

Contents

Acknowledgements..... xvii

Foreword xix

Chapter 1 An Introduction to BPM 1

- 1.1 Brief History of Business Process Management 1
 - 1.1.1 The Need for Business Value 1
 - 1.1.2 The Production Line 1
 - 1.1.3 The Process is Your Business 2
 - 1.1.4 Business Process Re-engineering 2
 - 1.1.5 The Growth of IT 4
 - 1.1.6 Today’s Process Challenges 4
- 1.2 Realising Business Process Management..... 6
 - 1.2.1 Business Process Strategy Phase 7
 - 1.2.2 Business Process Design Phase 9
 - 1.2.3 Business Process Implementation Phase 9
 - 1.2.4 Business Process Controlling Phase 11

Chapter 2 Introduction to the ARIS Platform 13

- 2.1 Business Process Management with ARIS..... 13
- 2.2 The Strategy Platform..... 15
 - 2.2.1 ARIS Balanced Scorecard (BSC) 15
 - 2.2.2 ARIS Business Optimizer 15
- 2.3 The Design Platform..... 16
 - 2.3.1 ARIS Toolset 16
 - 2.3.2 ARIS Easy Design 16
 - 2.3.3 ARIS Web Publisher..... 17
 - 2.3.4 ARIS Business Designer..... 17
 - 2.3.5 ARIS Business Architect 18
 - 2.3.6 ARIS Business Publisher 18
 - 2.3.7 ARIS Simulation..... 19
- 2.4 The Implementation Platform..... 19
 - 2.4.1 ARIS for SAP NetWeaver 20
 - 2.4.2 ARIS SOA Designer 20
 - 2.4.3 ARIS UML Designer 20
- 2.5 The Controlling Platform..... 21
 - 2.5.1 ARIS Process Performance Manager 21
 - 2.5.2 ARIS Audit Manager 21
- 2.6 What’s in this Book 22
- 2.7 How to Use this Book..... 23

2.8	For New Users of ARIS Business Designer.....	24
2.9	For ARIS Toolset and ARIS Easy Design Users	25
Chapter 3	The Basics of Process Modelling with the ARIS Design Platform	27
3.1	The ARIS Concept.....	27
3.1.1	Why Use a Framework?	27
3.1.2	What is a Model?	29
3.1.3	The ARIS House	29
3.1.4	ARIS as a Method for Business Modelling	33
3.2	Business Process Modelling with the ARIS Design Platform	36
3.2.1	Typical Scenarios for Using the ARIS Design Platform	36
3.2.2	Servers, Databases and Models	37
3.2.3	Objects, Occurrences and Relationships	39
3.2.4	Attributes and Properties	40
3.2.5	Modelling Conventions with Method Filters and Templates	42
3.2.6	A Model is Not Just a Picture	44
3.2.7	Major Features of the ARIS Design Platform	44
3.3	Conventions Used in this Book	47
Chapter 4	Business Process Architecture with ARIS.....	49
4.1	The Need for a Business Process Architecture	49
4.2	Definition of a Business Process Architecture	50
4.3	Architecture as a Necessary Implementation Infrastructure	51
4.4	Typical Models in a Business Process Hierarchy	51
4.4.1	The Process View	53
4.4.2	The Organisation View.....	56
4.4.3	The Data View	57
4.4.4	The Function View	59
4.4.5	The Product/Service View	60
Chapter 5	Getting Started with Your First Model	61
5.1	Let's Get Started.....	61
5.1.1	ARIS Business Servers	61
5.1.2	Opening ARIS Business Designer.....	62
5.1.3	Opening ARIS Business Architect	66
5.1.4	Menus and Toolbars	67
5.2	Starting Modelling.....	68
5.2.1	The ARIS Designer Module	68
5.2.2	Adding Objects	69
5.2.3	Saving Your Model.....	70
5.2.4	Placing and Connecting Objects.....	71
5.2.5	Process Flows and Decisions.....	72
5.2.6	Other Object Types.....	74
5.3	Viewing and Printing Your Model	75
5.3.1	Model Layout.....	75

