

Introduction

This book provides a concise guide to the kind of customization programmers can achieve with AutoCAD 2006. It demonstrates how to use AutoCAD through short code examples written in Visual Basic for Applications (VBA). It also includes a complete quick reference that lists all the events, methods, and properties available with AutoCAD. Finally, it describes all the constants and system variables.

What Is AutoCAD?

So, what is AutoCAD? First released in 1982 under the name MicroCAD, AutoCAD has become a powerful tool for drafting and design purposes. AutoCAD 2006 incorporates many new features to enhance flexibility and drawing control. To reflect this extra functionality, many new ActiveX objects, properties, methods, and events have been included for improved programmability.

What Is This Book About?

This book is about AutoCAD 2006 and how to use AutoCAD VBA in your applications to handle all your drawing tasks more efficiently. It shows you how to programmatically control the creation and editing of individual drawing objects, manipulate linetypes and layers, control text and dimension styles, and do much more. As you encounter each of these topics, you'll learn all about the associated objects, including their properties, methods, and events.

By interfacing with AutoCAD, you can exploit all of AutoCAD's functionality that would have taken you a long time to write yourself. This book will first help you learn how to use this functionality. Then it will become a handy reference later, when you have a question that you just can't answer.

This book splits topics into neat and intuitive segments and makes it easy to find specific information when you need it (that is, when you're coding real-world applications).

This book is divided into three main parts:

- Chapters 1 through 3 provide a rapid introduction to Visual Basic and explain the notation and commands particular to AutoCAD VBA projects.
- Chapters 4 through 22 supply a detailed breakdown of most of the AutoCAD object model, covering common tasks complete with several varied code examples demonstrating how to use the relevant objects' methods and properties.
- Finally, the quick-reference appendixes describe all the members of all the AutoCAD objects at a glance. Appendix D, on Object Model Cross-Reference, can be found on the Apress website (www.apress.com).

Who Is This Book For?

The book is a reference guide for AutoCAD programmers, and it's primarily designed to explain and demonstrate the features of AutoCAD 2006. As such, this isn't a beginner's guide; however, if you've programmed in any language that can interface with other COM objects, you should be able to easily understand and use this book.

In particular, the book is aimed at programmers who use AutoCAD for daily tasks and can see the benefits of customizing and automating these tasks. I present programming techniques needed to create and modify AutoCAD drawings, customize preferences, query and set system variables, and so on, using the built-in VBA.

You can customize AutoCAD to any degree of sophistication. If you can think it up, then I bet you can use AutoCAD VBA and this book to help you achieve your goal.

Tell Us What You Think

I've worked hard on this book to make it enjoyable and useful. My best reward would be to hear from you that you liked it and that it was worth the money you paid for it. I've done my best to try to understand and match your expectations.

Apress and I would like to know what you think about it. Tell us what you liked best, and what we could have done better. If you think this is just a marketing gimmick, then test us—drop us a line! We'll answer, and we'll take whatever you say under consideration for future editions. The easiest way to do so is to send e-mail to feedback@apress.com.

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