

addObjectIfAbsent: and slow EOF Performance

Creation Date: Feb 25, 1998

Keywords: EOF, NSMutableArray, Notifications, Performance

This document describes a problem that can cause memory leaks and slow performance for OPENSTEP applications. The problem occurs because Apple's EOF framework uses a category to add an **addObjectIfAbsent:** method to NSMutableArray.

```
@interface NSMutableArray (EOPointerBasedManipulation)
- (BOOL)addObjectIfAbsent:object;
    // adds an object to the array if and only if it isn't already in the array
    // return YES if object was not in the array or NO if it already was present
@end
```

Because this method is not documented, some Apple developers and writers of third-party frameworks have added their own **addObjectIfAbsent:** method. When EOF's EOObjectStoreCoordinator makes a call to **addObjectIfAbsent:** to register a notification, it does not receive the expected return value, and two additional notifications are generated. This can seriously affect system performance in applications which make a large number of database fetches. There are three possible solutions to the problem:

--Modify your implementation of the method to return the appropriate values, as shown above

--Modify your code to use Apple's implementation of this method

--Change the name of your custom method so Apple's implementation is not superceded.