

# The Developers Group Masterclass Debugging with Brian Long

at Building 3, Microsoft Campus, Thames Valley Park, Reading RG6 1WG  
[click here for map and directions](#)

Monday January 31st 2005

## Why Should I Attend?

Debugging is something all developers have to contend with. The facilities in your favourite development tool are typically sufficient for most issues encountered, but sometimes a little more breadth can be important in bringing a problem to a quick conclusion. This session will look at various debugging techniques and tools starting with an overview of the familiar and rapidly branching out into what is, for the average developer, the unknown. Focus is spread across debugging both Win32 systems and .NET systems, looking at available tools and techniques to add to your arsenal.

## What Will I see?

The agenda is planned to look like this.

After an introduction, in the first half we look at Win32 debugging:

9:30 Registration with tea/coffee and biscuits

10:00 Introduction

- Win32 Debugging
- Overview
- Tracing & logging – here we look at interesting possibilities to help this common requirement in following logic flow

11:20 Tea/coffee and biscuits

11:40 Memory management

- Memory leaks – looking at mechanisms and tools to help isolate these problems
- Memory fragmentation and memory managers
- Heisenbugs and Bohr bugs
- The CPU window and how to make it useful
- Microsoft debuggers and their problems
- Multi-process debugging
- Image file execution options & their applications

1:00 buffet lunch

The second half switches focus to .NET:

1:40 .NET Debugging

- Overview
- The various Microsoft debuggers, their purpose and use

3:20 Tea/coffee and biscuits

3:40 Useful image and execution analysis tools

- Memory management
- Memory leaks, their manifestation and identification in .NET
- Heisenbugs and Bohr bugs
- Interop systems

4:40 fidget break

4:50 Miscellaneous issues

- Performance issues
- Profiling .NET applications
- Writing your own .NET profiler

6:00 Close

The masterclass is informal and pertinent questions during the sections are welcomed.

## What Will I Know When I Leave?

Attendees at this masterclass will get the benefit of the years of experience Brian Long has had in debugging other people's problems in Win32 and .NET. You will have a wider appreciation for techniques and approaches that can help in debugging the more tricky issues that arise in software development and be introduced to a variety of tools that can be helpful in pinpointing the causes of elusive problems, both for Win32 and .NET.



Please book your place as soon as possible by **contacting us**, and no later than Monday January 24th. The cost of a place DG members is £165 + VAT (payable in advance). Members subscribing at Premier, Dual or Corporate rate are eligible to attend without further payment, but must also pre-book. Lunch and refreshments are included in the price.