



TokuDB Storage Engine for MySQL®
Version 2.2.0
Recompiling from MySQL Source on Linux
November 21, 2009

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1 Getting Started

This document describes how to build MySQL and the TokuDB for MySQL[®] handler on from source and link with the Tokutek[®] Fractal Tree[®] Library.

2 System and Hardware Requirements

Operating Systems: These instructions were tested using CentOS 5.1. They are expected to work with CentOS 5.2 and 5.3 as well and with other Linux distributions.

Compiler: These instructions were tested using gcc 4.1.2.

Processor Architecture: TokuDB runs on the following architectures.

- X86
- X86_64

Disk space: 1GB.



3 Setup

All of the action occurs in a build directory. Please make one.

```
$ mkdir tokubuilddir
$ cd tokubuilddir
$ export B=$PWD
```

4 Download and verify files

Please download and verify these three files from the Tokutek web site and put them in the build directory.

```
mysql-5.1.36-tokutek-2.2.0-15512-src.tar.gz
tokufractalreeindex-2.2.0-15512-linux-x86_64.tar.gz
tokumysql-2.2.0-15512-src.tar.gz
```

5 MySQL

Tokutek made some changes to the MySQL source that are required to either fix bugs or aid in performance. Please use the Tokutek version of MySQL that is based on the MySQL 5.1.36 source.

5.1 Untar

```
$ tar xzf mysql-5.1.36-tokutek-2.2.0-15512-src.tar.gz
```

5.2 Configure and build

The tokutek build script uses "configure" options derived from the Community build of MySQL 5.1.36.

```
$ pushd mysql-5.1.36
$ bash scripts/tokutek.build.bash \
    --mysqlversion=mysql-5.1.36-tokudb-2.2.0-15512 | bash -x
$ popd
```

for version 3.1 of bash. For later version, please add the following flag.

```
$ bash -O compat31 scripts/tokutek.build.bash \
    --mysqlversion=mysql-5.1.36-tokudb-2.2.0-15512 | bash -x
```

6 Tokutek Fractal Tree



The Tokutek Fractal Tree tarball contains the Fractal Tree shared library as well as some interface include files. There is also some code samples that use the library and demonstrate insertion and table scan performance.

6.1 Untar

```
$ tar xzf tokufractaltreeindex-2.2.0-15512-linux-x86_64.tar.gz
```

7 TokuMySQL Handlerton

7.1 Untar

```
$ tar xzf tokumysql-2.2.0-15512-src.tar.gz
```

7.2 Configure

```
$ pushd tokumysql-2.2.0-15512-src
$ ./configure.tokutek \
    --with-tokudb=$B/tokufractaltreeindex-2.2.0-15512-linux-x86_64 \
    --tokudb_version=tokudb-2.2.0-15512 \
    --with-mysql=$B/mysql-5.1.36/ --libdir=.
```

Please ignore an error message of

```
./configure.tokutek: line 6: shopt: compat31: invalid shell option name
which may occur, depending on the version of bash you are running.
```

7.3 Build

```
$ make DEBUG=0 LIBTOKUDB=tokufractaltreeindex-2.2.0-15512 SINGLESO=0 install
$ popd
```

The end result is a pluggable storage engine for MySQL.