



# Foreword

Writing a book is hard — writing a *good* book is very hard, and describing an area as complex as CIFS is a nightmare. The biggest pleasure of being involved with the production of this reference is in the clarity and depth of the end result — the impossible has been achieved, for the benefit of all involved in this protocol.

CIFS is an important protocol — indeed, in Windows networks it could be considered as important as TCP/IP, as almost all communication between Windows machines can flow over it. It provides file and print services, and, among other things, is a carrier for Remote Procedure Call and NT Domain services. When I came to CIFS in 2001, it was out of an interest in the Samba project — an Open Source implementation that I was running on Linux — where I soon became a specialist in Authentication. At the time, there was little good documentation available, particularly on the murky details of authentication.

For that reason, you will find my name scattered all over the Authentication area of this book. As a developer of a CIFS implementation, there are many things that I now know — and needed to know then — that were never clearly written down. Too often, the only reference on some functionality was the C code that implemented it — and the implicit hope that comments

vaguely represented reality. I personally spent many hours inspecting the publicly available sources of Samba and Samba-TNG, in the hope of gleaning some extra understanding, some critical detail.

My role in this book was one of many willing victims — exposing all I knew about CIFS, realising how little we had all actually proved, and how much we just assumed. Chris’ role was that of interrogator — asking all the difficult questions, and forcing us all to re-evaluate. The end result was a lot of testing, experimentation, and analysis, but also the solid research foundation behind this massive effort.

My hope is that with this book, future developers will no longer be required to pore over cryptic standards drafts — or badly commented C code — to understand the “big picture” into which their software sits.

More remarkably however, *Implementing CIFS* provides a solid technical reference on the protocol as a whole — between the standardese of the SNIA Technical Reference included as an appendix and the clear English of Chris’ own chapters is a wealth of technical information that aids even the most experienced developer.

Beyond that, by creating such readable documentation, *Implementing CIFS* allows more than blind faith in vendors words — CIFS is now assessable to network administrators and other non-programmers who can understand for themselves how this protocol works (and how it doesn’t).

By leading readers through the creation of his own basic CIFS client, Chris Hertel ensures that readers have a solid background in the basics — and can continue on to implementing the rest of the protocol sure of their foundations.

I’ve very much enjoyed working with Chris Hertel on *Implementing CIFS* — finally, I could see a description of this protocol that mere mortals could not only understand, but also enjoy!

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