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Contents

Preface v

Chapter 1 Overview of the RSX-11M-PLUS Documentation Set

1.1 Getting Started 1-1
1.2 How the Manuals Are Organized 1-1
1.3 Intended Reading Audiences for RSX-11M-PLUS Manuals 1-3
1.4 RSX-11M-PLUS Documentation Descriptions 1-5
1.4.1 Volume 1: Introduction 1-5
1.4.1.1 RSX-11M-PLUS Software Product Description 1-5
1.4.1.2 RSX-11M-PLUS Information Directory and Master Index 1-6
1.4.1.3 RSX-11M-PLUS Release Notes 1-6
1.4.1.4 Introduction to RSX-11M-PLUS 1-6
1.4.2 Volume 2: Operation 1-6
1.4.2.1 RSX-11M-PLUS System Generation and Installation Guide 1-6
1.4.2.2 RSX-11M-PLUS MCR Operations Manual 1-6
1.4.2.3 RSX-11M-PLUS Indirect Command Processor Manual 1-6
1.4.2.4 RSX-11M-PLUS Command Language Manual 1-7
1.4.2.5 RSX-11M-PLUS Batch and Queue Operations Manual 1-7
1.4.3 Volume 3: Utilities 1-7
1.4.3.1 RSX-11M-PLUS Utilities Manual 1-7
1.4.3.2 RSX-11M-PLUS and Micro/RSX Error Logging Manual 1-8
1.4.3.3 EDT Editor Manual 1-8
1.4.4 Volume 4: Program Development 1-8
1.4.4.1 RSX-11M-PLUS Guide to Program Development 1-9
1.4.4.2 PDP-11 MACRO-11 Language Reference Manual 1-9
1.4.4.3 RSX-11M-PLUS and Micro/RSX System Library Routines Reference Manual 1-9
1.4.4.4 RSX-11M-PLUS and Micro/RSX Debugging Reference Manual 1-9
1.4.4.5 RSX-11M-PLUS and Micro/RSX Task Builder Manual 1-9
1.4.4.6 RSX-11M-PLUS and Micro/RSX Executive Reference Manual 1-10

1.4.5 Volume 5: File Control Services and I/O Drivers 1-10
1.4.5.1 RSX-11M-PLUS and Micro/RSX I/O Operations Reference Manual 1-10
1.4.5.2 RSX-11M-PLUS and Micro/RSX I/O Drivers Reference Manual 1-10
1.4.6 Volume 6: Driver Development 1-10
1.4.6.1 RSX-11M-PLUS and Micro/RSX Guide to Writing an I/O Driver 1-11
1.4.6.2 RSX-11M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual 1-11
1.4.6.3 RSX-11M-PLUS and Micro/RSX XDT Reference Manual 1-11
1.4.7 Volume 7: System Management and Maintenance 1-11
1.4.7.1 RSX-11M-PLUS and Micro/RSX System Management Guide 1-11
1.4.8 Volume 8: PDP-11 Record Management Services 1-12
1.4.8.1 RSX-11M/M-PLUS RMS-11: An Introduction 1-12
1.4.8.2 RSX-11M/M-PLUS RMS-11 User's Guide 1-12
1.4.8.3 RSX-11M/M-PLUS RMS-11 Utilities 1-13
1.4.8.4 RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide 1-13
1.4.9 RSX-11M-PLUS Mini-Reference 1-14
1.4.10 EDT Editor Reference Card 1-14
1.4.11 PDP-11 Programming Card 1-14
1.5 RSX-11S Documentation 1-14

Chapter 2 The RSX-11M-PLUS Master Index

2.1 Introduction to the Master Index 2-1
2.1.1 Format of the Master Index 2-1
2.1.2 Manuals Included in the Master Index 2-1

Figures

1-1 Suggested Reading Sequence for RSX-11M-PLUS Manuals 1-2

Tables

1-1 RSX-11M-PLUS Documentation Set Kit Number QR500-GZ 1-3
2-1 Abbreviated Titles for Manuals in the RSX-11M-PLUS Master Index 2-2

Preface

Manual Objectives

The *RSX-11M-PLUS Information Directory and Master Index* introduces the RSX-11M-PLUS documentation set. It describes all the RSX-11M-PLUS manuals and contains a Master Index that is useful for referring to topics described in manuals in the documentation set. The descriptions of the manuals are intentionally brief; refer to the prefaces of individual manuals for additional information. Read the Information Directory before you read other manuals in the documentation set or use the system.

Intended Audience

The *RSX-11M-PLUS Information Directory and Master Index* is intended for all users of the RSX-11M-PLUS operating system. No previous knowledge of the system is required.

Structure of This Document

The first chapter of this manual briefly describes the manuals in the documentation set. It identifies the type of users that are likely to be interested in particular manuals, and it suggests a sequence for reading the manuals. The second chapter of this manual contains a Master Index which includes index entries for all the manuals in the documentation set.

Associated Documents

The next manual you should read in this documentation set is the *RSX-11M-PLUS Release Notes*, which will give you important information on the RSX-11M-PLUS software and documentation.

Chapter 1

Overview of the RSX-11M-PLUS Documentation Set

1.1 Getting Started

Your kit contains an RSX-11M-PLUS baseline system that is ready to run on your PDP-11 processor. You will use this baseline system to generate an RSX-11M-PLUS system, tailored to your own particular hardware and software requirements.

Before beginning system generation, you should become familiar with your RSX-11M-PLUS hardware configuration and with this documentation set, and you should thoroughly read the *RSX-11M-PLUS Release Notes* and the *RSX-11M-PLUS System Generation and Installation Guide*. You will then be prepared to choose among the options offered during system generation.

Figure 1-1 outlines a suggested sequence for reading the manuals in your documentation set. The sequence begins with introductory and more general manuals and proceeds to advanced manuals that assume a greater understanding of the system.

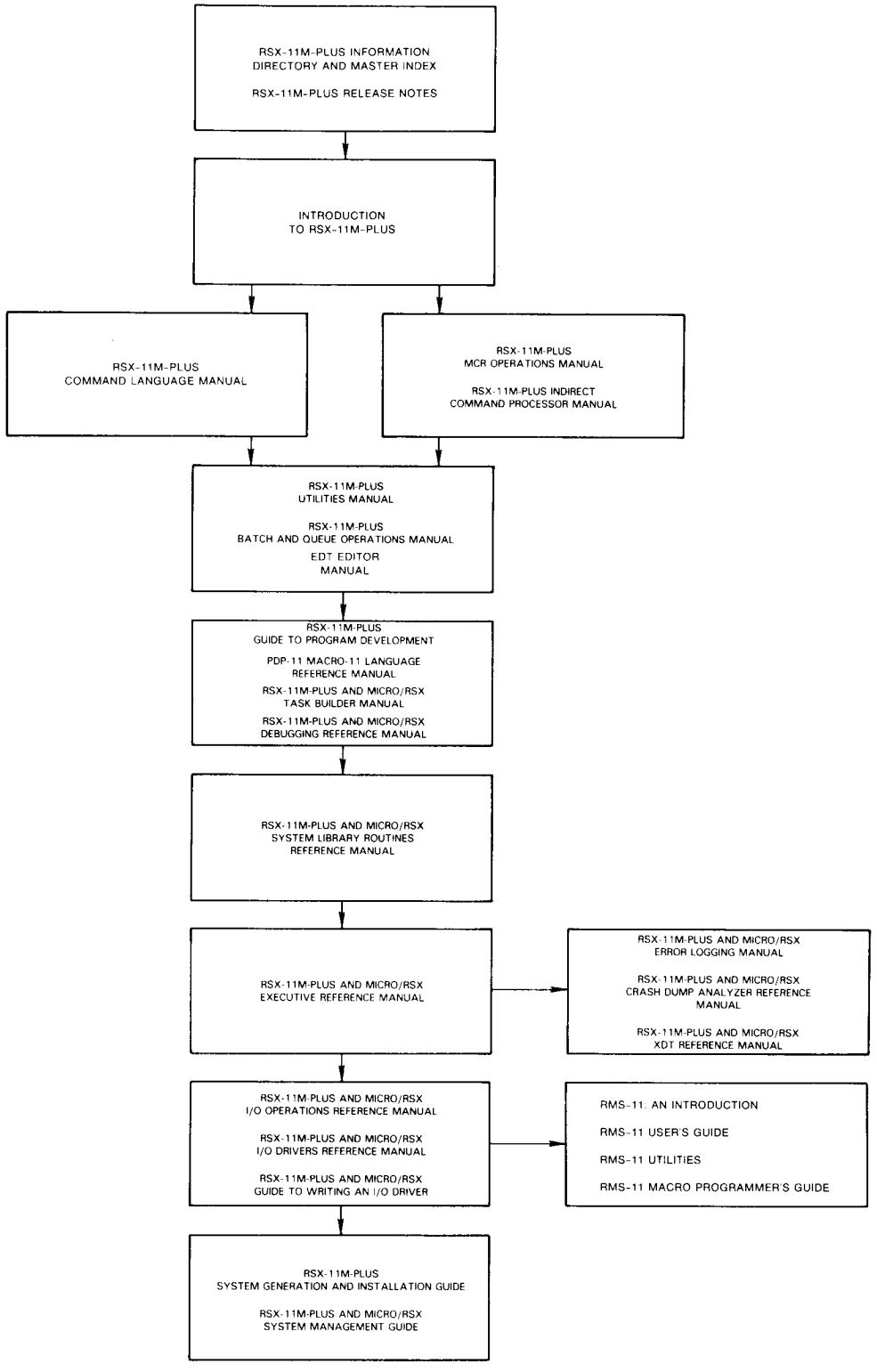
1.2 How the Manuals Are Organized

The RSX-11M-PLUS manuals are organized into eight volumes:

- Introduction
- Operation
- Utilities
- Program Development
- File Control Services and I/O Drivers
- Driver Development
- System Management and Maintenance
- PDP-11 Record Management Services

Each volume consists of one or more three-ring binders, and each binder contains one or more manuals. Refer to Table 1-1 for a complete list of the manuals.

Figure 1–1: Suggested Reading Sequence for RSX–11M–PLUS Manuals



The *EDT Editor Reference Card* and the *PDP-11 Programming Card* are packaged separately. The *RSX-11M-PLUS Mini-Reference* is also packaged separately in its own small binder.

1.3 Intended Reading Audiences for RSX-11M-PLUS Manuals

Table 1-1 lists the intended reading audience for each document in your set. The audience is divided into the loosely defined groups listed as follows (and indicated in Table 1-1 by an X in one or more of the columns):

US The user: anyone who types at a terminal on an RSX-11M-PLUS operating system

AP The applications programmer: anyone who uses the PDP-11 MACRO-11 assembly language or a high-level language to develop programs for user applications

SP The system programmer: anyone who uses PDP-11 MACRO-11 to maintain, modify, and develop software used by the applications programmer or the user

SM The system manager: the person familiar with and responsible for overall operation of an RSX-11M-PLUS system and its associated hardware

Table 1-1: RSX-11M-PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
Handy Reference Materials				
RSX-11M-PLUS Mini-Reference AV-H435E-TC	X	X	X	X
EDT Editor Reference Card AV-J756A-TC	X	X	X	X
PDP-11 Programming Card EH-S1046-78		X	X	X
Volume 1: Introduction				
RSX-11M-PLUS Software Product Description AE-H862P-TC	X	X	X	X
RSX-11M-PLUS Information Directory and Master Index AA-H426F-TC	X	X	X	X
RSX-11M-PLUS Release Notes AA-H427F-TC	X	X	X	X
Introduction to RSX-11M-PLUS AA-FD03B-TC	X	X	X	X
Volume 2: Operation				
RSX-11M-PLUS System Generation and Installation Guide AA-H431F-TC			X	X
RSX-11M-PLUS MCR Operations Manual AA-JS12A-TC	X	X	X	X

Table 1–1 (Cont.): RSX–11M–PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
RSX–11M–PLUS Indirect Command Processor Manual AA–JS10A–TC	X	X	X	X
RSX–11M–PLUS Command Language Manual AA–FD04B–TC	X	X	X	X
RSX–11M–PLUS Batch and Queue Operations Manual AA–JS18A–TC	X	X	X	X
Volume 3: Utilities				
RSX–11M–PLUS Utilities Manual AA–JS15A–TC	X	X	X	X
RSX–11M–PLUS and Micro/RSX Error Logging Manual AA–JS19A–TC			X	X
EDT Editor Manual AA–M476A–TK	X	X	X	X
Volume 4: Program Development				
RSX–11M–PLUS Guide to Program Development AA–JS20A–TC		X	X	X
PDP–11 MACRO–11 Language Reference Manual AA–V027B–TC		X	X	X
RSX–11M–PLUS and Micro/RSX System Library Routines Reference Manual AA–JS75A–TC		X	X	
RSX–11M–PLUS and Micro/RSX Debugging Reference Manual AA–JS09A–TC		X	X	X
RSX–11M–PLUS and Micro/RSX Task Builder Manual AA–JS08A–TC		X	X	X
RSX–11M–PLUS and Micro/RSX Executive Reference Manual AA–JS17A–TC		X	X	
Volume 5: File Control Services and I/O Drivers				
RSX–11M–PLUS and Micro/RSX I/O Operations Reference Manual AA–JS16A–TC		X	X	
RSX–11M–PLUS and Micro/RSX I/O Drivers Manual AA–JS11A–TC			X	
Volume 6: Driver Development				
RSX–11M–PLUS and Micro/RSX Guide to Writing an I/O Driver AA–H267C–TC		X	X	

Table 1–1 (Cont.): RSX–11M–PLUS Documentation Set Kit Number QR500-GZ

Title and Order Number	US	AP	SP	SM
RSX–11M–PLUS and Micro/RSX Crash Dump Analyzer Reference Manual AA–JS13A–TC			X	X
RSX–11M–PLUS and Micro/RSX XDT Reference Manual AA-JT78A-TC		X	X	X
Volume 7: System Management and Maintenance				
RSX–11M–PLUS and Micro/RSX System Management Guide AA–JS14A–TC			X	X
Volume 8: PDP-11 Record Management Services				
RSX–11M/M–PLUS RMS–11: An Introduction AA–L682A–TC	X	X	X	X
RSX–11M/M–PLUS RMS–11 User's Guide AA–L669A–TC		X		X
RSX–11M/M–PLUS RMS–11 Utilities AA–L670A–TC	X	X	X	X
RSX–11M/M–PLUS RMS–11 Macro Programmer's Guide AA–L668A–TC		X	X	

1.4 RSX–11M–PLUS Documentation Descriptions

The following sections contain brief descriptions of the volumes and the individual manuals in the RSX–11M–PLUS documentation set. For a complete description of any manual, read its preface.

1.4.1 Volume 1: Introduction

This volume includes information and manuals that introduce the RSX–11M–PLUS documentation set and operating system.

1.4.1.1 RSX–11M–PLUS Software Product Description

The Software Product Description (SPD) concisely describes the software features and system environment of RSX–11M–PLUS. It identifies the required and optional hardware and software along with the available training credits and additional services. It includes information on installation requirements and software product support, and it gives ordering information.

1.4.1.2 RSX-11M-PLUS Information Directory and Master Index

This manual orients the reader to the RSX-11M-PLUS documentation set. It includes descriptions of the manuals, a suggested sequence for reading the manuals, the intended reading audience for each manual, and a Master Index to the documentation set. The Master Index is composed of all the topics in the indexes for the individual manuals, without abridgment, and identifies the manual (or manuals) and page number (or page numbers) you need for information on a topic.

1.4.1.3 RSX-11M-PLUS Release Notes

This manual contains a summary description of new software features for this release as well as an overview of new device support. It also provides information about the operating system that is not documented in other manuals in the documentation set. Read the *RSX-11M-PLUS Release Notes* before generating and using your system.

1.4.1.4 Introduction to RSX-11M-PLUS

This tutorial manual is a simple, step-by-step introduction to the RSX-11M-PLUS operating system for new users. In an interactive terminal session, new users can log in to the system and practice using DIGITAL Command Language (DCL), the interactive text editor EDT, and program development facilities, on prepared demonstration files. After guiding the user through the practice session, the manual discusses some general system concepts and features. It also has a useful glossary that defines system terms in some detail.

1.4.2 Volume 2: Operation

The operation volume contains manuals that explain how to generate and install your RSX-11M-PLUS Version 4.1 system. It also documents the Monitor Console Routine (MCR), the DIGITAL Command Language (DCL), and batch and queue operations.

1.4.2.1 RSX-11M-PLUS System Generation and Installation Guide

This manual is a step-by-step guide to the system generation (SYSGEN) procedure. It includes instructions for copying the distribution kit onto the system disk and then generating an RSX-11M-PLUS system tailored to your needs.

1.4.2.2 RSX-11M-PLUS MCR Operations Manual

MCR is a command line interpreter, an interface for communication between you and the RSX-11M-PLUS operating system. This manual describes MCR commands and their formats and tells you how to use MCR. File ownership and file protection are explained. An alphabetical list of MCR and Task Termination Notification program (TKTN) messages is given in an appendix.

1.4.2.3 RSX-11M-PLUS Indirect Command Processor Manual

The Indirect Command Processor (Indirect) allows you to process files that contain Indirect, MCR, DCL, or utility commands. These commands are executed as though they had been entered from a terminal. This manual describes the Indirect commands, symbols, and functions, and presents actual examples.

1.4.2.4 RSX-11M-PLUS Command Language Manual

The DIGITAL Command Language (DCL) is a command line interpreter that provides direct, transparent access to most common MCR and utility functions. This manual is organized by system functions; it gives full descriptions of all DCL commands, with examples and notes on their usage. Also included is a quick reference guide to DCL commands and qualifiers.

1.4.2.5 RSX-11M-PLUS Batch and Queue Operations Manual

This manual explains the use of the Queue Manager (QMG) to control print and batch queue functions, and it describes, in detail, the QMG commands that control these functions. The manual also explains the batch processor and describes batch commands and syntax. Error messages are explained in the appendix, and there is a glossary.

1.4.3 Volume 3: Utilities

This volume contains three manuals, the *RSX-11M-PLUS Utilities Manual*, the *RSX-11M-PLUS and Micro/RSX Error Logging Manual*, and the *EDT Editor Manual*. The *RSX-11M-PLUS Utilities Manual* describes utilities that allow you to manipulate different kinds of files and their contents and to perform operations on supported media. The *RSX-11M-PLUS and Micro/RSX Error Logging Manual* describes the error logging system. The *EDT Editor Manual* describes the function and operation of the interactive text editor EDT.

1.4.3.1 RSX-11M-PLUS Utilities Manual

This manual explains each utility's use, describes its commands and switches, and gives detailed command formats and syntax rules. It describes the functions and operations of the following RSX-11M-PLUS utility programs:

- Bad Block Locator Utility (BAD)—Determines the number and location of bad blocks on a volume.
- Backup and Restore Utility (BRU)—Backs up files from a Files-11 volume to one or more backup volumes, and retrieves them as needed.
- File Compare Utility (CMP)—Compares two text files, record by record, and lists the differences between them.
- File Dump Utility (DMP)—A file listing program that allows you to examine the contents of a single file or a volume of files.
- Disk Save and Compress Utility (DSC)—Copies Files-11 disk files to tape or disk, and copies from DSC-created tape back to disk. (The function of the DSC utility is similar to that of the BRU utility.)
- Line Text Editor (EDI)—A line-oriented, interactive editor used to create and maintain text and source files.
- File Transfer Utility Program (FLX)—A file transfer and format conversion program that transfers files among DOS-11, RT-11, and Files-11 volumes.
- Disk Volume Formatter Utility (FMT)—Formats and verifies several types of Files-11 disks.
- Librarian Utility Program (LBR)—A library maintenance program that creates and modifies library files.

- Object Module Patch Utility (PAT)—Updates, or patches, relocatable binary object modules.
- Peripheral Interchange Program (PIP)—Copies files and performs file control functions.
- Source Language Input Program (SLP)—A noninteractive editing program that is used to maintain and edit source files.
- File Structure Verification Utility (VFY)—Verifies the consistency and validity of the file structure on a Files-11 volume.
- Task/File Patch Program (ZAP)—A patch utility that examines and directly modifies locations in a task image file or data file.

1.4.3.2 RSX-11M-PLUS and Micro/RSX Error Logging Manual

This manual explains the RSX-11M-PLUS error logging system, a combination of tasks that collect and report information about hardware-related events on an RSX-11M-PLUS system. The error logging system allows you to generate event reports in brief or full format, including information on the state of the system or hardware when the event occurred.

The manual includes chapters on the following:

- The Error Logger (ERRLOG) and the Error Log Interface (ELI)—ERRLOG obtains error information from the Executive and drivers and writes the information into the error log file. ELI sends user commands to ERRLOG.
- The Report Generator (RPT)—Generates Error Log Reports from the error log file.
- The Control File Language (CFL) compiler—Updates and modifies DIGITAL-supplied control file modules, or adds error logging support for non-DIGITAL devices.

1.4.3.3 EDT Editor Manual

This manual explains how to use the interactive text editor EDT to create and update ASCII text files. It explains the command line, keypad editing, line editing, nokeypad editing, and the redefining of keys. It also presents sample editing sessions.

1.4.4 Volume 4: Program Development

The first manual in this volume gives an overview of the program development process. The remaining manuals further explain the process by describing the MACRO-11 assembly language, I/O operations, system library routines, the On-Line Debugging Tool (ODT), the Task Builder (TKB), and the Executive.

1.4.4.1 RSX-11M-PLUS Guide to Program Development

This manual is a step-by-step guide to program development for the beginning MACRO-11 programmer. The manual describes the hardware and software necessary for program development and explains how to create, assemble, task build, debug, and maintain MACRO-11 programs. It also introduces the use of the Librarian Utility Program (LBR) for creating and maintaining user, macro, and object libraries. A brief description of FORTRAN program development is included to help orient the FORTRAN programmer. Examples are given for all steps in the program development process.

This guide is intended to be used together with other, more advanced manuals until you become familiar with the process; then, it can serve as a refresher guide.

1.4.4.2 PDP-11 MACRO-11 Language Reference Manual

This manual describes how to use the MACRO-11 assembler to code MACRO-11 programs. It includes descriptions of MACRO-11 features, directives for conditional assembly and program sectioning, and user-defined and System Macro Libraries. It also documents RSX-11M-PLUS operating procedures and error messages. Before reading the *PDP-11 MACRO-11 Language Reference Manual,* you should be familiar with your PDP-11 processor and the related terminology, as presented in the *PDP-11 Processor Handbook.*

1.4.4.3 RSX-11M-PLUS and Micro/RSX System Library Routines Reference Manual

This manual describes register handling and arithmetic routines, input and output data conversion routines, output formatting routines, and dynamic memory management and virtual memory management routines. For the more experienced programmer, a list of summary procedures is included.

1.4.4.4 RSX-11M-PLUS and Micro/RSX Debugging Reference Manual

This manual describes the use of the On-Line Debugging Tool (ODT) for debugging a task. Actual ODT command sequences are given, followed by explanatory text. The manual also describes procedures for debugging supervisor-mode libraries.

Before reading this manual, you should be familiar with the MACRO-11 assembly language and the Task Builder.

1.4.4.5 RSX-11M-PLUS and Micro/RSX Task Builder Manual

This manual describes the concepts and capabilities of the RSX-11M-PLUS and Micro/RSX Task Builder (TKB), the linker that produces executable task images (programs that are ready to be installed and run). It contains both programmer reference and operating information, including Task Builder allocation of virtual address space, resolution of global symbols, overlaying capability, the building of shared regions, instruction- and data-space tasks, supervisor-mode libraries, multiuser tasks, and cluster libraries.

Before reading this manual, you should be familiar with the procedures described in the *RSX-11M-PLUS MCR Operations Manual* or the *RSX-11M-PLUS Command Language Manual,* and the programming concepts discussed in the *RSX-11M-PLUS Guide to Program Development.*

1.4.4.6 RSX-11M-PLUS and Micro/RSX Executive Reference Manual

This manual describes the Executive services available for user tasks and the Executive (system) directives you need to obtain them. You must know how to develop user programs in MACRO-11 or in a high-level language such as FORTRAN to be able to use the Executive services.

1.4.5 Volume 5: File Control Services and I/O Drivers

This volume consists of manuals that describe the function of the File Control Services (FCS) and I/O drivers on an RSX-11M-PLUS system.

1.4.5.1 RSX-11M-PLUS and Micro/RSX I/O Operations Reference Manual

This manual provides reference material on RSX-11M-PLUS File Control Services (FCS). It explains how to use FCS to create, use, and delete files under program control. You should be familiar with MACRO-11 or FORTRAN program development procedures before using FCS.

The manual also describes the following:

- The Get Command Line subroutine (GCML)—Provides a device-independent interface for user programs retrieving command lines from either a terminal or a disk file.
- The Command String Interpreter (CSI)—Parses command lines containing file specifications and switches.
- The Table-Driven Parser (TPARS)—Parses command lines at two levels: a syntactical level and a semantic level. It is generated by parse tables created by the user.

Descriptions of ANSI magnetic tape support, unlabeled tape support, and the MAG SET command are included.

1.4.5.2 RSX-11M-PLUS and Micro/RSX I/O Drivers Reference Manual

This manual describes the functions of all DIGITAL-supplied I/O drivers. It provides the data needed by the experienced programmer who wants the advantages in space and time of interfacing with I/O drivers directly.

This manual describes the Files-11 Ancillary Control Processor (F11ACP) and the Magnetic Tape Ancillary Control Processor (MTAACP) and documents the queue I/O requests performed by these processors.

1.4.6 Volume 6: Driver Development

This volume consists of manuals that describe writing, maintaining, and debugging privileged software including I/O drivers.

1.4.6.1 RSX-11M-PLUS and Micro/RSX Guide to Writing an I/O Driver

This guide is an aid in writing an I/O driver to service a peripheral device for which DIGITAL does not supply a driver. It documents changes to system data structures made to accommodate the Error Logger and alternate Command Line Interpreter (CLI) support. Tables are included to aid you in determining the device mask word for user-written drivers, and an appendix describes the conversion of drivers from RSX-11M to RSX-11M-PLUS.

Before you read this manual, you should fully understand the operation of the device for which you require a driver. You must also be familiar with your PDP-11 processor, its peripheral devices, and the software supplied with the RSX-11M-PLUS system.

1.4.6.2 RSX-11M-PLUS and Micro/RSX Crash Dump Analyzer Reference Manual

This manual explains how to use the Crash Dump Analyzer (CDA) to determine the causes of system crashes. It contains operating instructions, descriptions of CDA switches and error messages, examples of CDA output listings, and an explanation of how to interpret the output listings. The manual also includes system symbolic and data structure macro definitions.

1.4.6.3 RSX-11M-PLUS and Micro/RSX XDT Reference Manual

This manual describes how to use the Executive Debugging Tool (XDT), an interactive tool for debugging privileged code.

1.4.7 Volume 7: System Management and Maintenance

This volume consists of one manual that describes how to operate your system correctly and effectively.

1.4.7.1 RSX-11M-PLUS and Micro/RSX System Management Guide

This manual documents the following programs that the system manager can use to test, monitor, maintain, and customize an RSX-11M-PLUS operating system:

- Account File Maintenance Program (ACNT)—Creates and maintains accounts on multiuser protection systems.
- Console Logger (CODRV and COT)—Handles I/O to the console output device and records system messages at a terminal and/or in a log file.
- I/O Exerciser (IOX)—Detects and diagnoses I/O problems on tape and disk units.
- Bad Block Replacement Control Task (RCT)—Performs bad block handling and recovery on Mass Storage Control Protocol (MSCP) devices.
- Resource Monitoring Display (RMD)—Displays information about the tasks currently active on the system and the system's available resources.
- System Shutdown Task (SHUTUP)—Shuts down the system in an orderly fashion.
- Virtual Monitor Console Routine (VMR)—A subset of MCR commands that you can use to alter a system image file.

- Shuffler (SHF)—Compresses space in system-controlled partitions when a memory allocation failure occurs.
- System Configuration Services (CON and HRC)—Reconfigure an RSX-11M-PLUS system in order to bypass faulty hardware elements and to isolate the system from their effects.

The manual includes information on how to manage pool resources and the PMT program; how to set up and run the Queue Manager; how to extend and alter DCL; and how to write command line interpreters (CLIs). The manual also includes information on Resource Accounting, queue optimization, Shadow Recording (SHA), and disk data caching. The Serial Despooler and RSX-11M-PLUS system conventions are described in separate appendixes.

1.4.8 Volume 8: PDP-11 Record Management Services

This volume is composed of a set of manuals that describes the PDP-11 Record Management Services (RMS-11). For information on where the RMS-11 files and utilities can be found on the RSX-11M-PLUS distribution kit, see the *RSX-11M-PLUS System Generation and Installation Guide*.

1.4.8.1 RSX-11M/M-PLUS RMS-11: An Introduction

This manual introduces the major concepts of RMS-11: record formats, file organizations, and record access modes. It introduces the RMS-11 operations and utility programs, and it defines the key terms necessary to understand RMS-11 capabilities and functions.

The manual is intended for all users of RMS-11, including both MACRO-11 and high-level language programmers. Nonprogramming users, programming users who are new to RSX-11M-PLUS, and RSX-11M-PLUS programmers who are new to RMS-11 should find this document especially useful.

The manual does not provide reference or usage information. You should read this manual before reading the other RMS-11 manuals.

1.4.8.2 RSX-11M/M-PLUS RMS-11 User's Guide

This manual is a guide to using RMS-11 in file and task design for application programs written in either MACRO-11 or high-level languages. It is intended for application programmers who want to achieve optimal performance either with a new application they are writing or with an existing application that no longer performs satisfactorily.

The manual first presents general design considerations to help users select the appropriate file organization for their applications. Then the details of file structure, design, and processing are discussed for each of the three RMS-11 file organizations: sequential, relative, and indexed. Finally, the manual describes techniques that can be used to optimize application program performance, regardless of file organization.

Note that only MACRO-11 programmers can use the full set of RMS-11 capabilities. Subsets of those capabilities are available to high-level language programmers. Programmers who are writing applications in high-level languages should consult their language documentation for details on RMS-11 support.

1.4.8.3 RSX-11M/M-PLUS RMS-11 Utilities

This reference manual describes the utility programs supported by RMS-11. It is intended for users such as high-level language programmers and nonprogramming users (system managers and operators, for example), who either do not require or do not have access to the full set of RMS-11 capabilities.

The RMS-11 utility programs are the following:

- RMS-11 File Design Utility (RMSDES)—An interactive utility for designing and creating sequential, relative, and indexed files.
- RMS-11 Indexed File Load Utility (RMSIFL)—Reads records from an RMS-11 file of any kind of organization and loads them into an indexed file, optimizing all indexes, both primary and alternates (if any).
- RMS-11 File Conversion Utility (RMSCNV)—Reads records from an RMS-11 file of any organization and loads them into another RMS-11 file of any organization. Note that RMSCNV, unlike RMSIFL, optimizes only the primary index when it loads an indexed file.
- RMS-11 File Display Utility (RMSDSP)—Produces a concise description of any RMS-11 file, including backup files.
- RMS-11 File Back-Up Utility (RMSBCK)—Transfers the contents of an RMS-11 file to another file, on another device, to preserve it in case the original file is lost or damaged.
- RMS-11 File Restoration Utility (RMSRST)—Restores files that were backed up by RMSBCK, so that they can be accessed by user programs.

The manual also documents RMSDEF, which has been superseded by RMSDES.

1.4.8.4 RSX-11M/M-PLUS RMS-11 Macro Programmer's Guide

This document is a reference manual describing the macros and symbols that make up the interface between a MACRO-11 program and the RMS-11 operation routines. It is intended for both MACRO-11 programmers and high-level language programmers who want to use the full set of RMS-11 capabilities in a MACRO-11 subprogram.

The manual presents such programming considerations as how to use RMS-11 macros and symbols in a MACRO-11 program, how to use the directory and file operations to process directories and files, and how to use the stream operations and record or block operations to process records or blocks. Detailed reference information is provided on each RMS-11 operation macro, the control blocks it uses, the options that can be specified in each control block field, and the values returned in control block fields. A summary of each control block, field, value, and mask is also provided.

In addition, the manual describes the RMS-11 completion codes, fatal error codes, and assembly-time messages.

1.4.9 RSX-11M-PLUS Mini-Reference

This small manual is a convenient reference for all system users. It includes sections on the Monitor Console Routine (MCR), the DIGITAL Command Language (DCL), the Task Builder (TKB), the RSX-11M-PLUS utilities, the On-Line Debugging Tool (ODT), the error logging system, the batch processor, the Queue Manager (QMG), the I/O error codes, the directive error codes, the Executive directive summary, the RMS-11 utilities, and the RMS-11 error codes. The manual also includes Radix-50 conversion tables and the ASCII character set.

1.4.10 EDT Editor Reference Card

This reference card describes keypad editing for the DIGITAL VT52 and VT100 video terminals. It presents common keyboard functions and gives instructions for beginning and ending an editing session. Keypad diagrams for the VT52 and VT100 terminals are included.

1.4.11 PDP-11 Programming Card

This card includes programming information on the following topics:

- PDP-11 addressing modes
- Single-operand instructions
- Double-operand instructions
- Processor register addresses
- Device register addresses
- 7-bit ASCII code
- Bootstrap loader starting addresses and device vectors

1.5 RSX-11S Documentation

The RSX-11S operating system is an optional, separately purchased product, supported by the RSX-11M-PLUS system. Included with the RSX-11S software is the RSX-11S documentation set. Some of the manuals in the documentation set describe the features and capabilities of the RSX-11S operating system, while others describe the host system.

The RSX-11S documentation set is fully described in the *RSX-11M/RSX-11S Information Directory and Master Index*. It is important that you thoroughly read the *RSX-11M/RSX-11S Release Notes* before reading the other manuals in the RSX-11S documentation set and generating your RSX-11S system.

Chapter 2
The RSX-11M-PLUS Master Index

2.1 Introduction to the Master Index

The Master Index is a comprehensive index to the entire RSX-11M-PLUS documentation set. The indexes of the individual manuals have been compiled without abridgment into the Master Index.

The Master Index is valuable to new users who are not sure which manual contains the information they need. It is valuable to all users as an index to topics that are discussed (or might logically be discussed) in more than one manual.

2.1.1 Format of the Master Index

Each entry in the Master Index is followed by the title of the manual it is referencing. For example, the complete title *RSX-11M-PLUS MCR Operations Manual* is abbreviated to "MCR." The titles of all manuals are in italics. See the next section for a list of the abbreviated titles.

2.1.2 Manuals Included in the Master Index

Table 2-1 contains a list of all the manuals included in the RSX-11M-PLUS Master Index. The Abbreviated Title column lists the shortened titles of manuals appearing in the Master Index, whereas the Complete Title column lists the full titles of manuals. Note that indexes for the *EDT Editor Manual* and the *RSX-11M-PLUS Release Notes* are not included in the Master Index.

