

Performing the Standalone Installation of Terracotta DB

This section describes how to perform the installation of Terracotta DB if you are downloading the trial version which comes as a downloadable tar file. Additionally you can download the Textual Query Language Extension APIs for the TCStore client, which also come as downloadable tar file.

Performing the standalone installation of Terracotta DB is as easy as downloading the kit and ensuring that the correct files are on your application's classpath. The only platform requirement is using JDK 1.8 or higher.

To install Terracotta DB

Step-1: If you do not have a standalone Terracotta DB kit, download it and a trial license from www.terracotta.org. The kit is packaged as a tar.gz file. Unpack it with a compatible decompression application.

Step-2: Add the following JARs from in the kit to your application's classpath:

- terracotta-db-<version>\client\store\terracotta-store-client-<version>.jar
This file contains the TCStore API
- terracotta-db-<version>\client\ehcache\terracotta-ehcache-client-<version>.jar
This file contains the Ehcache API
- terracotta-db-<version>\client\lib\terracotta-common-client-<version>.jar
This file is the bridge, or logging facade, to the Terracotta DB logging framework

Step-3: Save the Terracotta DB trial license key file to the Terracotta DB home directory.

Step-4: To configure Terracotta DB, and start instances of the server please create a tc-config.xml configuration file, or update the one that is provided in the terracotta-db-<version>\server\conf directory as shown below:

```
<tc-config xmlns="http://www.terracotta.org/config"
  xmlns:ohr="http://www.terracotta.org/config/offheap-resource"
  xmlns:backup="http://www.terracottatech.com/config/backup-restore"
  xmlns:data="http://www.terracottatech.com/config/data-roots">
  <plugins>
  <config>
    <ohr:offheap-resources>
      <ohr:resource name="offheap-1" unit="MB">2048</ohr:resource>
      <ohr:resource name="offheap-2" unit="MB">1024</ohr:resource>
    </ohr:offheap-resources>
  </config>
  <config>
    <data:data-directories>
      <data:directory name="PLATFORM" use-for-platform="true">C:\terracotta\cluster\data\platform</data:directory>
      <data:directory name="dataroot-1" use-for-platform="false">C:\terracotta\cluster\data\dataroot-1</data:directory>
      <data:directory name="dataroot-2" use-for-platform="false">C:\terracotta\cluster\data\dataroot-2</data:directory>
    </data:data-directories>
  </config>
  <service>
    <backup:backup-restore>
      <backup:backup-location path="C:\terracotta\cluster\data\backup" />
    </backup:backup-restore>
  </service>
  </plugins>
  <servers>
    <server host="Hostname-1" name="Server-11">
      <logs>C:\terracotta\cluster\logs\stripe-1-server-1</logs>
      <tsa-port>9410</tsa-port>
      <tsa-group-port>9430</tsa-group-port>
    </server>
    <server host="Hostname-2" name="Server-12">
      <logs>C:\terracotta\cluster\logs\stripe-1-server-2</logs>
      <tsa-port>9411</tsa-port>
      <tsa-group-port>9431</tsa-group-port>
    </server>
    <client-reconnect-window>120</client-reconnect-window>
  </servers>
</tc-config>
```

Note: This is the default Terracotta server configuration file for the Terracotta DB kit. It defines a single off-heap resource of 512MB to be used for storing data. It defines a single directory for the server to put its data into. It also defines a single server, but you can add another one to benefit from high availability. Please note that this is a per-stripe configuration, and a lot of the configurations need to match across stripes

Step-5: Using the startup command provided in `terracotta-db-<version>\server\bin`, you can start one of multiple instances of Terracotta Server node<s> as shown below:

`start-tc-server.bat -f <path to your tc-config file> -n <your server instance name from the tc-config file>`

e.g. `start-tc-server.bat -f terracotta-db-<version>\server\conf\tc-config.xml -n server-1`

Step-6: Terracotta DB uses a command line tool called "Cluster-tool" to do license installation. Your cluster tool binaries is located at `terracotta-db-<version>\tools\cluster-tool\bin\`

`clustertool.bat -n <name of your cluster> -l <path to your license file> <path to your tcconfig file/s>`

e.g. `cluster-tool.bat configure -n MyCluster -l ..\conf\license.xml ..\server\conf\tc-config.xml`

Connection successfully established to server at 127.0.0.1:9410

Command completed successfully

To install Textual Query Language Extensions APIs for TCStore client

Step-1: If you do not have a standalone Textual Query Language Extensions kit, download it as trial from www.terracotta.org. The kit is packaged as a tar.gz file. Unpack it with a compatible decompression application.

Step-2: Add all JARs from in the kit to your application's classpath. Note that this includes besides the language extension APIs also the standard TCStore client APIs.

Step-3: In your application code you can now execute textual queries to analyze the contents of your TCStore instances.

To get started using Terracotta DB, please see the sample on <https://github.com/SoftwareAG/terracotta-db-samples> and tutorial videos on <http://www.terracotta.org/> for examples of how to employ the various features and capabilities of Terracotta DB.