

Preface

ColdFusion has come a long way since its inception. Way back in 1995, Allaire Corporation came out with Version 1 of ColdFusion, and even then, developers loved it and could see its potential. Several versions and one very important merger with Macromedia later, ColdFusion MX has positioned itself as a leading Web-application server, integrating many different Internet technologies, including XML, Web services, and Java.

ColdFusion, at its core, is a server-side scripting environment that enables you to quickly get your sites up and running with much less code than the equivalent ASP, JSP, or PHP application requires but, at the same time, is even more powerful than these other languages. In fact, ColdFusion MX scripts are compiled into Java classes, and those Java classes are executed by an embedded version of JRun, Macromedia's powerful J2EE server.

This book is intended as a comprehensive tour of ColdFusion MX: It's broad enough to give you a feel for everything that ColdFusion MX can do, but it's deep enough that you can use the knowledge that you gain from this book to develop truly powerful ColdFusion applications. Whether you are a beginner or an expert, you should have the ColdFusion MX Bible in your reference library.

How This Book Is Organized

The scope of this book is rather broad and takes a natural progression, starting with a basic introduction, then moving on to using databases and the ColdFusion language itself before discussing more advanced concepts. The last part is the language reference, which has been organized very differently than most other references. There are nine parts to this book.

Part I: Getting Started with ColdFusion MX

The first part of the book incorporates seven chapters relating to the most basic aspects of ColdFusion. After a brief introduction, we provide a tutorial on building (and understanding) your first ColdFusion MX application. The rest of Part I focuses on the basics of the language itself, the underlying technology, and an introduction to using SQL effectively with ColdFusion. The last two chapters in Part I go into more detail about using forms and testing your code.

Part II: Using ColdFusion MX with Databases

ColdFusion would be nearly useless without some kind of database as its backend. Part II starts with a chapter on database design, moves on to a discussion about using databases with ColdFusion, and then spends two whole chapters on effective and advanced database techniques. Even if you think that you know everything about databases, don't skip this part of the book.

Part III: The ColdFusion MX Language

Part III focuses on the ins and outs of the ColdFusion language. The ten chapters in this section move from simple variables to complex variables such as arrays and structures before covering advanced topics such as user-defined functions, custom tags, state management, and exception handling.

Part IV: ColdFusion MX Components, Web Services, and Flash Integration

Part IV covers the new cutting-edge features of ColdFusion MX that can change the way that you write ColdFusion applications forever. The six chapters in Part IV should be read in order, because each builds on the concepts described in the preceding chapter. Part IV starts out with two chapters about understanding and building ColdFusion components and then discusses how and why you should move portions of your existing code to components. The last three chapters discuss Web services, Flash Remoting, and server-side ActionScript.

Part V: Integrating ColdFusion MX with Other Technologies

ColdFusion MX is most powerful if it's extended with other technologies such as Java, COM, and XML. Part V consists of four chapters covering Java objects, JSP, EJB, COM, WDDX and XML, and some of the tags that ColdFusion uses to communicate with external systems. Spend some extra time on Chapter 30, as XML is about to become a big part of your development life.

Part VI: Extending Your ColdFusion MX Applications

Part VI covers additional features that you can use to extend ColdFusion, such as task scheduling, file operations, Verity, and charting, as well as some of the community resources and development tools that help make application development go much faster than normal.

Part VII: ColdFusion MX Development Practices

Sometimes, how you code is as important as the code itself. Part VII covers important topics that are often overlooked, such as code documentation and testing, and also contains a discussion of Fusebox 3 written by none other than the Fusebox master himself, Hal Helms. The part also contains chapters about source-code control, effective use of ColdFusion Studio, and integrating security into your applications.

Part VIII: ColdFusion MX Administration

Part VIII is comparatively short, but it's packed with information about getting the most out of ColdFusion MX by tweaking its server settings. Part VIII is split into two chapters, the first covering all the settings available in ColdFusion Administrator and the second going into more detail about approaching specific settings and sets of options.

Part IX: ColdFusion MX Language Reference

Most language references use the format provided by Macromedia: an alphabetical listing of tags and functions (with tags separated from functions) and a separate list of categories. Part IX turns this model on its ear. Each section of the language (variables, databases, forms, and so on) has its own chapter, and tags and functions are listed together in each chapter.

This way, if you are working on a problem regarding database queries, you see all the tags and functions that are most often used to handle database queries in one place, which means that you may also see what you've been missing in the language (such as, for example, `CFOBJECTCACHE`).

If you need an alphabetical reference, we also provide a traditional alphabetized listing of all tags and functions with page references, and many tags cross-reference others so that, no matter what you're looking for, you can easily find it.

CD-ROM

The CD-ROM that accompanies this book supplies you with a great deal of additional material including author code listings and samples, many software applications, and a PDF eBook version of the final book. The CD-ROM Appendix at the end of the book gives full details of all these items.

How To Get The Most Out Of This Book

Treat this book as you would a novel and not a cookbook. Most people, on picking up the *ColdFusion MX Bible*, would probably look up the one specific subject that they want to learn about and go directly there. Although this approach is certainly a valid one if you have a specific problem to solve, we recommend that, at some point, you start from the very beginning and work your way all the way through the book. If you are not a beginner, feel free to skip all of Part I but read everything after that.

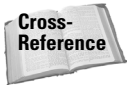
We recommend this approach even for advanced developers, because many people first starting out in ColdFusion unintentionally pick up some bad habits that remain with them even after they become better developers. The information contained in this book is based on sound development practices born of many years of experience in many different languages and technologies. The first thing that we want to do is help you understand how ColdFusion works and how to get the most out of it, and the second is to make sure that no bad habits come back to haunt you.

What the Icons Mean

Throughout this book, you will find icons in the margins that highlight special or important information. Keep an eye out for the following icons:



A Caution icon indicates a procedure that could cause difficulty or even data loss; pay careful attention to Caution icons to avoid common and not-so-common programming pitfalls.



Cross-Reference icons point to additional information about a topic, which you can find in other sections of the book.



A Note icon highlights interesting or supplementary information and often contains extra bits of technical information about a subject.



Tip icons draw attention to handy suggestions, helpful hints, and useful pieces of advice.