Table 2–1: Abbreviated Titles for Manuals in the RSX–11M–PLUS Master Index

Abbreviated Title	Complete Title
Batch and Queue	*RSX–11M–PLUS Batch and Queue Operations Manual*
Command Language	*RSX–11M–PLUS Command Language Manual*
Crash Dump Analyzer	*RSX–11M–PLUS and Micro/RSX Crash Dump Analyzer Reference Manual*
Debugging	*RSX–11M–PLUS and Micro/RSX Debugging Reference Manual*
Error Logging	*RSX–11M–PLUS and Micro/RSX Error Logging Manual*
Executive	*RSX–11M–PLUS and Micro/RSX Executive Reference Manual*
Indirect	*RSX–11M–PLUS Indirect Command Processor Manual*
Introduction	*Introduction to RSX–11M–PLUS*
I/O Drivers	*RSX–11M–PLUS and Micro/RSX I/O Drivers Reference Manual*
I/O Operations	*RSX–11M–PLUS and Micro/RSX I/O Operations Reference Manual*
MACRO–11	*PDP–11 MACRO–11 Language Reference Manual*
MCR	*RSX–11M–PLUS MCR Operations Manual*
Program Development	*RSX–11M–PLUS Guide to Program Development*
RMS–11 Introduction	*RSX–11M/M–PLUS RMS–11: An Introduction*
RMS–11 User's Guide	*RSX–11M/M–PLUS RMS–11 User's Guide*
RMS–11 Utilities	*RSX–11M/M–PLUS RMS–11 Utilities*
RMS–11 Macro	*RSX–11M/M–PLUS RMS–11 Macro Programmer's Guide*
System Generation	*RSX–11M–PLUS System Generation and Installation Guide*
System Library	*RSX–11M–PLUS and Micro/RSX System Library Routines Reference Manual*
System Management	*RSX–11M–PLUS and Micro/RSX System Management Guide*
Task Builder	*RSX–11M–PLUS and Micro/RSX Task Builder Manual*
Utilities	*RSX–11M–PLUS Utilities Manual*
Writing I/O Driver	*RSX–11M–PLUS and Micro/RSX Guide to Writing an I/O Driver*
XDT	*RSX–11M–PLUS and Micro/RSX XDT Reference Manual*

Master Index

A

A/D converter
  function code list, *I/O Drivers*, B-11
AA11-K D/A converter, *I/O Drivers*, 13-2
AAV11-A D/A converter, *I/O Drivers*, 13-2
/ABAUD keyword
  SET command, *MCR*, 3-157
  SET command (VMR), *System Management*, 5-50
ABO command
  See ABORT command
ABODF$, *Crash Dump Analyzer*, C-3
:AB option
  QUE /STO command, *System Management*, 3-33
ABORT command, *Debugging*, 1-6; *MCR*, 3-2; *DCL*, 7-17 to 7-20, 9-2; *Introduction*, 1-16, 5-14
  brief description, *MCR*, 1-6
  examples, *MCR*, 3-3
  format, *MCR*, 3-3
  IOX, *System Management*, 12-15
  parameters, *MCR*, 3-3
  /PMD keyword, *MCR*, 3-3
  Shadow Recording, *System Management*, 16-7
  /TERM keyword, *MCR*, 3-3
ABORT option, *Task Builder*, 12-5
/ABORT qualifier
  STOP/PROCESSOR command, *System Management*, 3-33
  STOP/QUEUE/MANAGER command, *System Management*, 3-35
Abort Task directive, *Executive*, 5-10
ABRT$ directive, *Executive*, 5-10
  ABS. default program section name, *MACRO-11*, 5-36
ABS argument
  for .ENABL/.DSABL, *MACRO-11*, 5-14
  for .PSECT, *MACRO-11*, 5-35
Absolute address, *Debugging*, 2-2
Absolute expression
  definition, *MACRO-11*, 2-15
Absolute location, *Debugging*, 2-5, 4-4; *XDT*, 2-11
Absolute Mode switch
  See /AB switch
ABSPAT option, *Task Builder*, 12-6
/AB switch
  ZAP utility, *Utilities*, 15-2, 15-5
Acceptance routine, *Writing I/O Driver*, 1-14
Access, *RMS-11 User's Guide*, 1-7; *RMS-11 Intro*, 1-1
  See also Access mode
  See also Shared access
  block, *RMS-11 User's Guide*, 1-20, 3-6; *RMS-11 Intro*, 4-7
  direct, *RMS-11 Intro*, 2-4
  modes, *RMS-11 Intro*, 3-11
  random, *RMS-11 User's Guide*, 1-7, 1-9; *RMS-11 Intro*, 2-4
    to indexed files, *RMS-11 User's Guide*, 5-7, 5-9
  sequential, *RMS-11 User's Guide*, 1-7; *RMS-11 Intro*, 2-4
    to indexed files, *RMS-11 User's Guide*, 5-16
  shared, *RMS-11 Intro*, 2-4
  structure, *RMS-11 Intro*, 3-1
Access control, *RMS-11 User's Guide*, 1-9
Access control parameter
  F11ACP, *I/O Operations*, H-12
Access declaration, *RMS-11 User's Guide*, 2-6
  read/write, *RMS-11 User's Guide*, 2-6

Access declaration (cont'd.)
read-only, *RMS-11 User's Guide*, 2-6
relative files, *RMS-11 User's Guide*, 4-6
sequential files, *RMS-11 User's Guide*, 3-6
/ACCESSED qualifier
MOUNT command, *System Management*, 1-8
/ACCESS keyword
INITVOLUME command, *MCR*, 3-84
Access mode, *RMS-11 Intro*, 3-1, 3-11
See also Random access
See also Sequential access
and file organization, *RMS-11 Intro*, 3-13
block, *RMS-11 User's Guide*, 1-20, 3-6; *RMS-11 Intro*, 3-11, 3-12, 4-7
sequential, *RMS-11 Intro*, 3-12
VBN, *RMS-11 Intro*, 3-11
FIND operation
indexed files, *RMS-11 User's Guide*, 7-3
relative files, *RMS-11 User's Guide*, 4-8
sequential files, *RMS-11 User's Guide*, 3-7
GET operation
indexed files, *RMS-11 User's Guide*, 7-4
relative files, *RMS-11 User's Guide*, 4-10
sequential files, *RMS-11 User's Guide*, 3-9
PUT operation
indexed files, *RMS-11 User's Guide*, 7-6
relative files, *RMS-11 User's Guide*, 4-11
sequential files, *RMS-11 User's Guide*, 3-10
random
by key, *RMS-11 User's Guide*, 1-12
by RFA, *RMS-11 User's Guide*, 1-12
by VBN, *RMS-11 User's Guide*, 1-20
to indexed files, *RMS-11 Intro*, 3-14
to relative files, *RMS-11 Intro*, 3-15
to sequential files, *RMS-11 Intro*, 3-14
record, *RMS-11 User's Guide*, 1-12; *RMS-11 Intro*, 3-11, 4-5
FIND operations, *RMS-11 Intro*, 4-6
GET operations, *RMS-11 Intro*, 4-6
key, *RMS-11 Intro*, 3-12
PUT operations, *RMS-11 Intro*, 4-6
RFA, *RMS-11 Intro*, 3-11
sequential, *RMS-11 Intro*, 3-11
sequential
blocks, *RMS-11 User's Guide*, 1-20
records, *RMS-11 User's Guide*, 1-12
Access mode
sequential (cont'd.)
to indexed files, *RMS-11 Intro*, 3-14
to relative files, *RMS-11 Intro*, 3-14
to sequential files, *RMS-11 Intro*, 3-14
switching, *RMS-11 Intro*, 3-13
Access path
switching between, *Writing I/O Driver*, 1-12
Access shared function, *I/O Operations*, 2-14
Access shared read function, *I/O Operations*, 1-14
Access shared write function, *I/O Operations*, 1-13
Access sharing, *RMS-11 Intro*, 2-4
See also Shared access
read, *RMS-11 Intro*, 3-6
write, *RMS-11 Intro*, 3-6
Access stream, *RMS-11 User's Guide*, 1-15
multiple, *RMS-11 User's Guide*, 2-17
and shared access, *RMS-11 User's Guide*, 2-9 to 2-10
indexed files, *RMS-11 User's Guide*, 7-10
relative files, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-15
Access types
file protection codes
initializing volumes with, *MCR*, 3-88
mounted Files–11 volume, *MCR*, 3-113
specifying default, *MCR*, 3-80
specifying personal default, *MCR*, 3-164
file protection mask, *MCR*, 2-3
UFD
establishing, *MCR*, 3-209
volume protection codes
initializing volumes with, *MCR*, 3-91
specifying default, *MCR*, 3-82
specifying default for mounted volume, *MCR*, 3-115
<ACCOUN> symbol, *Indirect*, 2-22
Account
and UFD, *MCR*, 2-2
and UIC, *MCR*, 2-2
creating, *MCR*, 2-22
protection, *MCR*, 3-177
transferring, *System Management*, 2-2
ACCOUNT.DAT file, *System Management*, 10-17

Account blocks, *System Management*, 10-23
memory-resident, *System Management*, 10-23
non-memory-resident, *System Management*, 10-23
Account file
contents of, *MCR*, 2-22
increasing size of, *System Management*, 2-13
on distribution kit, *System Generation*, 4-6
on pregenerated kit, *System Generation*, 5-36
using from another system, *System Management*, 2-2
Account File Maintenance Program
See ACNT
Accounting
SYSGEN question, *System Generation*, 3-28
Accounting Startup Transaction Block, *System Management*, 10-34
Accpath status flag, *System Management*, 4-13
ACD command
See ANCILLARY CONTROL DRIVER command
ACFPAR.DAT file, *System Generation*, 5-33; *System Management*, 4-1
modifying, *System Generation*, 5-34; *System Management*, 4-2
record format
controller, *System Generation*, 5-34; *System Management*, 4-2
CPU, *System Generation*, 5-34; *System Management*, 4-2
line frequency, *System Generation*, 5-34; *System Management*, 4-2
ACFPRE.TSK file, *System Generation*, 5-33; *System Management*, 4-1
$ACHCK routine, *Writing I/O Driver*, 7-7
$ACHKB routine, *Writing I/O Driver*, 7-7
ACHN$ directive, *Executive*, 5-12
ACNDF$, *Crash Dump Analyzer*, C-5
ACNT, *System Management*, 2-1; *DCL*, 3-9 to 3-11, 4-1
account entry
contents, *System Management*, 2-1
deleting, *System Management*, 2-6
examining, *System Management*, 2-8
listing, *System Management*, 2-10
modifying, *System Management*, 2-11
account file
copying, *System Management*, 2-3
extending, *System Management*, 2-3
ACNT
account file (cont'd.)
maximum number of entries, *System Management*, 2-4
sorting, *System Management*, 2-13
changing password, *MCR*, 3-195; *System Management*, 2-2
description, *System Management*, 1-11
error messages, *System Management*, 2-14
invoking, *System Management*, 2-3
nonprivileged use, *System Management*, 2-2
options, *System Management*, 2-3
ADD, *System Management*, 2-4
CREATE, *System Management*, 2-3
DELETE, *System Management*, 2-6
EXAMINE, *System Management*, 2-8
EXIT, *System Management*, 2-13
LIST, *System Management*, 2-10
MODIFY, *System Management*, 2-11
SORT, *System Management*, 2-13
password encryption, *System Management*, 2-1
protection
restoring, *System Management*, 2-3
setting new password, *MCR*, 3-177
use of, *MCR*, 2-22
using ESCAPE key to list options, *System Management*, 2-4
ACNTRN.CMD file, *System Management*, 10-18
ACP, *DCL*, 5-4, 5-49
See also Ancillary Control Processor
definition, *System Generation*, 1-7
error return, *I/O Operations*, H-3
IE.ABO, *I/O Operations*, H-3
IE.ALC, *I/O Operations*, H-3
IE.ALN, *I/O Operations*, H-3
IE.BAD, *I/O Operations*, H-3
IE.BDR, *I/O Operations*, H-4
IE.BTP, *I/O Operations*, H-4
IE.BVR, *I/O Operations*, H-4
IE.BYT, *I/O Operations*, H-4
IE.CKS, *I/O Operations*, H-4
IE.CLO, *I/O Operations*, H-4
IE.DFU, *I/O Operations*, H-4
IE.DUP, *I/O Operations*, H-4
IE.EOF, *I/O Operations*, H-4
IE.HFU, *I/O Operations*, H-4
IE.IFC, *I/O Operations*, H-4
IE.IFU, *I/O Operations*, H-4
IE.LCK, *I/O Operations*, H-5
IE.LUN, *I/O Operations*, H-5

ACP
error return (cont'd.)
IE.NOD, *I/O Operations*, H-5
IE.NSF, *I/O Operations*, H-5
IE.OFL, *I/O Operations*, H-5
IE.PRI, *I/O Operations*, H-5
IE.RER, *I/O Operations*, H-5
IE.SNC, *I/O Operations*, H-5
IE.SPC, *I/O Operations*, H-5
IE.SQC, *I/O Operations*, H-5
IE.WAC, *I/O Operations*, H-5
IE.WAT, *I/O Operations*, H-5
IE.WER, *I/O Operations*, H-6
IE.WLK, *I/O Operations*, H-6
QIO$ function
closing a file, *I/O Operations*, H-3
creating a file, *I/O Operations*, H-2
deleting a file, *I/O Operations*, H-3
extending a file, *I/O Operations*, H-3
opening a file, *I/O Operations*, H-3
using, *I/O Operations*, H-2
QIO$ interface, *I/O Operations*, H-1
specifying task, *Task Builder*, 10-5, 11-10
ACP function mask, *Writing I/O Driver*, 4-19
/ACP keyword
MOUNT command, *MCR*, 3-111, 3-119
ACS command, *System Management*, 1-5
See also ALLOCATE CHECKPOINT SPACE command
ACSUB module, *System Management*, 10-18
/AC switch, *Task Builder*, 10-5
/ACT, *Crash Dump Analyzer*, 2-3, 2-5
ACT command
See ACTIVE command
ACTFIL option, *Task Builder*, 12-7
Action routine, *I/O Operations*, 7-5
calling, *I/O Operations*, 7-5
using, *I/O Operations*, 7-6
Action statement
CFL, *Error Logging*, 5-30 to 5-31
ACTIVE command, *MCR*, 3-8
brief description, *MCR*, 1-6
examples, *MCR*, 3-8
format, *MCR*, 3-8
keywords
/ALL, *MCR*, 3-8
/TERM, *MCR*, 3-8
Active Page Register
See APR
Active task
address of TCB, *Crash Dump Analyzer*, 3-16
Active task (cont'd.)
AST queue, *Crash Dump Analyzer*, 3-18
attribute bits, *Crash Dump Analyzer*, 3-17
blocking bits, *Crash Dump Analyzer*, 3-17
name, *Crash Dump Analyzer*, 3-16
partition, *Crash Dump Analyzer*, 3-16
receive-by-reference queue, *Crash Dump Analyzer*, 3-19
receive queue, *Crash Dump Analyzer*, 3-18
state bits, *Crash Dump Analyzer*, 3-17
task image, *Crash Dump Analyzer*, 3-16
Active task display
RMD
altering from MCR command line, *System Management*, 7-11
altering from setup page, *System Management*, 7-11
description, *System Management*, 7-10
example, *System Management*, 7-10
OWNER command, *System Management*, 7-11
PRIORITY command, *System Management*, 7-11
TASK command, *System Management*, 7-11
Active task dump, *Crash Dump Analyzer*, 3-16
AST queue, *Crash Dump Analyzer*, 3-16
Offspring Control Block, *Crash Dump Analyzer*, 3-16
receive-by-reference queue, *Crash Dump Analyzer*, 3-16
receive queue, *Crash Dump Analyzer*, 3-16
ACTIVE TASK LIST command, *MCR*, 3-24
brief description, *MCR*, 1-6
example, *MCR*, 3-27
format, *MCR*, 3-26
Activity report
IOX, *System Management*, 12-12, 12-42
directing to device, *System Management*, 12-34
generating summary, *System Management*, 12-42
AD11-K converter, *I/O Drivers*, 13-2
Add & Print command
EDI editor, *Utilities*, 7-17
Add command
EDI editor, *Utilities*, 7-17
Addition binary operator
CFL expression, *Error Logging*, 5-14
Addition operator
summary, *MACRO-11*, 2-4

Addition precedence class operator
CFL expression, *Error Logging*, 5-16
ADD option
ACNT, *System Management*, 2-4
Address
See also RFA
absolute, *Debugging*, 2-2, 5-5
multicast mode (XEDRV), *I/O Drivers*, 10-2
pairs
Ethernet (XEDRV), *I/O Drivers*, 10-2
physical
See Physical address
physical mode (XEDRV), *I/O Drivers*, 10-2
record, *RMS-11 User's Guide*, 1-9
relative, *Debugging*, 2-2
format, *Debugging*, 2-2
relocatable, *Debugging*, 2-2, 5-5; *Introduction*, 5-6; *XDT*, 2-13
calculating, *Debugging*, 2-8, 7-1
relocating, *Task Builder*, 2-12
virtual, *Task Builder*, 2-15
See also Virtual address
Address boundary
See ZAP utility
Address doubleword, *Writing I/O Driver*, 7-1, 7-2
Address expression
See Expression
Addressing mode, *MACRO-11*, 4-1
absolute, *MACRO-11*, 4-6
autodecrement, *MACRO-11*, 4-4
autodecrement deferred, *MACRO-11*, 4-4
autoincrement, *MACRO-11*, 4-3
autoincrement deferred, *MACRO-11*, 4-3
difference between absolute and relative, *MACRO-11*, 4-7
effect of .ENABL AMA, *MACRO-11*, 4-7
immediate, *MACRO-11*, 4-5
index, *MACRO-11*, 4-4
index deferred, *MACRO-11*, 4-5
register, *MACRO-11*, 4-3
register deferred, *MACRO-11*, 4-3
relative, *MACRO-11*, 4-6
relative deferred, *MACRO-11*, 4-8
summary, *MACRO-11*, B-2
table of, *MACRO-11*, 4-2
Address mapping, *Executive*, 3-2
Address space
allocating, *Task Builder*, 2-5
logical, *Executive*, 3-2; *Task Builder*, 2-15
Address space (cont'd.)
virtual, *Executive*, 3-2; *Task Builder*, 2-15
reducing use, *Task Builder*, 3-1
Address window
creating, *Executive*, 5-47
declaring number of, *Task Builder*, 12-45
deleting, *Executive*, 5-74
mapping to region, *Executive*, 5-145
unmapping, *Executive*, 5-292
virtual, *Executive*, 3-3
Addr parameter
DIR$ macro, *I/O Drivers*, 1-16
ADINP: subroutine
initiating single analog output (K-series), *I/O Drivers*, 13-7
/ADJACENT qualifier
PRINT command, *Batch and Queue*, 2-3
/AD switch
PRI command, *Batch and Queue*, 2-3
ADSWP: subroutine
initiating synchronous A/D sweep
K-series, *I/O Drivers*, 13-8
synchronous A/D sweep
LADRV, *I/O Drivers*, 12-3
/ADV, *Crash Dump Analyzer*, 2-3, 2-5
ADV11-A D/A converter, *I/O Drivers*, 13-2
Advance driver feature, *Writing I/O Driver*, 1-18, 2-4
ADVANCE function
EDT editor, *Introduction*, 2-7
Adwell parameter
XRATE: subroutine
K-series, *I/O Drivers*, 13-28
LADRV, *I/O Drivers*, 12-23
A error
.ASCII, *MACRO-11*, 5-20
.ASCIZ, *MACRO-11*, 5-21
.BLKB/.BLKW, *MACRO-11*, 5-32
.BYTE, *MACRO-11*, 5-17
.ENABL/.DSABL, *MACRO-11*, 5-13
.ENDM, *MACRO-11*, 6-3
for invalid floating-point number, *MACRO-11*, 5-28
.IF, *MACRO-11*, 5-45
.IIF, *MACRO-11*, 5-49
in bad expression, *MACRO-11*, 2-14
inconsistent current location counter attribute, *MACRO-11*, 2-12
invalid forward reference defining global, *MACRO-11*, 2-8
.IRP, *MACRO-11*, 6-18
.IRPC, *MACRO-11*, 6-19

A error (cont'd.)
.LIST/.NLIST, *MACRO-11*, 5-8
.MACRO, *MACRO-11*, 6-3
.NARG, *MACRO-11*, 6-13
.NCHR, *MACRO-11*, 6-14
.NTYPE, *MACRO-11*, 6-15
on EMT and TRAP instructions, *MACRO-11*, 4-8
.PSECT, *MACRO-11*, 5-34, 5-37
.RAD50, *MACRO-11*, 5-22
.RADIX, *MACRO-11*, 5-26
.REPT, *MACRO-11*, 6-21
.RESTORE, *MACRO-11*, 5-40
.SAVE, *MACRO-11*, 5-40
single or double quotation mark character storage, *MACRO-11*, 5-19
.TITLE, *MACRO-11*, 5-10
/AF:::TOMORROW switch, *Batch and Queue*, 3-15
/AFF keyword
INS command (VMR), *System Management*, 5-21
INSTALL command, *MCR*, 3-95
OPENREGISTER command, *MCR*, 3-127
SET command (VMR), *System Management*, 5-51
/AF job switch
SUB command, *Batch and Queue*, 3-15
/AF switch
PRI command, *Batch and Queue*, 2-3
QUE /MOD command, *Batch and Queue*, 2-19
/AFTER:TOMORROW qualifier, *Batch and Queue*, 3-15
/AFTER qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
SUBMIT command, *Batch and Queue*, 3-15
$ALBLK (Allocate block), *System Library*, 8-10
ALERR module, *Task Builder*, 4-17, 5-62
ALERR routine, *Task Builder*, 4-19
Alignment
RMSDEF utility, *RMS-11 Utilities*, A-14
/ALIGN qualifier
START/PROCESSOR command, *System Management*, 3-37
/ALL, *Crash Dump Analyzer*, 2-4, 2-5
ALL block, *RMS-11 Macro*, 2-7, 5-71 to 5-72, 5-78, 5-102, 5-108, 5-116; *RMS-11 Intro*, 4-8
chaining to FAB, *RMS-11 Macro*, 2-11
ALL block (cont'd.)
initializing, *RMS-11 Macro*, 2-9
summary, *RMS-11 Macro*, 6-2
ALL command
See ALLOCATE command
All devices switch
See /ADV
/ALL keyword
ACTIVE command, *MCR*, 3-8
ASN command, *System Management*, 8-18
ASSIGN command, *MCR*, 3-21
DEFINE LOGICALS command, *MCR*, 3-57
DFL command, *System Management*, 8-18
ALLOCATE CHECKPOINT SPACE command, *MCR*, 3-6
/BLKS keyword, *MCR*, 3-6
brief description, *MCR*, 1-5
examples, *MCR*, 3-7
format, *MCR*, 3-6
Allocate Checkpoint Space command
See ACS command
ALLOCATE command, *MCR*, 3-10; *DCL*, 5-10, 5-11, 5-41 to 5-43, 9-2
allocating private device, *MCR*, 2-12
brief description, *MCR*, 1-7
examples, *MCR*, 3-11
format, *MCR*, 3-10
keywords
/TERM, *MCR*, 3-10
/TYPE, *MCR*, 3-10
parameters, *MCR*, 3-10
/TYPE qualifier, *Batch and Queue*, 3-13
Allocate Device Transaction Block, *System Management*, 10-40
ALLOCATION
RMSDES utility
area section, *RMS-11 Utilities*, 2-44
file section, *RMS-11 Utilities*, 2-31
Allocation, *RMS-11 User's Guide*, 1-19
indexed files, *RMS-11 User's Guide*, 6-22
DEQ, *RMS-11 User's Guide*, 6-26
initial, *RMS-11 User's Guide*, 6-22
relative files, *RMS-11 User's Guide*, 4-3
DEQ, *RMS-11 User's Guide*, 4-4
initial, *RMS-11 User's Guide*, 4-3
RMSDEF utility
data, *RMS-11 Utilities*, A-16
file, *RMS-11 Utilities*, A-14
RMSDES utility
areas, *RMS-11 Utilities*, 2-10, 2-25
RMSDSP utility
displaying, *RMS-11 Utilities*, 5-4

Allocation (cont'd.)
sequential files, *RMS-11 User's Guide*, 3-4
DEQ, *RMS-11 User's Guide*, 3-4
initial, *RMS-11 User's Guide*, 3-4
/ALLOC keyword
USER FILE DIRECTORY command, *MCR*, 3-208
/ALL qualifier
SHOW ASSIGNMENTS command, *System Management*, 8-18
SHOW LOGICALS command, *System Management*, 8-18
$ALOC1 routine, *Writing I/O Driver*, 7-8
$ALOCB routine, *Writing I/O Driver*, 7-8
/AL option
QUE /STA command, *System Management*, 3-37
/ALO switch
BAD utility, *Utilities*, 2-2
<ALPHAN> symbol, *Indirect*, 2-10
ALSCT subroutine, *Task Builder*, 5-70 to 5-73
/AL subswitch
VFY utility, *Utilities*, 14-4
$ALSVB (Allocate small virtual block), *System Library*, 8-26
/AL switch, *Task Builder*, 10-6
ALT command
See also ALTER command
VMR
definition, *System Management*, 5-8
example, *System Management*, 5-8
format, *System Management*, 5-8
parameters, *System Management*, 5-8
/PRI keyword, *System Management*, 5-8
ALTER command, *MCR*, 3-12
brief description, *MCR*, 1-6
examples, *MCR*, 3-13
format, *MCR*, 3-12
keywords
/PRI, *MCR*, 3-12
/RPRI, *MCR*, 3-12
/TERM, *MCR*, 3-12
parameters, *MCR*, 3-12
VMR
See ALT command
Alternate index
See Index
Alternate index (RMSIFL), *RMS-11 Utilities*, 3-11 to 3-12
Alternate key, *RMS-11 User's Guide*, 1-7, 1-11; *RMS-11 Intro*, 3-7
Alternate key (cont'd.)
RMSDEF utility
defining, *RMS-11 Utilities*, A-1
RMSIFL utility
allocating file space, *RMS-11 Utilities*, 3-13
sorting, *RMS-11 Utilities*, 3-11
Alternate key file (RMSIFL)
device allocation, *RMS-11 Utilities*, 3-7
Alter Priority directive, *Executive*, 5-15
support needed for ALTER command, *MCR*, 3-12
support required for ABORT command, *MCR*, 3-2
<ALTMOD> symbol, *Indirect*, 2-10
ALTMODE key
EDI editor, *Utilities*, 7-17
using to terminate command, *MCR*, 1-3
ALTP$ directive, *Executive*, 5-15
See Alter Priority directive
ALUN$ directive, *Executive*, 5-17
ASSIGN command, *MCR*, 3-14
assigning LUN at run time, *MCR*, 2-9
example, *I/O Drivers*, 1-18
LUN assignment, *I/O Drivers*, 1-4
summary, *I/O Operations*, F-1
ALUN$ macro, *I/O Drivers*, 1-15, 1-17
$ALVRT (Allocate virtual memory), *System Library*, 8-23
AM11-K multiple gain multiplexer, *I/O Drivers*, 13-2
AMA argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
American National Standards Institute
See ANSI
American Standard Code for Information Interchange
See ASCII
Ampersand (&)
logical AND operator, *MACRO-11*, 2-4
special character in MACRO–11, *MACRO-11*, 2-2
special meaning within .IF DF/NDF conditional, *MACRO-11*, 5-45
Analysis listings, *Crash Dump Analyzer*, 3-1 to 3-46
interpreting, *Crash Dump Analyzer*, 4-1
Analysis routines switch
See /ALL
Analysis switches, *Crash Dump Analyzer*, 2-3 to 2-7

ANALYZE/CRASH_DUMP command, *Crash Dump Analyzer,* 1-7
error messages, *Crash Dump Analyzer,* A-1
examples, *Crash Dump Analyzer,* 2-20
format, *Crash Dump Analyzer,* 2-11
input to, *Crash Dump Analyzer,* 2-12
qualifiers, *Crash Dump Analyzer,* 2-12 to 2-20
specification, *Crash Dump Analyzer,* 2-12
ANALYZE/ERROR_LOG command
See also RPT
command line, *Error Logging,* 3-3
defaults, *Error Logging,* 3-3
MCR and DCL equivalents, *Error Logging,* 3-1
qualifiers, *Error Logging,* 3-5
ANALYZE command
ANALYZE/CRASH_DUMP, *DCL,* 9-2 to 9-3
ANALYZE/MEDIA, *DCL,* 5-11, 5-18 to 5-23, 9-3
/ANCILLARY_PROCESSOR qualifier, *Task Builder,* 11-10
ANCILLARY CONTROL DRIVER command, *MCR,* 3-4
brief description, *MCR,* 1-5
examples, *MCR,* 3-5
format, *MCR,* 3-4
functions, *MCR,* 3-4
Ancillary Control Processor, *MCR,* 3-60, 3-108
See also ACP
Files–11, *MCR,* 3-111, 3-160
list of directories, *MCR,* 3-81, 3-89, 3-114
multiple file systems, *MCR,* 3-109
for foreign files, *MCR,* 3-114, 3-121
Magnetic Tape, *MCR,* 3-109
AND operator
special meaning within .IF DF/NDF conditional, *MACRO-11,* 5-45
summary, *MACRO-11,* 2-4
ANSI, *RMS-11 Macro,* 3-2
standard for Files–11 magnetic tapes, *MCR,* 2-1
standard for file specifications, *MCR,* 1-4
ANSI file name, *DCL,* 1-15
/ANSI keyword
SET command, *MCR,* 3-158
SET command (VMR), *System Management,* 5-51
ANSI magtape, *RMS-11 Macro,* 3-2, 5-20, 5-37, 5-70, 5-88, 5-97, 5-103
ANSI-standard tape
RMSBCK utility, *RMS-11 Utilities,* 6-1, 6-8
RMSDSP utility, *RMS-11 Utilities,* 5-3
ANSI tape standard, *I/O Operations,* G-1
Answer speed
TTDRV
determining for modem, *I/O Drivers,* 2-84
Apostrophe
See Single quotation mark
Apostrophe operator (')
See Operator
APPEND/ERROR_LOG command, *Error Logging,* 2-11
See also /APPEND switch
APPEND command, *DCL,* 4-63 to 4-64, 9-4
Append command
EDI editor, *Program Development,* 2-16
Append file open function, *I/O Operations,* 2-14
/APPEND qualifier
BRU utility, *Utilities,* 3-10
/APPEND switch
DSC utility, *Utilities,* 6-8
ELI, *Error Logging,* 2-11
See also APPEND/ERROR_LOG command
DELETE subswitch, *Error Logging,* 2-11
Append-to-file operation
subpacket information, *Error Logging,* 4-65
Application, *RMS-11 User's Guide,* 1-13, 2-3; *Introduction,* 6-2
designing, *RMS-11 User's Guide,* 2-1, 2-2, 2-4, 2-5, 2-10, 8-1
optimization, *RMS-11 User's Guide,* 2-11
/APPLICATIONS_PROCESSOR processor type, *System Management,* 3-20
APR, *RMS-11 User's Guide,* 8-3; *Task Builder,* 2-16 ; *Writing I/O Driver,* 1-2, 1-3
and memory-resident overlays, *RMS-11 User's Guide,* 8-6
changing mapping, *Executive,* 5-152
getting information, *Executive,* 5-152
specifying
example, *Task Builder,* 5-7
supervisor mode, *RMS-11 User's Guide,* 8-7; *Task Builder,* 8-2
/AP switch
PIP utility, *Utilities,* 12-8

/AP switch (cont'd.)
RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15
Area, *RMS-11 User's Guide*, 6-10, 8-3
See also ALL block
contiguity, *RMS-11 User's Guide*, 6-13
definition, *RMS-11 User's Guide*, 5-2
multiarea indexed files, *RMS-11 User's Guide*, 6-12
RMSDEF utility
defining, *RMS-11 Utilities*, A-13
RMSDES utility, *RMS-11 Utilities*, 2-10, 2-25
defining, *RMS-11 Utilities*, 2-1, 2-42
and BUCKET_SIZE attribute, *RMS-11 Utilities*, 2-32
and DATA_AREA attribute, *RMS-11 Utilities*, 2-40
and INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
and LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
and SIZE attribute, *RMS-11 Utilities*, 2-36
by default, *RMS-11 Utilities*, 2-43
explicitly, *RMS-11 Utilities*, 2-43
defining by default, *RMS-11 Utilities*, 2-17, 2-38
CREATE command, *RMS-11 Utilities*, 2-8, 2-28
SET ALL command, *RMS-11 Utilities*, 2-14
defining explicitly, *RMS-11 Utilities*, 2-17
numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-43
single-area indexed files, *RMS-11 User's Guide*, 6-11
Area description
obtaining
See DISPLAY operation
Area extending allocation
See EXTEND operation
Area information
displaying, *RMS-11 Utilities*, 5-4
Area number (RMSDEF), *RMS-11 Utilities*, A-16
A register, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
Arg1 parameter
CALLS
calling macro (LADRV), *I/O Drivers*, 12-24
macro (K-series), *I/O Drivers*, 13-29
ARGCHA routine, *Executive*, 1-13
Argument
concatenation of
example, *MACRO-11*, 6-8
macro
concatenation of, *MACRO-11*, 6-12
register, *Debugging*, 2-6, 5-3, 6-2
separator, *Debugging*, 2-4
Argument delimiter
circumflex (^), *MACRO-11*, 2-3
left angle bracket (<), *MACRO-11*, 2-3
table of, *MACRO-11*, 2-3
Argument separator, *XDT*, 2-10
Arithmetic calculations, *Debugging*, 7-1
Arithmetic operator, *Indirect*, 2-26
See also Operator
Array
setting for buffered sweep (K-series), *I/O Drivers*, 13-26
virtual
See Virtual array
Arrow keys
EDT editor, *Introduction*, 2-6
ASCII
character set, *MCR*, 3-123
data type
CFL, *Error Logging*, 5-5
displaying, *Debugging*, 4-6
operator, *Debugging*, 2-6
byte mode, *Debugging*, 4-6; *XDT*, 2-12
word mode, *Debugging*, 4-6; *XDT*, 2-12
ASCII character set, *MACRO-11*, A-1
ASCII character storage techniques, *MACRO-11*, 5-18
.ASCII directive, *MACRO-11*, 5-19
changes current location counter, *MACRO-11*, 5-31
inserting special values with angle brackets, *MACRO-11*, 5-20
summary, *MACRO-11*, 5-1
ASCII number conversion
ASCII to Radix-50 ($CAT5), *System Library*, 4-8
ASCII with blanks to Radix-50 ($CAT5B), *System Library*, 4-9

