

*Introduction
to the*

AS/400

SECOND EDITION

Robert W. Janson

Introduction to the AS/400

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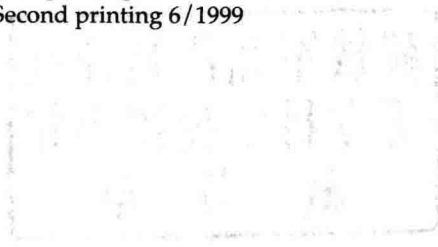
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Preface

This is not a manual disguised as a textbook. This book is a learning tool. Students are introduced/instructed to subjects in a manner that is easy to understand and consistent. This book is not loaded down with every technical “gee-whiz” detail of every utility and command. That’s what manuals are for and that is why new manuals come out with each new version of the operating system. This book covers constants—subjects and concepts that are universal to computers and the AS/400, and it presents these subjects in a way that is easy to understand for first time users. That’s the beauty of this text.

Since I wrote the first edition, there have been so many enhancements to the AS/400 it is mind boggling. Fortunately, most of the enhancements have been at the high end of the knowledge tree (ILE, referential constraints, networking, SQL). The introductory subjects, like PDM, SEU, QUERY/400, etc. have remained much the same. Luckily, I’ve become a better writer and teacher, so I have enhanced every topic with more figures and charts and filled out the coverage in some of the more complex areas (database, joins, hardware, compilation reports, testing). In addition, when change has come to the basics, like navigating the system using a GUI instead of the green screens, it has been included in this second edition.

There are several other things that are still much the same as when I wrote the first edition. First, is the screaming need for AS/400 skills and second is the incredible salaries employers are will to pay for these skills. Several of my students who learned from the draft copies of the first edition are now in the six figure salary range. Currently, my good students don’t stay in class very long because they get lured away with job offers after only 3 or 4 AS/400 classes!

Two other constants are the AS/400’s ease-of-use and anonymity. Every student knows what a PC is but practically none have even heard about an AS/400. When students think about computers they think PC and sign up for PC courses. The AS/400 brand has to be promoted to the general public by IBM. IBM sells AS/400’s like wildfire but few people outside of the IS department know what an AS/400 is or how popular they are.

There were several people and companies that helped me with this new edition. I’d like to thank Landstar LCS, Florida Detroit Diesel, Intuition Inc., and the City of Neptune Beach for allowing me time on their AS/400’s. In particular, Janet Traylor-Burns and Bill

Etheredge at FDD, Sara Sydnor at Intuition and Theresa Valentine at the City of Neptune Beach for getting the permissions to allow me on their sites. A special thanks to Brian Song at Landstar who got the permissions and spent time with me comparing previous OS versions to V4R2 and trying to make sense of the changes. Also, thanks to my employer Florida Community College at Jacksonville (FCCJ) for granting me a sabbatical to rewrite the book.

I'd also like to thank Dessa Francis of Desktop Publishing Insights and Angela Roth for their work on laying out the book. Of course, all my past students (especially Melody Blair) have zealously contributed to the book by finding all the mistakes in the exercises and text, so thanks to them also. Finally, thanks to Brenda, the love of my life.

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Welcome to the AS/400

1

Overview

This chapter begins with a brief definition and discussion of minicomputers and their role in a data processing organization. You will then learn about the origins and evolution of the AS/400 followed by an explanation of the major screens and menus that enable you to sign on and access the various AS/400 functions and utilities. Finally, on-line help will be explained and you will fall in love with your first AS/400 utility. (Bring a camera, because it will be a beautiful moment.)

At the end of this chapter you should understand:

- what a minicomputer is
- the 3 types of AS/400 software
- the 4 types of display screens
- how the various screens interrelate
- hypertext

You should be able to:

- sign on to the AS/400
- access and execute AS/400 functions using the menu system
- use the on-line help facility

What Is a Minicomputer?

Minicomputers are generally considered medium-sized computers. They are between microcomputers and mainframe computers in terms of processing speed, storage space and number of users that can be supported at once. The terms *minicomputer*, *microcomputer* and *mainframe*, however, are fuzzy descriptions. Before a computer is classified as one of these, it does not have to perform at a certain processing speed or have a minimum storage capacity. As a matter of fact, the smallest minicomputers are often less powerful than the biggest microcomputers, and the high end minicomputers are more powerful than many of the smallest mainframes (see Figure 1.1). There is considerable overlap at the extremes of all three categories and, in general, a wide range of capabilities can be found within each category. Another fact that adds to the fuzziness of these definitions is that the speed and storage capacity of all computer categories are increasing every year. What was considered a minicomputer in the late 1980's is within the range of most microcomputers today. In a few years it will probably be in the range of lap tops. The current generation of minis is performing at what was considered mainframe speed ten years ago.

An organization might choose a minicomputer over a micro or a mainframe for several reasons. First, a microcomputer simply may not be fast enough or have the storage capacity to support the required processing. Another limitation of micros is the number of users they can support at the same time. Many of them lack the power to run many programs at once and carry on simultaneous work sessions with multiple users. Networking a number of microcomputers is an alternative; however, this requires additional hardware and software and, often, highly trained personnel to maintain the network. All of these add to the low cost "PC solution." Mainframes, of course, have all the capabilities of a mini but they cost more, require specialized personnel to set up and maintain, take up more space and may need special environmental conditions—temperature control, water lines, etc. However, if massive computing power is needed, mainframes are often the best solution.

Many studies have been done over the years that show the AS/400 to be the best and low cost solution for multi-user business computing because of its leading edge technology and ease-of-use features. Of course, each situation needs to be evaluated separately, but over 600,000 AS/400's have been sold, making it the most popular minicomputer ever.

AS/400 History

The AS/400 is IBM's latest minicomputer. In "IBM language" it is referred to as a midrange computer. (Presumably they choose the term *midrange* because it sounds less diminutive than *mini*. And rightfully so, because very little is mini about the AS/400.) Its high end models provide incredible processing and storage capacity, and its software incorporates the latest advances and techniques to provide an efficient, easy-to-use and seamless user environment.