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# Debugging Cocoa Applications

[Cocoa > Performance](#)



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# Introduction to Debugging Cocoa Applications

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This topic discusses various ways to debug Cocoa applications.

## Organization of This Document

[“Setting gdb Breakpoints for Cocoa Methods”](#) (page 7) tells you how to set a breakpoint for a Foundation or Application Kit method.

[“Determining the Retain Count for an Object”](#) (page 9) tells you how to determine the retain count for an object.

Another source for information on debugging and application performance are the Performance Programming Topics.



# Setting gdb Breakpoints for Cocoa Methods

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You might find it necessary to set a breakpoint for a Foundation or Application Kit method. This is done by specifying the method name.

In Xcode create a new breakpoint. Type the full method name into the breakpoint like:

```
- [NSException raise]
```

or:

```
+ [NSObject allocWithZone:]
```

If you are using gdb from a Terminal, you can also set a breakpoint using the command line. In this case, you can simply type the method name, such as `raise` or `allocWithZone:`. If more than one class implements the method, gdb will ask you to disambiguate.





# Determining the Retain Count for an Object

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You might find it necessary to determine what is the retain count for an object.

From the gdb console in Xcode enter:

```
print (int)[theObject retainCount]
```

If you are using gdb from a Terminal, you can also examine the retain count using the command line.



# Document Revision History

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This table describes the changes to *Debugging Cocoa Applications*.

Date	Notes
2002-11-12	Revision history was added to existing topic. It will be used to record changes to the content of the topic.