ASCII number conversion (cont'd.)
decimal to binary
($CDTB), *System Library*, 4-4
doubleword (.DD2CT), *System Library*, 4-1
octal to binary
doubleword (.OD2CT), *System Library*, 4-3
octal to binary ($COTB), *System Library*, 4-6
ASCII stream file
RMSCNV utility, *RMS-11 Utilities*, 4-3, 4-8
RMSIFL utility, *RMS-11 Utilities*, 3-1
.ASCIZ directive, *MACRO-11*, 5-21
changes current location counter, *MACRO-11*, 5-31
inserting special values with angle brackets
See .ASCII directive
summary, *MACRO-11*, 5-1
.ASCPP routine
converting UIC to binary, *I/O Operations*, 4-7
.ASECT directive, *MACRO-11*, 5-39
assigns attributes to current location counter, *MACRO-11*, 2-12
default characteristics, *MACRO-11*, 5-40
special case of .PSECT, *MACRO-11*, 5-39
summary, *MACRO-11*, 5-1
terminates local symbol block, *MACRO-11*, 2-10
ASG option, *Task Builder*, 12-8
ASG TKB option
LUN assignment, *I/O Drivers*, 1-4
.ASK directive, *Indirect*, 2-39
.ASKN directive, *Indirect*, 2-41
.ASKS directive, *Indirect*, 2-44
.ASLUN routine
assigning LUN, *I/O Operations*, 4-11, 4-16
ASN command
See also ASSIGN command
MCR
/ALL keyword, *System Management*, 8-18
VMR
definition, *System Management*, 5-9
examples, *System Management*, 5-10
formats, *System Management*, 5-9
keywords
/GBL, *System Management*, 5-9, 5-10
/SYSTEM, *System Management*, 5-9, 5-10
ASN command
VMR (cont'd.)
parameters, *System Management*, 5-9
ASR-33 teletypewriter, *I/O Drivers*, 2-4
ASR-35 teletypewriter, *I/O Drivers*, 2-4
Assembler directive
See Directive
Assembling the Executive and Drivers section, *System Generation*, 3-70 to 3-71
Assembly, *RMS-11 Macro*, 2-20
language, *Program Development*, 1-4 to 1-6
See also MACRO-11
listing
examining at a terminal, *Program Development*, 3-6
formatting, *Program Development*, 2-6
generating, *Program Development*, 3-4 to 3-5
page break, *Program Development*, 2-6
printing, *Program Development*, 3-8
spooling, *Program Development*, 3-8
table of contents, *Program Development*, 2-6
terminal format, *Program Development*, 2-6
ASSIGN/QUEUE command, *System Management*, 3-29
See also ASSIGN command
assigning batch queues, *System Management*, 3-13
assigning print queues, *System Management*, 3-9
ASSIGN/REDIRECT command, *System Management*, 9-9
See also ASSIGN command
format, *System Management*, 9-1
parameters, *System Management*, 9-2
redirecting CO, *System Management*, 9-1
Assign Channel directive, *Executive*, 5-12
ASSIGN command, *MCR*, 3-14; *DCL*, 5-15, 5-24 to 5-30, 9-4 to 9-5
and logical devices, *MCR*, 2-11
and pseudo devices, *MCR*, 2-10
ASSIGN/QUEUE, *DCL*, 9-5
ASSIGN/REDIRECT, *DCL*, 5-31 to 5-33, 9-5
ASSIGN/TASK, *DCL*, 7-42 to 7-43, 9-5
brief description, *MCR*, 1-5
examples, *MCR*, 3-22
formats, *MCR*, 3-18, 3-19, 3-21

ASSIGN command (cont'd.)
in logical name translation, *I/O Operations*, 4-9
keywords
/ALL, *MCR*, 3-21
/FINAL, *MCR*, 3-19
/GBL, *MCR*, 3-19, 3-21
/GR, *MCR*, 3-19, 3-20, 3-21
/LOGIN, *MCR*, 3-19, 3-20
/SYSTEM, *MCR*, 3-19, 3-21
/TERM, *MCR*, 3-19, 3-20, 3-21
LUN
assignment, *I/O Drivers*, 1-4
redirection, *I/O Drivers*, 1-3
VMR
See ASN command
Assign LUN directive, *Executive*, 5-17
ASSIGN command, *MCR*, 3-14
assigning LUN at run time, *MCR*, 2-9
Assignment
logical
description, *MCR*, 2-11
global, *MCR*, 2-11
group, *MCR*, 2-11
local, *MCR*, 2-11
login, *MCR*, 2-11
task, *MCR*, 2-11
logical device, *MCR*, 2-11, 3-14
logical name, *MCR*, 3-15, 3-53
global, *MCR*, 3-14
group, *MCR*, 3-14
local, *MCR*, 3-14
login, *MCR*, 3-14
Assignment statement, *MACRO-11*, 2-6
See also Direct assignment statement
double equal sign (==), *MACRO-11*, 2-6, 2-7
double equal sign colon (==:), *MACRO-11*, 2-7
equal sign (=), *MACRO-11*, 2-6, 2-7
equal sign colon (=:), *MACRO-11*, 2-7
requirements for, *MACRO-11*, 2-7
Assign table dump, *Crash Dump Analyzer*, 3-1, 3-15
logical device names, *Crash Dump Analyzer*, 3-15
physical device names, *Crash Dump Analyzer*, 3-15
/AS switch
DMP utility, *Utilities*, 5-3
AST, *Executive*, 2-5, 2-7; *I/O Drivers*, 1-9, 1-10 ; *Writing I/O Driver*, 1-15
AST (cont'd.)
blocking, *I/O Drivers*, 1-11
caused by CTRL/Z, *MCR*, 2-14
declared by Executive, *System Management*, 1-7
disabling recognition, *Executive*, 5-68
enabling recognition, *Executive*, 5-82
interrupting attached task, *MCR*, 2-16
interrupt routine, *I/O Drivers*, 1-10
IO.ATA function (TTDRV), *I/O Drivers*, 2-22
parity error, *System Management*, 1-7
processing, *I/O Drivers*, 1-11
queue, *I/O Drivers*, 1-11
recognition
disable, *I/O Drivers*, 1-11
enable, *I/O Drivers*, 1-11
service
exit routine, *I/O Drivers*, 1-11
termination, *I/O Drivers*, 1-24
service routine, *Executive*, 2-8; *I/O Operations*, 2-42
FORTRAN, *Executive*, 1-19
specifying, *Executive*, 5-236
terminating, *Executive*, 5-19
service routine for, *MCR*, 3-2
specifying
Floating Point Processor exception, *Executive*, 5-229
for CLI, *Executive*, 5-211
power recovery, *Executive*, 5-239
receive-by-reference, *Executive*, 5-263
receive data, *Executive*, 5-253
requested exit, *Executive*, 5-255
unsolicited input (TTDRV), *I/O Drivers*, 2-20
using event flag, *I/O Drivers*, 1-11
Ast2 parameter, *I/O Drivers*, 2-12
IO.ATA function (TTDRV), *I/O Drivers*, 2-24
ast addr parameter
device-specific (CRDRV), *I/O Drivers*, 9-3
Asterisk (*)
See also Wildcard character
EDI editor, *Utilities*, 7-8
in cross-reference table, *MACRO-11*, 7-15
multiplication operator, *MACRO-11*, 2-4
special character in MACRO–11, *MACRO-11*, 2-2
Asterisk (*)
EDI editor, *Program Development*, 2-9
PIP utility, *Program Development*, 3-9

Asterisk (*) (cont'd.)
use as wildcard character, *MCR*, 2-6
Asterisk separator (*), *Debugging*, 2-4
Ast parameter
general (TTDRV), *I/O Drivers*, 2-12
I/O completion, *I/O Drivers*, 1-36
IO.ATA function (TTDRV), *I/O Drivers*, 2-23
IO.ATT function, *I/O Drivers*, 1-27
IO.CCO function (TTDRV), *I/O Drivers*, 2-26
IO.DET function, *I/O Drivers*, 1-28
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.HNG function (TTDRV), *I/O Drivers*, 2-38
IO.KIL function, *I/O Drivers*, 1-30
IO.RAL function (TTDRV), *I/O Drivers*, 2-38
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-43
IO.RST function (TTDRV), *I/O Drivers*, 2-45
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-62
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
IO.WBT function (TTDRV), *I/O Drivers*, 2-51
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
IO.XCL function (XEDRV), *I/O Drivers*, 10-19
IO.XIN function (XEDRV), *I/O Drivers*, 10-20
IO.XOP function (XEDRV), *I/O Drivers*, 10-6
IO.XRC function (XEDRV), *I/O Drivers*, 10-16
IO.XSC function (XEDRV), *I/O Drivers*, 10-7
IO.XTL function (XEDRV), *I/O Drivers*, 10-21
Ast parameter (cont'd.)
IO.XTM function (XEDRV), *I/O Drivers*, 10-12
QIO$ basic syntax, *I/O Drivers*, 1-5, 1-9
SF.GMC function (TTDRV), *I/O Drivers*, 2-53
standard function (UNIBUS switch driver), *I/O Drivers*, 14-3
AST Service Exit directive, *Executive*, 5-19
ASTX$S directive, *Executive*, 5-19; *I/O Drivers*, 1-11
ASTX$S macro, *I/O Drivers*, 1-15, 1-24
$ASUMR routine, *Writing I/O Driver*, 7-9
calling from driver, *Writing I/O Driver*, 7-4
Asynchronous I/O
XEDRV, *I/O Drivers*, 10-24
Asynchronous operation, *RMS-11 User's Guide*, 8-2, 8-4, 8-7 to 8-8
I/O techniques, *RMS-11 User's Guide*, 2-17
indexed files, *RMS-11 User's Guide*, 7-8
relative files, *RMS-11 User's Guide*, 4-14
sequential files, *RMS-11 User's Guide*, 3-14
Asynchronous system trap
See AST
Asynchronous terminal line, *Utilities*, C-1
AT., *Indirect*, 2-2
/ATL, *Crash Dump Analyzer*, 2-3, 2-5
ATL command, *MCR*, 3-24
See ACTIVE TASK LIST command
secondary pool usage, *System Management*, 8-17
ATLNK.CMD
saving, *Task Builder*, 11-55
ATRG$ directive, *Executive*, 5-22
At sign (@), *Indirect*, 1-1, 2-1, 2-2
ODT, *Program Development*, 5-8
At sign (@)
indirect command file, *Task Builder*, 1-12
special character in MACRO–11, *MACRO-11*, 2-2
used in absolute addressing mode, *MACRO-11*, 4-6
used in autodecrement deferred mode, *MACRO-11*, 4-4
used in autoincrement deferred mode, *MACRO-11*, 4-3
used in index deferred mode, *MACRO-11*, 4-5
used in register deferred mode, *MACRO-11*, 4-3

At sign (@) (cont'd.)
used in relative deferred addressing mode, *MACRO-11*, 4-8
At sign command (@), *Debugging*, 2-5, 4-4; *XDT*, 2-11
Attach mode, *Indirect*, 2-53
Attach Region directive, *Executive*, 5-22
Attribute, *RMS-11 User's Guide*, 1-2, 1-18; *RMS-11 Intro*, 3-15
block spanning, *RMS-11 User's Guide*, 1-19
bucket size, *RMS-11 User's Guide*, 1-19
contiguity, *RMS-11 User's Guide*, 1-19
file allocation, *RMS-11 User's Guide*, 1-19
file organization, *RMS-11 User's Guide*, 1-18
file specification, *RMS-11 User's Guide*, 1-18
keys, *RMS-11 User's Guide*, 1-19
MRN, *RMS-11 User's Guide*, 1-19
placement control, *RMS-11 User's Guide*, 1-19
protection, *RMS-11 User's Guide*, 1-18
record format, *RMS-11 User's Guide*, 1-18
record-output handling, *RMS-11 User's Guide*, 1-19
record size, *RMS-11 User's Guide*, 1-18
RMSDES utility, *RMS-11 Utilities*, 2-29
ALLOCATION
area section, *RMS-11 Utilities*, 2-44
file section, *RMS-11 Utilities*, 2-31
BLOCK_SPAN, *RMS-11 Utilities*, 2-37
BUCKET_SIZE
area section, *RMS-11 Utilities*, 2-43, 2-45
file section, *RMS-11 Utilities*, 2-32
CARRIAGE_CONTROL, *RMS-11 Utilities*, 2-37
CHANGES, *RMS-11 Utilities*, 2-40
clearing, *RMS-11 Utilities*, 2-6, 2-22, 2-25
individual values, *RMS-11 Utilities*, 2-26
CLUSTER_SIZE, *RMS-11 Utilities*, 2-31
CONTIGUOUS
area section, *RMS-11 Utilities*, 2-46
file section, *RMS-11 Utilities*, 2-35
CONTROL_FIELD_SIZE, *RMS-11 Utilities*, 2-37
DATA_AREA, *RMS-11 Utilities*, 2-40
DATA_FILL, *RMS-11 Utilities*, 2-40
displaying, *RMS-11 Utilities*, 2-15, 2-26
Attribute
RMSDES utility
displaying (cont'd.)
individual values, *RMS-11 Utilities*, 2-26
sections, *RMS-11 Utilities*, 2-27
DUPLICATES, *RMS-11 Utilities*, 2-40, 2-42, 2-44
EXTENSION
area section, *RMS-11 Utilities*, 2-45
file section, *RMS-11 Utilities*, 2-32
FILE PLACEMENT
system section, *RMS-11 Utilities*, 2-30
FORMAT, *RMS-11 Utilities*, 2-36
INDEX_AREA, *RMS-11 Utilities*, 2-41
INDEX_FILL, *RMS-11 Utilities*, 2-41
informational, *RMS-11 Utilities*, 2-1, 2-17, 2-29
LEVEL1_INDEX_AREA, *RMS-11 Utilities*, 2-41
MAGTAPE_BLOCK_SIZE, *RMS-11 Utilities*, 2-34
MAX_RECORD_NUMBER, *RMS-11 Utilities*, 2-34
NAME
file section, *RMS-11 Utilities*, 2-31
key section, *RMS-11 Utilities*, 2-38
NULL_KEY, *RMS-11 Utilities*, 2-39
ORGANIZATION, *RMS-11 Utilities*, 2-31
OWNER, *RMS-11 Utilities*, 2-34
POSITION, *RMS-11 Utilities*, 2-46
PROTECTION, *RMS-11 Utilities*, 2-33
resetting, *RMS-11 Utilities*, 2-21
REWIND_MAGTAPE, *RMS-11 Utilities*, 2-34
RMS-11, *RMS-11 Utilities*, 2-1, 2-17, 2-29
SEG0_POSITION, *RMS-11 Utilities*, 2-42
SEGn_LENGTH, *RMS-11 Utilities*, 2-42
SEGn_POSITION, *RMS-11 Utilities*, 2-42
setting, *RMS-11 Utilities*, 2-13
from a data file, *RMS-11 Utilities*, 2-25
from a description file, *RMS-11 Utilities*, 2-24
individual values, *RMS-11 Utilities*, 2-21

Attribute
RMSDES utility (cont'd.)
setting sections, *RMS-11 Utilities*, 2-21
SIZE, *RMS-11 Utilities*, 2-36
SOURCE, *RMS-11 Utilities*, 2-30
SUPERSEDE, *RMS-11 Utilities*, 2-35
TARGET, *RMS-11 Utilities*, 2-30
TYPE, *RMS-11 Utilities*, 2-38
Attribute buffer
F11ACP
address, *I/O Operations*, H-9
Attribute list
F11ACP, *I/O Operations*, H-7
Attribute size, *I/O Operations*, H-8
Attribute type
F11ACP, *I/O Operations*, H-7
file characteristic, *I/O Operations*, H-7
file name, *I/O Operations*, H-8
file owner, *I/O Operations*, H-7
file protection, *I/O Operations*, H-7
file type, *I/O Operations*, H-8
placement control, *I/O Operations*, H-8
read file header, *I/O Operations*, H-8
record I/O area, *I/O Operations*, H-7
revision number, *I/O Operations*, H-8
statistics block, *I/O Operations*, H-8
version number, *I/O Operations*, H-8
Audit trail
See also SLP utility
/AU switch
SLP utility, *Utilities*, 13-15
Autobaud detection, *MCR*, 3-157
Autobaud speed detection
TTDRV, *I/O Drivers*, 2-84
Autocall
enabling for modem (TTDRV), *I/O Drivers*, 2-55
Autoconfigure, *System Generation*, 5-33; *System Management*, 4-1
definition, *System Generation*, 1-8
description, *System Generation*, 3-6
device suport, *System Generation*, D-1
hardware support, *System Generation*, 3-10
overriding, *System Generation*, 3-9, 3-19
remark, *System Generation*, 3-9
restriction, *System Generation*, 3-7, 3-12
sample output, *System Generation*, 3-7
SYSGEN question, *System Generation*, 3-6, 3-19
overriding, *System Generation*, 3-9
Autoload, *Task Builder*, 4-1
indicator, *Task Builder*, 4-2, 4-6
Autoload (cont'd.)
path loading, *Task Builder*, 4-4
specifying, *Task Builder*, 4-3
Autoload vector, *Task Builder*, 3-22, 3-25, 4-5 to 4-7, B-20 to B-21
I- and D-space task, *Task Builder*, 7-10
overlaid shared region, *Task Builder*, 5-14
AUTO module, *Task Builder*, 4-15, 4-16, 5-61
AUTO option
INI keyword /BAD, *MCR*, 3-85
AUTOT module, *Task Builder*, 4-16, 5-61
Auxiliary buffer
XEDRV
transmitting, *I/O Drivers*, 10-12
a variable, *Debugging*, 2-1; *XDT*, 2-10
AVERAGE.FTN source code, *Program Development*, 7-3
/AVO keyword
SET command, *MCR*, 3-158
SET command (VMR), *System Management*, 5-51

B

Backing up file, *RMS-11 User's Guide*, 1-10, 1-12
Backslash (\)
ODT, *Program Development*, 5-5
Backslash (\)
cannot take forward reference, *MACRO-11*, 6-8
cannot use with relative symbol, *MACRO-11*, 6-8
special character in MACRO–11, *MACRO-11*, 2-2
used to pass numeric argument as symbol, *MACRO-11*, 6-8
Backslash operator (\)
See also Operator
BACK SPACE key, *DCL*, 3-13; *Introduction*, 1-7
/BACKSPACE qualifier
START/PROCESSOR command, *System Management*, 3-37
BACKUP.ERR, *Error Logging*, 2-3
/BACKUP_SET qualifier
BRU utility, *Utilities*, 3-11
Backup and Restore Utility
See BACKUP command
See BRU utility
BACKUP command, *DCL*, 5-91 to 5-130, 9-5 to 9-7

BACKUP command (cont'd.)
backing up
Files–11 volume, *DCL*, 5-92
foreign volume, *DCL*, 5-92
description, *System Management*, 1-14
/INITIALIZE qualifier, *DCL*, 5-92
/MOUNTED qualifier, *DCL*, 5-92
restoring
Files–11 volume, *DCL*, 5-92
foreign volume, *DCL*, 5-92
Backup copy
generated system, *System Generation*, 4-4
Backup date file
RMSRST utility, *RMS-11 Utilities*, 7-8, 7-10
Backup file
error log, *Error Logging*, 1-4, 2-1, 2-12
ELI defaults, *Error Logging*, 2-3
BACKUP function
EDT editor, *Introduction*, 2-7
Backup operation
See also Online backup
/BACKUP switch
ELI, *Error Logging*, 2-12
Backus-Naur Form metalanguage, *System Management*, 18-8
Bad block, *DCL*, 5-11, 5-18 to 5-23, 5-68
See also RCT task
descriptor file, *MCR*, 3-86
detection, *System Management*, 13-3
handling of MSCP disks, *System Management*, 13-3
information, *Utilities*, 6-8
initializing, *MCR*, 3-85, 3-86
listing with IOX, *System Management*, 12-16
locating
BAD utility, *Utilities*, 2-1
FMT utility, *Utilities*, 9-1
VFY utility, *Utilities*, 14-6
notification of DUDRV, *System Management*, 13-4
processing, *MCR*, 3-85
BAD utility, *Utilities*, 2-7
BRU utility, *Utilities*, 3-29
removing from IOX test, *System Management*, 12-16
replacing, *System Management*, 13-1, 13-5
partial, *System Management*, 13-6
revectoring, *System Management*, 13-3, 13-6
Bad block (cont'd.)
specifying in IOX, *System Management*, 12-16
Bad Block Locator Utility
See BAD utility
Bad Block Replacement Control Task
See RCT task
BADBLOCKS command
IOX, *System Management*, 12-16
displaying bad blocks, *System Management*, 12-16
examples, *System Management*, 12-16
specifying individual blocks, *System Management*, 12-16
specifying range of blocks, *System Management*, 12-16
use, *System Management*, 12-16
/BADBLOCKS qualifier
INITIALIZE command
Shadow Recording preparation, *System Management*, 16-2
Badge Reader hint
TTDRV, *I/O Drivers*, 2-84
/BAD keyword
INI command
Shadow Recording preparation, *System Management*, 16-2
INITVOLUME command, *MCR*, 3-85
options, *MCR*, 3-85
AUTO, *MCR*, 3-85
MAN, *MCR*, 3-85
NOAUTO, *MCR*, 3-85
OVR, *MCR*, 3-86
/BAD qualifier
BRU utility, *Utilities*, 3-12, 3-29
option
AUTOMATIC, *Utilities*, 3-12
MANUAL, *Utilities*, 3-12
OVERRIDE, *Utilities*, 3-12
options, *Utilities*, 3-29
Bad sector
track (disk driver), *I/O Drivers*, 4-11
/BAD switch
DSC utility, *Utilities*, 6-8
FMT utility, *Utilities*, 9-3
options, *Utilities*, 9-3
BAD utility
bad block descriptor entry, *Utilities*, 2-8
bad block processing, *Utilities*, 2-7
command line, *Utilities*, 2-1, A-1
device verification, *Utilities*, 2-7

BAD utility (cont'd.)
indirect command file, *Utilities*, 2-6
INI command, *Utilities*, 2-8
interaction with RCT, *System Management*, 13-1
media failures and, *System Management*, 11-2
messages, *Utilities*, 2-9
error, *Utilities*, 2-10
informational, *Utilities*, 2-10
programming consideration, *Utilities*, 2-9
running with EXECUTE command
IOX, *System Management*, 12-27
switches
/ALO, *Utilities*, 2-2
/LI, *Utilities*, 2-4
/LIST, *System Management*, 16-2
/MAN, *Utilities*, 2-4
/OVR, *Utilities*, 2-5
/PAT, *Utilities*, 2-5
/RETRY, *System Management*, 13-1; *Utilities*, 2-5
/UPD, *Utilities*, 2-5
/BA function
QUE /SP command, *System Management*, 3-20
interactive use, *System Management*, 3-11
:BA option
QUE /STA command, *System Management*, 3-37
Baseline system
definition, *System Generation*, 1-8
description, *System Generation*, 3-12
device configuration, *System Generation*, 3-13
terminal configuration, *System Generation*, 3-13
Base priority for nonprivileged tasks, *System Management*, 8-10
/BASIC qualifier, *Task Builder*, 11-11
<BASLIN> symbol, *Indirect*, 2-10
/BA switch
DMP utility, *Utilities*, 5-3
BATCH.TXT file
description, *System Management*, 1-11
/BATCH_PROCESSOR processor type, *System Management*, 3-20
/BATCH_PROCESSOR qualifier
INITIALIZE command
interactive use, *System Management*, 3-11
/BATCH_QUEUE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-20
Batch file
example, *Batch and Queue*, 3-2
Batch job
contents of, *Batch and Queue*, 3-1
defined, *Batch and Queue*, 3-1
queuing, *Batch and Queue*, 3-15
stopping, *DCL*, 4-92
Batch job information file
See BATCH.TXT file
Batch log, *Introduction*, 4-7
Batch log file, *Batch and Queue*, 3-19
example, *Batch and Queue*, 3-21, 3-22
line identifiers
DATA, *Batch and Queue*, 3-20
SKIP, *Batch and Queue*, 3-20
TERM, *Batch and Queue*, 3-20
Batch processing, *System Management*, 3-1; *DCL*, 1-23; *Introduction*, 4-1, 4-5 to 4-7
Batch processor
initializing, *System Management*, 3-11
installation, *System Management*, 3-10
installing, *System Management*, 3-11
SYSGEN question, *System Generation*, 3-28
Batch processor prototype task
See BPR
/BATCH qualifier
SHOW QUEUE command, *Batch and Queue*, 2-14
Batch queue, *System Management*, 3-17
assigning, *System Management*, 3-13
initializing, *System Management*, 3-12
Batch-specific command
list, *Batch and Queue*, 3-4
Baud rate
automatic detection of, *MCR*, 3-157
list (TTDRV), *I/O Drivers*, 2-60
receive, *MCR*, 3-184
remote terminal
setting, *MCR*, 3-181; *System Management*, 5-63
setting, *MCR*, 3-184
split
modem support (TTDRV), *I/O Drivers*, 2-84
transmit, *MCR*, 3-184
valid, *MCR*, 3-184
BC, *System Management*, 18-30

BCD print radix
CFL, *Error Logging*, 5-5
B command, *Debugging*, 2-7, 3-1, 3-2; *XDT*, 2-12
ODT, *Program Development*, 5-6
B conditional assembly test, *MACRO-11*, 5-45
only comma valid as separator, *MACRO-11*, 5-49
BCT, *System Management*, 18-31
BDB pool, *RMS-11 Macro*, 2-7
/BD switch
RMSRST utility, *RMS-11 Utilities*, 7-8, 7-10
Begin command
EDI editor, *Program Development*, 2-13; *Utilities*, 7-18
.BEGIN directive, *Indirect*, 2-4, 2-46
Begin-End block, *Indirect*, 2-4
beginning, *Indirect*, 2-46
ending, *Indirect*, 2-58
Begin-End block processing
terminating, *Indirect*, 2-60
BEGIN-END statement
CFL, *Error Logging*, 5-35
Bell, *DCL*, 3-22
B error
odd current location counter, *MACRO-11*, 5-31
BEX argument
for .LIST/.NLIST, *MACRO-11*, 5-7
/BF switch
SLP utility, *Utilities*, 13-15
Bias value, *Debugging*, 2-3
Trace program, *Debugging*, 8-3
BIN argument
for .LIST/.NLIST, *MACRO-11*, 5-7
Binary conversion
binary byte to octal ($CBTMG), *System Library*, 5-10
binary date to decimal ($CBDAT), *System Library*, 5-2
binary to signed decimal ($CBDSG), *System Library*, 5-5
binary to signed octal ($CBOSG), *System Library*, 5-9
binary to unsigned decimal ($CBDMG), *System Library*, 5-3
binary to unsigned octal ($CBOMG), *System Library*, 5-8
double-precision binary to decimal ($CDDMG), *System Library*, 5-6
Binary conversion (cont'd.)
general purpose binary to ASCII ($CBTA), *System Library*, 5-12
Binary key
2-byte unsigned, *RMS-11 User's Guide*, 6-5
4-byte unsigned, *RMS-11 User's Guide*, 6-5
Binary machine code, *Introduction*, 5-5
Binary operator
ampersand (&), *MACRO-11*, 2-4
asterisk (*), *MACRO-11*, 2-4
exclamation point (!), *MACRO-11*, 2-4
minus sign (-), *MACRO-11*, 2-4
plus sign (+), *MACRO-11*, 2-4
priority, *MACRO-11*, 2-4
slash (/), *MACRO-11*, 2-4
table of, *MACRO-11*, 2-4
use, *MACRO-11*, 2-4
used in expressions, *MACRO-11*, 2-14
Binary output file size switch
See /MEMSIZ
BINARY print radix
CFL, *Error Logging*, 5-5
Binary prompt
TTDRV, *I/O Drivers*, 2-14, 2-29, 2-43
Binary to ASCII conversion
UIC, *I/O Operations*, 4-8
Bit, *RMS-11 Intro*, 2-1
22-bit addressing
LADRV, *I/O Drivers*, 12-31, 12-32
Bit Clear
See BC
Bit Clear Test
See BCT
Bit density, *MCR*, 3-87, 3-112
diskette, *MCR*, 3-87
magnetic tape, *MCR*, 3-87
Bit extraction unary suffix operator
CFL expression, *Error Logging*, 5-11
Bit map
use, *System Management*, 1-7
Bit Set
See BS
Bit Set Test
See BST
Bit-to-text translation
device-level module, *Error Logging*, 4-7
user-written module, *Error Logging*, 4-27, 4-33
Bitwise AND binary operator
CFL expression, *Error Logging*, 5-14
Bitwise complement unary operator
CFL expression, *Error Logging*, 5-15

Bitwise operator
CFL expression, *Error Logging*, 5-14, 5-15, 5-16
Bitwise OR binary operator
CFL expression, *Error Logging*, 5-14
Bitwise XOR binary operator
CFL expression, *Error Logging*, 5-15
/BL, *Crash Dump Analyzer*, 2-8
Blank
ignoring in command line, *I/O Operations*, 7-8
Blank media requirement, *System Generation*, 2-2
BLDLAINIT.CMD file
pregenerated kit, *System Generation*, 5-49
. BLK. default program section name, *MACRO-11*, 5-36
.BLKB directive, *MACRO-11*, 5-31
changes current location counter, *MACRO-11*, 5-30
preferred way to reserve space, *MACRO-11*, 2-13
summary, *MACRO-11*, 5-1
$BLKC1 routine, *Writing I/O Driver*, 7-10
$BLKC2 routine, *Writing I/O Driver*, 1-17, 7-10
$BLKCK routine, *Writing I/O Driver*, 1-17, 7-10
BLK command
See BLOCK command
Blkh parameter
standard function (disk driver), *I/O Drivers*, 4-7
/BLKMOD keyword
SET command, *MCR*, 3-158
SET command (VMR), *System Management*, 5-52
/BLKS keyword
ALLOCATE CHECKPOINT SPACE command, *MCR*, 3-6
.BLKW directive, *MACRO-11*, 5-31
preferred way to reserve space, *MACRO-11*, 2-13
summary, *MACRO-11*, 5-1
Block, *RMS-11 User's Guide*, 1-16; *RMS-11 Intro*, 2-3
See also Control block
access mode, *RMS-11 User's Guide*, 1-20, 3-6; *RMS-11 Intro*, 3-11 to 3-12, 4-7
See also Shared access
remote, *RMS-11 User's Guide*, B-3
Block
access mode (cont'd.)
sequential, *RMS-11 Intro*, 3-12
VBN, *RMS-11 Intro*, 3-12
allocating, *Utilities*, 14-7
bad
See Bad block
context, *RMS-11 Intro*, 4-7
readable block, *RMS-11 Intro*, 4-7
writeable block, *RMS-11 Intro*, 4-7
disk
changing default number allocated, *System Management*, 1-8
extension
overriding default, *System Management*, 1-8
locking, *I/O Operations*, 2-16, 2-43
enable, *I/O Operations*, 2-15
F11ACP, *I/O Operations*, H-10, H-12
logical, *RMS-11 Intro*, 2-3; *I/O Operations*, 5-2
operations, *RMS-11 Intro*, 4-7
processing, *RMS-11 Intro*, 4-1, 4-7
reading
See READ operation
recovering lost, *Utilities*, 14-6
size (tape driver), *I/O Drivers*, 6-14
nolabel tape, *I/O Drivers*, 6-17
spanning, *RMS-11 User's Guide*, 1-16, 1-19, 3-1
variable-length records, *RMS-11 User's Guide*, 2-16
unlocking, *I/O Operations*, 2-44
verifying, *Utilities*, 14-6
virtual, *RMS-11 Intro*, 2-3; *I/O Operations*, 5-2
writing
See WRITE operation
BLOCK_SPAN
RMSDES utility, *RMS-11 Utilities*, 2-37
Block access
initialization, *I/O Operations*, 2-11
READ$ macro, *I/O Operations*, 2-11
WRITE$ macro, *I/O Operations*, 2-11
Block boundary, *I/O Operations*, 2-6
crossing
record attribute, *I/O Operations*, 3-9
fixed-length record
PUT$ macro, *I/O Operations*, 3-27
FSR block buffer, *I/O Operations*, 3-26
RMSDEF utility, *RMS-11 Utilities*, A-9

Block boundary (cont'd.)
variable-length record
PUT$ macro, *I/O Operations*, 3-27
Block buffer
initializing FDB, *I/O Operations*, 2-17
pool space
FSR, *I/O Operations*, 2-36
BLOCK command, *MCR*, 3-29
brief description, *MCR*, 1-6
examples, *MCR*, 3-29
format, *MCR*, 3-29
keyword
/TERM, *MCR*, 3-29
parameters, *MCR*, 3-29
Block I/O, *I/O Operations*, 2-9, 2-10
block size, *I/O Operations*, 2-12
buffer, *I/O Operations*, 2-12
completion event flag, *I/O Operations*, 2-12
I/O status block, *I/O Operations*, 2-12
operation, *I/O Operations*, 1-8
FD.RWM parameter, *I/O Operations*, 3-6
request
record attribute, *I/O Operations*, 3-9
Block mode
EDI editor, *Program Development*, 1-4
RMSCNV utility, *RMS-11 Utilities*, 4-1
Block number switch
See /BL switch
Block On/Off command
EDI editor, *Utilities*, 7-18
Block operation, *RMS-11 Macro*, 4-14
Block-operation macro, *RMS-11 Macro*, C-3
$READ, *RMS-11 Macro*, 5-98
$WRITE, *RMS-11 Macro*, 5-127
Block processing, *RMS-11 Macro*, 4-11
Block-replacement operation
subpacket information, *Error Logging*, 4-66
Block size
block I/O, *I/O Operations*, 2-12
override, *I/O Operations*, 3-10
resetting
CLOSE$ macro, *I/O Operations*, 2-18
Block stream, *RMS-11 Macro*, 4-14
Block stream operation, *RMS-11 Macro*, 4-12
Block tape
override size, *I/O Operations*, 2-18
/BL subswitch
PIP utility, *Utilities*, 12-37
/BL switch
CMP utility, *Utilities*, 4-3
/BL switch (cont'd.)
DMP utility, *Utilities*, 5-4
DSC utility, *Utilities*, 6-11
FLX utility, *Utilities*, 8-7
RMSCNV utility, *RMS-11 Utilities*, 4-8
$BLXIO routine, *Writing I/O Driver*, 7-11
$BMSET Executive routine, *Error Logging*, 4-21
BOO command
See BOOT command
Boot block
writing, *System Generation*, 4-3
BOOT command, *MCR*, 2-7, 3-30
brief description, *MCR*, 1-5
example, *MCR*, 3-31
format, *MCR*, 3-30
parameters, *MCR*, 3-30
/BOOT keyword
SAV command (VMR), *System Management*, 5-45
Bootstrapping
system, *MCR*, 3-30, 3-31
unmapped, *MCR*, 3-31
unsaved, *MCR*, 3-31
^B operator
for temporary binary radix, *MACRO-11*, 5-26
/BOT keyword
SET command (VMR), *System Management*, 5-52 to 5-53
Bottom command
EDI editor, *Utilities*, 7-19
BOTTOM function
EDT editor, *Introduction*, 2-7
BPI
See Bit density
BPR, *System Management*, 3-2
error messages, *System Management*, 3-51 to 3-53
BPR.TSK
installing, *System Management*, 3-11
/BP switch
RMSDPS utility, *RMS-11 Utilities*, 5-3 to 5-4
BPT trap instruction, *XDT*, 1-8
Branch
location, *Debugging*, 2-5; *XDT*, 2-11
offset, *Debugging*, 4-5, 7-2
calculating, *Debugging*, 4-5
Branch instruction, *MACRO-11*, 4-8
Breakpoint, *Debugging*, 3-1, 3-3; *XDT*, 1-9, 2-14