5.3.2	Zoom and Scaling	76
5.3.3	Printing Your Model	77
5.4	Finishing Off.....	78
5.4.1	Closing Your Model	78
5.4.2	Closing ARIS	79
Chapter 6	More About the ARIS Interface	81
6.1	The ARIS Modules	81
6.2	ARIS Home Page.....	82
6.3	Explorer Module	83
6.3.1	Navigation Bar	84
6.3.2	Information Tabs.....	86
6.3.3	Using Explorer	86
6.4	Designer Module	87
6.4.1	Designer Window	88
6.4.2	Symbols Bar.....	89
6.4.3	Navigation and Properties.....	89
6.4.4	The Matrix Editor	91
6.4.5	Administration Module.....	92
6.4.6	The Script Editor.....	93
6.5	Menus and Toolbars	94
6.5.1	Main Menu.....	94
6.5.2	Toolbars	95
6.5.3	Filters and Checkboxes	96
6.5.4	Right-Click Menus.....	97
6.5.5	Menu Icons.....	97
6.6	Properties and Attributes	98
6.6.1	ARIS Properties	98
6.6.2	ARIS Attributes	99
6.7	ARIS Options.....	102
6.8	How to Get Help.....	103
6.8.1	ARIS Topics.....	103
6.8.2	ARIS Method	104
6.8.3	Context-sensitive Help.....	104
Chapter 7	The Event-driven Process Chain	105
7.1	Introduction.....	105
7.2	The EPC Objects.....	105
7.2.1	Events.....	105
7.2.2	Functions.....	107
7.3	The Event-driven Process Chain	107
7.3.1	Naming Events in the EPC	108
7.3.2	Why Use Events?.....	110
7.4	Rules and Process Flow	112
7.4.1	Rules	112

7.5	Decisions	113
7.5.1	Modelling Decisions	113
7.5.2	Decision Rules	114
7.5.3	Joining Decision Paths.....	115
7.5.4	Do-nothing Decision Paths	117
7.6	Parallel Paths	118
7.7	Triggers.....	119
7.7.1	Basic Triggers	119
7.7.2	Multiple Triggers	120
7.8	Loops	121
7.9	Horizontal or Vertical Layout?.....	122
7.10	Putting it All Together.....	124
7.10.1	The Rules for Modelling in an EPC	124
Chapter 8	ARIS Explorer Module	127
8.1	Introduction	127
8.2	Explorer Window	127
8.2.1	Navigation Bar.....	128
8.2.2	Information Tabs	128
8.2.3	Explorer Toolbar.....	128
8.2.4	Explorer Filters	129
8.2.5	Left-Click Operations	129
8.2.6	Right-Click Operations.....	129
8.3	The Navigation Bar	130
8.4	The ARIS Network of Servers	132
8.4.1	Connecting to a New Server	132
8.4.2	Using a Networked Server.....	132
8.4.3	The LOCAL Server	133
8.4.4	Databases	133
8.4.5	Database Usernames and Passwords	134
8.4.6	Logging Off a Database.....	137
8.4.7	Method Filters.....	137
8.5	The Information Tabs	139
8.5.1	Groups.....	140
8.5.2	Models, Objects and Occurrences	141
8.5.3	Attributes and Properties	142
8.5.4	Names, Identifiers and the GUID	143
8.6	ARIS Explorer Commands.....	144
8.6.1	New Item Commands	144
8.6.2	Open Model	146
8.6.3	Find	147
8.6.4	Model History.....	147
8.6.5	Copy, Cut and Paste Commands	147
8.6.6	Move Commands.....	150
8.6.7	Rename	151
8.6.8	Refresh.....	151

8.6.9	Change Password	151
8.6.10	Backup and Restore	152
Chapter 9	ARIS Designer Module.....	153
9.1	Introduction.....	153
9.2	Creating and Opening Models.....	153
9.2.1	Creating New Models	153
9.2.2	Opening Existing Models	153
9.2.3	Saving and Closing	154
9.3	The Designer Window	155
9.3.1	Modelling Window	155
9.3.2	Designer Toolbar	156
9.3.3	Left-Click Operations	156
9.3.4	Right-Click Operations	156
9.3.5	Tooltips	157
9.3.6	Designer Checkboxes	157
9.3.7	Symbols Bar.....	157
9.3.8	Navigation Bar.....	158
9.3.9	Properties Bar.....	158
9.4	Adding and Naming Objects	159
9.4.1	Using the Symbols Bar	160
9.4.2	Selecting and Placing an Object	162
9.4.3	Renaming an Object.....	162
9.4.4	Adding Multiple Objects	162
9.5	Re-using Objects.....	162
9.5.1	Using an Existing Object by Name.....	163
9.5.2	Copy and Paste an Existing Object.....	164
9.5.3	Drag and Drop from the Explorer Tree	164
9.6	Connecting Objects.....	164
9.6.1	Connection Mode.....	165
9.6.2	Connection Types and Direction	166
9.6.3	Quick Drawing of Connections	168
9.6.4	Place and Connect.....	168
9.6.5	Place and Connect of Multiple Objects	169
9.6.6	Nested Objects	170
9.6.7	Displaying Connection Types.....	171
9.7	Selecting, Moving, Sizing and Deleting Items	172
9.7.1	Selecting Multiple Items	172
9.7.2	Right-Click Item Selection	172
9.7.3	Moving Objects.....	173
9.7.4	Resizing Objects	173
9.7.5	Moving Connections.....	174
9.7.6	Aligning Connections	174
9.7.7	Deleting Objects.....	175
9.7.8	Undo and Redo	175

