the key HKEY\_LOCAL\_MACHINE\SOFTWARE\WOW6432Node\Apache Software Foundation\Procrun 2.0 \cassandra\Parameters\Java.
- 3. Right-click Options and select Modify.... You can then change the min and max heap size from -Xms and -Xmx.

# Configuring Java heap space for Teamwork Cloud

## On Linux

 If you start Teamwork Cloud from the executable file twcloud, you can configure the -Xmx parameter from the file jvm.options (located in the same folder).

#### On Windows

- If you start Teamwork Cloud from the executable file twcloud.exe, you can configure the -Xmx parameter from the file jvm.options (located in the same folder).
- If you start Teamwork Cloud from a Windows service, you must use the Registry Editor to update the value.

To change the value using the Registry Editor

- 1. Run regedit from the command line.
- 2. Browse for the key HKEY\_LOCAL\_MACHINE\SOFTWARE\WOW6432Node\Apache Software Foundation\Procrun 2.0\Teamwork Cloud\Parameters\Java.
- 3. Right-click JvmMx and select Modify....
- 4. Select Base to Decimal and change the value. The value is in megabytes (mb).

# Configuring Java heap space for WebApp

Heap space for WebApp is handled by Tomcat.

### On Linux

Heap settings are located in /opt/local/TeamworkCloud/WebAppPlatform/bin/setenv.sh JVM\_OPTS="-server -XX:+UseParalleIGC -Xms4096M -Xmx8192M"

## **On Windows**

• The heap setting for WebApp is located in the registry

To change the value using the Registry Editor

- 1. Run regedit from the command line.
- 2. Browse for the key HKEY\_LOCAL\_MACHINE\SOFTWARE\WOW6432Node\Apache Software Foundation\Procrun 2.0\WebApp\Parameters\Java. 3. Right-click JvmMx and select Modify....
- 4. Select Base to Decimal and change the value. The value is in megabytes (mb).