Breakpoint (cont'd.)
address register, *Debugging*, 2-6, 3-2, 5-4; *XDT*, 2-12
clearing, *Debugging*, 3-2
inserting with OPEN command, *XDT*, 1-9
inserting with ZAP utility, *XDT*, 1-11
instruction register, *Debugging*, 2-6, 5-4; *XDT*, 2-12
proceed count, *Debugging*, 3-4
proceed count register, *Debugging*, 2-6, 5-4; *XDT*, 2-12
register, *Program Development*, 5-6
removing, *Debugging*, 2-7, 3-2; *XDT*, 2-12
setting, *Debugging*, 2-7, 3-1
setting in a driver, *Writing I/O Driver*, 6-5
setting in a task, *Program Development*, 5-6
setting with XDT, *XDT*, 2-2
BREAKPOINT TO EXECUTIVE DEBUGGING TOOL command, *MCR*, 3-32
brief description, *MCR*, 1-7
example, *MCR*, 3-32
format, *MCR*, 3-32
Breakthrough write
TTDRV, *I/O Drivers*, 2-18, 2-20
nonprivileged task, *I/O Drivers*, 2-20
privileged task, *I/O Drivers*, 2-20
B register, *Debugging*, 2-6, 5-4; *XDT*, 2-12
Brief format report, *Error Logging*, 1-4
processing, *Error Logging*, 4-10, 4-17
RPT, *Error Logging*, 3-13
/BRIEF qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-13
See also /FORMAT switch
SHOW QUEUE command, *Batch and Queue*, 2-14
BRK command, *XDT*, 1-9
See also BREAKPOINT TO EXECUTIVE DEBUGGING TOOL command
BROADCAST command, *MCR*, 3-33; *DCL*, 3-32 to 3-35, 9-7; *Introduction*, 3-9
and indirect command file, *MCR*, 3-33
brief description, *MCR*, 1-7
examples, *MCR*, 3-34
formats, *MCR*, 3-33
message formats, *MCR*, 3-34
option, *MCR*, 3-34
BRO command
See BROADCAST command
/BRO keyword
SET command, *MCR*, 3-159
SET command (VMR), *System Management*, 5-53
/BR subswitch
PIP utility, *Utilities*, 12-19
/BR switch
QUE /LI command, *Batch and Queue*, 2-14
BRUSYS system, *System Generation*, 2-6
BRU utility, *MCR*, 3-94; *System Management*, 1-14
See also BACKUP command
bad block processing, *Utilities*, 3-29
command line, *Utilities*, A-2
format, *Utilities*, 3-6
parameters, *Utilities*, 3-6
copying a saved system, *System Management*, 5-20
copying system images, *Utilities*, 3-30
data transfer, *Utilities*, 3-30
device information, *Utilities*, 3-2
device support, *Utilities*, 3-5
disk initialization, *Utilities*, 3-18
disk initialization values, *System Generation*, 2-10
examples, *Utilities*, 3-32
file creation date, *Utilities*, 3-31
file revision date, *Utilities*, 3-31
file specification
wildcard character, *Utilities*, 3-7, 3-9
file treatment, *Utilities*, 3-31
file header, *Utilities*, 3-31
file synonym, *Utilities*, 3-31
lost file, *Utilities*, 3-31
messages, *Utilities*, 3-39
fatal, *Utilities*, 3-51
informational, *Utilities*, 3-39
warning, *Utilities*, 3-40
qualifiers
/APPEND, *Utilities*, 3-10
/BACKUP_SET, *Utilities*, 3-11
/BAD, *Utilities*, 3-12
/BUFFERS, *Utilities*, 3-12
/COMPARE, *Utilities*, 3-13
/CREATED, *Utilities*, 3-13
/DENSITY, *Utilities*, 3-14
/DIRECTORY, *Utilities*, 3-14
/DISPLAY, *Utilities*, 3-16
/ERRORS, *Utilities*, 3-16
/EXCLUDE, *Utilities*, 3-16
/EXTEND, *Utilities*, 3-16

BRU utility
qualifiers (cont'd.)
/HEADERS, *System Generation*, 2-10; *Utilities*, 3-16
/IDENTIFICATION, *Utilities*, 3-17
/IMAGE, *Utilities*, 3-17
/INITIALIZE, *Utilities*, 3-18
/INVOLUME, *Utilities*, 3-18
/LENGTH, *Utilities*, 3-19
/MAXIMUM, *System Generation*, 2-10; *Utilities*, 3-19
/MOUNTED, *Utilities*, 3-20
/NEW_VERSION, *Utilities*, 3-20
/NOINITIALIZE, *Utilities*, 3-21
/NOPRESERVE, *Utilities*, 3-21
/NOSUPERSEDE, *Utilities*, 3-21
/OUTVOLUME, *Utilities*, 3-21
/POSITION, *Utilities*, 3-22
/PROTECTION, *Utilities*, 3-22
/REVISED, *Utilities*, 3-23
/REWIND, *Utilities*, 3-24
/SUPERSEDE, *Utilities*, 3-24
/TAPE_LABEL, *Utilities*, 3-24
/UFD, *Utilities*, 3-24
/VERIFY, *Utilities*, 3-25
/WINDOWS, *Utilities*, 3-25
standalone, *Utilities*, 3-27
booting, *Utilities*, 3-28
locating, *Utilities*, 3-28
tasks, *Utilities*, 3-27
transporting system image, *MCR*, 3-30, 3-147
BS, *System Management*, 18-30
/BS keyword
MOUNT command, *MCR*, 3-119
/BS switch
FLX utility, *Utilities*, 8-7
PIP utility, *Utilities*, 12-9
BST, *System Management*, 18-31
Bucket, *RMS-11 Intro*, 4-2
continuation, *RMS-11 User's Guide*, 5-5
fill number, *RMS-11 Intro*, 4-2
populating indexed files, *RMS-11 User's Guide*, 6-28
high-key value, *RMS-11 User's Guide*, 5-5 to 5-6
I/O units, *RMS-11 User's Guide*, 1-16
index, *RMS-11 User's Guide*, 5-6
locking
and shared access, *RMS-11 User's Guide*, 2-8
Bucket
locking (cont'd.)
FIND operation, *RMS-11 User's Guide*, 2-8
GET operation, *RMS-11 User's Guide*, 2-8
relative files, *RMS-11 User's Guide*, 4-1
RMSCNV utility, *RMS-11 Utilities*, 4-10
BUCKET_SIZE
RMSDES utility
area section, *RMS-11 Utilities*, 2-43, 2-45
file section, *RMS-11 Utilities*, 2-32
Bucket format
indexed files, *RMS-11 User's Guide*, 5-2
Bucket size
calculation
alternate indexes, *RMS-11 User's Guide*, 6-19
primary index, *RMS-11 User's Guide*, 6-16
indexed files, *RMS-11 User's Guide*, 6-15
relative files, *RMS-11 User's Guide*, 4-2
RMSDEF utility, *RMS-11 Utilities*, A-15
Bucket splitting, *RMS-11 User's Guide*, 5-11
RRV, *RMS-11 User's Guide*, 5-12
Buf0 parameter
SETIBF: subroutine
K-series, *I/O Drivers*, 13-26
LADRV, *I/O Drivers*, 12-21
Bufadd parameter
device-specific function
receiving (LRDRV), *I/O Drivers*, 11-9
Buffer
attribute
address, *I/O Operations*, H-9
cache, *RMS-11 User's Guide*, 4-15
count
multiple, *I/O Operations*, 2-18
diagnostic (XEDRV), *I/O Drivers*, 10-22
format
declaring size, *Task Builder*, 12-16
full escape sequence (TTDRV), *I/O Drivers*, 2-76
I/O, *RMS-11 User's Guide*, 1-14
size, *RMS-11 User's Guide*, 2-5
intermediate (TTDRV), *I/O Drivers*, 2-81
item list 1 structure (TTDRV), *I/O Drivers*, 2-32
item list 2 structure
IO.EIO function (TTDRV), *I/O Drivers*, 2-34

Buffer (cont'd.)
load microcode
IO.LOD function (LADRV), *I/O Drivers*, 12-26
management
call RLSBUF (LADRV), *I/O Drivers*, 12-29
device queue (LADRV), *I/O Drivers*, 12-29
input sweep (LADRV), *I/O Drivers*, 12-29
K-series, *I/O Drivers*, 13-29, 13-30
LADRV, *I/O Drivers*, 12-28, 12-29
output sweep (LADRV), *I/O Drivers*, 12-29
overrun (LADRV), *I/O Drivers*, 12-29
task queue (LADRV), *I/O Drivers*, 12-29
multiple, *RMS-11 User's Guide*, 2-18, 3-14, 4-15; *I/O Operations*, 2-18
count, *I/O Operations*, 3-10
type, *I/O Operations*, 2-18
pool space
FSR, *I/O Operations*, 2-36
protocol/address pair (XEDRV), *I/O Drivers*, 10-9
read
protocol type (XEDRV), *I/O Drivers*, 10-17
reading
destination address (XEDRV), *I/O Drivers*, 10-18
Ethernet address (XEDRV), *I/O Drivers*, 10-16
protocol type (XEDRV), *I/O Drivers*, 10-17
received character (TTDRV), *I/O Drivers*, 2-79
record
declaring size, *Task Builder*, 12-24
removing from device queue (K-series), *I/O Drivers*, 13-24
return buffer number
K-series, *I/O Drivers*, 13-21
set
multicast address (XEDRV), *I/O Drivers*, 10-10
protocol type (XEDRV), *I/O Drivers*, 10-14
set next
K-series, *I/O Drivers*, 13-21

Buffer (cont'd.)
setting
characteristics (XEDRV), *I/O Drivers*, 10-8
destination address (XEDRV), *I/O Drivers*, 10-12
size
maximum, *I/O Drivers*, 10-24
minimum, *I/O Drivers*, 10-24
remote line (TTDRV), *I/O Drivers*, 2-84
special user
sample of driver handling, *Writing I/O Driver*, 8-15, 8-30
specifying number, *I/O Operations*, 2-19
task
checkpointing (TTDRV), *I/O Drivers*, 2-79
task record, *I/O Operations*, 3-20
locate mode, *I/O Operations*, 3-26
PUT$ macro, *I/O Operations*, 3-26
text, *Program Development*, 1-4
type-ahead (TTDRV), *I/O Drivers*, 2-79
user, *RMS-11 User's Guide*, 1-14
Buffer auxiliary characteristic
zero size, *I/O Drivers*, 10-24
Buffer boundary
locate mode, *I/O Operations*, 3-22
Buffer count
default, *I/O Operations*, 2-19
Buffer descriptor
task, *I/O Operations*, 3-10
Buffered I/O, *Writing I/O Driver*, 1-16
Buffer flush routine, *I/O Operations*, 4-28
Buffer FSR block
locate mode, *I/O Operations*, 3-21
space allocation, *I/O Operations*, 2-19
Buffering
big, *I/O Operations*, 1-12
multiple
performance, *I/O Operations*, 1-12
record I/O, *I/O Operations*, 1-11
Buffer pool, *RMS-11 Macro*, 3-5
private (TTDRV), *I/O Drivers*, 2-80
BUFFERSIZE command
IOX, *System Management*, 12-18
Command mode, *System Management*, 12-18
initial default, *System Management*, 12-18

BUFFERSIZE command
IOX (cont'd.)
Interactive mode
restriction, *System Management*, 12-10
random data pattern, *System Management*, 12-18
restriction
DECtapes, *System Management*, 12-18
FILES11 disk testing, *System Management*, 12-18
SELECT command line, *System Management*, 12-18
VERIFY command line, *System Management*, 12-18
/BUFFERSIZE keyword
SET command
messages to CO, *System Management*, 9-4
Buffer space
PARAMETERLIST display statistics
IOX, *System Management*, 12-36
/BUFFERS qualifier
BRU utility, *Utilities*, 3-12
/BUF keyword
SET command, *MCR*, 3-159
SET command (VMR), *System Management*, 5-53
Buf parameter
GLUN$ macro, *I/O Drivers*, 1-22
Bufptr parameter
IO.STA function (LADRV), *I/O Drivers*, 12-27
Bugcheck facility, *Crash Dump Analyzer*, 1-4; *XDT*, 2-5
BUILD command, *System Management*, 4-10
example, *System Management*, 4-10
format, *System Management*, 4-10
Build command file
See INSBLD.CMD file
Building tasks, *RMS-11 User's Guide*, 1-12
See also Task Builder
Building the Executive and Drivers section, *System Generation*, 3-72 to 3-73
Building the Privileged Task section, *System Generation*, 3-74 to 3-75
Bus run
naming convention for, *System Management*, 4-19
Bus run (cont'd.)
switched
disconnecting from processor, *System Management*, 4-32
linking, *System Management*, 4-19
modifying connection to processor, *System Management*, 4-31
Bus switch, *Writing I/O Driver*, 1-18
BYE command, *MCR*, 3-36
brief description, *MCR*, 1-7
examples, *MCR*, 3-37
format, *MCR*, 3-37
keyword
/HOLD, *MCR*, 3-36
/BY switch
DMP utility, *Utilities*, 5-4
.BYTE directive, *MACRO-11*, 5-17
changes current location counter, *MACRO-11*, 5-30
example using concatenated macro argument, *MACRO-11*, 6-12
summary, *MACRO-11*, 5-1
Byte location
displaying, *Debugging*, 4-2, 4-4
opening, *Debugging*, 4-2, 4-4
Byte mode
changing to word mode, *Debugging*, 4-3
operator
ASCII, *Debugging*, 2-6; *XDT*, 2-12
octal, *Debugging*, 2-7, 4-2; *XDT*, 2-12
BYTE numeric data type
CFL, *Error Logging*, 5-5
BYTE value
equivalent string, *Error Logging*, 5-4

C

C.CHRL field
XEDRV
destination address, *I/O Drivers*, 10-14
multicast address, *I/O Drivers*, 10-11
protocol/address buffer, *I/O Drivers*, 10-10
reading
destination address, *I/O Drivers*, 10-18
Ethernet address, *I/O Drivers*, 10-17
protocol type, *I/O Drivers*, 10-17
set characteristics buffer, *I/O Drivers*, 10-8

C.DATI field
XEDRV
destination address, *I/O Drivers*, 10-14
multicast address, *I/O Drivers*, 10-11
protocol/address buffer, *I/O Drivers*, 10-10
protocol type, *I/O Drivers*, 10-14
reading
destination address, *I/O Drivers*, 10-18
Ethernet address, *I/O Drivers*, 10-17
protocol type, *I/O Drivers*, 10-17
set characteristics buffer, *I/O Drivers*, 10-8
C.DATO field
XEDRV
destination address, *I/O Drivers*, 10-14
multicast address, *I/O Drivers*, 10-11
protocol/address buffer, *I/O Drivers*, 10-10
protocol type, *I/O Drivers*, 10-14
reading
Ethernet address, *I/O Drivers*, 10-17
protocol type, *I/O Drivers*, 10-17
set characteristics buffer, *I/O Drivers*, 10-8
C.STAT field
XEDRV
destination address, *I/O Drivers*, 10-14
multicast address, *I/O Drivers*, 10-11
protocol/address buffer, *I/O Drivers*, 10-10
protocol type, *I/O Drivers*, 10-14
reading
destination address, *I/O Drivers*, 10-18
Ethernet address, *I/O Drivers*, 10-17
protocol type, *I/O Drivers*, 10-17
set characteristics buffer, *I/O Drivers*, 10-8
C.TYP field
XEDRV
multicast address, *I/O Drivers*, 10-11
protocol/address buffer, *I/O Drivers*, 10-10
protocol type, *I/O Drivers*, 10-14
reading
destination address, *I/O Drivers*, 10-18
C.TYP field
XEDRV
reading (cont'd.)
Ethernet address, *I/O Drivers*, 10-17
protocol type, *I/O Drivers*, 10-17
set characteristics buffer, *I/O Drivers*, 10-8
setting destination address, *I/O Drivers*, 10-14
$C5TA (Radix-50 to ASCII), *System Library*, 5-13
/CACHE, *Crash Dump Analyzer*, 2-4, 2-5
Cache, *RMS-11 User's Guide*, 4-15
definition, *System Management*, 15-1
indexed files, *RMS-11 User's Guide*, 7-9
Cache data
See Data caching
Cache dump, *Crash Dump Analyzer*, 3-44
/CACHE keyword
MOUNT command, *MCR*, 3-111
CREATE option, *MCR*, 3-111
[NO]DEFER_WRITES option, *MCR*, 3-111
[NO]DIRECTORY option, *MCR*, 3-111
[NO]LOGICAL option, *MCR*, 3-111
[NO]OVERLAY option, *MCR*, 3-112
[NO]READ_AHEAD option, *MCR*, 3-112
[NO]VIRTUAL option, *MCR*, 3-112
REGION option, *MCR*, 3-111
SET command, *MCR*, 3-159
CREATE option, *MCR*, 3-159
[NO]DEFER_WRITES option, *MCR*, 3-160
[NO]DIRECTORY option, *MCR*, 3-160
[NO]LOGICAL option, *MCR*, 3-160
[NO]OVERLAY option, *MCR*, 3-160
[NO]READ_AHEAD option, *MCR*, 3-160
[NO]VIRTUAL option, *MCR*, 3-160
REGION option, *MCR*, 3-159
Cache memory, *Crash Dump Analyzer*, 3-44
Cache memory switch
See /CACHE
/CACHE qualifier
options, *System Management*, 15-2
use with MOUNT command, *System Management*, 15-2
Cache region
See Disk data caching

Cache region display
RMD
detailed statistics, *System Management*, 7-21
altering from MCR command line, *System Management*, 7-24
altering from setup page, *System Management*, 7-23
contents, *System Management*, 7-22
example, *System Management*, 7-21
general statistics, *System Management*, 7-19
altering from MCR command line, *System Management*, 7-21
altering from setup page, *System Management*, 7-21
contents, *System Management*, 7-20, 15-9
example, *System Management*, 7-19
RATE command, *System Management*, 7-21
REGION command, *System Management*, 7-21
CALDEV Executive routine, *Error Logging*, 4-26
Call
operation routine
arguments in memory, *RMS-11 Macro*, 2-15
macro argument, *RMS-11 Macro*, 2-13, 2-14
CALL ABORT, *Executive*, 5-10
CALL ACHN, *Executive*, 5-12
CALL ALTPRI, *Executive*, 5-15
CALL ASNLUN, *Executive*, 5-17
CALL ATRG, *Executive*, 5-22
CALL CANALL, *Executive*, 5-62
CALL CANMT, *Executive*, 5-40
CALL CLREF, *Executive*, 5-35
CALL CNCT, *Executive*, 5-42
CALL CNCTN, *Executive*, 5-42
CALL CPCR, *Executive*, 5-45
CALL CRAW, *Executive*, 5-47
CALL CRELOG, *Executive*, 5-36
CALL CRELON, *Executive*, 5-36
CALL CRGF, *Executive*, 5-51
CALL CRRG, *Executive*, 5-53
CALL CRVT, *Executive*, 5-59
CALL DECLAR, *Executive*, 5-64
CALL DELLOG, *Executive*, 5-65
CALL DELLON, *Executive*, 5-65
CALL DISCKP, *Executive*, 5-70
CALL DSASTR, *Executive*, 5-68
CALL DTRG, *Executive*, 5-72
CALL ELAW, *Executive*, 5-74
CALL ELGF, *Executive*, 5-76
CALL ELVT, *Executive*, 5-78
CALL EMST, *Executive*, 5-80
CALL ENACKP, *Executive*, 5-84
CALL ENASTR, *Executive*, 5-82
CALL EXIT, *Executive*, 5-88
CALL EXITIF, *Executive*, 5-85
CALL EXST, *Executive*, 5-89
CALL EXTTSK, *Executive*, 5-91
CALL FEAT, *Executive*, 5-93
CALL FSS, *Executive*, 5-97
CALL GETCII, *Executive*, 5-105
CALL GETDDS, *Executive*, 5-108
CALL GETLUN, *Executive*, 5-126
CALL GETMCR, *Executive*, 5-129
CALL GETPAR, *Executive*, 5-134
CALL GETREG, *Executive*, 5-136
CALL GETTIM, *Executive*, 5-140
CALL GETTSK, *Executive*, 5-142
CALL GMCX, *Executive*, 5-131
CALL GTCMCI, *Executive*, 5-100
CALL INASTR, *Executive*, 5-68
CALL macro
special-purpose (K-series), *I/O Drivers*, 13-28
CALL MAP, *Executive*, 5-145
CALL MARK, *Executive*, 5-148
CALL op code
standard (K-series), *I/O Drivers*, 13-28
CALL PRSFCS, *Executive*, 5-157
CALL PRSRMS, *Executive*, 5-163
CALL PWRUP, *Executive*, 5-239
CALL QIO, *Executive*, 5-168
CALL RCST, *Executive*, 5-174
CALL RCTLOG, *Executive*, 5-186
CALL RCTLON, *Executive*, 5-186
CALL READEF, *Executive*, 5-181, 5-183, 5-184
CALL READSW, *Executive*, 5-138
CALL RECEIV, *Executive*, 5-176
CALL RECOEX, *Executive*, 5-178
CALL REQUES, *Executive*, 5-195
CALL RESUME, *Executive*, 5-204
CALL RMAF, *Executive*, 5-190
CALL RPOI, *Executive*, 5-191
CALL RREF, *Executive*, 5-198
CALL RRST, *Executive*, 5-201
CALL RUN, *Executive*, 5-206

CALLS
calling macro example (LADRV), *I/O Drivers*, 12-24
special calling macro (LADRV), *I/O Drivers*, 12-24
CALL SDRC, *Executive*, 5-222
CALL SDRCN, *Executive*, 5-222
CALL SDRP, *Executive*, 5-225
CALL SEND, *Executive*, 5-217
CALL SETCLI, *Executive*, 5-215
CALL SETDDS, *Executive*, 5-219
CALL SETEF, *Executive*, 5-228
CALL SETTIM, *Executive*, 5-268
CALL SMSG, *Executive*, 5-231
CALL SNXC, *Executive*, 5-234
CALL SPAWN, *Executive*, 5-241
CALL SPAWNN, *Executive*, 5-241
CALL SREA, *Executive*, 5-255
CALL SREF, *Executive*, 5-259
CALL SREX, *Executive*, 5-255
CALL STAF, *Executive*, 5-266
CALL START, *Executive*, 5-206
CALL statement
CFL, *Error Logging*, 5-32
CALL STLOR, *Executive*, 5-271
CALL STLORS, *Executive*, 5-271
CALL STOP, *Executive*, 5-274
CALL STOPFR, *Executive*, 5-275
CALL SUSPND, *Executive*, 5-238
CALL TFEA, *Executive*, 5-283
CALL TRALOG, *Executive*, 5-286
CALL TRALON, *Executive*, 5-286
CALL ULGF, *Executive*, 5-290
CALL UNMAP, *Executive*, 5-292
CALL USTP, *Executive*, 5-294
CALL VRCD, *Executive*, 5-296
CALL VRCS, *Executive*, 5-298
CALL VRCX, *Executive*, 5-300
CALL VSDA, *Executive*, 5-302
CALL VSRC, *Executive*, 5-304
CALL VSRCN, *Executive*, 5-304
CALL WAIT, *Executive*, 5-148
CALL WAITFR, *Executive*, 5-311
CALL WFLOR, *Executive*, 5-309
CALL WFLORS, *Executive*, 5-309
CALL WFSNE, *Executive*, 5-307
CALL WTQIO, *Executive*, 5-172
CANCEL command, *MCR*, 3-38, 3-140; *DCL*, 7-23, 9-7
brief description, *MCR*, 1-6
example, *MCR*, 3-38
format, *MCR*, 3-38
CANCEL command (cont'd.)
parameters, *MCR*, 3-38
VMR
See CAN command
Cancel I/O
entry point, *Writing I/O Driver*, 4-60
overview, *Writing I/O Driver*, 2-5
VTDRV, *I/O Drivers*, 3-4
Cancel Mark Time Requests directive, *Executive*, 5-40
Cancel Scheduled Initiation Requests directive, *Executive*, 5-62
CAN command
See also CANCEL command
VMR
definition, *System Management*, 5-11
example, *System Management*, 5-11
format, *System Management*, 5-11
parameter, *System Management*, 5-11
CAPS LOCK key, *DCL*, 3-14
/CARD_READER processor type, *System Management*, 3-20
Card deck
batch jobs, *Batch and Queue*, 3-23
$EOJ card, *Batch and Queue*, 3-24
example, *Batch and Queue*, 3-24
$JOB card, *Batch and Queue*, 3-24
$PASSWORD card, *Batch and Queue*, 3-24
$PRINT card, *Batch and Queue*, 3-24
sequence field, *Batch and Queue*, 3-24
$SUBMIT card, *Batch and Queue*, 3-24
Card reader (CRDRV), *I/O Drivers*, 9-1
checks
pick, *I/O Drivers*, 9-4
read, *I/O Drivers*, 9-4
recovery, *I/O Drivers*, 9-5
stack, *I/O Drivers*, 9-5
console message, *I/O Drivers*, 9-5, 9-6
control character, *I/O Drivers*, 9-7, 9-8
formats
alphanumeric, *I/O Drivers*, 9-8
binary, *I/O Drivers*, 9-8
data, *I/O Drivers*, 9-8
function, *I/O Drivers*, 9-7
code list, *I/O Drivers*, B-12
indicator, *I/O Drivers*, 9-4, 9-5
input card limitation, *I/O Drivers*, 9-8
input error, *I/O Drivers*, 9-4
programming hint, *I/O Drivers*, 9-8
ready message, *I/O Drivers*, 9-5
switches, *I/O Drivers*, 9-4, 9-5
power, *I/O Drivers*, 9-4

Card reader (CRDRV)
switches (cont'd.)
reset, *I/O Drivers*, 9-5
stop, *I/O Drivers*, 9-5
Card Reader Processor
See CRP
Card Reader Spooling Transaction Block, *System Management*, 10-47
CARRIAGE_CONTROL
RMSDES utility, *RMS-11 Utilities*, 2-37
Carriage control, *I/O Operations*, 2-6, 2-7
record attribute, *I/O Operations*, 3-9
RMSDEF utility, *RMS-11 Utilities*, A-9
word
record attribute, *I/O Operations*, 3-9
Carriage return
automatic (TTDRV), *I/O Drivers*, 2-77
cannot follow single or double quotation mark, *MACRO-11*, 5-19
CTRL/R (TTDRV), *I/O Drivers*, 2-71
CASE conditional declaration
CFL, *Error Logging*, 5-29
CASE statement
CFL, *Error Logging*, 5-34
Cassette, *RMS-11 Macro*, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-118
exercising with IOX, *System Management*, 12-2
function code list, *I/O Drivers*, B-12
/CA switch
RMSCNV utility, *RMS-11 Utilities*, 4-8
$CAT5 (ASCII to Radix-50), *System Library*, 4-8
$CAT5B (ASCII with blanks to Radix-50), *System Library*, 4-9
CATCHALL.CMD file
See also TDX
example, *System Management*, 19-5
Catchall task, *Indirect*, 2-2
See also TDX
definition of, *MCR*, 1-4
Catchup
definition, *System Management*, 16-5
Cathode-ray tube
See CRT
CBD, *System Management*, 5-26
See also Common Block Directory
$CBDAT (Binary date to decimal), *System Library*, 5-2
CBD command
See also COMMON BLOCK DIRECTORY command
$CBDMG (Binary to unsigned decimal), *System Library*, 5-3
$CBDSG (Binary to signed decimal), *System Library*, 5-5
CBM, *System Management*, 18-33
$CBOMG (Binary to unsigned octal), *System Library*, 5-8
$CBOSG (Binary to signed octal), *System Library*, 5-9
Cb parameter
device-specific function
tape driver, *I/O Drivers*, 6-7
VTDRV, *I/O Drivers*, 3-3
IO.STC function (VTDRV), *I/O Drivers*, 3-6
/CB switch
CMP utility, *Utilities*, 4-3
$CBTA (General purpose binary to ASCII), *System Library*, 5-12
$CBTMG (Binary byte to octal), *System Library*, 5-10
/CC keyword
MOUNT command, *MCR*, 3-120
CCML$ macro, *I/O Operations*, 6-12
/CC switch, *Task Builder*, 10-7
CDA, *Error Logging*, 1-1; *System Management*, 1-17 ; *Writing I/O Driver*, 6-1
analysis listing, *Crash Dump Analyzer*, 3-1 to 3-46
function, *Crash Dump Analyzer*, 1-1
input to, *Crash Dump Analyzer*, 1-5
messages, *Crash Dump Analyzer*, A-1
running, *Crash Dump Analyzer*, 1-6
as installed task, *Crash Dump Analyzer*, 1-7
as uninstalled task, *Crash Dump Analyzer*, 1-7
switches, *Crash Dump Analyzer*, 2-3 to 2-11
CDA command line, *Crash Dump Analyzer*, 2-1 to 2-11
binary file, *Crash Dump Analyzer*, 2-2
crash input file, *Crash Dump Analyzer*, 2-3
default, *Crash Dump Analyzer*, 2-10
format, *Crash Dump Analyzer*, 2-1
list file, *Crash Dump Analyzer*, 2-1
symbol file, *Crash Dump Analyzer*, 2-2
$CDDMG (Double-precision binary to decimal), *System Library*, 5-6

CDR argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
/CD switch
PIP utility, *Utilities*, 12-10
RMSBCK utility, *RMS-11 Utilities*, 6-8 to 6-9
$CDTB (Decimal to binary), *System Library*, 4-4
CE.ACN address protocol/pair
XEDRV, *I/O Drivers*, 10-10
CE.IUM address protocol/pair
XEDRV, *I/O Drivers*, 10-10
CE.MCE multicast error
XEDRV, *I/O Drivers*, 10-11
CE.NMA multicast error
XEDRV, *I/O Drivers*, 10-11
CE.PCN protocol usage conflict
XEDRV, *I/O Drivers*, 10-10
CE.RES error code
XEDRV, *I/O Drivers*, 10-9
CE.RTL error code
XEDRV, *I/O Drivers*, 10-9
CE.RTS error code
XEDRV, *I/O Drivers*, 10-9
Cell, *RMS-11 Intro*, 3-5
relative files, *RMS-11 User's Guide*, 4-1
sequential files, *RMS-11 User's Guide*, 3-2
Central buffer pool, *RMS-11 Macro*, 3-4
Central Processing Unit
See CPU
CEX, *System Generation*, 5-49
CFL
command line
DEVSM1, *Error Logging*, 4-11
comments, *Error Logging*, 5-3
data types, *Error Logging*, 5-4 to 5-8
numeric, *Error Logging*, 5-5 to 5-7
string conversion, *Error Logging*, 5-4
declaration
conditional, *Error Logging*, 5-28 to 5-30
CASE, *Error Logging*, 5-29
IF, *Error Logging*, 5-28
data item, *Error Logging*, 5-25
definition, *Error Logging*, 5-3
scope, *Error Logging*, 5-25
variables, *Error Logging*, 5-25
definition, *Error Logging*, 4-2, 5-2
error messages
See ERLCFL error messages
expression operand
literal, *Error Logging*, 5-9
CFL
expression operand (cont'd.)
variable, *Error Logging*, 5-9
expression operators, *Error Logging*, 5-9 to 5-16
expressions, *Error Logging*, 5-3, 5-9 to 5-15
conditionals, *Error Logging*, 5-3
definition, *Error Logging*, 5-3
list, *Error Logging*, 5-3
expression type
function, *Error Logging*, 5-10
literal, *Error Logging*, 5-9
subexpression, *Error Logging*, 5-9
variable, *Error Logging*, 5-9
file
command input, *Error Logging*, 5-3
data input, *Error Logging*, 5-3
error output, *Error Logging*, 5-4
report output, *Error Logging*, 5-3
user-prompting, *Error Logging*, 5-3
format string, *Error Logging*, 5-41
control directives, *Error Logging*, 5-41
data-formatting directives, *Error Logging*, 5-42
formatting directives, *Error Logging*, 5-41
functions, *Error Logging*, 5-16 to 5-25
computational, *Error Logging*, 5-20
conditional, *Error Logging*, 5-17
conversion, *Error Logging*, 5-17, 5-19
encoding, *Error Logging*, 5-19
format, *Error Logging*, 5-16
look-ahead, *Error Logging*, 5-21
packet information, *Error Logging*, 5-22
report control, *Error Logging*, 5-22
RPT control, *Error Logging*, 5-20
string-handling, *Error Logging*, 5-23
time-handling, *Error Logging*, 5-24
user I/O, *Error Logging*, 5-25
intermediate form modules, *Error Logging*, 5-1
keyword, *Error Logging*, 5-3
literal value, *Error Logging*, 5-9
See also LITERAL statement
named variables, *Error Logging*, 5-8, 5-8 to 5-9
numeric literals, *Error Logging*, 5-6
numeric operators, *Error Logging*, 5-13 to 5-16
parsing routines, *Error Logging*, 4-4
primitives, *Error Logging*, 5-1
print radices, *Error Logging*, 5-5

CFL
print radices (cont'd.)
defaults, *Error Logging*, 5-6
signalling, *Error Logging*, 5-39
spaces and tabs in text, *Error Logging*, 5-3
statements, *Error Logging*, 5-3, 5-25 to 5-40
action, *Error Logging*, 5-30 to 5-31
control, *Error Logging*, 5-31 to 5-36
lexical conditionals, *Error Logging*, 5-35
table, *Error Logging*, 5-36, 5-37, 5-38
user interface
command mode, *Error Logging*, 5-42
option mode, *Error Logging*, 5-43
C flag
in assembly listing, *MACRO-11*, 3-1
CFL compiler, *Error Logging*, 1-1, 1-5, 5-1
user interface, *Error Logging*, 5-42
$CFORK, *Writing I/O Driver*, 1-19
CFT, *Utilities*, C-7
.CHAIN directive, *Indirect*, 2-47
Changeable key, *RMS-11 User's Guide*, 6-9; *RMS-11 Intro*, 3-10
CHANGE command
EDT editor, *Introduction*, 2-6
Change command
EDI editor, *Program Development*, 2-15, 7-4; *Utilities*, 7-19
Change-limits operation
subpacket information, *Error Logging*, 4-66
Change mode
See Character mode
CHANGES
RMSDES utility, *RMS-11 Utilities*, 2-40
defining areas by default, *RMS-11 Utilities*, 2-44
in indirect command file, *RMS-11 Utilities*, 2-4
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with CREATE, *RMS-11 Utilities*, 2-8, 2-28
with SAVE, *RMS-11 Utilities*, 2-27
Change supervisor mode
See CSM library
Channel
definition
multiaccess (XEDRV), *I/O Drivers*, 10-27
set information (K-series), *I/O Drivers*, 13-25
/CHAR_LENGTH keyword
SET command, *MCR*, 3-161
SET command (VMR), *System Management*, 5-53
Character
See also Special character and Separating character
control
CRDRV, *I/O Drivers*, 9-7, 9-8
TTDRV, *I/O Drivers*, 2-69 to 2-72
invalid, *MACRO-11*, 2-3
padding (tape driver), *I/O Drivers*, 6-17
pass-through, *MCR*, 3-178, 3-182
receive buffer (TTDRV), *I/O Drivers*, 2-79
special keys, *MCR*, 2-15 to 2-17
translation, *MCR*, 3-4 to 3-5, 3-122
unprocessed (TTDRV), *I/O Drivers*, 2-61
wildcard, *MCR*, 2-6
Characteristics
buffer
XEDRV, *I/O Drivers*, 10-8
zero size, *I/O Drivers*, 10-24
clearing on remote (TTDRV), *I/O Drivers*, 2-84
multiple (VTDRV), *I/O Drivers*, 3-6
obtaining (tape driver), *I/O Drivers*, 6-8
physical (disk driver), *I/O Drivers*, 4-1
resetting
importance of (tape driver), *I/O Drivers*, 6-15
set
tape driver, *I/O Drivers*, 6-10
setting
Ethernet, *I/O Drivers*, 10-7
protocol/address (XEDRV), *I/O Drivers*, 10-9
side effect (TTDRV), *I/O Drivers*, 2-65
terminal (VTDRV), *I/O Drivers*, 3-7
XEDRV multicast address, *I/O Drivers*, 10-10
table (VTDRV), *I/O Drivers*, 3-8
terminal
get multiple (TTDRV), *I/O Drivers*, 2-20, 2-53
set multiple (TTDRV), *I/O Drivers*, 2-20
Character mode
EDT editor, *Introduction*, 2-3 to 2-6
Character set
ASCII, *MACRO-11*, A-1
definition, *MACRO-11*, 2-1