- Chapter 10 Model Appearance..... 177**
 - 10.1 Changing the Model Appearance 177
 - 10.2 Zooming and Scaling..... 177
 - 10.2.1 Model Overview Window 177
 - 10.2.2 View and Zoom Commands 178
 - 10.3 Model Appearance Properties 179
 - 10.3.1 Representation 180
 - 10.3.2 Connections 182
 - 10.3.3 Print..... 183
 - 10.3.4 Grid 184
 - 10.4 Object Appearance 185
 - 10.5 Connection Appearance..... 186
 - 10.6 Model Layout 188
 - 10.6.1 The Model Grid 188
 - 10.6.2 Aligning Objects 190
 - 10.6.3 Arrange Object Order 191
 - 10.6.4 Grouping 191
 - 10.6.5 Automatic Model Layout..... 191
 - 10.6.6 Part Layout..... 195
 - 10.6.7 Insert and Remove Space..... 195
 - 10.7 Templates..... 196
 - 10.7.1 Introduction..... 196
 - 10.7.2 Creating a Template..... 196
 - 10.7.3 Applying a Template to a Model 197
 - 10.7.4 Setting the Current Model Template 197

- Chapter 11 Objects and Relationships..... 199**
 - 11.1 Introduction 199
 - 11.2 Types and Instances..... 199
 - 11.3 Making Resource Allocations 200
 - 11.3.1 Connecting Objects..... 200
 - 11.4 Resource Objects 203
 - 11.4.1 Organisation..... 203
 - 11.4.2 Application Systems 206
 - 11.4.3 Data 208
 - 11.4.4 Information Carriers 213
 - 11.4.5 Knowledge 216
 - 11.4.6 Resource..... 219
 - 11.4.7 Relationships..... 219
 - 11.4.8 Business Environment 220
 - 11.5 Putting it All Together..... 222
 - 11.5.1 The Function as a Transformation..... 223
 - 11.5.2 Using Libraries of Resource Objects..... 224
 - 11.6 Viewing Relationships..... 225
 - 11.6.1 Graphical Representation..... 225
 - 11.6.2 The Type Attribute 225

11.6.3	Attribute Placement	226
11.6.4	Relationships Display	226
11.6.5	ARIS Reports	227
11.7	Function Allocation Diagrams.....	227
Chapter 12	Model Assignments and the Function Allocation Diagram	229
12.1	Model Assignments	229
12.1.1	The Relationship Between an Object and a Model	229
12.2	Creating Model Assignments	230
12.2.1	Create and Assign a Model.....	230
12.2.2	Assigning an Existing Model.....	232
12.2.3	Drag and Drop Assignments.....	232
12.2.4	Hide Assignments	233
12.3	Viewing and Opening Model Assignments.....	233
12.3.1	The Assignments Dialog Box	234
12.3.2	The Assignment Icon	234
12.3.3	The Assignments Tab	235
12.4	Deleting Assignments.....	236
12.5	Model Structure Using Assignments	236
12.6	The Lean EPC.....	238
12.7	Function Allocation Diagrams.....	239
12.7.1	Create and Assign a New FAD.....	240
12.7.2	Assigning an Existing FAD Model.....	241
12.8	Show/Hide Assignments.....	242
12.8.1	Hide Assignments	242
12.8.2	Show Assignments.....	244
Chapter 13	Modelling your Business Structure	245
13.1	The Need for Structure	245
13.2	Horizontal and Vertical Structures	245
13.3	Horizontal Structure.....	249
13.3.1	Segmentation.....	249
13.3.2	Linking Models Using Events	249
13.3.3	Using the Process Interface Object.....	250
13.3.4	Rules for Horizontally Segmenting Models	252
13.3.5	Segmenting Existing Models	252
13.3.6	Combining Segmented Models.....	256
13.4	Vertical Structure.....	256
13.4.1	Hierarchical Decomposition	256
13.4.2	Creating Hierarchy Through Model Assignments.....	258
13.4.3	Decomposing Functions with EPCs	259
13.4.4	Sub-process with Complex Triggers and Outcomes	263
13.4.5	Assignment Relationships.....	266
13.5	Benefits and Drawbacks to Hierarchical Modelling	267
13.5.1	Theoretical Issues with Hierarchical Modelling.....	267

