
Contents

Introduction	1
What This Book Is	1
What This Book Is Not	1
How to Use This Book	2
A Glance Backward at the System/3X Family	3
CHAPTER 1	
IBM AS/400—A New Beginning	9
Meet the Family	9
How Are AS/400 Computers Different from System/3X	13
9404 System Specifics	15
9406 System Specifics	18
AS/Entry 5363 Specifics	21
Performance Overview	25
A Closer Look	30
Hardware Architecture	31
Built-In Data Base	34
Storage Management	39
Auxiliary Storage	42
<i>Diskette Storage</i>	42
<i>Fixed Disk Storage</i>	43
<i>Tape Storage</i>	47
Packaging Technology	47

CHAPTER 2

Options and Peripherals

49

Workstations	50
InfoWindow 3476 Display Station	50
InfoWindow 3477 Display Station	52
PS/2 Terminal Emulation	55
4224 Printer	55
4234 Printer	57
4245 Printer	59
6262 Printer	59
3816 Page Printer	60
3825 Page Printer	62
3827 Page Printer	63
Workstation Controllers	63
<i>Twinaxial Workstation Controllers</i>	64
<i>ASCII Workstation Controllers</i>	64
Protocol Converters	65
5208 Link Protocol Converter	66
5209 Link Protocol Converter	66
Main Storage Expansion Options	67
AS/Entry Main Storage Expansion	67
9404 Main Storage Expansion	68
9406 Main Storage Expansion	68
Auxiliary Storage Options	69
Diskette Storage	71
<i>Diskette Unit 5.25 Inches</i>	71
<i>Diskette Unit 8 Inches</i>	71
<i>9331 Diskette Unit Model 1</i>	71
<i>9331 Diskette Unit Model 2</i>	72
Fixed Disk Storage	74
<i>Additional Disk Drive for the AS/Entry</i>	74
<i>9404 Disk Unit</i>	74
<i>9332 DASD</i>	75
<i>9335 DASD</i>	76
Tape Storage	76
<i>Internal Streaming Tape Drive</i>	78

<i>High Capacity Internal Streaming Tape Drive</i>	78
<i>9346 Cartridge Tape Unit</i>	80
<i>9347 Tape Unit</i>	80
<i>2440 Model A12 Tape I/O Subsystem</i>	81
<i>9348 Tape Unit</i>	83
<i>3422 Tape Unit</i>	83
<i>3490 Tape Unit</i>	83
Auxiliary Storage Controllers	84
<i>Magnetic Storage Device Controller</i>	85
<i>9346 Tape Unit Controller</i>	85
<i>2440 Tape I/O Subsystem Attachment Feature</i>	85
<i>9348 Magnetic Tape Subsystem Attachment Feature</i>	86
<i>2440/9348 Magnetic Tape Subsystem Attachment Feature</i>	86
<i>3422/3430 Magnetic Tape Subsystem Attachment Feature</i>	86
Communications Options	87
Communications Interfaces/Protocols—A Road Map	87
9406 Communications Subsystems	90
<i>Base Two-Line Expansion</i>	91
<i>Base Six-Line Expansion</i>	92
<i>232/V.24 Communications Subsystems</i>	92
<i>Two-Line Communications Subsystem</i>	92
<i>Four-Line Communications Subsystem</i>	92
<i>Eight-Line Communications Subsystem</i>	93
<i>V.35 Communications Subsystem</i>	93
<i>Token-Ring Network Subsystem</i>	93
9404 Communications Subsystems	94
<i>232/V.24 Adapter</i>	94
<i>V.35 Adapter</i>	95
<i>Token-Ring Adapter</i>	95
AS/Entry Communications Subsystems	95
<i>BSC Adapter</i>	95
<i>SDLC Adapter</i>	95
<i>Async Adapter</i>	95
<i>Token-Ring Adapter</i>	96
<i>Expanded Communications</i>	96
Modems	96
<i>5853 Modem</i>	96