Character set (cont'd.)
DIGITAL Multinational Character Set, *MACRO-11*, A-1
DIGITAL Multinational Character Set chart, *MACRO-11*, A-10
multinational, *MCR*, 3-4
radix–50, *MACRO-11*, A-8
Character translation
SYSGEN question, *System Generation*, 3-30
CHAR function
EDT editor, *Introduction*, 2-7
Checkpoint
region, *System Management*, 1-3
task, *System Management*, 1-3
/CHECKPOINT:SYSTEM qualifier, *Task Builder*, 11-12
/CHECKPOINT:TASK qualifier, *Task Builder*, 11-13
/CHECKPOINT_FILE qualifier
SET DEVICE command, *System Management*, 1-5
Checkpointable task
fixing, *System Management*, 5-19
Checkpoint area
task, *Task Builder*, B-12
Checkpoint Common Region directive, *Executive*, 5-45
Checkpoint file
deallocating space from, *MCR*, 3-6
discontinuing, *MCR*, 3-6
primary, *MCR*, 3-6
secondary, *MCR*, 3-6
system, *MCR*, 3-6
truncating, *MCR*, 3-7
Checkpointing, *System Management*, 1-3, 5-21; *Introduction*, 6-6
common, *System Management*, 5-26
during prompt (TTDRV), *I/O Drivers*, 2-16, 2-42
during read (TTDRV), *I/O Drivers*, 2-30
dynamic space allocation, *System Management*, 1-5
task (VTDRV), *I/O Drivers*, 3-5
task buffer (TTDRV), *I/O Drivers*, 2-79
terminal
input TTDRV, *I/O Drivers*, 2-83
Checkpoint space
allocating, *Task Builder*, 10-6, 11-12, 11-13
amount needed, *MCR*, 3-6
dynamic allocation, *MCR*, 3-6; *System Management*, 1-5
Checkpoint task
definition of, *MCR*, 2-19
Check recovery
CRDRV, *I/O Drivers*, 9-5
Checksum
calculating
SLP utility, *Utilities*, 13-2
validating file content, *Utilities*, 11-8
value, *I/O Operations*, 5-5
Choosing Executive Options section, *System Generation*, 3-22 to 3-34
Choosing Peripheral Configuration section, *System Generation*, 3-35 to 3-69
Choosing SYSGEN Options section, *System Generation*, 3-16 to 3-21
CINT$, *Executive*, 5-24; *Writing I/O Driver*, 1-1
Circumflex (^)
allows passing angle brackets as part of macro argument, *MACRO-11*, 6-6
construct for argument delimiter, *MACRO-11*, 2-3
do not confuse different meanings, *MACRO-11*, 6-6
special character in MACRO–11, *MACRO-11*, 2-2
universal unary operator, *MACRO-11*, 2-4
used when passing DIGITAL multinational characters, *MACRO-11*, 6-6
Circumflex command (^), *Debugging*, 2-5, 4-3, 4-4; *XDT*, 2-11
$CKBFB routine, *Writing I/O Driver*, 7-12
$CKBFI routine, *Writing I/O Driver*, 7-12
$CKBFR routine, *Writing I/O Driver*, 7-12
$CKBFW routine, *Writing I/O Driver*, 7-12
Ckcsr parameter
IO.CLK function (LADRV), *I/O Drivers*, 12-26
/CKP keyword
INS command (VMR), *System Management*, 5-21
INSTALL command, *MCR*, 3-95
RUN command, *MCR*, 3-143
CL device, *MCR*, 2-10
redirecting, *MCR*, 2-10
CLEAN_UP parameter
STOP/ACCOUNTING command, *System Management*, 10-10
CLEAR command, *System Management*, 4-11
example, *System Management*, 4-11
format, *System Management*, 4-11

CLEAR command (cont'd.)
RMSDES utility, *RMS-11 Utilities*, 2-6, 2-18, 2-25 to 2-26
Clear Event Flag directive, *Executive*, 5-35
CLEF$ directive, *Executive*, 5-35
/CLE keyword
SWITCH REGISTER command, *MCR*, 3-201
/CLI, *Crash Dump Analyzer*, 2-4, 2-5
CLI, *DCL*, 1-1; *Introduction*, 1-5
See also DCL
adding to account entry, *System Management*, 2-4
application, *System Management*, 17-4
changing, *System Management*, 2-11
command processing
serial, *System Management*, 17-8
commands, *MCR*, 1-7
continuation lines, *System Management*, 17-4
DCL, *Program Development*, 1-2 to 1-3; *System Management*, 17-2
default, *MCR*, 3-67
definition, *System Management*, 1-18, 17-1
determining, *Program Development*, 1-2
disabling, *MCR*, 3-42
displaying, *System Management*, 2-8, 2-10
eliminating, *MCR*, 3-42
examples, *System Management*, 17-9, 17-15
FORTRAN, *System Management*, 17-15 to 17-20
MACRO–11, *System Management*, 17-9 to 17-15
getting information, *Executive*, 5-105
in account entry, *System Management*, 2-2, 2-4
initializing
/NULL qualifier, *System Management*, 17-3
/PROMPT qualifier, *System Management*, 17-4
/SNGL keyword, *System Management*, 17-4
initializing data structures for, *MCR*, 3-42
interaction with system, *System Management*, 17-4, 17-5
login, *MCR*, 3-67
MCR, *Program Development*, 1-2 to 1-3; *System Management*, 17-2
as default, *System Management*, 2-4
prompting, *System Management*, 17-3
CLI
prompts
CTRL/C, *System Management*, 17-3
empty-line, *System Management*, 17-3
task-exit, *System Management*, 17-4
prompt string, *MCR*, 3-42
receiving system message, *Executive*, 5-100
retrieving command buffer, *Executive*, 5-100
setting up, *Executive*, 5-215
spawning, *Executive*, 4-5
specifying ASTs, *Executive*, 5-211
specifying task, *Task Builder*, 10-8, 11-14
status bits for, *MCR*, 3-45
supplied with system, *System Management*, 1-18
SYSGEN question, *System Generation*, 3-28
system messages
codes, *System Management*, 17-6
receiving, *System Management*, 17-5
task, *MCR*, 3-42; *System Management*, 5-21
task names, *System Management*, 17-3
writing
alternate, *System Management*, 1-18
Executive directives for, *System Management*, 17-4
<CLI> symbol, *Indirect*, 2-22
CLI command
See also COMMAND LINE INTERPRETER command
controlling alternate CLIs with, *System Management*, 17-2
/INIT keyword, *System Management*, 17-2
CLI dispatcher task, *System Management*, 18-5
/CLI keyword
HELP command, *MCR*, 3-72
INS command
MCR, *System Management*, 17-2
INS command (VMR), *System Management*, 5-21
INSTALL command, *MCR*, 3-96
SET command, *MCR*, 3-161
CLI mode, *Indirect*, 2-54
$CLINS routine, *Writing I/O Driver*, 7-13
CLI parser block dump, *Crash Dump Analyzer*, 3-24
/CLI switch, *Indirect*, 2-4, 2-33
/CLI switch (Indirect), *Indirect*, 2-4, 2-33
CLKDF$, *Crash Dump Analyzer*, C-12

Clock
computing rate and presetting (K-series), *I/O Drivers*, 13-27
line frequency
rate of interrupts, *System Management*, 1-6
programmable
rate of interrupts, *System Management*, 1-6
set clock A rate
K-series, *I/O Drivers*, 13-10
setting frequency, *System Generation*, 5-34; *System Management*, 4-2
CLOCKA: subroutine
setting clock A rate
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-6
Clock B
controlling (K-series), *I/O Drivers*, 13-11
CLOCKB: subroutine
controlling clock B
K-series, *I/O Drivers*, 13-11
LADRV, *I/O Drivers*, 12-7
Clock interrupt
rate of occurrence, *MCR*, 3-140
Clock queue, *DCL*, 7-13 to 7-16, 7-23, 9-40
deleting entry, *DCL*, 7-23
displaying, *MCR*, 3-46; *DCL*, 7-72
effect on default TI, *MCR*, 2-10
CLOCK QUEUE command, *MCR*, 3-46
brief description, *MCR*, 1-6
example, *MCR*, 3-46
format, *MCR*, 3-46
Clock queue dump, *Crash Dump Analyzer*, 3-41
Clock queue switch
See /CLQ
Clock start command
LADRV, *I/O Drivers*, 12-25
CLOG$ directive, *Executive*, 5-36
ASSIGN command, *MCR*, 3-15
CLON$ directive, *Executive*, 5-36
ASSIGN command, *MCR*, 3-15
CLOSE$ example, *I/O Operations*, 5-10
CLOSE$ macro, *I/O Operations*, 3-1
file processing, *I/O Operations*, 3-17
completion, *I/O Operations*, 2-8
format
file processing, *I/O Operations*, 3-18
resetting
block size, *I/O Operations*, 2-18
Close & Delete command
EDI editor, *Utilities*, 7-20
Close command
EDI editor, *Utilities*, 7-20
.CLOSE directive, *Indirect*, 2-48
$CLOSE macro, *RMS-11 Macro*, 5-3
CLOSE operation, *RMS-11 Macro*, 3-9, 5-3; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
BDB requirement, *RMS-11 Macro*, 2-7
I/O buffer requirement, *RMS-11 Macro*, 2-7
Close Secondary command
EDI editor, *Utilities*, 7-20
/CLQ, *Crash Dump Analyzer*, 2-4, 2-6
CLQ command
See CLOCK QUEUE command
CLSTR option, *Task Builder*, 12-9 to 12-10
/CL switch, *Task Builder*, 10-8
CLUSTER_SIZE
RMSDES utility, *RMS-11 Utilities*, 2-31
Cluster library, *Task Builder*, 5-49
building, *Task Builder*, 5-50 to 5-55
examples, *Task Builder*, 5-55 to 5-60
overlay run-time system, *Task Builder*, 5-61
CM/CR11 card reader
SYSGEN question, *System Generation*, 3-47
$C macro form, *Executive*, 1-6
processing errors, *Executive*, 1-7
/CMD keyword
RUN command, *MCR*, 3-143
CMKT$ directive, *Executive*, 5-40
$CMPAL routine, *Task Builder*, 8-2
$CMPCS routine, *Task Builder*, 8-2
CMPRT option, *Task Builder*, 8-4, 12-11
/CMP switch
DSC utility, *Utilities*, 6-13
CMP utility
command line, *Utilities*, 4-1, A-6
default switches, *Utilities*, 4-4
messages, *Utilities*, 4-8
error, *Utilities*, 4-8
informational, *Utilities*, 4-8
output file format, *Utilities*, 4-5
switches
/BL, *Utilities*, 4-3
/CB, *Utilities*, 4-3
/CO, *Utilities*, 4-3
/DI, *Utilities*, 4-3
/FF, *Utilities*, 4-3
/LI, *Utilities*, 4-3
/LN, *Utilities*, 4-3

CMP utility
switches (cont'd.)
/MB, *Utilities*, 4-3
/SL, *Utilities*, 4-3
/SP, *Utilities*, 4-3
/TB, *Utilities*, 4-4
/VB, *Utilities*, 4-4
/CM switch, *Task Builder*, 10-9
SLP utility, *Utilities*, 13-15
CNCT$ directive, *Executive*, 5-42
%CND$IF
CFL conditional function, *Error Logging*, 5-17
%CND$SELECT
CFL conditional function, *Error Logging*, 5-17
CND argument
for .LIST/.NLIST, *MACRO-11*, 5-7
CNF, *System Generation*, 2-6
changing CSR and vector, *System Generation*, 2-7
switches, *System Generation*, 2-7
CNF module, *Error Logging*, 4-2
%CNV$BCD
CFL conversion function, *Error Logging*, 5-18
%CNV$BINARY
CFL conversion function, *Error Logging*, 5-18
%CNV$DECIMAL
CFL conversion function, *Error Logging*, 5-18
%CNV$DECIMAL_P
CFL conversion function, *Error Logging*, 5-18
%CNV$HEX
CFL conversion function, *Error Logging*, 5-18
%CNV$MACHINE
CFL conversion function, *Error Logging*, 5-19
%CNV$OCTAL
CFL conversion function, *Error Logging*, 5-18
%CNV$RAD50
CFL conversion function, *Error Logging*, 5-19
%CNV$RSX_TIME
CFL conversion function, *Error Logging*, 5-19
%CNV$STRING
CFL conversion function, *Error Logging*, 5-19
%CNV$VMS_TIME
CFL conversion function, *Error Logging*, 5-19
COBOL command, *Introduction*, 5-12
%COD$BCD
CFL encoding function, *Error Logging*, 5-19
%COD$BINARY
CFL encoding function, *Error Logging*, 5-20
%COD$DECIMAL
CFL encoding function, *Error Logging*, 5-19
%COD$HEX
CFL encoding function, *Error Logging*, 5-19
%COD$MACHINE
CFL encoding function, *Error Logging*, 5-20
%COD$OCTAL
CFL encoding function, *Error Logging*, 5-19
%COD$RSX_TIME
CFL encoding function, *Error Logging*, 5-20
%COD$VMS_TIME
CFL encoding function, *Error Logging*, 5-20
/CODE:CLI qualifier, *Task Builder*, 11-14
/CODE:DATA_SPACE qualifier, *Task Builder*, 11-15
/CODE:EAE qualifier, *Task Builder*, 11-16
/CODE:FAST_MAP qualifier, *Task Builder*, 11-17
/CODE:FPP qualifier, *Task Builder*, 11-18
/CODE:OTS_FAST qualifier, *Task Builder*, 11-19
/CODE:PIC qualifier, *Task Builder*, 11-20
/CODE:POSITION_INDEPENDENT qualifier, *Task Builder*, 11-21
Code and mask symbol
declaring
ALL block, *RMS-11 Macro*, C-3 to C-4
DAT block, *RMS-11 Macro*, C-3 to C-4
FAB, *RMS-11 Macro*, C-1
KEY block, *RMS-11 Macro*, C-3 to C-4
NAM block, *RMS-11 Macro*, C-2
PRO block, *RMS-11 Macro*, C-3 to C-4
RAB, *RMS-11 Macro*, C-2
SUM block, *RMS-11 Macro*, C-3 to C-4
XAB, *RMS-11 Macro*, C-4
value
ALL block, *RMS-11 Macro*, 6-2
DAT block, *RMS-11 Macro*, 6-14
FAB, *RMS-11 Macro*, 6-22
NAM block, *RMS-11 Macro*, 6-94
PRO block, *RMS-11 Macro*, 6-108

Code and mask symbol
value (cont'd.)
RAB, *RMS-11 Macro*, 6-115
SUM block, *RMS-11 Macro*, 6-145
Code symbol
See Code and mask symbol
CO device, *MCR*, 2-10; *System Management*, 9-1
as default, *System Management*, 9-6
assigning to null device, *System Management*, 9-6
attaching, *System Management*, 9-3
detaching, *System Management*, 9-3
disabling, *System Management*, 9-6
displaying current assignment, *System Management*, 9-5
enabling, *System Management*, 9-6
monitoring status, *System Management*, 9-8
reading from, *System Management*, 9-4
reassigning, *System Management*, 9-6
redirecting, *MCR*, 2-10; *System Management*, 9-9
using as pseudo device, *System Management*, 9-1
using with the Console Logger, *System Management*, 9-2
writing to, *System Management*, 9-4
Coding standard, *MACRO-11*, E-1
CODRV driver, *System Management*, 1-14, 9-1
loading, *System Management*, 9-3
reasons for, *System Management*, 9-2
/COLOG keyword, *System Management*, 9-5
SET command, *MCR*, 3-161
Colon (:)
invalid as .ASCII string delimiter, *MACRO-11*, 5-20
invalid as .ASCIZ string delimiter, *MACRO-11*, 5-21
invalid as .IDENT string delimiter, *MACRO-11*, 5-11
invalid as .RAD50 string delimiter, *MACRO-11*, 5-22
must precede switch value in RSX command string, *MACRO-11*, 7-5
never as character string delimiter, *MACRO-11*, 5-20
special character in MACRO–11, *MACRO-11*, 2-1
terminates a label, *MACRO-11*, 1-2
%COM$AND
CFL computational function, *Error Logging*, 5-20
%COM$HARDWARE
CFL computational function, *Error Logging*, 5-20
%COM$LONGWORD
CFL computational function, *Error Logging*, 5-20
%COM$NEGATE
CFL computational function, *Error Logging*, 5-20
%COM$NULL
CFL computational function, *Error Logging*, 5-20
COM argument
for .LIST/.NLIST, *MACRO-11*, 5-7
Comma (,)
in macro argument, *MACRO-11*, 6-7
ODL operator, *Task Builder*, 3-26
separating character, *MACRO-11*, 2-3
special character in MACRO–11, *MACRO-11*, 2-2
used in operand field, *MACRO-11*, 1-4
Command, *Introduction*, 1-1
abbreviating, *DCL*, 1-12, 1-24; *Introduction*, 1-11
adding your own, *System Management*, 19-3
at sign (@), *Debugging*, 2-5, 4-4; *XDT*, 2-11
B, *Debugging*, 2-7; *XDT*, 2-12
circumflex (^), *Debugging*, 2-5, 4-3, 4-4; *XDT*, 2-11
D, *Debugging*, 2-7; *XDT*, 2-13
E, *Debugging*, 2-7, 6-2
equal sign (=), *Debugging*, 2-7, 7-2; *XDT*, 2-12
F, *Debugging*, 2-7, 6-4
G, *Debugging*, 2-8; *XDT*, 1-8, 2-13
I, *Debugging*, 2-8; *XDT*, 2-13
K, *Debugging*, 2-8; *XDT*, 2-13
L, *Debugging*, 2-8, 6-4; *XDT*, 2-14
left angle bracket (<), *Debugging*, 2-5, 4-6; *XDT*, 2-11
LINE FEED, *Debugging*, 2-5, 4-4; *XDT*, 2-10
MCR, *DCL*, 1-12
N, *Debugging*, 2-8, 6-2
O, *Debugging*, 2-9, 7-2; *XDT*, 2-14
P, *Debugging*, 2-9; *XDT*, 1-9, 2-14
privileged, *MCR*, 2-18
R, *Debugging*, 2-9; *XDT*, 2-14
RETURN, *Debugging*, 2-4, 4-2; *XDT*, 2-10

Command (cont'd.)
right angle bracket (>), *Debugging*, 2-5, 4-5; *XDT*, 2-11
RMSDES utility, *RMS-11 Utilities*, 2-1, 2-4
S, *Debugging*, 2-9; *XDT*, 2-2, 2-14
U, *Debugging*, 2-9
underscore (_), *Debugging*, 2-5, 4-5; *XDT*, 2-11
V, *Debugging*, 2-9
variable
a, *Debugging*, 2-1; *XDT*, 2-10
k, *Debugging*, 2-1; *XDT*, 2-10
m, *Debugging*, 2-1
n, *Debugging*, 2-1; *XDT*, 2-10
#symbol, *XDT*, 2-10
list, *XDT*, B-1
x, *Debugging*, 2-1; *XDT*, 2-10
VMR
See also VMR commands
comments in, *System Management*, 5-5
continuation lines, *System Management*, 5-5
file specifications, *System Management*, 5-5
keywords
overview, *System Management*, 5-4
name, *System Management*, 5-4
parameter, *System Management*, 5-4
W, *Debugging*, 2-9, 6-2
X, *Debugging*, 1-5, 2-10; *XDT*, 2-1, 2-14
Z, *Debugging*, 2-10
Command file, *DCL*, 6-5 to 6-6
closing, *I/O Operations*, 6-12
indirect
See Indirect command file
resetting scan macro, *I/O Operations*, 6-11
RMSDEF utility, *RMS-11 Utilities*, A-5
Command format
VMR, *System Management*, 5-4
COMMAND function
EDT editor, *Introduction*, 2-10, 2-19
Command library, *Indirect*, 2-33
default file type, *Indirect*, 2-33
DIGITAL-supplied, *Indirect*, 2-34
Command line, *MCR*, 1-1; *DCL*, 1-8
comments, *DCL*, 1-20
components of, *MCR*, 1-1
compressing, *MCR*, 1-4
continuation, *MCR*, 1-3; *System Management*, 5-5 ; *DCL*, 1-20
continuing, *MCR*, 2-4
entering, *MCR*, 1-1
Command line (cont'd.)
extending, *MCR*, 1-3
file specifications, *System Management*, 5-5
general format, *Utilities*, 1-3
ignoring blanks and tabs, *I/O Operations*, 7-8
including comments in, *MCR*, 1-3
length, *DCL*, 3-12
maximum length of, *MCR*, 2-4
maximum number of characters in, *MCR*, 1-3; *System Management*, 5-5
parameters, *MCR*, 1-2
parsing, *I/O Operations*, 7-1; *Indirect*, 2-82; *MCR*, 1-4
processing, *MCR*, 1-4; *I/O Operations*, 6-1
rejected, *System Management*, 5-82
terminating, *MCR*, 1-3
total length, *MCR*, 1-3; *System Management*, 5-5
use of quotation marks, *MCR*, 1-4
use of spaces within, *MCR*, 1-2
use of special characters, *MCR*, 1-4
VMR
components, *System Management*, 5-4
extending, *System Management*, 5-5
format, *System Management*, 5-4
including comments, *System Management*, 5-5
Command line (TKB)
DCL format, *Task Builder*, 1-4
MCR format, *Task Builder*, 1-2
multiline input, *Task Builder*, 1-7
terminating, *Task Builder*, 1-7
Command line interpreter
See CLI
COMMAND LINE INTERPRETER command, *MCR*, 3-41
brief description, *MCR*, 1-7
examples, *MCR*, 3-45
formats, *MCR*, 3-41
keywords
/DISABLE, *MCR*, 3-41
/ELIM, *MCR*, 3-41
/ENABLE, *MCR*, 3-42
/INIT, *MCR*, 3-42
/MESSAGE, *MCR*, 3-44
/SHOW, *MCR*, 3-44
/UNOVR, *MCR*, 3-45
parameters, *MCR*, 3-41
subkeywords
/CPR, *MCR*, 3-42

COMMAND LINE INTERPRETER command
subkeywords (cont'd.)
/CTRLC, *MCR*, 3-42
/DISABLE, *MCR*, 3-43
/DPR, *MCR*, 3-43
/LOG, *MCR*, 3-43
/MESSAGE, *MCR*, 3-43
/NULL, *MCR*, 3-43
/PRIV, *MCR*, 3-44
/PROMPT, *MCR*, 3-44
/QUIET, *MCR*, 3-44
/RESTRICT, *MCR*, 3-44
/SNGL, *MCR*, 3-44
/TASK, *MCR*, 3-44
Command line interpreter switch
See /CLI, /CPB
Command mode
IOX
description, *System Management*, 12-9
Command name
abbreviating, *MCR*, 1-1
acronyms, *MCR*, 1-2
Command procedure
invoking, *Indirect*, 2-35
universal library, *Indirect*, 2-33
/COMMAND qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-23, 3-26
See also /REPORT switch
Commands
nonprivileged
summary of, *MCR*, 1-5
privileged
summary of, *MCR*, 1-5
summary of MCR, *MCR*, 1-5 to 1-7
Command string
RMSBCK utility, *RMS-11 Utilities*, 6-2 to 6-3
RMSCNV utility, *RMS-11 Utilities*, 4-3 to 4-4
RMSDEF utility, *RMS-11 Utilities*, A-5
RMSIFL utility, *RMS-11 Utilities*, 3-2 to 3-3
RMSRST utility, *RMS-11 Utilities*, 7-2 to 7-3
Command string checking (RMSIFL), *RMS-11 Utilities*, 3-9
Command string examples (IAS), *MACRO-11*, 7-13
Command string format (IAS), *MACRO-11*, 7-11
Command String Interpreter
See CSI
Command syntax
VMR, *System Management*, 5-4
continuation lines, *System Management*, 5-5
entering comments, *System Management*, 5-5
keywords
overview, *System Management*, 5-4
parameters, *System Management*, 5-4
Command utility
messages, *RMS-11 Utilities*, C-1
COMMAN symbol, *Indirect*, 2-30
Comma separator (,)
See Separator
Comment, *Indirect*, 1-7, 2-4
delimiter for, *MCR*, 1-3
including in command line, *MCR*, 1-3
Comment character in batch jobs
format, *Batch and Queue*, 3-12
Comment field
begins with semicolon (;), *MACRO-11*, 1-4
definition of, *MACRO-11*, 1-4
using .REM, *MACRO-11*, 5-13
valid characters, *MACRO-11*, 1-4
Common
checkpointing, *MCR*, 3-100; *System Management*, 5-26
device, *MCR*, 3-102, 3-175
See Device common
directive
fixing, *System Management*, 5-18
displaying, *DCL*, 7-73 to 7-74
installing, *MCR*, 3-100; *System Management*, 5-26
memory image, *MCR*, 3-102
name, *MCR*, 3-130; *System Management*, 5-33
partition, *MCR*, 3-130
read/write, *MCR*, 3-130; *System Management*, 5-33
read-only, *MCR*, 3-130; *System Management*, 5-33
protecting, *System Management*, 5-23
read/write
checkpointing, *MCR*, 3-100; *System Management*, 5-26
read-only
installing, *MCR*, 3-100; *System Management*, 5-26

Common (cont'd.)
reinstalling, *MCR*, 3-102
resident
See Resident common
shared
See Shared common
status flags, *DCL*, 7-73 to 7-74
synchronizing task use, *System Management*, 5-25
task sharing, *System Management*, 5-25
unfixing, *System Management*, 5-80
Common Block Directory, *MCR*, 3-94
See also CBD
displaying, *MCR*, 3-39
removing regions, *MCR*, 3-135
COMMON BLOCK DIRECTORY command, *MCR*, 3-39
brief description, *MCR*, 1-6
examples, *MCR*, 3-40
format, *MCR*, 3-39
parameters, *MCR*, 3-39
/TASKS keyword, *MCR*, 3-40
Common Block Directory dump, *Crash Dump Analyzer*, 3-29
Common directive, *Writing I/O Driver*, 1-20
Common event flag, *Executive*, 2-2
reading, *Executive*, 5-184
COMMON option, *Task Builder*, 5-16, 12-12
Common region, *MCR*, 3-63
accessing, *MCR*, 3-98
checkpointing, *Executive*, 5-45
code libraries, *System Management*, 1-1
data commons, *System Management*, 1-1
displaying, *MCR*, 3-39
installed, *MCR*, 3-97
protecting, *MCR*, 3-97
removing, *MCR*, 3-135
shuffling, *System Management*, 1-4, 8-20
status, *MCR*, 3-40
status bits, *MCR*, 3-39
synchronizing, *MCR*, 3-99
tasks, *MCR*, 3-40
unfixing, *MCR*, 3-211
Communication
function code list, *I/O Drivers*, B-12
parallel link, *I/O Drivers*, B-13
with other systems, *System Management*, 1-19
Communications device
SYSGEN question, *System Generation*, 3-65
Communications Executive
See CEX
Communications port
connecting computer systems, *Utilities*, C-1
setting, *Utilities*, C-3
setting terminal characteristics, *Utilities*, C-1
Communications support
SYSGEN question, *System Generation*, 3-27
Compaction (memory)
definition, *System Management*, 1-4
COMPAREDATA command
IOX, *System Management*, 12-19
error report, *System Management*, 12-19
FILES11 command line, *System Management*, 12-19
initial default, *System Management*, 12-19
SELECT command line, *System Management*, 12-19
$COMPARE macro, *RMS-11 Macro*, 2-16, 2-17
example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
/COMPARE qualifier
BRU utility, *Utilities*, 3-13
Compatibility mode
building task, *Task Builder*, 10-9, 11-22
/COMPATIBLE qualifier, *Task Builder*, 11-22
Compilation path
control file module, *Error Logging*, 4-11
Compiler, *Introduction*, 5-3
See High-level language
Compiler literal declaration, *Error Logging*, 4-11
Complement operator (^C), *MACRO-11*, 5-29
See also ^C operator
Completion handler, *RMS-11 Macro*, 2-18
Completion return macro
declaring, *RMS-11 Macro*, C-2
Completion routine, *Task Builder*, 8-2
specifying, *Task Builder*, 12-11
user-written, *Task Builder*, 8-25
Completion symbol
declaring, *RMS-11 Macro*, C-3
Compound test, *Indirect*, 2-71
Compressing deleted records, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
Compression
RMSIFL utility, *RMS-11 Utilities*, 3-11

/COMPRESS qualifier
LIBRARY command, *Program Development*, 6-10
CON argument
cannot share data, *MACRO-11*, 5-38
for .PSECT, *MACRO-11*, 5-35
if section ends with odd address, *MACRO-11*, 5-39
/CONCATENATE qualifier, *Task Builder*, 11-23
Concatenating files, *Program Development*, 4-4
Concatenation Character command
EDI editor, *Utilities*, 7-20
CON command
VMR
definition, *System Management*, 5-12
examples, *System Management*, 5-13 to 5-15
formats, *System Management*, 5-12
keywords
CONTROLLERS, *System Management*, 5-12
CPU, *System Management*, 5-13
FULL, *System Management*, 5-13
UNITS, *System Management*, 5-13
parameters, *System Management*, 5-12
CON commands
abbreviating, *System Management*, 4-7
BUILD, *System Management*, 4-8, 4-10
CLEAR, *System Management*, 4-8, 4-11
descriptions, *System Management*, 4-7 to 4-32
DISPLAY, *System Management*, 4-8, 4-12
entering, *System Management*, 4-7
ESTATUS, *System Management*, 4-8, 4-15
HELP, *System Management*, 4-8, 4-17
IDENT, *System Management*, 4-8, 4-18
LINK, *System Management*, 4-8, 4-19
LIST, *System Management*, 4-8, 4-20
OFFLINE, *System Management*, 4-8, 4-22
OFFLINE MEMORY, *System Management*, 4-25
ONLINE, *System Management*, 4-8, 4-26
ONLINE MEMORY, *System Management*, 4-28
SET, *System Management*, 4-8, 4-29
storing command sequence, *System Management*, 4-20
summary, *System Management*, 4-7
SWITCH, *System Management*, 4-8, 4-31
UNLINK, *System Management*, 4-8, 4-32
Concurrent I/O, *Writing I/O Driver*, 1-14
Condition
high pool, *System Management*, 8-3
low pool, *System Management*, 8-3
Conditional assembly directive, *Writing I/O Driver*, 4-2; *MACRO-11*, 5-44
.IF, *MACRO-11*, 5-44
.IFF, *MACRO-11*, 5-46
.IFT, *MACRO-11*, 5-46
.IFTF, *MACRO-11*, 5-46
.IIF, *MACRO-11*, 5-48
Conditional declaration
CFL, *Error Logging*, 5-28 to 5-30
Conditional fork, *Writing I/O Driver*, 1-19
necessity, *Writing I/O Driver*, 1-19
<CONFIG> symbol, *Indirect*, 2-22
Configuration
See also Device state
IOX test, *System Management*, 12-20
nonstandard, *System Generation*, 5-34; *System Management*, 4-2
peripheral
choosing at system generation, *Writing I/O Driver*, 5-10
CONFIGURATION command
VMR
See CON command
Configuration data file
See SYSPARAM.DAT configuration data file
Configuration Program
See CNF
Configuration worksheet, *System Generation*, A-1
CONFIGURE command
IOX, *System Management*, 12-20
device type
default values, *System Management*, 12-20
specifying, *System Management*, 12-20
display command, *System Management*, 12-20
example, *System Management*, 12-21
examples, *System Management*, 12-21
logical names, *System Management*, 12-20
parameter command, *System Management*, 12-20

CONFIGURE command (cont'd.)
IOX test configuration, *System Management*, 12-4
examples, *System Management*, 12-5
CON interface, *System Management*, 4-4
error messages, *System Management*, 4-33 to 4-36
format, *System Management*, 4-33
invoking, *System Management*, 4-6
direct task format, *System Management*, 4-6
indirect command file, *System Management*, 4-7, 4-20
interactively, *System Management*, 4-6
Connect directive, *Executive*, 5-42
Connectivity mask, *Writing I/O Driver*, 1-19
$CONNECT macro, *RMS-11 Macro*, 5-6
CONNECT operation, *RMS-11 Macro*, 5-6, 5-7; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
BDB requirement, *RMS-11 Macro*, 2-8
$CONNECT macro, *RMS-11 Macro*, 5-6
I/O buffer requirement, *RMS-11 Macro*, 2-7
indexed files, *RMS-11 User's Guide*, 7-2
IRAB requirement, *RMS-11 Macro*, 2-5
key buffer requirement, *RMS-11 Macro*, 2-6
record stream, *RMS-11 Macro*, 4-8
relative files, *RMS-11 User's Guide*, 4-7
sequential files, *RMS-11 User's Guide*, 3-7
Connect to Interrupt Vector directive, *Executive*, 5-24
Console
displaying current assignment, *System Management*, 9-5
CONSOLE.LOG file, *System Management*, 9-6
as default log file, *System Management*, 9-5
Console driver
SYSGEN question, *System Generation*, 3-28
Console listing device
See CL device
Console Logger, *System Management*, 9-1
communication with, *System Management*, 9-3
description, *System Management*, 1-14
messages
length, *System Management*, 9-4
task communication, *System Management*, 9-3
Console Logging
commands
format, *System Management*, 9-4
Console Logging
commands (cont'd.)
functions, *System Management*, 9-4
command summary, *System Management*, 9-3
default log file, *System Management*, 9-6
displaying CO assignment, *System Management*, 9-5
displaying log file assignment, *System Management*, 9-5
error messages, *System Management*, 9-14 to 9-15
installing COT, *System Management*, 9-2
loading CODRV, *System Management*, 9-2
log file
changing specification, *System Management*, 9-7
creating a new version, *System Management*, 9-7
disabling, *System Management*, 9-8
example, *System Management*, 9-10
reading, *System Management*, 9-10
reassigning, *System Management*, 9-6
sample session, *System Management*, 9-10
starting, *System Management*, 9-5
stopping, *System Management*, 9-5
using multiple commands, *System Management*, 9-8
writing to CO, *System Management*, 9-4
Console output device
See CO device
/CONSOLE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-20
Console switch register
obtaining contents, *Executive*, 5-138
Console terminal
default assignment, *System Management*, 9-6
disabling, *System Management*, 9-6
reassigning, *System Management*, 9-6
Constant register
See C register
Container file
RMSBCK utility, *RMS-11 Utilities*, 6-1, 6-3, 6-7
RMSDSP utility, *RMS-11 Utilities*, 5-1, 5-3 to 5-4
detailed display, *RMS-11 Utilities*, 5-4
RMSRST utility, *RMS-11 Utilities*, 7-3, 7-9 to 7-10

