

# Contents

<b>About This Book .....</b>	<b>xiii</b>
<b>About The Author .....</b>	<b>xvii</b>
<b>Acknowledgments .....</b>	<b>xix</b>
<b>Chapter 1: Introduction and Quick-Start Guide .....</b>	<b>1</b>
What Is an ODS Document?.....	1
Life Before ODS Document .....	2
Life with ODS Document .....	2
Why Use an ODS Document? .....	2
Why Not Manage Change with Office Software?.....	3
Quick-Start Guide.....	3
File Location.....	3
Data.....	4
Saving Output to an ODS Document.....	4
Replaying Output .....	5
Subsetting Output .....	8
Managing Output.....	10
Changing Titles and Footnotes.....	12
Using Folders .....	13
Deleting and Overwriting Document Contents .....	15
What Remains to Be Covered?.....	16
Summary .....	16
<b>Chapter 2: The ODS DOCUMENT Destination .....</b>	<b>17</b>
Introduction .....	17
Convention.....	18
What Is the Output Delivery System (ODS)?.....	18
Definition of the ODS Destination.....	18
ODS without the Document Facility .....	19
ODS with the DOCUMENT Destination.....	21

Role of the DOCUMENT Procedure.....	23
Reasons to Use the Document.....	24
Naming ODS Output.....	24
The ODS TRACE Statement .....	25
Determining the Directory Where ODS Output Is Stored .....	27
Implementation Details of the Item Store.....	28
Controlling Output Using SELECT and EXCLUDE Lists.....	28
Summary .....	30
<b>Chapter 3: The ODS DOCUMENT Statement.....</b>	<b>31</b>
Introduction .....	31
The ODS DOCUMENT Statement .....	32
The NAME= Option.....	32
Example: Storing Output at the Top Level.....	32
Comparing ODS TRACE Output to ODS Document Paths .....	36
The DIR= Option .....	36
Behavior of the Pathname .....	38
The CATALOG= Option.....	40
Using Access Options (Write and Update) .....	40
Example: Reviewing Your Progress .....	42
Summary .....	44
<b>Chapter 4: Listing Documents Using the DOCUMENT Procedure.....</b>	<b>45</b>
Introduction .....	46
The DOCUMENT Procedure.....	46
Terminology .....	46
Directory Notation .....	47
Root Level Directory .....	47
Current Directory.....	47
Invoking the DOCUMENT Procedure .....	47
The NAME= Option.....	48
The LABEL= Option.....	50
Running the Document Procedure Interactively.....	50
Access Modes .....	51
The LIST Statement.....	51
Simple Invocation of the LIST Statement .....	52
Sequence Numbers .....	53

LEVELS= Option .....	56
Using the DETAILS= Option .....	60
ORDER= Option .....	62
BYGROUPS Option.....	63
Warning: BYGROUPS Option Might Show No Output.....	66
Using WHERE= Clauses to Conditionally View a Document.....	67
WHERE Variables .....	67
Examples.....	68
Interlude .....	70
Debugging WHERE= Clauses.....	71
The WHERE= Clause and ODS Names .....	73
Comparison with the ODS SELECT and EXCLUDE Statements .....	73
_LABELPATH_ - Proceed at Your Own Risk.....	74
The SETLABEL Statement.....	75
Important: Labels Are Not Titles.....	77
Summary .....	79
<b>Chapter 5: The REPLAY Statement .....</b>	<b>81</b>
Introduction .....	81
How Replay Works.....	82
REPLAY Statement Syntax.....	83
Replaying to All Open Destinations.....	84
The DEST= Option.....	86
Replaying to Multiple Destinations.....	87
Replaying in a Different Order.....	88
The LEVELS= Option.....	88
Overriding Titles with the ACTIVETITLE and ACTIVEFOOTN Options.....	89
Replaying Using WHERE= Clauses .....	89
Replaying Subsets of Output Objects .....	90
Example: Reordering BY-Grouped Output .....	95
Replaying Output with Temporary Formats .....	96
Temporary or Permanent Formats? .....	98
Summary .....	100
<b>Chapter 6: Managing Folders .....</b>	<b>103</b>
Introduction .....	104
How ODS Document Folders are Different .....	104
Absolute Pathnames .....	104
Relative Pathnames .....	105

