Event Manager

Contents

Introduction to Events 2-4
Low-Level Events 2-8
Operating-System Events 2-10
High-Level Events 2-13
Priority of Events 2-15
Switching Contexts 2-15
About the Event Manager 2-16
Using the Event Manager 2-17
Obtaining Information About Events 2-18
Processing Events 2-21
Using the WaitNextEvent Function 2-22
Writing an Event Loop 2-24
Setting the Event Mask 2-26
Handling Events in a Dialog Box 2-29
Creating a Size Resource 2-30
Handling Low-Level Events 2-32
Responding to Mouse Events 2-33
Responding to Keyboard Events 2-38
Scanning for a Cancel Event 2-47
Responding to Update Events 2-48
Responding to Activate Events 2-51
Responding to Disk-Inserted Events 2-56
Responding to Null Events 2-58
Handling Operating-System Events 2-59
Responding to Suspend and Resume Events 2-61
Responding to Mouse-Moved Events 2-63
Handling High-Level Events 2-68
Responding to Events From Other Applications 2-70
Searching for a Specific High-Level Event 2-72
Determining the Sender of a High-Level Event 2-73

Contents 2-1

Sending High-Level Events 2-74 2-78 Requesting Return Receipts Handling Apple Events 2-79 **Event Manager Reference** 2-80 **Data Structures** The Event Record 2-80 The Target ID Record 2-82 2-83 The High-Level Event Message Record The Event Queue 2-84 2-85 **Event Manager Routines** 2-85 **Receiving Events** 2-101 Sending Events 2-106 Converting Process Serial Numbers and Port Names Reading the Mouse 2-109 2-111 Reading the Keyboard **Getting Timing Information** 2-113 2-115 Application-Defined Routine Filter Function for Searching the High-Level Event Queue 2-115 Resource 2-116 The Size Resource 2-116 Summary of the Event Manager 2-121 Pascal Summary 2-121 Constants 2-121 2-123 Data Types **Event Manager Routines** 2-124 Application-Defined Routine 2-125 2-126 C Summary Constants 2-126 Data Types 2-128 **Event Manager Routines** 2-129 Application-Defined Routine 2-130 Assembly-Language Summary 2-131 **Data Structures** 2-131 Trap Macros 2-131 Global Variables 2-132 Result Codes 2-133

2-2 Contents