
Subject: Mutex locks vs copy constructors

Posted by [cas_](#) on Fri, 19 Sep 2008 13:54:59 GMT

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Hi!

I believe that copy constructors of `Mutex::Lock`, `RWMutex::ReadLock` and `RWMutex::WriteLock` should be declared private. Currently, they are public and this fact can easily lead to errors if someone is not careful enough. `Core/Mt.h` should be changed as follows:

```
struct Mutex::Lock {
    Mutex& s;
    Lock(Mutex& s) : s(s) { s.Enter(); }
    ~Lock()          { s.Leave(); }
private:
    Lock( const Lock& );
};
```

```
struct RWMutex::ReadLock {
    RWMutex& s;
    ReadLock(RWMutex& s) : s(s) { s.EnterRead(); }
    ~ReadLock()          { s.LeaveRead(); }
private:
    ReadLock( const ReadLock& );
};
```

```
struct RWMutex::WriteLock {
    RWMutex& s;
    WriteLock(RWMutex& s) : s(s) { s.EnterWrite(); }
    ~WriteLock()          { s.LeaveWrite(); }
private:
    WriteLock( const WriteLock& );
};
```