CON task, *MCR*, 3-103; *System Management*, 1-12 ; *Writing I/O Driver*, 1-24, 5-2, 5-7, 5-8, 5-9
overview, *Writing I/O Driver*, 1-24
CONTEXT
CFL named variable, *Error Logging*, 5-9
Context, *RMS-11 User's Guide*, 1-9, 1-15
block, *RMS-11 Intro*, 4-7
readable block, *RMS-11 Intro*, 4-7
writeable block, *RMS-11 Intro*, 4-7
block stream, *RMS-11 Macro*, 4-12
CONNECT operation, *RMS-11 User's Guide*, 3-7, 4-7, 7-2
current-record, *RMS-11 Macro*, 4-3; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-5
DELETE operation, *RMS-11 User's Guide*, 4-7, 7-3
DISCONNECT operation, *RMS-11 User's Guide*, 3-7, 4-8
FIND operation, *RMS-11 User's Guide*, 3-8, 4-8, 7-3
FLUSH operation, *RMS-11 User's Guide*, 3-9, 4-10, 7-5
GET operation, *RMS-11 User's Guide*, 3-10, 4-11, 7-5
next-record, *RMS-11 Macro*, 4-3; *RMS-11 User's Guide*, 1-9, 1-15; *RMS-11 Intro*, 4-5
PUT operation, *RMS-11 User's Guide*, 3-11, 4-11, 7-6
record stream, *RMS-11 Macro*, 4-2
REWIND operation, *RMS-11 User's Guide*, 3-11, 4-12, 7-6
TRUNCATE operation, *RMS-11 User's Guide*, 3-12
UPDATE operation, *RMS-11 User's Guide*, 3-13, 4-12, 7-6
Context block, *Executive*, 5-109, 5-220
Context status flag, *System Management*, 4-13
Contiguity, *RMS-11 User's Guide*, 1-19, 8-12
indexed files, *RMS-11 User's Guide*, 6-13
relative files, *RMS-11 User's Guide*, 4-4
RMSCNV utility, *RMS-11 Utilities*, 4-2
RMSDEF utility, *RMS-11 Utilities*, A-15
RMSIFL utility, *RMS-11 Utilities*, 3-1, 3-6
sequential files, *RMS-11 User's Guide*, 3-5
virtual, *RMS-11 Intro*, 2-3
CONTIGUOUS
RMSDES utility
area section, *RMS-11 Utilities*, 2-46
file section, *RMS-11 Utilities*, 2-35
Contiguous KRB and SCB, *Writing I/O Driver*, 2-7, 4-48
Continuation bucket, *RMS-11 User's Guide*, 5-5
Continuation line
CLI, *System Management*, 17-4
example, *MCR*, 1-3; *System Management*, 5-5
use in a command line, *MCR*, 1-3; *System Management*, 5-5
CONTINUE command, *DCL*, 7-21 to 7-22, 9-8
See also ON and IF commands
format, *Batch and Queue*, 3-9
Shadow Recording, *System Management*, 16-8
/CONTINUE qualifier
START/PROCESSOR command, *System Management*, 3-37
Contradictory Bit Mask
See CBM
CONTROL_C command
IOX, *System Management*, 12-22
Command mode, *System Management*, 12-9
CTRL/C
disabling, *System Management*, 12-22
effect on, *System Management*, 12-22
enabling, *System Management*, 12-22
Execution mode, *System Management*, 12-9
initial default, *System Management*, 12-22
CONTROL_FIELD_SIZE
RMSDES utility, *RMS-11 Utilities*, 2-37
Control and status register
See CSR
Control block, *RMS-11 Macro*, 1-2; *RMS-11 User's Guide*, 1-14, 2-2; *RMS-11 Intro*, 4-7
ALL, *RMS-11 Intro*, 4-8
chaining, *RMS-11 Macro*, 2-13
DAT, *RMS-11 Intro*, 4-8
declaring, *RMS-11 Macro*, 2-8
examining, *RMS-11 Macro*, 2-16
FAB, *RMS-11 Intro*, 4-8
initializing, *RMS-11 Macro*, 2-7
KEY, *RMS-11 Intro*, 4-8

Control block (cont'd.)
NAM, *RMS-11 Intro*, 4-8
PRO, *RMS-11 Intro*, 4-8
RAB, *RMS-11 Intro*, 4-8
setting up, *RMS-11 Macro*, 2-11
SUM, *RMS-11 Intro*, 4-8
Control block field
See Field
Control character, *MCR*, 2-15 to 2-17
TTDRV
escape sequence, *I/O Drivers*, 2-75
Control commands
IOX
description, *System Management*, 12-6
Control directive
.IDENT, *MACRO-11*, 5-11
listing, *MACRO-11*, 5-12, 5-13
overriding with command line options, *MACRO-11*, 5-8
.SBTTL, *MACRO-11*, 5-10
table of arguments, *MACRO-11*, 5-7
.TITLE, *MACRO-11*, 5-9
Control event
error logging, *Error Logging*, 4-4
Control file
definition, *Error Logging*, 4-2
error log, *Error Logging*, 3-1, 3-2
universal library, *Error Logging*, 5-1
Control File Language
See CFL
Control file module, *Error Logging*, 1-3, 1-5
architecture, *Error Logging*, 4-2
CFL, *Error Logging*, 5-1
compilation path, *Error Logging*, 4-11
CPU-level, *Error Logging*, 4-7
universal, *Error Logging*, 4-7
definition, *Error Logging*, 4-2
device-level, *Error Logging*, 4-7 to 4-9
DIGITAL-supplied, *Error Logging*, 1-5, A-5
error log, *Error Logging*, 3-1, 3-27
general format, *Error Logging*, 5-3
interaction, *Error Logging*, 4-12 to 4-15
modifying, *Error Logging*, 4-12
non-DIGITAL device, *Error Logging*, 4-27
program control flow, *Error Logging*, 4-9
recompiling, *Error Logging*, 4-12
summary, *Error Logging*, 4-4 to 4-7
table of, *Error Logging*, 2-7 to 2-8
universal library
See ERRLOG.ULB
user-written, *Error Logging*, 1-5
Control function mask, *Writing I/O Driver*, 4-18, 4-19
Control information code
event-level dispatching, *Error Logging*, 4-16
Control key, *MCR*, 2-15
See CTRL key
Controller, *Writing I/O Driver*, 1-4
access, *Writing I/O Driver*, 1-11
delayed, *Writing I/O Driver*, 1-12
dual support, *Writing I/O Driver*, 1-12
access list, *Writing I/O Driver*, 2-2
ACFPAR.DAT record format, *System Generation*, 5-34; *System Management*, 4-2
activating with ONLINE command, *System Management*, 4-26
allowing parallel operations, *Writing I/O Driver*, 2-2
assignment, *Writing I/O Driver*, 1-12
busy/not busy, *Writing I/O Driver*, 1-12
configuration status for, *Writing I/O Driver*, 2-2
DD-type
SYSGEN question, *System Generation*, 3-51
DECtape II
SYSGEN question, *System Generation*, 3-51
defining type, *Writing I/O Driver*, 2-1
definition (XEDRV), *I/O Drivers*, 10-26
group number, *Writing I/O Driver*, 1-5
I/O count, *Writing I/O Driver*, 1-12, 1-14
interrupts, *Writing I/O Driver*, 1-12
interrupt vector, *Writing I/O Driver*, 1-7
2-level controllers, *Writing I/O Driver*, 1-14
location of a CSR for a, *Writing I/O Driver*, 2-2
maintaining hardware-specific information for, *Writing I/O Driver*, 2-2
making accessible, *Writing I/O Driver*, 5-6
mnemonic format, *System Generation*, 3-35
MSCP-type
SYSGEN question, *System Generation*, 3-45
name, *Writing I/O Driver*, 2-1
number, *Writing I/O Driver*, 1-5
placing on line, *Writing I/O Driver*, 5-7
reassignment, *Writing I/O Driver*, 1-12
and load sharing, *Writing I/O Driver*, 1-12

Controller (cont'd.)
RH-type
SYSGEN question, *System Generation*, 3-36
RK11
SYSGEN question, *System Generation*, 3-41
RK611/711
SYSGEN question, *System Generation*, 3-42
RL11/RLV11
SYSGEN question, *System Generation*, 3-43
RP11
SYSGEN question, *System Generation*, 3-44
RX11
SYSGEN question, *System Generation*, 3-50
RX211/RXV21
SYSGEN question, *System Generation*, 3-50
status, *Writing I/O Driver*, 1-12
subcontroller device, *Writing I/O Driver*, 1-14
block, *Writing I/O Driver*, 1-14
supporting more than one device, *Writing I/O Driver*, 1-13
TC11 DECtape
SYSGEN question, *System Generation*, 3-49
TM/TMA/TMB11
SYSGEN question, *System Generation*, 3-54
TU58
SYSGEN question, *System Generation*, 3-51
Controller failure, *System Management*, 11-4
Controller Request Block
See KRB
Controller request queue, *Writing I/O Driver*, 1-12, 2-2
Controller status change
entry point, *Writing I/O Driver*, 4-62, 4-63
overview, *Writing I/O Driver*, 2-6
Controller status extension 2, *Writing I/O Driver*, 4-39
Controller status extension 3, *Writing I/O Driver*, 4-37
Controller table
See CTB
Controller Table Block
See CTB
Controller table status byte, *Writing I/O Driver*, 4-53
Control statement
CFL, *Error Logging*, 5-31 to 5-36
Control task tape, *I/O Operations*, G-9
Control-Z mode, *Indirect*, 2-53
Conversion
See also ASCII number conversion
See also Binary conversion
See also Date conversion
See also Decimal conversion
See also Octal conversion
See also Radix-50 conversion
See also Time conversion
A/D input to floating point (K-series), *I/O Drivers*, 13-12
UIC
ASCII/binary, *I/O Operations*, 4-7
unsigned integer (K-series), *I/O Drivers*, 13-18
Conversion routine, *Writing I/O Driver*, 1-17
CONVERT command, *DCL*, 4-53 to 4-58, 9-8
Converting file, *RMS-11 User's Guide*, 1-10, 1-12
COP attribute, *System Management*, 18-35
^C operator
in command line, *MACRO-11*, 5-29
one's complement operator, *MACRO-11*, 5-29
/COPIES file qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
COPY command, *Program Development*, 4-3; *Utilities*, C-7; *DCL*, 4-45 to 4-49, 9-9; *Introduction*, 3-4
EDT editor, *Introduction*, 2-17
example, *Utilities*, C-8
/REMOTE option, *Utilities*, C-8
COPY key, *DCL*, 3-15
CORAL.MAC file, *System Management*, 8-2
pool monitoring interface, *System Management*, 8-2
CORIMG.SYS file
See Checkpoint file
Coroutine statement
user-written module, *Error Logging*, 4-32
Correction files
layered product, *System Generation*, 2-26 to 2-27

/CO subswitch
PIP utility, *Utilities*, 12-37
/CO switch, *Task Builder*, 10-10
CMP utility, *Utilities*, 4-3
file
PRI command, *Batch and Queue*, 2-3
QUE /MOD command, *Batch and Queue*, 2-19
FLX utility, *Utilities*, 8-7
job
PRI command, *Batch and Queue*, 2-3
QUE /MOD command, *Batch and Queue*, 2-19
LBR utility, *Utilities*, 10-12
$COTB (Octal to binary), *System Library*, 4-6
/COTERM option
SET /COLOG command, *System Management*, 9-6
Co-tree, *Task Builder*, 3-32
creating statement, *Task Builder*, 3-42
COT task, *System Management*, 1-14, 9-1
aborting, *System Management*, 9-5
installing, *System Management*, 9-2
reasons for, *System Management*, 9-2
redirecting CO, *System Management*, 9-9
COUNT
CFL named variable, *Error Logging*, 5-9
/CPB, *Crash Dump Analyzer*, 2-4, 2-5
CPCR$ directive, *Executive*, 5-45
/CPR subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-42
/CP switch, *Task Builder*, 10-11
CPU, *Introduction*, 6-5, 6-6
CPU affinity
removing, *Executive*, 5-190
setting, *Executive*, 5-265
CPU-detected error code
event-level dispatching, *Error Logging*, 4-16
CPU interval
displaying, *System Management*, 7-19
transaction file, *System Management*, 10-16
/CPU keyword
OPENREGISTER command, *MCR*, 3-127
CPU-level module, *Error Logging*, 4-7, 4-11, A-6
Cpu parameter
UNIBUS switch driver
device-specific, *I/O Drivers*, 14-4
IO.CON function, *I/O Drivers*, 14-5
CPU tick
displaying, *System Management*, 7-19
CR11 card reader, *I/O Drivers*, 9-1
Crash, *Introduction*, 1-19
See System failure
cause
determining, *Crash Dump Analyzer*, 4-1
HALT, *Crash Dump Analyzer*, 1-5
HALT instruction, *Crash Dump Analyzer*, 1-4
infinite loop, *Crash Dump Analyzer*, 1-4, 1-5
processor trap, *Crash Dump Analyzer*, 1-4
restart procedure, *Crash Dump Analyzer*, 1-4
CRASH_REASON parameter
START/ACCOUNTING command, *System Management*, 10-5
/CRASHDEV keyword
SET command, *MCR*, 3-161
Crash dump
obtaining, *Crash Dump Analyzer*, 1-4
Crash dump analysis, *Writing I/O Driver*, 6-1
Crash Dump Analyzer
See CDA
Crash dump binary file, *Crash Dump Analyzer*, 1-5, 1-6, 2-2
Crash dump device, *Crash Dump Analyzer*, 1-1, 1-5
displaying current one, *Crash Dump Analyzer*, 1-3
invalid, *Crash Dump Analyzer*, 1-5
limitations, *Crash Dump Analyzer*, 1-2
loadable, *Crash Dump Analyzer*, 1-2
pregenerated kit, *System Generation*, 5-49
restrictions, *Crash Dump Analyzer*, 1-2
selecting, *Crash Dump Analyzer*, 1-3
specifying, *Crash Dump Analyzer*, 2-2
SYSGEN question, *System Generation*, 3-32
valid for RSX-11M/M-PLUS system, *Crash Dump Analyzer*, 1-2
valid for Micro/RSX system, *Crash Dump Analyzer*, 1-2
valid for pregenerated RSX-11M-PLUS system, *Crash Dump Analyzer*, 1-2
Crash dump driver, *Crash Dump Analyzer*, 1-1
procedure, *Crash Dump Analyzer*, 1-5
unloading, *Crash Dump Analyzer*, 1-4
Crash dump listing
See also Analysis listings
interpreting, *Crash Dump Analyzer*, 4-1 to 4-3

Crash dump listing
interpreting (cont'd.)
mapping data, *Crash Dump Analyzer*, 4-1
stack depth, *Crash Dump Analyzer*, 4-2
Crash notification device, *Crash Dump Analyzer*, 1-1, 1-2, 1-5
Crash Recovery Transaction Block, *System Management*, 10-37
CRASH statement
CFL, *Error Logging*, 5-40
$CRAVL, *Crash Dump Analyzer*, 3-12, 3-36
CRAW$ directive, *Executive*, 5-48
CRE argument to ORG$ macro, *RMS-11 Macro*, 2-3
Create Address Window directive, *Executive*, 5-47
CREATE command, *DCL*, 4-14 to 4-15, 9-9; *Introduction*, 2-1, 3-5
CREATE/DIRECTORY, *DCL*, 4-16 to 4-18, 9-10
RMSDES utility, *RMS-11 Utilities*, 2-7, 2-18, 2-28, 2-31
defining areas by default, *RMS-11 Utilities*, 2-44
defining areas explicilty, *RMS-11 Utilities*, 2-43
INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
key numbering, *RMS-11 Utilities*, 2-38
LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
setting attributes, *RMS-11 Utilities*, 2-21
with GET, *RMS-11 Utilities*, 2-10, 2-25
/CREATED qualifier
BRU utility, *Utilities*, 3-13
option
AFTER, *Utilities*, 3-13
BEFORE, *Utilities*, 3-13
Create Group Global Event Flags directive, *Executive*, 5-51
Create Logical Name directive, *Executive*, 5-36
ASSIGN command, *MCR*, 3-15
$CREATE macro, *RMS-11 Macro*, 5-9
$CLOSE macro, *RMS-11 Macro*, 5-3
CREATE operation, *RMS-11 Macro*, 3-9, 5-9, 5-10, 5-11, 5-12, 5-14, 5-15, 5-16, 5-17, 5-18, 5-19, 5-20, 5-21; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
CREATE operation (cont'd.)
and shared access, *RMS-11 User's Guide*, 2-6
BDB requirement, *RMS-11 Macro*, 2-7
$CREATE macro, *RMS-11 Macro*, 5-9
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
remote access, *RMS-11 User's Guide*, B-2 to B-3
CREATE option
ACNT, *System Management*, 2-3
MOUNT /CACHE command, *MCR*, 3-111
SET /CACHE command, *MCR*, 3-159
/CREATE qualifier
LIBRARY command, *Program Development*, 6-2, 6-4
Create Region directive, *Executive*, 5-53
Create Virtual Terminal directive, *Executive*, 5-56
Creating Image File section, *System Generation*, 3-81 to 3-83
CREF
See Cross-reference listing
C register, *Debugging*, 2-6, 5-3; *XDT*, 2-12
indicator, *Debugging*, 2-7, 7-3; *XDT*, 2-13
/CRE keyword
FLA command, *MCR*, 3-65
CRF argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
with RT-11, *MACRO-11*, 8-6
CRF utility, *Program Development*, 1-9; *MACRO-11*, 7-14
assembly cross-reference, *Program Development*, 3-7
/CRO switch, *Utilities*, B-1, B-2
data processing, *Utilities*, B-1
error messages, *Utilities*, B-7
file
listing, *Utilities*, B-2
object, *Utilities*, B-2
symbol table, *Utilities*, B-2, B-3
task image, *Utilities*, B-2
global cross-reference, *Program Development*, 4-5, 4-6
MACRO-11, *Utilities*, B-1, B-2
messages, *Utilities*, B-6
options with RT-11, *MACRO-11*, 8-7
SEND packet, *Utilities*, B-2, B-5
/SP switch, *Utilities*, B-3

CRF utility (cont'd.)
TKB, *Utilities*, B-1, B-2
CRGF$ directive, *Executive*, 5-51
/CROSS_REFERENCE qualifier, *Task Builder*, 11-24
LINK command, *Program Development*, 4-5
MACRO command, *Program Development*, 1-9, 3-7
.CROSS directive, *MACRO-11*, 5-15
relationship to /C[R] or /CROSS option, *MACRO-11*, 5-16
summary, *MACRO-11*, 5-1
Cross-reference
LINK command, *Program Development*, 4-5
listing
assembly, *Program Development*, 3-7
global, *Program Development*, 4-5, 4-6
TKB, *Program Development*, 4-6
Cross-reference listing
example, *Task Builder*, 10-12 to 10-14, 11-25 to 11-26
map file, *Task Builder*, 10-12, 11-24
sample, *MACRO-11*, H-1
Cross-Reference Processor
See CRF utility
See CRP
Cross-reference processor option, *MACRO-11*, 7-14
Cross-reference table
special symbols, *MACRO-11*, 7-15
/CRO switch
CRF utility, *Utilities*, B-1, B-2
CRP, *Batch and Queue*, 3-23; *System Management*, 3-2
error recovery, *Batch and Queue*, 3-27
operation, *Batch and Queue*, 3-26
$CRPKT Executive routine, *Error Logging*, 4-25
CRRG$ directive, *Executive*, 5-53
/CR switch, *Task Builder*, 10-12
LBR utility, *Program Development*, 6-2, 6-5; *Utilities*, 10-13
MAC command, *Program Development*, 3-7
TKB, *Program Development*, 1-9, 4-6
CRT, *I/O Drivers*, 2-7
rubout (TTDRV), *I/O Drivers*, 2-21
/CRT keyword
SET command, *MCR*, 3-161
SET command (VMR), *System Management*, 5-53
CRVT$ directive, *Executive*, 5-60
.CSECT directive, *MACRO-11*, 5-39
.CSECT directive (cont'd.)
assigns attributes to current location counter, *MACRO-11*, 2-12
default characteristics, *MACRO-11*, 5-40
special case of .PSECT, *MACRO-11*, 5-39
summary, *MACRO-11*, 5-2
terminates local symbol block, *MACRO-11*, 2-10
CSI, *I/O Operations*, 6-1
expanding file specification, *I/O Operations*, 6-18
initializing control block, *I/O Operations*, 6-18
parsing file specification, *I/O Operations*, 6-18
CSI$1 macro
command syntax analyzer, *I/O Operations*, 6-18
CSI$2 macro
command semantic parser, *I/O Operations*, 6-19
initializing control block, *I/O Operations*, 6-18
parsing file specification, *I/O Operations*, 6-18
CSI$4 macro
command semantic parser, *I/O Operations*, 6-21
expanding file specification, *I/O Operations*, 6-18
CSI$ macro, *I/O Operations*, 6-14
CSI$ND macro, *I/O Operations*, 6-22
defining end of descriptor table, *I/O Operations*, 6-29
CSI$SV macro, *I/O Operations*, 6-22
creating switch value descriptor table entry, *I/O Operations*, 6-27
CSI$SW macro, *I/O Operations*, 6-22
creating switch descriptor table entry, *I/O Operations*, 6-22
CSI control block
bit values definition, *I/O Operations*, 6-14
offsets definition, *I/O Operations*, 6-14
CSI macro
switch definition, *I/O Operations*, 6-22
CSI routine, *I/O Operations*, 6-13
CSI run-time macros, *I/O Operations*, 6-18
CSM library, *Task Builder*, 8-7
building, *Task Builder*, 8-7
converting from SCAL library, *Task Builder*, 8-23
dispatching, *Task Builder*, 8-23

CSM library (cont'd.)
example, *Task Builder*, 8-9 to 8-19
linking task, *Task Builder*, 8-9
CSR, *Writing I/O Driver*, 1-1
accessing, *Writing I/O Driver*, 1-1
address
boot device, *MCR*, 3-149
BRUSYS default, *System Generation*, 2-7
determining, *System Generation*, 3-35
floating assignment algorithm, *System Generation*, D-3
saving, *MCR*, 3-150
address space, *Writing I/O Driver*, 1-1
assignment
error, *Writing I/O Driver*, 5-8
setting, *Writing I/O Driver*, 5-7
changing address value, *System Management*, 4-29
definition, *System Generation*, 1-8
definition (XEDRV), *I/O Drivers*, 10-26
determining, *System Generation*, 2-1
/CSR keyword
SAVE command, *MCR*, 3-149
CSRQ$ directive, *Executive*, 5-62
/CS switch
PAT utility, *Utilities*, 11-2, 11-8
SLP utility, *Utilities*, 13-15
/CTB
use in LOAD, *Writing I/O Driver*, 5-14
CTB, *MCR*, 3-104; *Writing I/O Driver*, 1-4
composite arrangement, *Writing I/O Driver*, 2-16
definition, *Writing I/O Driver*, 1-4
details, *Writing I/O Driver*, 4-48, 4-49, 4-53
format, *Writing I/O Driver*, 4-49, 4-53
layout, *Writing I/O Driver*, 4-49
overview, *Writing I/O Driver*, 2-1
requirement, *Writing I/O Driver*, A-3
system list, *Writing I/O Driver*, 2-1
use in handling interrupts, *Writing I/O Driver*, 2-1
use in LOAD, *Writing I/O Driver*, 5-14
validation during LOAD, *Writing I/O Driver*, 5-11
CTBDF$, *Crash Dump Analyzer*, C-14
/CTB keyword
LOA command (VMR), *System Management*, 5-29
LOAD command, *MCR*, 3-103
/CTL, *Crash Dump Analyzer*, 2-4, 2-6
%CTL$CLOSE function
CFL, *Error Logging*, 5-21
%CTL$EOF function
CFL, *Error Logging*, 5-21
%CTL$FILE_STATUS function
CFL, *Error Logging*, 5-21
%CTL$INPUT function
CFL, *Error Logging*, 5-21
%CTL$OPEN function
CFL, *Error Logging*, 5-21
%CTL$STATUS function
CFL, *Error Logging*, 5-21
$CTLST symbol, *Writing I/O Driver*, 2-16
CTRL/C, *MCR*, 2-16
causing an AST, *MCR*, 2-14
interrupting output, *MCR*, 2-14
invoking CLI prompt, *MCR*, 3-42
invoking the MCR prompt, *MCR*, 2-13
IOX
disabling in, *System Management*, 12-9
effect on, *System Management*, 12-22
enabling in, *System Management*, 12-9
entering Interactive mode, *System Management*, 12-10
ODT, *Debugging*, 1-6
CTRL/C abort support
SYSGEN question, *System Generation*, 3-29
CTRL/C character
TTDRV, *I/O Drivers*, 2-15, 2-70
aborting, *I/O Drivers*, 2-70
abort task, *I/O Drivers*, 2-19
directed to task, *I/O Drivers*, 2-70
excluding, *I/O Drivers*, 2-19
hold screen mode, *I/O Drivers*, 2-70
terminate read, *I/O Drivers*, 2-70
TF.RPT, *I/O Drivers*, 2-16
TF.RST, *I/O Drivers*, 2-17
CTRL/C command, *Program Development*, 1-2
See CONTROL_C command
CTRL/G sequence
messages to CO, *System Management*, 9-4
CTRL/I, *MCR*, 2-16
CTRL/I character
TTDRV, *I/O Drivers*, 2-70
CTRL/J, *Debugging*, 4-4
CTRL/J character
TTDRV, *I/O Drivers*, 2-70
CTRL/K, *MCR*, 2-16
CTRL/K character
TTDRV, *I/O Drivers*, 2-70
CTRL/L, *MCR*, 2-16

CTRL/L character
TTDRV, *I/O Drivers*, 2-71
CTRL/M character
TTDRV, *I/O Drivers*, 2-71
CTRL/O, *MCR*, 2-17
Command mode
IOX, *System Management*, 12-39
Interactive mode
IOX, *System Management*, 12-39
XDT, *XDT*, 2-14
CTRL/O character
TTDRV, *I/O Drivers*, 2-15, 2-16, 2-71
canceling, *I/O Drivers*, 2-18, 2-20, 2-25, 2-29, 2-30, 2-50, 2-52
canceling on breakthrough write, *I/O Drivers*, 2-27
IO.RPR, *I/O Drivers*, 2-42
state, *I/O Drivers*, 2-61
TF.RPT, *I/O Drivers*, 2-16
TF.RST, *I/O Drivers*, 2-17
CTRL/O command, *Program Development*, 3-6
CTRL/P command, *Utilities*, C-5
CTRL/Q, *MCR*, 2-17
CTRL/Q character
TTDRV, *I/O Drivers*, 2-15
resume output, *I/O Drivers*, 2-71
state, *I/O Drivers*, 2-61
TF.RPT, *I/O Drivers*, 2-16
TF.RST, *I/O Drivers*, 2-17
CTRL/Q command, *Program Development*, 3-6
CTRL/R, *MCR*, 2-17
CTRL/R character
TTDRV, *I/O Drivers*, 2-16, 2-71
carriage return, *I/O Drivers*, 2-71
line feed, *I/O Drivers*, 2-71
prompt, *I/O Drivers*, 2-16
redisplay, *I/O Drivers*, 2-27
automatic, *I/O Drivers*, 2-18
input, *I/O Drivers*, 2-20
retype, *I/O Drivers*, 2-20
TF.RPR, *I/O Drivers*, 2-16, 2-30
TF.RST, *I/O Drivers*, 2-17
CTRL/S, *MCR*, 2-17
CTRL/S character
TTDRV, *I/O Drivers*, 2-15, 2-71
breakthrough write, *I/O Drivers*, 2-20
state, *I/O Drivers*, 2-61
suspend output, *I/O Drivers*, 2-71
TF.RPT, *I/O Drivers*, 2-16
TF.RST, *I/O Drivers*, 2-17
CTRL/S command, *Program Development*, 3-6
CTRL/U, *MCR*, 2-17
ODT, *Debugging*, 2-7
CTRL/U character
TTDRV, *I/O Drivers*, 2-16, 2-72
delete start of line, *I/O Drivers*, 2-72
prompt, *I/O Drivers*, 2-16
TF.RPR, *I/O Drivers*, 2-16, 2-30
TF.RST, *I/O Drivers*, 2-17
CTRL/U command, *Program Development*, 5-3
CTRL/X, *MCR*, 2-17
CTRL/X character
TTDRV, *I/O Drivers*, 2-72, 2-74
clear type-ahead, *I/O Drivers*, 2-72
CTRL/Z, *MCR*, 2-17
RMSBCK utility, *RMS-11 Utilities*, 6-2
RMSCNV utility, *RMS-11 Utilities*, 4-4
file terminator, *RMS-11 Utilities*, 4-8
RMSDES utility, *RMS-11 Utilities*, 2-2, 2-9, 2-18
RMSDSP utility, *RMS-11 Utilities*, 5-2
RMSIFL utility, *RMS-11 Utilities*, 3-2
RMSRST utility, *RMS-11 Utilities*, 7-2
CTRL/Z character
TTDRV, *I/O Drivers*, 2-15, 2-72, 2-74
exit task, *I/O Drivers*, 2-72
TF.RPT, *I/O Drivers*, 2-16
CTRL/Z command
EDI editor, *Utilities*, 7-21
/CTRLC subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-42
CTRL key, *DCL*, 3-18
CTRL/C, *DCL*, 3-19, 7-18 to 7-20; *Introduction*, 1-4
CTRL/G, *DCL*, 3-22
CTRL/I, *DCL*, 3-22
CTRL/K, *DCL*, 3-22
CTRL/L, *DCL*, 3-21
CTRL/M, *DCL*, 3-22
CTRL/O, *DCL*, 3-20; *Introduction*, 1-16
CTRL/Q, *DCL*, 3-19
CTRL/R, *DCL*, 3-21; *Introduction*, 1-9
CTRL/S, *DCL*, 3-19
CTRL/U, *DCL*, 3-20; *Introduction*, 1-9
CTRL/X, *DCL*, 3-21
CTRL/Z, *DCL*, 3-20; *Introduction*, 1-9, 1-10
.CTRL routine
control device, *I/O Operations*, 4-27

.CTRL routine (cont'd.)
tape, *I/O Operations*, 5-7
^C unary operator
represents pressing CTRL/C in command lines, *MACRO-11*, 7-1
Current location counter, *MACRO-11*, 2-11
cannot assign value with forward reference, *MACRO-11*, 2-12
change with direct assignment statement, *MACRO-11*, 2-11
changing attributes of, *MACRO-11*, 2-12
effect of odd value, *MACRO-11*, 5-31
list of statements that may leave as odd value, *MACRO-11*, 5-30
using to reserve space, *MACRO-11*, 2-12
Current location counter symbol (.), *MACRO-11*, 2-11
assign new value to, *MACRO-11*, 2-11
in program sections, *MACRO-11*, 5-37
Current location indicator, *XDT*, 2-10; *Debugging*, 7-3
/CURRENT qualifier
SHOW ERROR_LOG command, *Error Logging*, 2-13
Current-record context
See Context
Cursor, *Introduction*, 1-4
control (TTDRV)
terminal-independent, *I/O Drivers*, 2-21, 2-81
position (TTDRV), *I/O Drivers*, 2-15
restore, *I/O Drivers*, 2-29, 2-48, 2-50
save, *I/O Drivers*, 2-29, 2-48, 2-50
CUT function
EDT editor, *Introduction*, 2-9
CVADF: subroutine
converting A/D input to floating point
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
$CVLBN routine, *Writing I/O Driver*, 7-14
$CVLOK (Page lock), *System Library*, 8-31
$CVRL (Virtual to real address), *System Library*, 8-34
$CVTUC (Uppercase text), *System Library*, 6-1
CXA16/CXB16/CXY08 line muliplexer
SYSGEN question, *System Generation*, 3-60
CXA16 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83
CXB16 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83
CXY08 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83
Cylinder, *RMS-11 Intro*, 2-1
See also Placement control
Cylinder crossed count, *System Management*, 10-8
Cylinder number, *Writing I/O Driver*, 1-17
Cylinder Scan
definition, *Writing I/O Driver*, 1-17

D

D.xxx offsets
in DCB, *Writing I/O Driver*, 4-16 to 4-21
D$CUIC, *Indirect*, 2-5
/D_LINES qualifier
FORTRAN command, *Program Development*, 7-7
DAP (data access protocol)
See DECnet
DAPRES
remote access code, *RMS-11 User's Guide*, B-1
remote access support, *RMS-11 User's Guide*, 8-7
D argument
for .PSECT, *MACRO-11*, 5-34
/DA switch, *Task Builder*, 10-15
TKB, *Program Development*, 5-2
DASWP: subroutine
initiating synchronous D/A sweep
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
$DAT (Date conversion)
alternate format, *System Library*, 6-4
standard format, *System Library*, 6-3
Data
asynchronous, *Writing I/O Driver*, 1-16
sending to task, *Executive*, 5-222, 5-304
DATA_AREA
RMSDES utility, *RMS-11 Utilities*, 2-40
DATA_FILL
RMSDES utility, *RMS-11 Utilities*, 2-40
Data access protocol (DAP)
See DECnet
Database, *Writing I/O Driver*, 1-23
assembling during system generation, *Writing I/O Driver*, 5-4
code
bit symbols, *Writing I/O Driver*, 4-28
converting RSX-11M to RSX-11M-PLUS, *Writing I/O Driver*, A-1, A-2

