

Demystifying EDI

**A Practical Guide to Electronic
Data Interchange Implementation,
Transactions, and Systems**

Russell A. Stultz

Wordware Publishing, Inc.

Contents

Acknowledgments	ix
---------------------------	----

Part 1—Introduction to EDI

Chapter 1 About This Book	3
Introduction	3
Organization	4
The CD-ROM	5
Getting Started	6
Chapter 2 Compelling Reasons for EDI	7
Introduction	7
EDI Mail	7
Manual Trading	7
The EDI Transaction.	10
Stepping Up to EDI	11
Conclusions.	13
Review Questions	13
Chapter 3 EDI Standards and Legal Issues	15
Introduction.	15
Standards	15
A Brief History.	15
Some Background	16
The Standards	16
Changes and Updates	16
Message Content	16
More Adoptions	17
New Applications	17
Aligning the ANSI ASC X12 and UN/EDIFACT Standards	17
Current Status	19
Proprietary Standards	19
ANSI X12.	19
EDIFACT.	20
EDI Mail Small and Large	23
Digging Deeper	23
The ANSI X12 Format.	23
The EDIFACT Format.	25

Contents

Legal Issues	27
Trading Partner Agreements	28
Third-Party Agreements	29
Laws, Rules, and Regulations	29
Review Questions	29
Chapter 4 Selecting EDI Software	31
Introduction.	31
Analyzing Your Business.	31
Trading Practices.	32
Current Systems.	32
Staff Qualifications and Potential	35
EDI Benefits	35
EDI Use by Others.	36
Conversion Costs	37
Interface Issues	38
Available EDI Applications	40
EDI System Alternatives	40
Inflexible and Flexible Systems.	40
What's Next.	41
Review Questions	42
Chapter 5 Data Communications, VANs, and Security.	43
Introduction.	43
Data Communications	43
The Value-Added Network.	45
Charges	46
Electronic Mailboxes	46
Checking for EDI Mail.	47
Trading with Multiple Partners	47
VAN Interconnects.	47
Communication Alternatives	47
Internet FTP	47
Point-to-Point	49
Launching an Exchange	50
Security	51
Man Overboard!	51
Security Issues.	51
In-House EDI System Security.	52
Secure Creation of Outbound Messages	52
Secure Processing of Incoming Messages	53
Secure Retention of Data	54
EDI Mail Security Mechanisms.	54
Encryption	55
Key Management	56
Certification	56

Archiving	57
Digital Signatures	57
Sealing	57
Smart Cards	57
Biometrics	58
Concluding Thoughts about Security	58
What's Next.	58
Review Questions	59

Part 2—Using EDI Software (Trading Partner Desktop)

Chapter 6	Setting Up Trading Partner Desktop	63
	Introduction.	63
	What You Need	63
	Review Questions	64
Chapter 7	Installing Trading Partner Desktop (TPD)	67
	Introduction.	67
	Hardware and Software Requirements	67
	Installation	67
	Running Setup	68
	Installing Adobe Acrobat Reader	72
	Some System Settings.	74
	Things to Do	77
	What's Next?	81
	Review Questions	81
Chapter 8	Configuring Communications and Adding a Trading Partner	83
	Introduction.	83
	Configuring Communications	83
	Adding a Trading Partner	89
	The Trading Partner Directory Structure	94
	What's Next.	94
	Review Questions	95
Chapter 9	Configuring a Trading Partner and Adding Transaction Sets	97
	Introduction.	97
	Using Your Checklist.	97
	Configuring a Trading Partner and Adding Transaction Sets.	100
	Automatic Configuration	104
	Looking Back	104
	What's Next	105
	Review Questions.	106

Chapter 10	Mapping Transaction Sets	107
	Introduction	107
	Examining the Specifications.	107
	Heading and Summary	109
	Detail	109
	Looking More Closely	110
	Manual Mapping	114
	Hands-On Mapping Activity	114
	Concluding Comments about Mapping	123
	Creating a Cross Reference (XRF) File	123
	Examining the XRF Files.	125
	What's Next	126
	Review Questions.	126
Chapter 11	EDI Files, Processing, and Exchanging Data with External Applications (Export and Import Utilities)	129
	Introduction	129
	Processing Tasks and Files.	130
	File Processing Overview	130
	Inbound EDI Mail.	130
	Outbound EDI Mail.	133
	File Examples.	134
	Other Files	135
	Mail_in.new File Example	136
	Examining the Mail_in.new File.	137
	Mail_out.new File Example	138
	Examining the Mail_out.new File	138
	Sorted Mail File (Mail_in.srt) Example	139
	Examining the Sorted Mail File	139
	Translated Mail File (Mail_out.trn) Example	140
	Examining the Translated Mail File	141
	Export File (Mail_in.rfm) Example	141
	Examining the Export File.	142
	Exporting to and Importing from an External Application	143
	Taking a Closer Look.	143
	Parsing the Reformatted File	144
	Producing the Import File	145
	Program Complexity	146
	What's Next	147
	Review Questions.	147
Chapter 12	Automating EDI Processing with Task Lists	149
	Introduction	149
	Task Lists and the Scheduler.	149
	Task Lists Overview	150
	Using the Tasklist Editor.	150
	Launching External Programs.	153

The Scheduler.	155
What's Next	157
Review Questions.	158
Chapter 13 What's Next	159
Introduction	159
Moving Ahead.	159
Review Questions.	160

Part 3—Appendixes

Appendix A Transaction Set Guidelines	163
810 Invoice	164
Introduction	164
Notes	164
Transaction Set Notes	166
850 Purchase Order.	201
Introduction	201
Notes	201
Transaction Set Notes	204
Appendix B Glossary of EDI Terms	297
Index	303