Introduction

CompTIA has rolled out the most dramatic structural change in the history of the A+ certification program. Since its inception, the A+ certification has been divided into two sections: core hardware components and troubleshooting and operating system structures and troubleshooting. Originally you had two choices for the operating system exam: DOS/Windows or Apple OS.

The new exam structure introduces an Essentials exam that covers basic hardware and operating system technologies. To complete the A+ certification, you also must pass one of three advanced exams: Depot Technician, Technical Support Technician, or IT Technician exams. These exams are designed to align with commonly used PC repair and service job titles.

All four exams are fixed length and linear. However, they are also dynamic in nature, as they have been for the last two exam revolutions. There were no beta exams used to validate the current question pools. Instead, new questions will be added to the pool over time. CompTIA will routinely inject new questions into the exams as unscored items until their psychometric validity can be established. After validation, the questions will be returned to the question pools as scored items, thus creating a dynamic test pool that is continually being renewed.

How This Book Is Organized

This book has been designed to prepare its users to challenge the October 2006 version of the A+ Certification exams from the Computer Technology Industry Association. A+ Certification is a two-step process: You must pass the Essentials exam and one of the other advanced exams. For more information on CompTIA and the A+ exams, visit http://www.comptia.org.

This book will provide you with the knowledge and skills required to pass the A+ exam and become a certified computer service technician. A+ certification is recognized nationwide and is a hiring criterion used by companies such as AT&T, IBM, Microsoft, and Hewlett-Packard. Therefore, becoming A+ certified will enhance your job opportunities and career advancement potential.

There was much discussion beforehand about how to produce this book. Should it be four books (one per test), two books (one for Essentials and one to cover the three advanced exams), or should it all be in one book. As it turns out, the four exams are so intertwined and the questions have so much overlap among the exams that it made sense to produce one bigger book that covered everything.

The first eight chapters are exclusively tied to the 220-601 Essentials exam. On the other hand, Chapter 27 is the only chapter that doesn't have any reference to the Essentials exam. All the chapters in between have elements from Essentials and from one or more of the advanced exams. The objectives being covered in each chapter are spelled out at the beginning of the chapter.

Each chapter concludes with a collection of multiple-choice questions that can be used for test-prep purposes.

The appendices are fixed-length representations of each A+ exam: Essentials, IT Technician, DepotTechnician, and Remote Support Technician.

Conventions Used in This Book

Each chapter begins with a list of CompTIA objectives that establishes a foundation and systematic approach to the material in the chapter.

Each page is populated with Exam Alerts that point out the presence of known exam-related materials.

Each chapter concludes with multiple-choice exam-prep questions to prepare you for the real exams.

Special Elements

In this edition, we have added a new feature called Challenges to each chapter to challenge students to apply what they are learning to scenario-based situations that require more than a single word or sentence to evaluate.

> **NOTE**
>
> This is a note that presents some key information that may not necessarily be essential information for taking the exam.

> **EXAM ALERT**
>
> **This is a tip that will prove useful in preparing for one or more of the exams.**

> **CAUTION**
>
> This is a caution that something you might accidentally do could have undesirable results—so take care!

Test Taking Tips

The A+ exam is an objective-based, fixed length, timed test delivered in a multiple-choice format. There are two general methods of preparing for the test. If you are an experienced technician using this material to obtain certification, use the testing features at the end of each chapter and the final four chapters to test each area of knowledge. Track your weak areas and spend the most time concentrating on them.

If you are a newcomer to the subject of serious computer repair, plan a systematic study of the materials, reserving the testing functions until each chapter has been completed.

In either case, after you complete the study materials, use the various testing functions available on the CD to practice taking the test. Use the Study and Exam modes to test yourself by chapter or on a mixture of questions from all areas of the text. Practice until you are very certain that you are ready. The CD will provide you with explanations of questions and answers for your review.

- ▶ Answer the questions you know first. You can always go back later and work on questions you don't know.

- ▶ Don't leave any questions unanswered. They will be counted as incorrect.

- ▶ There are no trick questions. The correct answer is in there somewhere.

- ▶ Get plenty of hands-on practice before the test, using the time limit set for the test.

- ▶ Make certain to prepare for each test category listed previously. The key is not to memorize, but to understand the topics.

- ▶ Take your watch. The A+ exam is a timed test. You will need to keep an eye on the time to make sure that you are getting to the items that you are most sure of.

- ▶ Get plenty of rest before taking the test.