

# NXReference

**Adopted By:** IXFileFinder  
IXStoreBlock  
NXConnection  
NXInvalidationNotifier  
NXProxy

**Declared In:** machkit/reference.h

## Protocol Description

The NXReference protocol defines a set of methods for implementing simple reference counting of objects. This allows an object to be referenced multiple times without each client needing to assume that the referenced object may be in use by others. A client of the referenced object can simply send it a **free** message when finished; if the object still has outstanding references, it doesn't free itself.

## Method Types

Adding or deleting a reference – addReference  
– free

Getting the number of references  
– references

## Instance Methods

### **addReference**

– **addReference**

Increments the number of references to the receiver and returns **self**.

### **free**

– **free**

Decrements the receiver's reference count, returning **self** if the reference count remains greater than 0. If the reference count becomes 0, this method deallocates the receiver's storage and returns **nil**.

A typical implementation for a reference counted object that is vended over a Distributed Objects connection might look like this:

```
- free
{
    refs--;
    if (refs > 0) return self;

    [NXConnection removeObject:self];
    return [super free];
}
```

### **references**

– (unsigned int)**references**

Returns the number of references to the receiver.