### **NAME**

update - mark object dirty

## **SYNOPSIS**

```
#include <ShoreApp.h>
T *Ref<T>::update() const
```

#### DESCRIPTION

**Update** informs Shore of an application's intent to modify a Shore object. In particular, it obtains an EX (exclusive-mode) lock on the object if such a lock is not already held by the current transaction. Update must be called before any non-"const" method of the object is called. If the application fails to call **update** on an object before each call of a non-"const" method, the compiler will flag the method call as an error.

```
Ref<myInterfaceType> obj = REF(myInterfaceType)::lookup(...
obj.update()->non_const_method1();
obj.update()->non_const_method2();
```

An alternative, and ever-so-slightly more efficient way to use **update** is to use non-const references, which call **update** behind the scenes once upon assignment, and can thereafter be used to call non-const references.

```
WRef<myInterfaceType> obj = WREF(myInterfaceType)::lookup(...
// update has already been called.

obj.non_const_method1();
obj.non_const_method2();
```

If either **update** or the copy operator for WRef<T> encounters any errors, it calls the installed error handler. Applications can reduce the possibility of such errors by using Ref<T>::fetch (see **fetch(cxxlb)**), Ref<T>::valid **valid(cxxlb)**), or **access(oc)** to obtain an exclusive lock before calling **update**.

# VERSION

This manual page applies to Version 1.1 of the Shore software.

## **SPONSORSHIP**

The Shore project is sponsored by the Advanced Research Project Agency, ARPA order number 018 (formerly 8230), monitored by the U.S. Army Research Laboratory under contract DAAB07-91-C-Q518.

### COPYRIGHT

Copyright © 1994, 1995, 1996, 1997, Computer Sciences Department, University of WisconsinMadison. All Rights Reserved.

# SEE ALSO

access(oc), fetch(cxxlb), method(cxxlb), ref(cxxlb), valid(cxxlb).