13.6	Modelling at the Conceptual Layer	269
13.6.1	The Value Added Chain Diagram	269
13.6.2	The EPC as a High-level Model	270
13.7	Vertical Views of the Hierarchy.....	272
13.7.1	The Function Hierarchy and the Function Tree.....	272
13.7.2	Decomposing Events with the Event Diagram.....	273
13.7.3	Model Linking with Decomposed Events	275
Chapter 14	ARIS Properties and Attributes	277
14.1	Introduction	277
14.2	ARIS Properties.....	277
14.2.1	Properties Dialog Box.....	278
14.2.2	Properties Sub-Dialog Boxes.....	280
14.2.3	Properties Bar	284
14.3	ARIS Attributes	285
14.3.1	The Attributes Window	286
14.3.2	Attributes Column Display	287
14.3.3	Editing Attributes.....	289
14.3.4	Saving Attribute Changes	290
14.3.5	The Attributes Tab.....	290
14.3.6	Attributes Dialog Box.....	292
14.4	Attribute Placement	293
14.4.1	Object Attribute Placement.....	293
14.4.2	Connection Attribute Placement.....	296
14.4.3	Moving Attribute Placements	297
14.4.4	Inserting Model Attributes.....	298
14.4.5	Inserting Free-form Text.....	299
14.5	Special Attributes	300
14.5.1	System Attributes and Links.....	300
14.5.2	User Attributes.....	302
Chapter 15	Definitions, Occurrences and Copies	305
15.1	Occurrences and Definitions	305
15.2	Copying Objects	306
15.2.1	Object Occurrence Copies	306
15.2.2	Object Definition Copies	309
15.2.3	Object Variant Copies.....	310
15.2.4	Object Master Copy	310
15.2.5	Object Shortcuts.....	311
15.3	Copying Models	312
15.3.1	Model Copy	312
15.3.2	Model Definition Copies	313
15.3.3	Model Variant Copy	314
15.3.4	Model Shortcuts.....	318
15.4	Viewing Occurrences, Definitions and Variants.....	318
15.4.1	Viewing Object Occurrences	318

15.4.2	Viewing Object Definitions	321
15.4.3	Viewing Object Variants	321
15.4.4	Viewing Model Variants.....	323
Chapter 16	Standardised Modelling with ARIS	325
16.1	The Need for Standardisation	325
16.1.1	Benefits of Standardisation.....	325
16.1.2	Driving Reuse Through Standardisation	326
16.1.3	A Common Process Repository	326
16.1.4	Using ARIS to Drive Standardisation.....	326
16.2	What to Standardise	327
16.2.1	Basic Rules for Process Capture and Modelling	327
16.2.2	A Core Set of Models, Objects and Symbols	328
16.2.3	Modelling of Who?, What?, When?, Where?, Why? and How?.....	328
16.2.4	Relationships and What They Mean.....	329
16.2.5	How to Represent Common Scenarios	329
16.2.6	Use of Attributes	329
16.2.7	Model Appearance	330
16.2.8	Approaches to Model Linking and Structure.....	330
16.2.9	Libraries and Reuse	331
16.3	Conventions Handbooks and other Standardisation Approaches.....	331
16.3.1	Formal Standards Documents	332
16.3.2	Guidelines	333
16.3.3	Intranet Help and Support Site.....	334
16.3.4	Sample Databases and Models	334
16.3.5	Method Filters	334
16.3.6	Using an ARIS Server.....	335
16.3.7	Using an ARIS Web Server.....	335
16.3.8	Object and Model Libraries	336
16.3.9	Templates	336
16.3.10	Training.....	336
16.3.11	Report Scripts.....	336
16.3.12	Semantics Checks	337
16.3.13	Audits, Reviews and Quality Gates	337
Chapter 17	Roles and Responsibilities for BPM.....	339
17.1	The Roles and Responsibilities for BPM	339
17.1.1	Managing Business Process Management.....	339
17.1.2	The BPM Sponsor.....	340
17.1.3	The Head of Business Process Management	340
17.1.4	The BPM Steering Committee.....	340
17.1.5	Business Process Experts.....	340
17.1.6	The BPM Competence Centre	341
17.1.7	The Process Owner	341
17.1.8	The Process Coordinator.....	342

17.1.9	The Process Modeller	342
17.2	Modelling Principles.....	342
Appendix A	Function Keys and Shortcuts.....	345
	Function Keys.....	345
	ARIS Designer Navigation and Selection Keys.....	346
	Attributes Table Navigation and Selection Keys	348
Glossary		349
Subject Index		353