Database
converting RSX-11M to RSX-11M-PLUS (cont'd.)
defining CTB, *Writing I/O Driver*, A-3
SCB requirements, *Writing I/O Driver*, A-2
creating source code, *Writing I/O Driver*, 4-2
defining link word for, *Writing I/O Driver*, 4-3
details of structures, *Writing I/O Driver*, 4-30 to 4-34, 4-44 to 4-48
driver
sample code, *Writing I/O Driver*, 8-1, 8-3
structures, *Writing I/O Driver*, 2-1, 2-3
global label, *Writing I/O Driver*, 4-2
$USRTB, *Writing I/O Driver*, 4-3
$xxDCB, *Writing I/O Driver*, 4-3
labeling of data structures, *Writing I/O Driver*, 4-2
loadable, *Writing I/O Driver*, 1-24, 4-3
incorporating, *Writing I/O Driver*, 5-1
module
inserting into library, *Writing I/O Driver*, 5-4
overview of structures, *Writing I/O Driver*, 2-3
owning CTB, *Writing I/O Driver*, 2-1
programming
requirements, *Writing I/O Driver*, 4-2 to 4-3
resident, *Writing I/O Driver*, 1-24, 4-3
incorporating, *Writing I/O Driver*, 5-1
linking to CTB, *Writing I/O Driver*, 4-3
structures
augmented, *Writing I/O Driver*, 1-14
composite arrangement, *Writing I/O Driver*, 2-12
conventional, *Writing I/O Driver*, 1-14
ordering of, *Writing I/O Driver*, 4-2
typical arrangements, *Writing I/O Driver*, 2-6, 2-7, 2-8
validation during LOAD, *Writing I/O Driver*, 5-11
Data block
dequeuing, *Executive*, 5-174, 5-176, 5-178, 5-296, 5-298, 5-300
local, *Program Development*, 2-8
queuing, *Executive*, 5-217, 5-302
Data Cache Manager
See DCM
Data caching, *MCR*, 3-111 to 3-112, 3-159 to 3-160
deferred write requests, *MCR*, 3-111, 3-160
options, *MCR*, 3-111, 3-159
region, *MCR*, 3-111, 3-159
specifying partition, *MCR*, 3-111, 3-159
Data caching support
SYSGEN question, *System Generation*, 3-27
DATA command, *Batch and Queue*, 3-2
example, *Batch and Queue*, 3-6, 3-7
format, *Batch and Queue*, 3-6
qualifiers, *Batch and Queue*, 3-6
Data compare error
conditions for, *System Management*, 12-47
definition, *System Management*, 12-13
.DATA directive, *Indirect*, 2-49
Data file
RMSDES utility, *RMS-11 Utilities*, 2-3, 2-17, 2-24
creating, *RMS-11 Utilities*, 2-3, 2-7, 2-28
GET command, *RMS-11 Utilities*, 2-10
Data format
ANSI tape, *I/O Operations*, 1-8
file device, *I/O Operations*, 1-6
Data integrity checking
RMSBCK utility, *RMS-11 Utilities*, 6-6 to 6-7, 6-9
RMSRST utility, *RMS-11 Utilities*, 7-6, 7-8
Data mode, *Indirect*, 2-53
Data packet
sending, *Executive*, 5-231
Data patterns
IOX
list, *System Management*, 12-40
Data record, *RMS-11 Intro*, 3-7
Data-set descriptor, *I/O Operations*, 2-27
address initialization, *I/O Operations*, 2-14
as data structure, *I/O Operations*, 1-5
definition, *I/O Operations*, 1-3
general description, *I/O Operations*, 1-5
OFNB$x macro, *I/O Operations*, 3-15
pointer definition, *I/O Operations*, 1-3
pointer file-open, *I/O Operations*, 2-13
pointer initialization, *I/O Operations*, 2-14
specifying, *I/O Operations*, 2-26
Data space, *Debugging*, 7-2; *Executive*, 3-1; *XDT*, 2-4
command, *Debugging*, 2-7; *XDT*, 2-13
enabling, *Debugging*, 1-3
Executive support for
running VMR, *System Management*, 5-3

Data space (cont'd.)
mapping, *Executive*, 3-3
moving data, *Executive*, 5-155
task, *Task Builder*, 7-1
Data storage, *RMS-11 Intro*, 2-1
and file organization, *RMS-11 User's Guide*, 2-5
control in assembly language, *Program Development*, 1-5
directive, *Program Development*, 1-5
MACRO-11 definition, *Program Development*, 2-8
program section, *Program Development*, 2-8
Data structure, *Writing I/O Driver*, 1-14
memory management directive, *Executive*, 3-10
DATA subpacket, *Error Logging*, 4-3, 4-4
See also Dispatcher module
append-to-file operation, *Error Logging*, 4-65
block-replacement operation, *Error Logging*, 4-66
change-limits operation, *Error Logging*, 4-66
device error, *Error Logging*, 4-66
device information messages, *Error Logging*, 4-66
driver-load or unload event, *Error Logging*, 4-68
listing, *Error Logging*, 4-65 to 4-68
memory parity error event, *Error Logging*, 4-66
set-backup-file operation, *Error Logging*, 4-65
switch-logging-files operation, *Error Logging*, 4-65
system-crash event, *Error Logging*, 4-67
system-message event, *Error Logging*, 4-68
unknown interrupt event, *Error Logging*, 4-67
Data Terminal Emulator
See DTE
Data transfer, *Writing I/O Driver*, 1-12
BRU utility, *Utilities*, 3-30
DSC utility, *Utilities*, 6-18
FLX utility, *Utilities*, 8-1
Data transfer time
I/O service time and, *System Management*, 14-2
DATATRIEVE-11 program
as report generator, *System Management*, 10-17
DATATRIEVE-11 program (cont'd.)
converting transaction file for, *System Management*, 10-17
writing accounting report with, *System Management*, 10-17
Data type
keys, *RMS-11 User's Guide*, 6-3
and segmenting, *RMS-11 User's Guide*, 6-7
2-byte-signed integer, *RMS-11 User's Guide*, 6-4
4-byte signed integer, *RMS-11 User's Guide*, 6-4
2-byte unsigned binary, *RMS-11 User's Guide*, 6-5
4-byte unsigned binary, *RMS-11 User's Guide*, 6-5
packed decimal, *RMS-11 User's Guide*, 6-6
string, *RMS-11 User's Guide*, 6-3
key values, *RMS-11 Intro*, 3-7
DAT block, *RMS-11 Macro*, 5-78, 5-94; *RMS-11 Intro*, 4-8
chaining to FAB, *RMS-11 Macro*, 2-11 to 2-13
declaring, *RMS-11 Macro*, 2-7
initializing, *RMS-11 Macro*, 2-9
summary, *RMS-11 Macro*, 6-12
Date, *DCL*, 1-13
See also DAT block
displaying, *System Management*, 5-78; *DCL*, 8-4
setting, *System Management*, 5-78; *DCL*, 8-2
specifying, *System Library*, 6-5
<DATE> symbol, *Indirect*, 2-22
Date conversion
alternate format date ($DAT), *System Library*, 6-4
standard format date ($DAT), *System Library*, 6-3
/DATE switch
RPT, *Error Logging*, 3-8
arguments, *Error Logging*, 3-9
processing, *Error Logging*, 4-4
/DCB, *Crash Dump Analyzer*, 2-4, 2-6
DCB
ASCII device name, *Writing I/O Driver*, 4-17
composite arrangement, *Writing I/O Driver*, 2-12

DCB (cont'd.)
creating mask words in, *Writing I/O Driver*, 4-20
definition, *Writing I/O Driver*, 1-4
details, *Writing I/O Driver*, 4-16, 4-17
driver dispatch table pointer, *Writing I/O Driver*, 4-18
driver-specific function masks, *Writing I/O Driver*, 4-20 to 4-24
establishing characteristics for, *Writing I/O Driver*, 2-7
establishing I/O function masks, *Writing I/O Driver*, 4-21
fields, *Writing I/O Driver*, 4-16, 4-17
format, *Writing I/O Driver*, 4-16, 4-17
labeling, *Writing I/O Driver*, 4-3
length of UCB, *Writing I/O Driver*, 4-17
linking to next DCB, *Writing I/O Driver*, 4-16
list of, *Writing I/O Driver*, 2-3
means to access Driver Dispatch Table, *Writing I/O Driver*, 2-3
number of units stored, *Writing I/O Driver*, 4-3
overview, *Writing I/O Driver*, 2-3
pointer to first UCB, *Writing I/O Driver*, 4-16
unit number range, *Writing I/O Driver*, 4-17
validation during LOAD, *Writing I/O Driver*, 5-12
DCBDF$, *Crash Dump Analyzer*, C-15
DCL, *RMS-11 User's Guide*, B-2; *MCR*, 3-47; *Program Development*, 1-2 to 1-3; *System Management*, 17-2; *DCL*, 1-1, 9-1; *Introduction*, 1-1, 1-11, 3-1, 5-1; *MACRO-11*, 7-1
commands
SET, *System Management*, 18-4
intermediate form
See IFORM
interpretation, *System Management*, 18-5
mapping to MCR, *System Management*, 18-16
QMG
command format, *System Management*, 3-15
naming conventions, *System Management*, 3-15
running as a task, *System Management*, 18-3
DCL (cont'd.)
SET TERMINAL command
/MCR qualifier, *MCR*, 1-1
SYSGEN question, *System Generation*, 3-28
task
See DCL task
DCL command
See also DIGITAL COMMAND LANGUAGE command
linking
ODT, *Debugging*, 1-3
ODTID, *Debugging*, 1-3
explicitly, *Debugging*, 1-4
supervisor-mode libraries, *Debugging*, 1-4
DCL command qualifier, *MACRO-11*, 7-7
DCL command table, *System Management*, 18-6
example, *System Management*, 18-58 to 18-59
interpreting, *System Management*, 18-13
modifying, *System Management*, 18-22
/DCL keyword
HELP command, *MCR*, 3-72
SET command, *MCR*, 3-162
DCL Master Command Table
See MCT
DCL operating procedure, *MACRO-11*, 7-7
DCL prompt, *MCR*, 1-1
DCL task
commands
adding, *System Management*, 18-22
deleting, *System Management*, 18-27
modifying, *System Management*, 18-27
definition, *System Management*, 1-19, 18-1
IFORM, *System Management*, 18-20
installation, *System Management*, 18-2
alternatives, *System Management*, 18-2
catchall task, *System Management*, 18-4
conventional, *System Management*, 18-2
MCR task, *System Management*, 18-3
MCR fallthrough, *System Management*, 18-4
modifying, *System Management*, 1-19
overlay, *System Management*, 18-24
parser process, *System Management*, 18-6
parser table, *System Management*, 18-15
PT/TT, *System Management*, 18-26
file, *System Management*, 18-22
task building, *System Management*, 18-4
first pass, *System Management*, 18-5

DCL task
task building (cont'd.)
second pass, *System Management*, 18-5
translator process, *System Management*, 18-6
DCM
definition, *System Management*, 15-1
enabling, *System Management*, 15-1
D command, *Debugging*, 2-7; *XDT*, 2-13
/DC switch
DMP utility, *Utilities*, 5-4
DDDRV, *I/O Drivers*, 5-1
$DDIV (Double-precision divide), *System Library*, 3-4
DDS
See Default directory string
/DD switch
PIP utility, *Utilities*, 12-10
DDT$ macro call
arguments, *Writing I/O Driver*, 4-5
use of, *Writing I/O Driver*, 4-5
$DEAC1 routine, *Writing I/O Driver*, 7-15
$DEACB routine, *Writing I/O Driver*, 7-15
Deaccess lock
F11ACP, *I/O Operations*, H-10
DEA command
See DEALLOCATE command
DEALLOCATE command, *MCR*, 3-48; *DCL*, 5-44 to 5-45, 9-10
brief description, *MCR*, 1-7
example, *MCR*, 3-48
format, *MCR*, 3-48
parameters, *MCR*, 3-48
Deallocate Device Transaction Block, *System Management*, 10-41
Deallocation entry point, *Writing I/O Driver*, 4-61
DEASSIGN/QUEUE command, *System Management*, 3-30
See also DEASSIGN command
DEASSIGN command, *DCL*, 5-34 to 5-36, 9-10
DEASSIGN/QUEUE, *DCL*, 9-11
DEB command
See DEBUG command
$DEBUG, *I/O Operations*, 7-2
DEBUG command, *MCR*, 3-49; *DCL*, 7-44 to 7-45, 9-11
brief description, *MCR*, 1-6
examples, *MCR*, 3-49
format, *MCR*, 3-49
parameter, *MCR*, 3-49
DEBUG command (cont'd.)
RSX-11M-PLUS and Micro/RSX, *Debugging*, 1-6
Debugging
aid, *MCR*, 3-49
introduction, *Program Development*, 1-7
MACRO-11 source file, *Program Development*, 3-3, 3-4
task, *MCR*, 3-49; *Program Development*, 4-8, 5-1, 5-2, 7-7, 7-8
tool
See ODT
using map, *Program Development*, 5-2, 5-8
Debugging aid
including, *Task Builder*, 10-15, 11-27
/DEBUG qualifier, *Task Builder*, 11-27
LINK command, *Program Development*, 5-1
Debug routine, *I/O Operations*, 7-6
.DEC directive, *Indirect*, 2-50
Decimal conversion
decimal to binary
($CDTB), *System Library*, 4-4
doubleword (.DD2CT), *System Library*, 4-1
Decimal mode, *Indirect*, 2-54
Decimal number
specifying, *MCR*, 1-2
DECIMAL print radix
CFL, *Error Logging*, 5-5
Decimal version numbers
SYSGEN question, *System Generation*, 3-29
/DEC keyword
SET command, *MCR*, 3-162
SET command (VMR), *System Management*, 5-54
DECL$S directive, *Executive*, 5-64
Declare GSD record type, *Task Builder*, A-4
Declare Significant Event directive, *Executive*, 5-64
DECLARE statement
CFL, *Error Logging*, 5-25
DECnet, *RMS-11 User's Guide*, 8-6 to 8-8, B-1; *DCL*, 1-15
and CREATE operations, *RMS-11 User's Guide*, B-2 to B-3
and ERASE operations, *RMS-11 User's Guide*, B-2
and file organization, *RMS-11 User's Guide*, B-3
and OPEN operations, *RMS-11 User's Guide*, B-2 to B-3

DECnet (cont'd.)
and PARSE operations, *RMS-11 User's Guide*, B-1
and REMOVE operations, *RMS-11 User's Guide*, B-1
and RENAME operations, *RMS-11 User's Guide*, B-1
and SEARCH operations, *RMS-11 User's Guide*, B-1
block access, *RMS-11 User's Guide*, B-3
DAPRES resident library, *RMS-11 User's Guide*, B-1
disk-resident overlaid code, *RMS-11 User's Guide*, B-1
FALs
on different systems, *RMS-11 User's Guide*, B-3
file specification, *RMS-11 User's Guide*, B-2
default, *RMS-11 User's Guide*, B-2
node, *RMS-11 User's Guide*, B-2
quoted string, *RMS-11 User's Guide*, B-2
I/O buffers, *RMS-11 User's Guide*, B-3
indexed files, *RMS-11 User's Guide*, B-3
relative files, *RMS-11 User's Guide*, B-3
sequential files, *RMS-11 User's Guide*, B-3
limitations on functions, *RMS-11 User's Guide*, B-1
shutting down with SHUTUP.CMD, *System Management*, 6-3
DECnet package
CEX
pregenerated kit, *System Generation*, 5-49
pool use
pregenerated kit, *System Generation*, 5-49
DECODE statement
CFL, *Error Logging*, 5-31
DECREMENT statement
CFL, *Error Logging*, 5-30
DECtape, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-77, 5-88, 5-97, 5-104, 5-111, 5-117
exercising with IOX, *System Management*, 12-3
format, *MCR*, 2-1
accessing, *MCR*, 2-1
function code list, *I/O Drivers*, B-8, B-13
DECtape file structure, *I/O Operations*, 5-1
DECTAPE II, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-77, 5-88, 5-104
Dedicated mode
LADRV, *I/O Drivers*, 12-1
DEF$SZ argument, *RMS-11 Macro*, C-1
<DEFAUL> symbol, *Indirect*, 2-10
Default, *Introduction*, 1-14 to 1-15, 3-10
compilers, *RMS-11 User's Guide*, 2-2
DEQ, *RMS-11 User's Guide*, 4-4
file specification, *RMS-11 User's Guide*, A-6, B-2
file type
MACRO-11, *Program Development*, 3-5
TKB, *Program Development*, 4-1
RMS-11, *RMS-11 User's Guide*, 2-2
RMSDES utility, *RMS-11 Utilities*, 2-21
system library search
MACRO-11, *Program Development*, 1-5, 1-10, 2-6
TKB, *Program Development*, 1-11, 4-2
transfer (starting) address, *Program Development*, 4-7
VMR
device, *System Management*, 5-5
directory, *System Management*, 5-6
file types, *System Management*, 5-6
version number, *System Management*, 5-6
/DEFAULT_LIBRARY qualifier, *Task Builder*, 11-28
Default directory string, *Executive*, 5-109, 5-220; *Indirect*, 2-23, 2-26
retrieving, *Executive*, 5-108
setting, *Executive*, 5-219
Default extension quantity
See DEQ
RMSDEF utility, *RMS-11 Utilities*, A-15
Default Filename Block
See DFNB
DEFER_WRITES option, *System Management*, 15-5
MOUNT /CACHE command, *MCR*, 3-111
SET /CACHE command, *MCR*, 3-160
Deferred write, *RMS-11 User's Guide*, 2-17, 6-27
and mass insertion, *RMS-11 User's Guide*, 6-29
indexed files, *RMS-11 User's Guide*, 7-8
relative files, *RMS-11 User's Guide*, 4-14
sequential files, *RMS-11 User's Guide*, 3-14
Deferred write request
description, *System Management*, 15-5
I/O completion time, *System Management*, 15-5

Deferred write requests
data caching, *MCR*, 3-111, 3-160
DEFINE command, *DCL*, 5-14, 5-37 to 5-40, 9-11
DEFINE LOGICALS command, *MCR*, 3-53
brief description, *MCR*, 1-5
examples, *MCR*, 3-57
format, *MCR*, 3-54, 3-55, 3-56
keywords
/ALL, *MCR*, 3-57
/FINAL, *MCR*, 3-55
/GBL, *MCR*, 3-55, 3-56, 3-57
/GR, *MCR*, 3-55, 3-56, 3-57
/SYSTEM, *MCR*, 3-56, 3-57
/TERM, *MCR*, 3-56, 3-57
/DEF keyword
SET command, *MCR*, 3-162
DEL argument to ORG$ macro, *RMS-11 Macro*, 2-3
.DELAY directive, *Indirect*, 2-51
DEL C function
EDT editor, *Introduction*, 2-8
DELET$ macro, *I/O Operations*, 3-2, 3-38
DELETE/ENTRY command, *Introduction*, 3-14
DELETE/PROCESSOR command, *System Management*, 3-27
See also DELETE command
processor types, *System Management*, 3-27
DELETE/QUEUE command, *System Management*, 3-26
See also DELETE command
Delete & Print command
EDI editor, *Utilities*, 7-22
Delete access, *MCR*, 2-3
common region, *MCR*, 3-98; *System Management*, 5-24
file
initializing volumes with, *MCR*, 3-88
specifying default, *MCR*, 3-80
specifying default for mounted volume, *MCR*, 3-113
specifying personal default, *MCR*, 3-164
UFD
establishing, *MCR*, 3-209
volume
initializing volumes with, *MCR*, 3-91
specifying default, *MCR*, 3-82
specifying default for mounted volume, *MCR*, 3-115
Delete and print command
EDI editor, *Program Development*, 2-16
DELETE command, *Utilities*, C-9; *DCL*, 4-38 to 4-41, 9-12; *Introduction*, 3-5 to 3-6, 3-7
DELETE/DIRECTORY, *DCL*, 4-19, 9-12
DELETE/ENTRY, *DCL*, 4-83 to 4-84, 9-12
DELETE/JOB, *DCL*, 4-83 to 4-84, 9-13
DELETE/PROCESSOR, *DCL*, 9-13
DELETE/QUEUE, *DCL*, 9-13
deleting a job from a queue, *Batch and Queue*, 1-9
EDT editor, *Introduction*, 2-15
examples, *Batch and Queue*, 2-11
format, *Batch and Queue*, 2-10
/REMOTE option, *Utilities*, C-8
Delete command
EDI editor, *Utilities*, 7-21
/DELETE file qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
SUBMIT command, *Batch and Queue*, 3-15
DELETE key, *MCR*, 2-15; *DCL*, 1-22, 3-13; *Introduction*, 1-7, 1-9
TTDRV, *I/O Drivers*, 2-73
Delete Logical directive
ASSIGN command, *MCR*, 3-15
Delete Logical Name directive, *Executive*, 5-65
ASSIGN command, *MCR*, 3-15
$DELETE macro, *RMS-11 Macro*, 5-25
Delete mode, *Indirect*, 2-54
DELETE operation, *RMS-11 Macro*, 4-11; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and key position, *RMS-11 User's Guide*, 6-7
and shared access, *RMS-11 User's Guide*, 2-6
compressing records, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9
$DELETE macro, *RMS-11 Macro*, 5-25
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 5-15, 7-2, 7-9
optimizing, *RMS-11 User's Guide*, 6-7
relative files, *RMS-11 User's Guide*, 4-7
DELETE option
ACNT, *System Management*, 2-6

Device (cont'd.)
fairness-count, *MCR*, 3-174
Files–11 structure, *MCR*, 2-1
file specification, *RMS-11 User's Guide*, A-1, A-4
file-structured, *MCR*, 3-108
fixed media, *Crash Dump Analyzer*, 1-5
generic name, *Writing I/O Driver*, 2-3
getting information, *Executive*, 5-126
I/O requests
redirecting, *MCR*, 3-134
identifier for, *MCR*, 2-9
improving response to requests, *System Management*, 1-7
industrial, *DCL*, 5-5
information, *Indirect*, 2-94
interrupt, *Writing I/O Driver*, 1-5
IOX configuration
adding to, *System Management*, 12-20
displaying, *System Management*, 12-20
removing from, *System Management*, 12-20, 12-48
IOX exercise
selecting, *System Management*, 12-5
status during, *System Management*, 12-54
laboratory, *DCL*, 5-5
list, *MCR*, 3-118
list of supported, *I/O Drivers*, 1-42, 1-43
logical, *DCL*, 5-6, 5-36
logical assignment, *MCR*, 2-11
logical name, *Indirect*, 2-96; *MCR*, 2-11
logical names on VAX–11 host, *System Generation*, 2-21
magnetic tape, *RMS-11 User's Guide*, 1-12
making accessible, *Writing I/O Driver*, 5-6
mnemonic, *System Generation*, 2-3
mounted, *MCR*, 3-52
name
nonphysical, *I/O Drivers*, 1-20
physical, *I/O Drivers*, 1-19, 1-20
pseudo, *I/O Drivers*, 1-20
name
displaying, *MCR*, 3-50
non-file-structured, *MCR*, 3-108
nonshared, *MCR*, 3-108
notation format, *System Generation*, 3-35
null, *MCR*, 2-11; *System Management*, 5-37
off-line, *MCR*, 3-52; *System Management*, 5-16
on-line, *MCR*, 3-52
Device (cont'd.)
ownership, *MCR*, 2-12
peripheral, *DCL*, 5-1 to 5-10; *Introduction*, 6-1, 6-7
adding to configuration, *System Generation*, 5-34; *System Management*, 4-2
definition of, *MCR*, 2-9
physical
See Physical device
placing off line, *System Management*, 4-6
placing on line, *System Management*, 4-6
pregenerated kit, *System Generation*, 5-46
private, *Batch and Queue*, 3-13; *MCR*, 3-180; *DCL*, 5-41 to 5-45
See Device, nonshared
See Volume, nonshared
allocating, *MCR*, 2-12
deallocating, *MCR*, 3-10, 3-48
definition, *MCR*, 2-12
displaying, *MCR*, 3-196
privileged status, *MCR*, 2-12
pseudo, *MCR*, 2-10, 3-134; *System Generation*, B-4 ; *Introduction*, 3-11
redirecting, *MCR*, 2-10
public, *MCR*, 3-52, 3-108; *DCL*, 5-13
definition, *MCR*, 2-12
dismounting, *MCR*, 2-12
displaying, *MCR*, 3-180, 3-196
setting, *MCR*, 3-180
queuing I/O request, *Executive*, 5-168, 5-172
REASSIGN command, *I/O Drivers*, 1-20
REDIRECT command, *I/O Drivers*, 1-20
redirecting, *System Management*, 5-37
restrictions, *System Management*, 5-37
registers, *Writing I/O Driver*, 1-1, 1-3, 4-45
removing, *System Management*, 5-81
attached device, *System Management*, 5-81
RL02
example of testing with IOX, *System Management*, 12-63
saving system image, *MCR*, 3-147
sequential, *MCR*, 3-108
setting attributes, *DCL*, 5-134
shadow, *MCR*, 3-60
shared, *MCR*, 3-108
spooled, *MCR*, 3-134
storage of static characteristics, *Writing I/O Driver*, 2-3

Device (cont'd.)
subcontroller, *Writing I/O Driver*, 1-14
support, *System Generation*, B-1 to B-5
Autoconfigure, *System Generation*, 3-10, D-1
BRU utility, *Utilities*, 3-5
DSC utility, *Utilities*, 6-4
FLX utility, *Utilities*, 8-2
FMT utility, *Utilities*, 9-7
switches, *Crash Dump Analyzer*, 2-6
syntax for specification of, *MCR*, 2-5
system default
adding to account entry, *System Management*, 2-4
changing, *System Management*, 2-11
displaying, *System Management*, 2-8, 2-10
in account entry, *System Management*, 2-1, 2-4
table of logical assignments for, *MCR*, 2-12
testing with IOX
file-structured, *System Management*, 12-1
non-file-structured, *System Management*, 12-1
steps involved, *System Management*, 12-2
time, *System Management*, 12-50
TI
pseudo, *I/O Drivers*, 1-21
virtual, *I/O Drivers*, 1-21
timeout, *Writing I/O Driver*, 2-5
entry point, *Writing I/O Driver*, 4-60
unit failures, *System Management*, 11-4
unit-record, *RMS-11 Intro*, 3-5
unowned, *DCL*, 5-10
definition, *MCR*, 2-12
using, *MCR*, 2-12
user's default, *MCR*, 2-10
valid crash dump, *Crash Dump Analyzer*, 1-2
verification, *Utilities*, 2-7
DEVICE_ACTIVITY subpacket
See IO_ACTIVITY subpacket
DEVICE_ID subpacket, *Error Logging*, 4-3
listing, *Error Logging*, 4-62
DEVICE_OP subpacket, *Error Logging*, 4-3
listing, *Error Logging*, 4-63
Device common
MACRO-11 example, *Task Builder*, 5-31 to 5-35
Device context
definition, *System Management*, 4-6
Device control
LUN register, *Debugging*, 2-6, 5-4, 6-2
Device Control Block
See DCB
Device control code
event-level dispatching, *Error Logging*, 4-15
Device control file module, *Error Logging*, 2-7 to 2-8
Device controller dump, *Crash Dump Analyzer*, 3-42
common interrupt address, *Crash Dump Analyzer*, 3-42
Controller Request Block, *Crash Dump Analyzer*, 3-43
controller status, *Crash Dump Analyzer*, 3-43
Controller Table, *Crash Dump Analyzer*, 3-42
Device controller switch
See /CTL
Device control routine, *I/O Operations*, 4-27
Device driver
building, *MCR*, 3-105
loadable, *MCR*, 3-105, 3-128
loading, *MCR*, 3-103; *System Management*, 5-29
specifying partition, *MCR*, 3-104
mapping, *MCR*, 3-103; *System Management*, 5-30
nonresident, *MCR*, 3-103
symbol table file
location of, *MCR*, 3-105
testing, *Indirect*, 2-70
vectoring, *MCR*, 3-103, 3-105
Device error, *Error Logging*, 1-5, 1-6
hardware register contents, *Error Logging*, 1-6
subpacket information, *Error Logging*, 4-66
Device error code
event-level dispatching, *Error Logging*, 4-15
Device error logging, *Error Logging*, 2-7 to 2-8
$DVCER routine, *Error Logging*, 4-23
Device identification subpacket
See DEVICE_ID subpacket
Device information
.PRSDV routine, *I/O Operations*, 4-15
Device information code
event-level dispatching, *Error Logging*, 4-15
Device information dump, *Crash Dump Analyzer*, 3-30

Device information dump (cont'd.)
control processing flags, *Crash Dump Analyzer*, 3-31
device characteristics word, *Crash Dump Analyzer*, 3-31
Device Control Block, *Crash Dump Analyzer*, 3-34
I/O request packet, *Crash Dump Analyzer*, 3-34
Status Control Block, *Crash Dump Analyzer*, 3-34
terminal status word, *Crash Dump Analyzer*, 3-30
UCB extension, *Crash Dump Analyzer*, 3-34
Device information message
subpacket information, *Error Logging*, 4-66
Device information table, *Error Logging*, 4-17, 4-18, 4-35
Device interrupt address
overview, *Writing I/O Driver*, 2-6
Device interrupt vector, *Writing I/O Driver*, 2-4
Device-level module, *Error Logging*, 2-7, 4-7 to 4-9, 4-11
adding to system, *Error Logging*, 4-27
bit-to-text translation, *Error Logging*, 4-7, 4-27, 4-33
coroutine statement, *Error Logging*, 4-32
device data declaration, *Error Logging*, 4-29
device name, *Error Logging*, 4-28
device registers, *Error Logging*, 4-29
error type, *Error Logging*, 4-32
example, *Error Logging*, 4-36 to 4-50
exiting, *Error Logging*, 4-34
flow of, *Error Logging*, 4-28
intermodule variables, *Error Logging*, 4-32
local work variables, *Error Logging*, 4-31
MODULE statement, *Error Logging*, 4-35
non-DIGITAL device, *Error Logging*, 4-21
notes requirement, *Error Logging*, 4-33
procedures, *Error Logging*, 4-28 to 4-34
PROCEDURE statement, *Error Logging*, 4-29
register declaration, *Error Logging*, 4-30
SUBPACKET declaration, *Error Logging*, 4-29
table of, *Error Logging*, 4-8
writing, *Error Logging*, 4-28 to 4-34
Device name
assigning logical, *MCR*, 2-11
logical, *Crash Dump Analyzer*, 3-14
notes module, *Error Logging*, 4-34
Device name (cont'd.)
physical, *Crash Dump Analyzer*, 3-14
string descriptor, *I/O Operations*, 2-27
user-written module, *Error Logging*, 4-28
Device name field, *I/O Operations*, 2-32
Device operation subpacket
See DEVICE_OP subpacket
/DEVICE processor type, *System Management*, 3-19
/DEVICE qualifier
PRINT command, *Batch and Queue*, 2-3
SHOW QUEUE command, *Batch and Queue*, 2-14
Device register
device-level modules, *Error Logging*, 4-29
DEVICES command, *MCR*, 3-50
brief description, *MCR*, 1-6
examples, *MCR*, 3-50
formats, *MCR*, 3-50
/LOG keyword, *MCR*, 3-50
parameters, *MCR*, 3-50
VMR
See DEV command
DEVICE setup command, *System Management*, 7-17
Device specification, *MCR*, 2-5
use of colon in, *MCR*, 2-5
Device-specific QIO$
LADRV, *I/O Drivers*, 12-25
/DEVICES qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-5, 3-9
See also /DEVICE switch
arguments, *Error Logging*, 3-9
Device state, *System Management*, 4-5
marked for off line, *System Management*, 4-5
marked for on line, *System Management*, 4-5
off line, *System Management*, 4-5
on line, *System Management*, 4-5
Device statistics
Resource Accounting
example, *System Management*, 10-7
Device Statistics Block, *System Management*, 10-49
/DEVICE switch
RPT, *Error Logging*, 3-5, 3-9
See also /DEVICES qualifier
arguments, *Error Logging*, 3-5, 3-9
processing, *Error Logging*, 4-4

Device timeout logging
$DTOER routine, *Error Logging*, 4-22
$DVTMO routine, *Error Logging*, 4-22
/DEV keyword
DISMOUNT command, *MCR*, 3-61
TASKLIST command, *MCR*, 3-204
Dev parameter
ALUN$ macro, *I/O Drivers*, 1-18
DEVSM1 control file module, *Error Logging*, 4-6, 4-11, 4-17, 4-36, A-5
DEVUDA control file module, *Error Logging*, 2-7, 4-6, 4-11, A-5
/DFB keyword
INSTALL command, *MCR*, 3-96
INSTALL command (VMR), *System Management*, 5-22
DF conditional assembly test, *MACRO-11*, 5-45
DFIN$G argument, *RMS-11 Macro*, C-1
DFIN$L argument, *RMS-11 Macro*, C-1
DFL command
See DEFINE LOGICALS command
/ALL keyword, *System Management*, 8-18
DFNB, *I/O Operations*, 2-29, 3-15
as data structure, *I/O Operations*, 1-5
definition, *I/O Operations*, 1-3
FNBLK$ macro, *I/O Operations*, 2-29
OFNB$x macro, *I/O Operations*, 3-15
specifying, *I/O Operations*, 2-26
/DF switch
LBR utility, *Utilities*, 10-16
PIP utility, *Utilities*, 12-12
/DG switch
LBR utility, *Utilities*, 10-17
DH11 multiplexer
TTDRV, *I/O Drivers*, 2-82
DH11 serial line multiplexer
TTDRV
remote line, *I/O Drivers*, 2-84
DHQ11 multiplexer
TTDRV, *I/O Drivers*, 2-82
DHU11/DHV11/DHQ11 line muliplexer
SYSGEN question, *System Generation*, 3-60
DHU11 multiplexer
TTDRV, *I/O Drivers*, 2-82
DHV11 multiplexer
TTDRV, *I/O Drivers*, 2-82
Diagnostic
buffer
p5 address, *I/O Drivers*, 10-22
p6 size, *I/O Drivers*, 10-22
XEDRV, *I/O Drivers*, 10-22
Diagnostic (cont'd.)
function
IO.DGN (DDDRV), *I/O Drivers*, 5-4
IO.XRC, *I/O Drivers*, 10-22, 10-23
IO.XTM, *I/O Drivers*, 10-22, 10-23
no data transfer (XEDRV), *I/O Drivers*, 10-24
request block (XEDRV), *I/O Drivers*, 10-22
user-mode function, *I/O Drivers*, 1-34, 1-35
Diagnostic error message, *System Management*, 5-82
Diagnostic run
FORTRAN IV source file, *Program Development*, 7-3, 7-4
MACRO-11 source file, *Program Development*, 3-1, 3-2
Diagnostics Loader task
See DLD task
Dial command string
for modem, *Utilities*, C-5
/DIAL option
SET HOST/DTE command, *Utilities*, C-5
Dial-up line
baud rate
SYSGEN question, *System Generation*, 3-58
SYSGEN question, *System Generation*, 3-58
DIC, *Executive*, 1-2
DIF conditional assembly test, *MACRO-11*, 5-45
effect on .ENABL/.DSABL LCM, *MACRO-11*, 5-45
DIFFERENCES command, *DCL*, 4-65 to 4-70, 9-14
DIGITAL Command Language
See DCL
DIGITAL COMMAND LANGUAGE
command, *MCR*, 3-47
brief description, *MCR*, 1-7
examples, *MCR*, 3-47
format, *MCR*, 3-47
Digital input
K-series, *I/O Drivers*, 13-14
DIGITAL Multinational Character Set, *MCR*, 3-4
chart, *MACRO-11*, A-10
table, *MACRO-11*, A-1
use in keyword arguments, *MACRO-11*, 6-11