Positioning Arguments .....	105
When the TO Argument Requires a Sequence Number .....	106
WHERE= Clauses and Directories .....	106
The MAKE Statement.....	107
The DIR Statement .....	110
The RENAME TO Statement .....	112
Renaming a Document .....	112
Warning about Renaming Output Objects.....	114
The COPY TO Statement .....	115
A Common Mistake .....	117
Copying Using the LEVELS= option .....	123
The MOVE TO Statement.....	124
Browsing Collections of Documents with the DOC Statement.....	126
The LIBRARY= Option.....	127
The NAME= Option.....	128
The DELETE Statement .....	129
Warning: You Cannot Delete the Current Directory .....	130
The HIDE Statement.....	132
Extended Examples .....	136
Replay with the LEVELS= Option.....	136
Listing Every Document in Your System.....	140
Description of %alldocs Macro Arguments .....	141
Managing ODS Documents via the Graphical User Interface. ....	143
Summary .....	143
<b>Chapter 7: Customizing Output.....</b>	<b>145</b>
Introduction .....	145
The Document Used in This Chapter .....	146
Output Objects in an ODS Document .....	146
Introduction to Context .....	148
Example: A Context Reference Chart .....	148
The OBPAGE Statement .....	151
The OBPAGE Statement Might Be Ignored in Some Procedures. ....	155
The OBTITLE Statement .....	156
The SHOW option. ....	159

The OBSTITLE Statement.....	161
Using #BYVAL and #BYVAR Variable Values to Build a Custom Subtitle .....	163
Example: Using the #BYLINE Variable Value.....	164
Object Notes: The OBANOTE and OBBNOTE Statements .....	165
Document Notes .....	167
Adding Notes Using the TEXT Statement.....	167
Adding Notes Using the DOCUMENT Procedure’s NOTE Statement.....	170
Document Notes Compared with Object Notes .....	173
The Final Version of the Example Document .....	174
Summary .....	176
<b>Chapter 8: Exporting to Data Sets.....</b>	<b>177</b>
Introduction .....	177
The Power of Combining the ODS OUTPUT Destination with the Document Facility .....	178
The ODS OUTPUT Destination.....	179
The ODS OUTPUT Statement .....	179
The ODS OUTPUT Destination without the Document .....	179
The ODS OUTPUT Destination with the Document.....	183
Combining Data Sets from the Document.....	186
Combining the OUTPUT and DOCUMENT Destination.....	191
ODS OUTPUT and the DOCUMENT Procedure’s Data Sets.....	192
Simple List Output.....	192
Contents of the Document Data Listing .....	192
Conditionally Executing the DOCUMENT Procedure with CALL EXECUTE .....	194
The SASDOC Engine.....	197
Accessing a Directory of Output.....	198
Applications of the SASDOC Engine.....	200
The SASDOC Engine and Sequence Numbers. ....	205
Summary .....	210
<b>Chapter 9: Importing Data to the Document .....</b>	<b>211</b>
Overview.....	211
The Document Is Not a SAS Library.....	212
The IMPORT Statement.....	212
Data for Examples .....	212
Importing a Data Set.....	213

Importing Text Files .....	215
Importing Data and Its Template to a Document .....	218
Summary .....	218
<b>Chapter 10: Working with Links .....</b>	<b>219</b>
Introduction .....	219
Creating a Link .....	220
Source and Target.....	221
Replaying Links .....	221
The FOLLOW Option of the LIST Statement.....	222
Orphaned Links .....	223
Document Management Using Links.....	224
Modifying PDF Bookmarks Using Links .....	227
Hard Links .....	228
Summary .....	233
<b>Chapter 11: Working with Templates .....</b>	<b>235</b>
Introduction .....	235
What Is a Template? .....	236
Terminology .....	237
Template Store .....	237
Template Search Path.....	237
Template Access Mode .....	237
Updated Document for Examples in This Chapter .....	238
Defining Your Own Template Store.....	238
Template Store Organization .....	240
Exploring the Template System.....	240
Example: Removing Automatic Page Breaks .....	244
Modifying Template Definitions .....	247
Undoing Template Changes.....	248
Templates and the Document.....	249
Identifying Templates in the Document Listing .....	249
The OBTEMPL Statement.....	250
Document Saves a Reference, Not the Actual Template.....	251
Modifying the DOCUMENT Procedure's Templates.....	256
Styles .....	258

<b>Assigning a Custom Template to an Object in a Document.....</b>	<b>258</b>
<b>The Custom Template.....</b>	<b>259</b>
<b>Data Set Used .....</b>	<b>259</b>
<b>Summary .....</b>	<b>262</b>
<b>Appendix .....</b>	<b>263</b>
<b>References .....</b>	<b>277</b>
<b>Index .....</b>	<b>279</b>