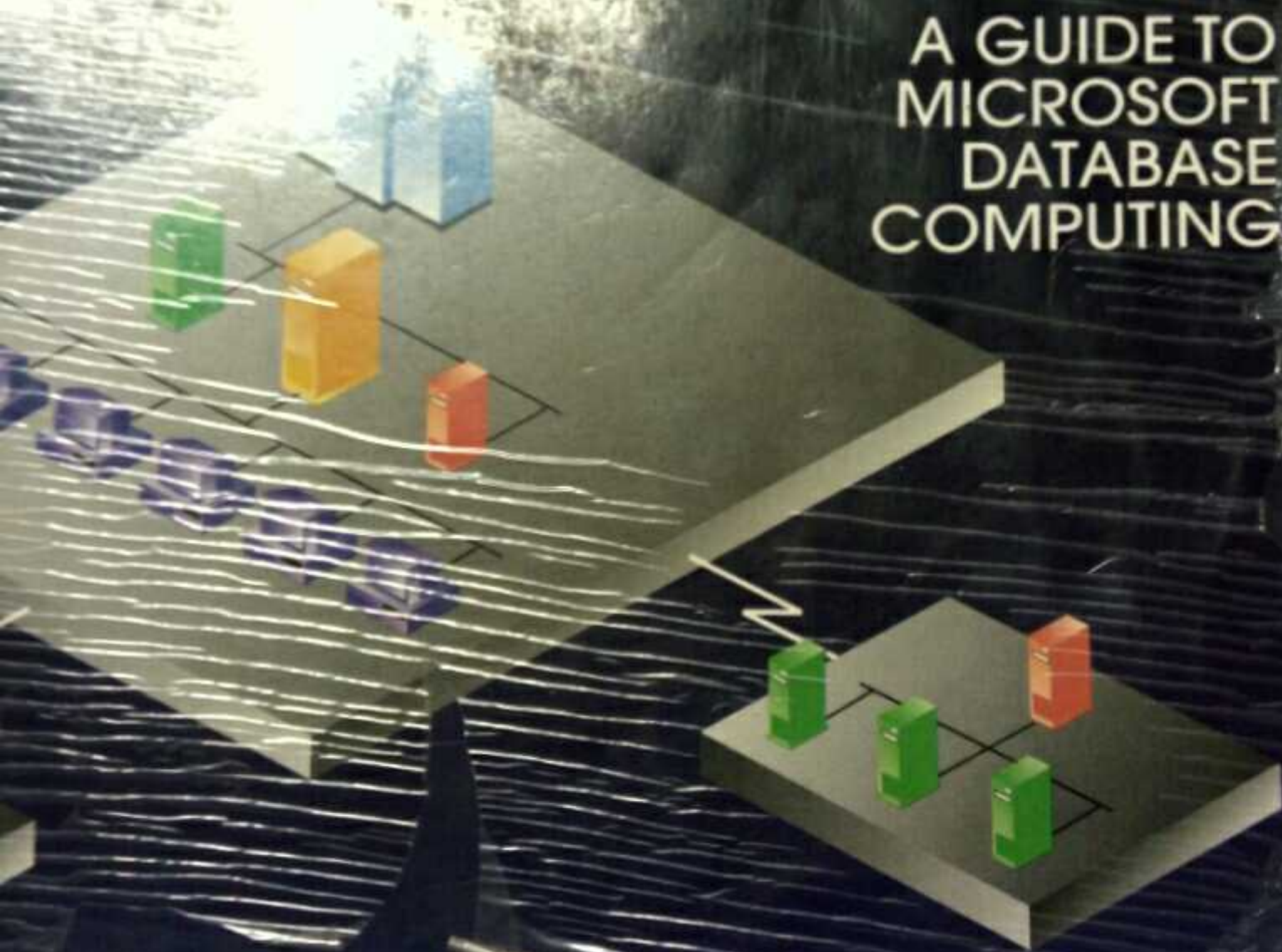


# THE SQL SERVER HANDBOOK

A GUIDE TO  
MICROSOFT  
DATABASE  
COMPUTING



KEN ENGLAND / NIGEL STANLEY



# Foreword

Microsoft SQL Server has grown in importance with the rapid take-up of Windows NT as a platform for small to medium size database applications. Commercially, its popularity has much to do with its excellent price performance, and it is often assumed by the less well-informed that this is its major virtue. However, anyone who has followed the evolution of the database from its initial release will be aware that it has become a powerful and sophisticated product.

With the ending of the partnership between Microsoft and Sybase, whose SQL Server database formed the original kernel of the product, Microsoft SQL Server has diverged significantly from its origins and with Version 6.0 it is delivering a very distinctive set of capabilities. Version 6.0 is a major release by any measure. It moves Microsoft SQL Server up market by offering support for SMP hardware and includes some parallel database administration capabilities such as parallel back-up and recovery. Performance has also been improved in other areas, for example, by support for bi-directional cursors. Particularly interesting is its distributed management capabilities which are clearly targeted at enterprise wide usage.

It is not surprising then that this product is now attracting the attention of database managers and administrators across the globe, and the need for a volume which defines, illustrates and explains its latest incarnation is obvious. England and Stanley are both UK based consultants with international reputations and long experience in the field of database. They have done an excellent job explaining and clarifying the many features of the product and their relevance. They provide advice for the database designer, the administrator and the programmer and they do so in an easily accessible and readable way.

This book is an essential reference to those who use, intend to use, or simply wish to understand Microsoft SQL Server.

*Robin Bloor*

*CEO, ButlerBloor*



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# Preface

This book is based on Version 6.0 of Microsoft SQL Server, which was released in June 1995. This version provides a technically sophisticated and fully functional database management system for the Microsoft Windows NT operating system which can be running on Intel based platforms or Risc computers such as Digital Equipment Corporation's 64 bit AXP processor commonly known as Alpha.

Microsoft first shipped SQL Server on Windows NT in September 1993 with SQL Server 6.0 shipping in June 1995. SQL Server 6.0 excels in the area of distributed management where its distributed management object layer and graphical management tools enable a database administrator to manage a set of SQL Servers in remote locations on the network as easily as if they were local. With the new replication facilities present in SQL Server 6.0, Microsoft are supplying a product that can be used to build distributed systems that can be comprised of a number of geographically distributed servers but can still be managed practically.

The growing popularity of Windows NT and SQL Server 6.0 among customers, software development companies, and consulting firms has prompted us to write this book. It is intended to be a comprehensive introduction to the extensive capabilities offered by SQL Server and a text in which we can impart some of our experience.

This book is definitely not intended to be a re-hash of the documentation set. It is intended to be a text where readers, whether they be developers, database administrators, people performing a technical database evaluation or computer professionals looking to broaden their horizons, can gain a good overview of the product in one place and can also find thorough explanations of subjects such as locking, performance tuning and database administration.

This book is also not intended to focus on SQL Server alone but to position SQL Server within the rest of the Microsoft database family and to look at scenarios such as upsizing from Microsoft Access.