Introduction

Shortly before my book *DB2 9 for Linux, UNIX, and Windows Database Administration: Certification Study Guide* (MC Press, 2007) went into a second printing (which was in May 2009), IBM invited me to help develop the DB2 9.7 for Linux, UNIX, and Windows Database Administration (DBA) certification exam (Exam 541). Knowing that a new version of the DBA exam was about to be created, I contacted my editor to ask whether we should update my DB2 9 DBA book to cover the upcoming exam. At that time, it was decided that such a revision would be too costly and time consuming — that instead, the next revision would take place after the DB2 10 exams were developed.

That same year, IBM invited me to, once again, teach my DB2 for Linux, UNIX, and Windows DBA Certification Crammer course at its Information On Demand (IOD) conference. And because attendees would be able to take the 541 exam, at no charge, while they were at the conference, IBM asked whether I could update my training material and teach to the 541 exam. My answer was "yes," and I spent the next four to six weeks completely reworking my training material to cover the 541 exam. Of course, I used the same technique to develop the material for that course that I use to develop all my certification exam training material and study guides: I carefully review the questions found on every version of the certification exam, and I make sure that I cover the

topics test candidates will encounter when they attempt to take a certification exam.

Starting around April of 2010, I began receiving emails from various individuals who wanted to know when I would have a study guide available for the DB2 9.7 DBA exam. My response always went something like this: "My publisher has decided not to do a book for the DB2 9.7 DBA exam. However, I will be teaching a class that will help you prepare for the 541 exam at the IDUG/IOD conference this May/October." This response almost always led to a request for a copy of my training material. But, because that material is copyrighted (and is, in fact, registered with the U.S. Copyright Office), I don't distribute it freely. So, unfortunately, I was unable to honor such requests.

Last year, after teaching my class at the 2010 IOD conference (where I once again was bombarded with questions about when a book for the 541 exam would be available), I approached my editor and made the suggestion that we make my training material for the 541 exam available, in the form of a supplement to the DB2 9 for Linux, UNIX, and Windows Database Administration: Certification Study Guide. She agreed, and the result is this book.

If you've bought this book (or if you are thinking about buying this book), chances are you've already decided that you want to acquire the DB2 9.7 for Linux, UNIX, and Windows Database Administrator Certification that's available from IBM. As an individual who has helped develop 17 IBM DB2 certification exams, let me assure you that the exams you must pass in order to become a certified DB2 professional are not easy. IBM prides itself on designing comprehensive certification exams that are relevant to the work environment to which an individual holding a particular certification will be exposed. As a result, all of IBM's certification exams are designed with the following items in mind:

- What are the critical tasks that must be performed by an individual who holds a particular professional certification?
- What skills must an individual possess in order to perform each critical task identified?
- How frequently will an individual perform each critical task identified?

You will find that in order to pass a DB2 certification exam, you must possess a solid understanding of DB2; for some of the more advanced certifications, such as the 541 exam, you must understand many of the DB2 nuances as well.

Now for the good news. You are holding in your hands the only material that has been developed specifically to help you prepare for the DB2 9.7 for Linux, UNIX, and Windows Database Administration exam (Exam 541). When IBM began work on the 541 exam, I was invited once again to participate in the exam development process. In addition to helping define the exam objectives, I authored several exam questions, and I provided feedback on many more before the final exams went into production. As a consequence, I have seen every exam question you are likely to encounter, and I know every concept on which you will be tested when you take the 541 exam. Using this knowledge, along with copies of the actual exam questions, I developed these study notes, which cover every concept you must know in order to pass Exam 541. In short, if you see it in this book, you can count on seeing it on the exam; if you don't see it in this book, it won't be on the exam.

Where Are the Practice Questions?

For those of you who have purchased my DB2 certification study guides in the past, I would like to say thank you. A tremendous amount of effort goes into the creation of those books, and it is rewarding to know that they are helping people become DB2-

certified. In addition to thanking you, I also want to comment up front about the absence in this book of sample questions and answers that you have grown to expect in my study guides. Because the pages that follow contain the slides I use to teach my DB2 for Linux, UNIX, and Windows DBA Certification Crammer course, there are no sample questions. And because I've been busy trying to finish the manuscript for my 23rd book — From Idea to Print: How to Write a Technical Article or Book and Get It Published — quite frankly, I did not have the time to create practice questions for this book!

With that said, I can promise you that you will find everything in the pages that follow that you must know in order to pass the 541 exam. If you become familiar with the material presented in this book, you should do well on the test.

Conventions Used

You will find many examples of DB2 administrative commands and SQL statements throughout this book. The following conventions are used whenever a DB2 command or SQL statement is presented:

- [] Parameters or items shown inside brackets are required and must be provided.
- Parameters or items shown inside angle brackets are optional and do not have to be provided.
 - A vertical bar is used to indicate that one (and only one) item in the list of items presented can be specified.
- A comma followed by three periods (ellipsis) indicates that multiple instances of the preceding parameter or item can be included in the DB2 command or SQL statement.

The following example illustrates each of these conventions:

```
UPDATE [DATABASE | DB]

[CONFIGURATION | CONFIG | CFG]

FOR [DatabaseAlias]

USING [[KeyWord] [Value] ,...]

<IMMEDIATE | DEFERRED>
```

In this example, DATABASE or DB is required, as is CONFIGURATION, CONFIG, or CFG; a *DatabaseAlias* value; and a *KeyWord-Value* pair, as indicated by the brackets ([]). In the case of DATABASE or DB, only one option can be specified, as indicated by the vertical bar (|). The same is true for CONFIGURATION, CONFIG, or CFG. More than one *KeyWord-Value* pair can be provided, as indicated by the comma-ellipsis (, . . .) characters that follow the *Value* parameter. IMMEDIATE and DEFERRED are optional, as indicated by the angle brackets (< >), and either one or the other, but not both, can be specified, as indicated by the vertical bar (|).

SQL is not a case-sensitive language, but for clarity, the SQL examples provided are shown in mixed case: command syntax is presented in upper case, while user-supplied elements such as table names and column names are presented in lower case. However, the examples shown can be entered in any case.



Note: Although basic syntax is presented for most of the DB2 commands and SQL statements covered in this book, the actual syntax supported may be much more complex.

To view the complete syntax for a specific command, or to obtain more information about a particular command, refer to the *IBM DB2*, *Version 9.7 Command Reference* product documentation. To view the complete syntax for a specific SQL statement or to obtain more information about a particular statement, refer to the *IBM DB2*, *Version 9 SQL Reference*, *Volume 2* product documentation.