786X Modem	98
5822 DSU	99
5394 Remote Workstation Controller	100
Other Options	101
AS/Entry 5363 Processor Expansion	102
9404 Expansion Unit	102
9404 Feature Power Supply	103
9404 Battery Power Unit	103
9406 I/O Card Unit	103
5259 Migration Data Link	103
5299 Terminal Multiconnector and the TTPA	105
Option Compatibility Matrix	106
9406 Rack Configurations	107
System Unit/9332 Rack	107
System Unit Rack	108
9332 Disk Unit Rack	109
9335 Disk Unit Rack	109
I/O Expansion Rack	110
I/O Card Unit Expansion Rack	111

CHAPTER 3

Using Your AS/400 113

Getting Your Feet Wet	113
Signing On	114
Using On-Line Help	115
Signing Off	124
Using AS/400 On-Line Education	125
<i>What You Need Before You Start</i>	127
<i>Taking the First Course in AS/400 On-Line Education</i>	127
The Real Software—a Model	132
Application Programs	134
Operating Systems	135
LIC Instructions	135
How the AS/400's Software Layers Are Different	136
How the Layers Work Together	138

Communications Support	179
Systems Management	183
Application Development	184
System/3X Compatibility	188

CHAPTER 6

Advanced Business Systems Communications 191

Computer Communications in the Office—	
An Introduction	191
What Is SNA?	192
Electronic Customer Support Communications	193
Remote Workstations	194
Distributed Computer Communications	196
AS/400 Distributed Network	198
AS/400 and System/370 Distributed Network	200
AS/400 and the Token-Ring Network	202
Token-Ring: AS/400 and PS/2s	204
Token-Ring: AS/400 and AS/400	207
Token-Ring: AS/400 and S/370	208
An AS/400 Configuration for Token-Ring Networks	211

CHAPTER 7

Advanced Business Systems and Your Business 213

What Are My Business Computing Needs?	214
When Should I Consider Advanced Business Systems?	215
What about Personal System/2?	215
What about System/370 Computers?	216
Choosing the Software	217
Choosing Advanced Business System Hardware	219
Small Business Environment—Bob's Gearbox Co.	219
Medium Business Environment—Johnson & Thornbush	221
Large Business Environment—Atole Enterprises	225
The Business Decisions	227
Cost Justification	227
Lease or Buy?	231

User Education	233
Electronic Customer Support	234
Ergonomics	236
Comfort for the Eyes	236
Workstation Comfort	237
What about Noise?	238
Security	239
Loss Prevention	239
Theft Prevention	240
Service	240
Migrating from System/3X to AS/400	241
Sizing a Replacement AS/400	241
Migrating System/3X I/O Devices to AS/400	243
Migrating Programs and Data from S/36	244
Migrating Programs and Data from S/38	246
Migrating Programs and Data from S/34	248

APPENDIX A

Guide to AS/400 Publications	249
-------------------------------------	------------

APPENDIX B

Peripheral Compatibility Guide	293
---------------------------------------	------------

Supported by AS/400	293
Devices Not Supported by AS/400	295

Index	297
--------------	------------

AS/400 Software Compatibility—	
Will S/3X Programs Work?	140
Inside AS/400 Compatibility	141
Systems Application Architecture—The New Standard	142

CHAPTER 4

Application Programs 145

Can Prewritten Programs Fit the Bill?	145
Cross-Industry Application Programs	146
OfficeVision/400	146
<i>Calendar Management</i>	149
<i>Electronic Mail</i>	150
<i>Document Management</i>	152
<i>Text Processing</i>	152
<i>Directory Management</i>	155
<i>Bridging to Other Functions</i>	156
AS/400 Query	157
AS/400 Business Graphics Utility	159
ImagePlus™	160
Industry-Specific Application Programs	163
Custom Application Programs	165

CHAPTER 5

Operating Systems 167

Introduction to Operating System Concepts	167
Batch versus Interactive Processing	168
What Is Multi-User?	169
What Is Multi-Application?	170
Operating System Products	170
SSP—An Executive Overview	171
OS/400—An Executive Overview	172
A Closer Look at OS/400	175
Data Base Support	175