Learning DCOM
Synopsis

DCOM -- the Distributed Component Object Model -- is a recent upgrade of a time-honored and well-tested technology promoted by Microsoft for distributed object programming. Now that components are playing a larger and larger part in Windows 98, Windows NT 4.0, and Windows 2000, every Windows programmer will want to understand the technology. DCOM competes with CORBA as a rich and robust method for creating expandable and flexible components, allowing you to plug in new parts conveniently and upgrade without the need for code changes to every program that uses your component. This book introduces C++ programmers to DCOM and gives them the basic tools they need to write secure, maintainable programs. While using Visual C++ development tools and wizards where appropriate, the author never leaves the results up to magic. The C++ code used to create distributed components and the communications exchanged between systems and objects are described at a level where the reader understands their significance and can use the insights for such tasks as debugging and improving performance. The first few chapters explain both the remote procedure calls that underlie DCOM's communication and the way DCOM uses C++ classes. Readers become firmly grounded in the relation between components, classes, and objects, the ways objects are created and destroyed, how clients find servers, and the basics of security and threading. After giving you a grounding in how DCOM works, this book introduces you to the Microsoft tools that make it all easy. By showing what really happens each time you choose a button in a wizard, Learning DCOM makes it possible for you to choose what you need. This book is for anyone who wants to understand DCOM. While thoroughly practical in its goals, it doesn't stint on the background you need to make your programs safe, efficient, and easy to maintain. Topics include: MIDL (Microsoft Interface Definition Language, the language for defining COM interfaces) COM error and exception handling Custom, dispatch, and dual interfaces Standard and custom factories Management of in-process versus out-of-process servers Distributed memory management Pragmatic explanation of the DCOM wire protocol Standard, custom, handler, and automation marshaling Multithreading and apartments Security at the system configuration and programming level Active Template Library (ATL), ATL wizards -- and what they don't do Writing a component that can be invoked from Visual Basic Techniques for using distributed components Creating an ActiveX control and embedding it in a Web client Authentication and the use of Windows NT security features Techniques for merging marshaling code Connection and distributed events management An introduction to COM+ features

Book Information
Dear Readers, I am about to build a COM DLL which also uses DCOM library from 3rd party. I read Essential COM, Inside COM, and all stuffs I found on the Internet and MSDN. I can understand piece by piece but I cannot systemmize everything I learned from these sources. All the what, why and how are still scattered every where in this COM world. Until I read this book. I am so glad I found the right book that helps me reconstruct my learning so that I can apply what I have learned. I like the way the author presented the materials. The author linked the subject back and forth in such a way that the understanding grow from page to page. The pictures used plain language but very practical and to the point. This book takes me out of COM confusion. Now I am fully confident in designing the COM DLL assigned to me. I am so happy that I want to share with you all and highly recommend this book. It is not just the materials are so good but the price too. Oh, boy, what a perfect gift for such a price. Thank the author, the publisher, the distributors and those reviewers that lead me to this book.

This is an excellent book that is aimed at experienced C++ programmers. It is well written, clear, and to the point. The first four chapters cover the basics and lay a solid foundation for what’s to come. The author starts the fifth chapter with "While you can actually write complete, functioning server and client components from the material given in the previous chapters, you’ll find them very limited." The remainder of the book then provides the details on how to build and use distributed
components. I have a number of books on COM/DCOM but this is without a doubt my favorite. I recommend it very highly. If I could own only one COM/DCOM book this would be it.

I didn’t not know all I needed to know about come when I started this book, but by the time you get to chapter 6 you are well versed in the principles and concepts of COM and DCOM. The only short fall of this book is that it packs so much information into the first 6 chapters that you don’t really see the whole picture until you start writing com objects. And because it is in c++ you start off with a hard language that will make all the others look easy. Get this book you will not be sorry. Makes an incredibly great reference guide.

I am using VxDCOM (Wind River Systems version for embedded devices) and not any MS developer products. This book gave me a clear enough explanation to allow me to use the sample code and explanations to let a couple of MPC 8260 boards talk to each other. So, the windows stuff was applicable enough to help a person new to DCOM get something running on a non-Windows version of DCOM.

When I wrote this comment (25012000) all reviewers gave 5 stars to this book, and I did agree with them. I’d like just to add a hint: Essential COM (Don Box) book is better to explain COM, but if you are really new to COM read this Thai’s book first (don’t forget to read the appendix when you have read 4 first chapters), and then you can read the Essential COM.

This is a good book for C++ programmers wanting to learn com. This simplistic one language approach has made the book popular, since com is complicated enough without trying to briefly throw 3 programming languages at it. However, it will never be your only book on Com. Eventually you’ll need to use your com objects from ASP or somewhere else (this is the purpose of com, binary reuse). This topic will also require a lot of study, and if your going to write com objects expect to spend a lot of time with this book open. I’m a programmer with 11 years experience. Com is one of the more complicated things I’ve encountered in my programming career. This book did have a few typo’s (3 or 4 jumped out at me), however, they did not detract from the content. My first impression was that Don Box had the best book on Com I’d ever seen (I browsed it in Borders), but this book seemed equally as nice (and a few bucks cheaper).I would have liked to see another another practical example (never enough).Overall, an excellent book.
If you are going to buy one book on COM/DCOM, this should be it. I recommend it that highly. It contains a clear and concise introduction to all the important COM concepts. I also have Don Box's "Essential COM", but this one is much easier to follow. If you want to quickly come up to speed on COM programming and start writing some code quickly, get this book!

Thanks to those previous reviews, I just bought this book, and I came to agree that this is really an excellent book on COM/DCOM. I've learned the "why & how" this technology compare to previous proven ones. Not like others which rarely explain the "why", this book leads you through the concepts and applies. Even I'm an experienced software engineer but it still worths it to read the first few chapters...I completed the first two in one sitting. The book layout is also very well organized.

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