DIGITAL Multinational Character Set (cont'd.)
using circumflex when passing as arguments, *MACRO-11*, 6-6
DIGITAL Network Architecture
See DNA
Digital output
K-series, *I/O Drivers*, 13-18
DIGITAL Standard Editor
See EDT editor
Digital start event
K-series, *I/O Drivers*, 13-14
DIGITAL-supplied driver, *System Generation*, 1-8
DIGO: subroutine
digital start event (K-series), *I/O Drivers*, 13-14
DINP: subroutine
digital input (K-series), *I/O Drivers*, 13-14
DIR$ macro, *Executive*, 1-7; *I/O Drivers*, 1-15, 1-16
example, *I/O Drivers*, 1-16
format, *I/O Drivers*, 1-16
DIR attribute, *System Management*, 18-36
<DIRECT> symbol, *Indirect*, 2-23
Direct access
See Random access
Direct-access label, *Indirect*, 2-37
Direct assignment statement
equal sign colon (=:), *MACRO-11*, 2-7
forward referencing, *MACRO-11*, 2-8
may change current location counter, *MACRO-11*, 5-31
use of space character, *MACRO-11*, 2-8
Directive, *Indirect*, 1-4, 2-3, 2-36
See also Executive directive
assembler, *Program Development*, 1-5
conditional assembly, *MACRO-11*, 5-44
conventions, *Executive*, 5-7
data storage, *MACRO-11*, 5-17
DIC list, *Executive*, C-1
.END, *Program Development*, 2-8, 3-4, 4-3, 4-8
EXIT$S, *Program Development*, 2-6
file control, *MACRO-11*, 5-49
function, *MACRO-11*, 5-13
functions, *Indirect*, 2-3
general-purpose, *Program Development*, 2-6 to 2-7
.IDENT, *Program Development*, 2-5
indefinite repeat, *MACRO-11*, 6-17
listing control, *MACRO-11*, 5-3
list of obsolete, *MACRO-11*, I-1
Directive (cont'd.)
.LIST TTM, *Program Development*, 2-6
macro, *MACRO-11*, 6-1
macro attribute, *MACRO-11*, 6-13, 6-14
macros, *Executive*, 1-4
$C form, *Executive*, 1-6
$ form, *Executive*, 1-5
naming conventions, *Executive*, 1-4
$S form, *Executive*, 1-6
.MCALL, *Program Development*, 1-10, 2-6, 3-4, 6-3, 6-4
memory management, *Executive*, 3-1
data structures, *Executive*, 3-10
summary, *Executive*, 3-8
.NLIST BEX, *Program Development*, 2-6
overriding permanent definitions with .MCALL, *MACRO-11*, 6-21
.PAGE, *Program Development*, 2-6
processing, *Executive*, 1-2
.PSECT, *Program Development*, 2-8
rejecting, *Executive*, 1-2
.SBTTL, *Program Development*, 2-6
summary, *Indirect*, 2-5 to 2-8; *MACRO-11*, B-3, C-7
symbol control, *MACRO-11*, 5-42
system, *Program Development*, 1-10
table of general, *MACRO-11*, 5-1
.TITLE, *Program Development*, 2-5, 6-6
Directive common
fixing, *System Management*, 5-18
Directive condition, *I/O Drivers*, 1-37
Directive Identification Code
See DIC
Directive Parameter Block
See DPB
Directives
Indirect Command Processor, *Introduction*, 4-3 to 4-4
Directive status, *I/O Drivers*, 1-37
Directive status codes, *Indirect*, 2-17 to 2-18
Directive Status Word
See DSW
Directive summary
I/O related, *I/O Operations*, F-1
Direct line access
See DLX
Directory, *DCL*, 4-1, 4-3; *Introduction*, 1-13
See also UFD
creating, *DCL*, 4-16
creating files, *MCR*, 2-2
data caching, *MCR*, 3-160

Directory (cont'd.)
default, *MCR*, 3-163; *DCL*, 4-4, 4-96, 4-100
default for terminal, *MCR*, 2-7
deleting, *MCR*, 2-2; *DCL*, 4-19
file, *I/O Operations*, 5-2
identification information
.PARSE routine, *I/O Operations*, 4-13
.PRSDI routine, *I/O Operations*, 4-15
least recently used list, *System Management*, 1-8
library, *MCR*, 3-142; *DCL*, 7-28 to 7-31, 8-10
as default for INSTALL command, *MCR*, 3-95
as default for RUN command, *MCR*, 3-142
displaying, *DCL*, 8-11
setting, *DCL*, 8-10
listing, *Program Development*, 3-9
listing file, *Utilities*, 12-18
login, *MCR*, 3-67
maintaining, *DCL*, 4-29
named, *MCR*, 2-5; *DCL*, 4-96
numbered, *MCR*, 2-5; *DCL*, 4-96
group number, *MCR*, 2-5
member number, *MCR*, 2-5
protection, *DCL*, 4-12 to 4-13, 4-17, 4-107 to 4-109
default, *DCL*, 4-110 to 4-112
purging, *Program Development*, 3-9
search time
decreasing, *System Management*, 1-8
structure, *I/O Operations*, 5-3
syntax, *MCR*, 2-5
system, *DCL*, 7-28 to 7-31, 8-10
as default for INSTALL command, *MCR*, 3-95
as default for RUN command, *MCR*, 3-142
validating, *Utilities*, 14-3
DIRECTORY command, *Program Development*, 3-9; *DCL*, 4-29 to 4-37, 9-14; *Introduction*, 1-13, 3-6 to 3-7
Directory count
acceptable values for, *MCR*, 3-80, 3-89, 3-114
maximum, *MCR*, 3-80, 3-114
specifying, *MCR*, 3-80, 3-89
Directory entry
deleting
.REMOV routine, *I/O Operations*, 4-19
Directory entry (cont'd.)
inserting
.ENTER routine, *I/O Operations*, 4-19
locating
.FIND routine, *I/O Operations*, 4-16
replacing
See RENAME operation
routine, *I/O Operations*, 4-16
Directory I/O
data caching, *MCR*, 3-111
definition, *System Management*, 15-6
Directory identification
FNB (F11ACP), *I/O Operations*, H-11
Directory operation, *RMS-11 Macro*, 3-5; *RMS-11 User's Guide*, 1-17; *RMS-11 Intro*, 4-1
See also Operation
$ENTER macro, *RMS-11 Macro*, 5-35
Directory-operation macro
declaring, *RMS-11 Macro*, C-2
$PARSE, *RMS-11 Macro*, 5-78
$REMOVE, *RMS-11 Macro*, 5-102
$RENAME, *RMS-11 Macro*, 5-86
DIRECTORY option, *System Management*, 15-6
default extent size for, *System Management*, 15-6
MOUNT /CACHE command, *MCR*, 3-111
SET /CACHE command, *MCR*, 3-160
/DIRECTORY qualifier
BRU utility, *Utilities*, 3-14
Directory string
default
read, *I/O Operations*, 4-3
write, *I/O Operations*, 4-3
routine
default, *I/O Operations*, 4-3
Directory string descriptor, *I/O Operations*, 2-27
/DIR keyword
FIX command (VMR), *System Management*, 5-18
DIRSYM.MAC, *Executive*, 4-3
Disable AST Recognition directive, *Executive*, 5-68
Disable Checkpointing directive, *Executive*, 5-70
.DISABLE directive, *Indirect*, 2-52
/DISABLE keyword
COMMAND LINE INTERPRETER command, *MCR*, 3-41

/DISABLE qualifier
MACRO command, *Program Development*, 3-1
/DISABLE subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-43
$DISCONNECT macro, *RMS-11 Macro*, 5-27
DISCONNECT operation, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
block stream, *RMS-11 Macro*, 4-12
$DISCONNECT macro, *RMS-11 Macro*, 5-27
indexed files, *RMS-11 User's Guide*, 7-3
record stream, *RMS-11 Macro*, 4-9
relative files, *RMS-11 User's Guide*, 4-8
sequential files, *RMS-11 User's Guide*, 3-7
Disk, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-77, 5-88, 5-111, 5-117
backing up
BRU utility, *Utilities*, 3-1
DSC utility, *Utilities*, 6-1
blank, *DCL*, 5-11 to 5-12
characteristics
displaying, *MCR*, 3-50
comparing, *Utilities*, 6-13
compressing, *Utilities*, 6-4
conventional backup, *Utilities*, 3-3
copying
BRU utility, *Utilities*, 3-1
DSC utility, *Utilities*, 6-1
data caching support, *System Generation*, 3-27
DB-type
SYSGEN question, *System Generation*, 3-37
default number of blocks allocated
changing, *System Management*, 1-8
dismounting, *MCR*, 3-60
displaying free space
PIP utility, *Utilities*, 12-17
VFY utility, *Utilities*, 14-4
DK-type
SYSGEN question, *System Generation*, 3-41
DL-type
SYSGEN question, *System Generation*, 3-43
DM-type
SYSGEN question, *System Generation*, 3-42
Disk (cont'd.)
DP-type
SYSGEN question, *System Generation*, 3-44
DR-type
SYSGEN question, *System Generation*, 3-38
DS-type
SYSGEN question, *System Generation*, 3-38
DU-type
SYSGEN question, *System Generation*, 3-45
DY-type
SYSGEN question, *System Generation*, 3-51
EM-type
SYSGEN question, *System Generation*, 3-39
examining data, *Utilities*, 5-1
formatting
FLX utility, *Utilities*, 8-4
FMT utility, *Utilities*, 9-1
full backup, *Utilities*, 3-4
function code list, *I/O Drivers*, B-8
home block, *MCR*, 3-79
image backup, *Utilities*, 3-3
initialization values, *System Generation*, 2-10
initializing, *MCR*, 3-83; *Utilities*, 3-2, 3-18
locating bad block, *Utilities*, 2-1
ML11
SYSGEN question, *System Generation*, 3-39
mounting, *Utilities*, 3-2
MSCP
SYSGEN question, *System Generation*, 3-45
new, *DCL*, 5-11 to 5-12
power failure affecting, *I/O Drivers*, 1-42
primary
shadowing, *System Management*, 1-15
private, *Program Development*, 1-12
public, *Program Development*, 1-12
RA60/80/81
SYSGEN question, *System Generation*, 3-45
RC25
SYSGEN question, *System Generation*, 3-45

Disk (cont'd.)
RD51/52/53
SYSGEN question, *System Generation*, 3-45
recovering
lost block, *Utilities*, 14-6
space, *Utilities*, 6-4
restoring, *Utilities*, 3-1
RK05
SYSGEN question, *System Generation*, 3-41
RK05F
SYSGEN question, *System Generation*, 3-41
RK06/06
SYSGEN question, *System Generation*, 3-42
RL01/RL02
SYSGEN question, *System Generation*, 3-43
RL02
example of testing with IOX, *System Management*, 12-63
RM02/03/05/80
SYSGEN question, *System Generation*, 3-38
RP02/RPR02/RP03
SYSGEN question, *System Generation*, 3-44
RP04/05/06
SYSGEN question, *System Generation*, 3-37
RP07
SYSGEN question, *System Generation*, 3-38
RS03/04
SYSGEN question, *System Generation*, 3-38
RX01
SYSGEN question, *System Generation*, 3-50
RX02
SYSGEN question, *System Generation*, 3-51
RX50
SYSGEN question, *System Generation*, 3-45
scratch, *DCL*, 5-11 to 5-12
selective backup, *Utilities*, 3-4
spinning down, *MCR*, 3-61
swapping
definition, *System Management*, 1-4
Disk (cont'd.)
testing with IOX, *System Management*, 12-2
selecting random blocks, *System Management*, 12-44
skipping blocks, *System Management*, 12-33
transferring data, *Utilities*, 6-18
TU56
SYSGEN question, *System Generation*, 3-50
verifying, *Utilities*, 14-1
block, *Utilities*, 14-6
Disk block
random or sequential
IOX, *System Management*, 12-44
Disk data caching
activating, *System Management*, 15-1
cache region
creating, *System Management*, 15-4
naming, *System Management*, 15-5
using alternate, *System Management*, 15-4
definition, *System Management*, 15-1
description, *System Management*, 1-18
eliminating association with a device, *System Management*, 15-12
I/O operations, *System Management*, 15-2
including as a directive common, *System Management*, 15-1
monitoring, *System Management*, 15-7
options for different types of I/O, *System Management*, 15-5
region, *System Management*, 15-16
Disk device
See also Medium
drive, *RMS-11 Intro*, 2-1
structure, *RMS-11 Intro*, 2-1
cylinder, *RMS-11 Intro*, 2-1
platter, *RMS-11 Intro*, 2-1
sector, *RMS-11 Intro*, 2-1
track, *RMS-11 Intro*, 2-1
Disk driver, *I/O Drivers*, 4-1 to 4-13
physical characteristic, *I/O Drivers*, 4-1
programming hints, *I/O Drivers*, 4-11
QIO$ macro, *I/O Drivers*, 4-7
/DIS keyword
SWITCH REGISTER command, *MCR*, 3-201
Disk file structure, *I/O Operations*, 5-1
Disk-resident
overlay, *RMS-11 User's Guide*, 1-13, 8-3, 8-8 to 8-9

Disk-resident
overlay (cont'd.)
remote access code, *RMS-11 User's Guide*, B-1
Disk Save and Compress Utility
See DSC utility
Disk space
recovery
See also DELETESYS.CMD file
after SYSGEN, *System Generation*, 4-4
on pregenerated kit, *System Generation*, 5-48
Disk swapping, *System Management*, 1-4
Disk Volume Formatter Utility
See FMT utility
DISMOUNT command, *MCR*, 3-60; *DCL*, 5-12, 5-13, 5-63 to 5-66, 9-15
brief description, *MCR*, 1-5
examples, *MCR*, 3-62
formats, *MCR*, 3-60
keywords
/DEV, *MCR*, 2-12, 3-61
/LOCK, *MCR*, 3-61
/TERM, *MCR*, 3-61
/USER, *MCR*, 3-61
parameters, *MCR*, 3-61
shadow device, *MCR*, 3-60
Dismount Device Transaction Block, *System Management*, 10-43
DISPATCH control file module, *Error Logging*, 4-4, 4-9, 4-10, A-5
as input symbol file, *Error Logging*, 4-11
subpacket declaration, *Error Logging*, 4-10
Dispatcher module
See also DATA subpacket
DSP1P1, *Error Logging*, 4-4, 4-11, 4-17, 4-65, A-5
DSP2P1, *Error Logging*, 4-5, 4-11, 4-17, 4-66, A-5
DSP3P1, *Error Logging*, 4-5, 4-11, 4-17, 4-66, A-5
DSP4P1, *Error Logging*, 4-5, 4-11, 4-17, 4-66, A-5
DSP5P1, *Error Logging*, 4-5, 4-11, 4-17, 4-21, 4-66, 4-67, A-5
DSP6P1, *Error Logging*, 4-5, 4-11, 4-17, 4-67, A-5
DSP7P1, *Error Logging*, 4-6, 4-11, 4-17, 4-67, 4-68, A-5
DSP8P1, *Error Logging*, 4-6, 4-11, 4-17, A-5
Dispatcher module (cont'd.)
example, *Error Logging*, 4-50 to 4-59
subpacket declaration, *Error Logging*, 4-61
Dispatching
CPU-level, *Error Logging*, 4-5, 4-21
device-level, *Error Logging*, 4-17 to 4-21
event-level, *Error Logging*, 4-5, 4-15 to 4-17
Display (RMSDSP), *RMS-11 Utilities*, 5-5
DISPLAY command, *System Management*, 4-12
examples, *System Management*, 4-13 to 4-14
format, *System Management*, 4-12
keywords
ALL, *System Management*, 4-12
ATTRIBUTES, *System Management*, 4-12
CONTROLLERS, *System Management*, 4-12
FULL, *System Management*, 4-13
UNITS, *System Management*, 4-13
parameter
FOR string, *System Management*, 4-12
Shadow Recording, *System Management*, 16-9
Display commands
IOX
description, *System Management*, 12-6
Display information (RMSDSP), *RMS-11 Utilities*, 5-1
Displaying allocation information
RMSDSP utility, *RMS-11 Utilities*, 5-4
Displaying area information
RMSDSP utility, *RMS-11 Utilities*, 5-4
Displaying indexed file attribute
RMSDSP utility, *RMS-11 Utilities*, 5-4
Displaying key information
RMSDSP utility, *RMS-11 Utilities*, 5-4
$DISPLAY macro
$DISPLAY macro, *RMS-11 Macro*, 5-29
Display mode, *Indirect*, 2-54
DISPLAY operation, *RMS-11 Macro*, 3-6, 5-30, 5-31, 5-32 ; *RMS-11 User's Guide*, 1-18
BDB requirement, *RMS-11 Macro*, 2-8
I/O buffer requirement, *RMS-11 Macro*, 2-7
wildcard loop, *RMS-11 Macro*, 3-11
/DISPLAY qualifier
BRU utility, *Utilities*, 3-16

Display switch
ELI, *Error Logging*, 2-3, 2-12
Distributed I/O, *Writing I/O Driver*, 1-18
Distribution kit
See also Pregenerated kit
backup sets, *System Generation*, 2-3
contents, *System Generation*, 2-3
copying, *System Generation*, 2-6 to 2-26
on line, *System Generation*, 2-14 to 2-20
on VAX host with VAX-11 RSX, *System Generation*, 2-20 to 2-26
stand alone, *System Generation*, 2-6 to 2-14
definition, *System Generation*, 1-2
label, *System Generation*, 2-4
magnetic tape, *System Generation*, 2-3
RK07, *System Generation*, 2-4
RL02, *System Generation*, 2-3
types, *System Generation*, 2-3
/DI switch
CMP utility, *Utilities*, 4-3
FLX utility, *Utilities*, 8-7
DISWP: subroutine
initiating synchronous digital input sweep
K-series, *I/O Drivers*, 13-15
LADRV, *I/O Drivers*, 12-10
$DIV (Integer divide), *System Library*, 3-2
Divide routine
divide ($DIV), *System Library*, 3-2
double-precision divide ($DDIV), *System Library*, 3-4
Division binary operator
CFL expression, *Error Logging*, 5-13
Division operator
summary, *MACRO-11*, 2-4
DJ11 line multiplexer
SYSGEN question, *System Generation*, 3-62
DJ11 multiplexer
TTDRV, *I/O Drivers*, 2-82
DL11-E serial line multiplexer
TTDRV
remote line, *I/O Drivers*, 2-84
DL11 serial line interface
TTDRV, *I/O Drivers*, 2-82
DLD task, *System Management*, 11-6
how to use, *System Management*, 11-7 to 11-9
.DLFNB routine
deleting file by filename block, *I/O Operations*, 4-26
DLOG$ directive, *Executive*, 5-65
DLOG$ directive (cont'd.)
ASSIGN command, *MCR*, 3-15
DLON$ directive, *Executive*, 5-65
ASSIGN command, *MCR*, 3-15
/DL switch, *Task Builder*, 10-16
DLX
XEDRV
definition, *I/O Drivers*, 10-26
incompatibility, *I/O Drivers*, 10-24
DLXDF$ macro
XEDRV, *I/O Drivers*, 10-3
DM11-BB line interface
SYSGEN question, *System Generation*, 3-59
DMAP attribute, *System Management*, 18-40
DMC11 line interface
SYSGEN question, *System Generation*, 3-66
DMO command
See DISMOUNT command
/DMP, *Crash Dump Analyzer*, 2-4, 2-6
DMPALL control file module, *Error Logging*, 4-7, A-5
DMP utility
command line, *Utilities*, 5-2, A-8
error messages, *Utilities*, 5-10
example, *Utilities*, 5-7
mode
device, *Utilities*, 5-2
file, *Utilities*, 5-2
switches
/AS, *Utilities*, 5-3
/BA, *Utilities*, 5-3
/BL, *Utilities*, 5-4
/BY, *Utilities*, 5-4
/DC, *Utilities*, 5-4
/DENS, *Utilities*, 5-4
/FI, *Utilities*, 5-5
/HD, *Utilities*, 5-5
/HF, *Utilities*, 5-5
/HX, *Utilities*, 5-5
/ID, *Utilities*, 5-5
/LB, *Utilities*, 5-6
/LC, *Utilities*, 5-6
/LIM, *Utilities*, 5-6
/LW, *Utilities*, 5-6
/MD, *Utilities*, 5-6
/OCT, *Utilities*, 5-6
/R5, *Utilities*, 5-7
/RC, *Utilities*, 5-6
/RW, *Utilities*, 5-7
/SB, *Utilities*, 5-7
/SF, *Utilities*, 5-7
/SP, *Utilities*, 5-7

DMP utility
switches (cont'd.)
/WD, *Utilities*, 5-7
DMR11 line interface
SYSGEN question, *System Generation*, 3-66
$DMUL (Double-precision multiply), *System Library*, 3-3
DNA
XEDRV, *I/O Drivers*, 10-27
/DNS switch
FLX utility, *Utilities*, 8-8
Documentation set
organization, *System Generation*, 4-7
Dollar sign ($)
in file specification, *MCR*, 2-6
ODT, *Program Development*, 5-6, 5-7, 5-8
specifying directory with, *MCR*, 3-95, 3-142
Dollar sign ($), *Debugging*, 2-5, 5-1; *XDT*, 2-11
reserved for DIGITAL system symbols, *MACRO-11*, 2-1, 2-5
/DOLLARS qualifier
DATA command, *Batch and Queue*, 3-6
^D operator
for temporary decimal radix, *MACRO-11*, 5-26
DOS–11
device support, *Utilities*, 8-1
transferring file, *Utilities*, 8-4
volume
deleting, *Utilities*, 8-10
directory listing, *Utilities*, 8-9
initializing, *Utilities*, 8-10
DOS–11 format
accessing volume, *MCR*, 2-1
DO statement
CFL, *Error Logging*, 5-34
/DO switch
FLX utility, *Utilities*, 8-4
DOSWP: subroutine
initiating synchronous digital output sweep
K-series, *I/O Drivers*, 13-16
LADRV, *I/O Drivers*, 12-13
Dot (.) indicator
See Register indicator
Double colon (::)
effect when defining a label, *MACRO-11*, 2-6
special character in MACRO–11, *MACRO-11*, 2-1
terminates a label, *MACRO-11*, 1-2
Double equal sign (==)
effect when defining a label, *MACRO-11*, 2-6
special character in MACRO–11, *MACRO-11*, 2-1
used in direct assignment statements, *MACRO-11*, 2-6, 2-7
Double equal sign colon (==:)
effect when defining a label, *MACRO-11*, 2-6
special character in MACRO–11, *MACRO-11*, 2-1
used in direct assignment statements, *MACRO-11*, 2-7
Double-precision divide ($DDIV), *System Library*, 3-4
Double-precision multiply ($DMUL), *System Library*, 3-3
Double-precision routine, *System Library*, 3-3
Double quotation mark (")
component of a term, *MACRO-11*, 2-14
for ASCII character storage, *MACRO-11*, 5-18
special character in MACRO–11, *MACRO-11*, 2-2
Doubleword
address, *Writing I/O Driver*, 7-2
DOUT: subroutine
digital output (K-series), *I/O Drivers*, 13-18
DPB, *Executive*, 1-2; *I/O Drivers*, 1-12, 1-15; *Writing I/O Driver*, 4-10
details, *Writing I/O Driver*, 4-13, 4-15
diagnostic, *I/O Drivers*, 1-35
word data, *I/O Drivers*, 1-35
dynamic creation, *I/O Drivers*, 1-15
example, *I/O Drivers*, 1-12
format, *Writing I/O Driver*, 4-13, 4-14
usage in creating I/O packet, *Writing I/O Driver*, 3-2
$DPB$$, *Executive*, 1-6; *I/O Drivers*, 1-14
/DPRO keyword
SET command, *MCR*, 3-163
/DPR subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-43
$DQUMR routine, *Writing I/O Driver*, 7-16
DR11-K digital I/O interface, *I/O Drivers*, 13-2
DRDSP
directive dispatcher, *Writing I/O Driver*, 3-2
D register, *Debugging*, 2-6, 5-4, 6-2

DRERR$ macro
I/O completion code, *I/O Drivers*, 1-37
Drive, *RMS-11 Intro*, 2-1
Drive and pack serial number switch
See /SERIAL switch
Driver, *Writing I/O Driver*, 1-2
acceptance routine, *Writing I/O Driver*, 1-14
accessing a controller, *Writing I/O Driver*, 1-19
advanced features, *Writing I/O Driver*, 1-8, 1-10, 1-16, 1-17, 1-18, 2-4
assembling during system generation, *Writing I/O Driver*, 5-4
assembling in Micro/RSX, *Writing I/O Driver*, 5-15
building
loadable, *Writing I/O Driver*, 5-2
resident, *Writing I/O Driver*, 5-2
building in Micro/RSX, *Writing I/O Driver*, 5-15
code, *Writing I/O Driver*, 1-3, 1-23
creating, *Writing I/O Driver*, 4-4
definition, *Writing I/O Driver*, 1-5
function, *Writing I/O Driver*, 4-4
general description, *Writing I/O Driver*, 4-5
requirements, *Writing I/O Driver*, 4-54
usage of symbolic offsets, *Writing I/O Driver*, 4-54
conversion routine, *Writing I/O Driver*, 1-17
converting RSX-11M to RSX-11M-PLUS
adding $GTPKT, *Writing I/O Driver*, A-3
adding the DDT$, *Writing I/O Driver*, A-4
conditional symbols, *Writing I/O Driver*, A-3
handling function, *Writing I/O Driver*, A-5
interrupt entry, *Writing I/O Driver*, A-5
LBN conversion, *Writing I/O Driver*, A-5
modifying the driver, *Writing I/O Driver*, A-3
reconfiguration, *Writing I/O Driver*, A-4
using $CVLBN, *Writing I/O Driver*, A-5
Driver
converting RSX-11M to RSX-11M-PLUS (cont'd.)
using INTSV$, *Writing I/O Driver*, A-5
volume valid, *Writing I/O Driver*, A-5
database, *Writing I/O Driver*, 1-4, 1-23
linkages, *Writing I/O Driver*, 1-23
data structure, *Writing I/O Driver*, 1-4, 4-25
accessing, *Writing I/O Driver*, 4-2
details, *Writing I/O Driver*, 4-9
symbolic offsets, *Writing I/O Driver*, 4-2
DDT$ macro call
arguments, *Writing I/O Driver*, 4-5
placement of, *Writing I/O Driver*, 4-5
debugging, *Writing I/O Driver*, 1-24, 6-5, 6-10, 6-13 ; *XDT*, 2-2
using CDA, *Writing I/O Driver*, 6-1
using XDT, *Writing I/O Driver*, 6-2
defining labels, *Writing I/O Driver*, 4-55
definition, *System Generation*, 1-8
details of code, *Writing I/O Driver*, 4-54, 4-65
DIGITAL-supplied, *System Generation*, 1-8
dual access, *Writing I/O Driver*, 1-12
entry point
See Driver entry point
executable instructions, *Writing I/O Driver*, 1-4
executing on correct processor, *Writing I/O Driver*, 1-20
Executive
choosing options, *Writing I/O Driver*, 5-10
Executive services, *Writing I/O Driver*, 3-3 to 3-5
for NPR devices (on PDP-11), *Writing I/O Driver*, 7-2
full-duplex, *Writing I/O Driver*, 4-12
GTPKT$ macro call
arguments, *Writing I/O Driver*, 4-6
placement of, *Writing I/O Driver*, 4-6
handling full-duplex operations, *Writing I/O Driver*, 1-14
handling multiple I/O requests, *Writing I/O Driver*, 1-14
I/O packet, *Writing I/O Driver*, 1-5
I/O queue
placement of I/O packet, *Writing I/O Driver*, 4-10

Driver (cont'd.)
I/O request
function codes for, *Writing I/O Driver*, 4-12
processing, *Writing I/O Driver*, 1-18
I/O requirements, *Writing I/O Driver*, 4-18
incorporating, *Writing I/O Driver*, 1-22, 1-23, 5-1
at system generation, *Writing I/O Driver*, 5-1
guidelines for, *Writing I/O Driver*, 5-1
into a Micro/RSX system, *Writing I/O Driver*, 1-22, 5-15
loadable, *Writing I/O Driver*, 5-1
resident, *Writing I/O Driver*, 5-1
initiating I/O, *Writing I/O Driver*, 1-19
interrupt handling, *Writing I/O Driver*, 1-8
interrupt level, *Writing I/O Driver*, 1-6, 1-8
interrupts, *Writing I/O Driver*, 7-1
INTSV$ macro call
arguments, *Writing I/O Driver*, 4-7
placement of, *Writing I/O Driver*, 4-7
loadable
database, *Writing I/O Driver*, 5-1, 5-3
definition, *Writing I/O Driver*, 1-2
entry points for LOAD and UNLOAD, *Writing I/O Driver*, 4-9
incorporating, *Writing I/O Driver*, 1-22, 5-1, 5-3
rebuilding and reincorporating, *Writing I/O Driver*, 6-13
with loadable database, *Writing I/O Driver*, 1-23
with resident database, *Writing I/O Driver*, 1-24
loading, *Writing I/O Driver*, 5-6
pregenerated kit, *System Generation*, 5-44
macro call, *Writing I/O Driver*, 4-5
mapping with Executive, *Writing I/O Driver*, 1-2, 1-3
modifying data in UCB, *Writing I/O Driver*, 2-3
module
inserting into library, *Writing I/O Driver*, 5-4
partition, *Writing I/O Driver*, 5-5
predriver initiation, *Writing I/O Driver*, 3-1
process, *Writing I/O Driver*, 1-9
definition, *Writing I/O Driver*, 1-5
Driver (cont'd.)
processing
I/O request, *Writing I/O Driver*, 1-5, 3-3
interrupts, *Writing I/O Driver*, 1-6
programming
conventions, *Writing I/O Driver*, 4-1
requirements, *Writing I/O Driver*, 4-4 to 4-9
protocol, *Writing I/O Driver*, 1-8, 4-1
requesting I/O packet, *Writing I/O Driver*, 1-5, 1-19
resident, *Writing I/O Driver*, 1-23
definition, *Writing I/O Driver*, 1-2
incorporating, *Writing I/O Driver*, 1-23, 5-1, 5-2
with resident database, *Writing I/O Driver*, 1-24
sample source code, *Writing I/O Driver*, 8-3, 8-15
servicing
I/O request, *Writing I/O Driver*, 1-5
specifying as loadable, *Writing I/O Driver*, 4-9
standards, *Writing I/O Driver*, 4-1
system generation, *Writing I/O Driver*, 5-5
dialogue summary, *Writing I/O Driver*, 5-9
effect, *Writing I/O Driver*, 5-3
system macro call
arguments, *Writing I/O Driver*, 4-5
general functions, *Writing I/O Driver*, 4-5
task-building, *Writing I/O Driver*, 5-5
type, *Writing I/O Driver*, 1-2
UMR procedures, *Writing I/O Driver*, 7-2, 7-3
user-supplied, *System Generation*, 1-13
vectored, *Writing I/O Driver*, 1-21
XDT support, *Writing I/O Driver*, 6-2
Driver debugging, *Writing I/O Driver*, 6-1
Driver Dispatch Table, *Writing I/O Driver*, 4-5
address of routines, *Writing I/O Driver*, 1-4
entry points, *Writing I/O Driver*, 2-4
association of, *Writing I/O Driver*, 4-54
format, *Writing I/O Driver*, 4-54
generation of, *Writing I/O Driver*, 4-5
from DDT$, *Writing I/O Driver*, 4-54
labels required, *Writing I/O Driver*, 4-55
layout, *Writing I/O Driver*, 4-55

Driver Dispatch Table (cont'd.)
linking to the driver code and database, *Writing I/O Driver*, 4-54
Driver entry point, *Writing I/O Driver*, 1-4, 2-4
block check and conversion, *Writing I/O Driver*, 4-57
cancel I/O, *Writing I/O Driver*, 4-57, 4-59, 4-60
controller status change, *Writing I/O Driver*, 4-57, 4-62, 4-63
deallocation, *Writing I/O Driver*, 4-61
device timeout, *Writing I/O Driver*, 4-57, 4-60
I/O initiation, *Writing I/O Driver*, 4-57, 4-59
interrupt, *Writing I/O Driver*, 4-57, 4-64, 4-65
next command, *Writing I/O Driver*, 4-60
power failure, *Writing I/O Driver*, 4-57, 4-61
queue optimization, *Writing I/O Driver*, 4-61
standard labels, *Writing I/O Driver*, 4-57
unit status change, *Writing I/O Driver*, 4-57, 4-63, 4-64
Driver-load or unload event
subpacket information, *Error Logging*, 4-68
Driver status flag, *System Management*, 4-13
Driver support
non-DIGITAL device, *Error Logging*, 4-21
DRQIO
performing redirect algorithm, *Writing I/O Driver*, 3-2
$DRQRQ routine, *Writing I/O Driver*, 1-17
locating the conversion routine, *Writing I/O Driver*, 1-17
DRV11 digital I/O interface, *I/O Drivers*, 13-2
/DRV keyword
OPENREGISTER command, *MCR*, 3-128
.DSABL directive, *MACRO-11*, 5-13
summary, *MACRO-11*, 5-2
table of symbolic arguments, *MACRO-11*, 5-14
.DSABL FPT directive
disables floating-point truncation, enables rounding, *MACRO-11*, 5-28
.DSABL GBL directive
effect on undefined symbols, *MACRO-11*, 2-6, 2-14
.DSABL LC directive
effect on valid character set, *MACRO-11*, 2-1
.DSABL LCM directive
effect on .IF IDN/.IF DIF, *MACRO-11*, 5-45
.DSABL LSB directive
terminates local symbol block, *MACRO-11*, 2-10
DSAR$S directive, *Executive*, 5-68; *I/O Drivers*, 1-11
DSCP$S directive, *Executive*, 5-70
DSC utility
bad block information, *Utilities*, 6-8
command line, *Utilities*, 6-5, A-9
data transfer, *Utilities*, 6-18
device support, *Utilities*, 6-4
file label, *Utilities*, 6-6
messages, *Utilities*, 6-21
codes, *Utilities*, 6-21
error, *Utilities*, 6-22
I/O, *Utilities*, 6-34
operation overview, *Utilities*, 6-1, 6-17
switches
/APPEND, *Utilities*, 6-8
/BAD, *Utilities*, 6-8
/BL, *Utilities*, 6-11
/CMP, *Utilities*, 6-13
/DENS, *Utilities*, 6-13
options, *Utilities*, 6-13
/RW, *Utilities*, 6-15
/VE, *Utilities*, 6-17
DSK attribute, *Task Builder*, 3-30
DSP1P1 dispatcher module, *Error Logging*, 4-4, 4-11, 4-17, A-5
DATA subpackets, *Error Logging*, 4-65
DSP2P1 dispatcher module, *Error Logging*, 4-5, 4-11, 4-12 to 4-15, 4-17, A-5
DATA subpackets, *Error Logging*, 4-66
listing, *Error Logging*, 4-50 to 4-59
DSP3P1 dispatcher module, *Error Logging*, 4-5, 4-11, 4-17, A-5
DATA subpackets, *Error Logging*, 4-66
DSP4P1 dispatcher module, *Error Logging*, 4-5, 4-11, 4-17, A-5
DATA subpackets, *Error Logging*, 4-66
DSP5P1 dispatcher module, *Error Logging*, 4-5, 4-11, 4-17, 4-21, A-5
DATA subpackets, *Error Logging*, 4-66, 4-67
DSP6P1 dispatcher module, *Error Logging*, 4-5, 4-11, 4-17, A-5

DSP6P1 dispatcher module (cont'd.)
DATA subpackets, *Error Logging*, 4-67
DSP7P1 dispatcher module, *Error Logging*, 4-6, 4-11, 4-17, A-5
DATA subpackets, *Error Logging*, 4-67, 4-68
DSP8P1 dispatcher module, *Error Logging*, 4-6, 4-11, 4-17, A-5
D-space
See Data space
DSPPAT option, *Task Builder*, 12-13
/DS switch
MAC command, *Program Development*, 3-2
$DSW, *Executive*, 1-2
DSW, *Executive*, 1-2
register, *Debugging*, 2-5, 5-3
DSW$ status code return, *I/O Drivers*, 1-37
DT07 UNIBUS switch, *I/O Drivers*, 14-1; *Writing I/O Driver*, 1-18
DTE, *System Management*, 1-19
CTRL/P command, *Utilities*, C-5
messages, *Utilities*, C-10
ODT, *Utilities*, C-6
requirements, *Utilities*, C-1
DTE command
example, *Utilities*, C-6, C-9
format, *Utilities*, C-4
/ID option, *Utilities*, C-5
parameters, *Utilities*, C-4
$DTOER Executive routine, *Error Logging*, 4-22
DTRG$ directive, *Executive*, 5-72
Dual access, *Writing I/O Driver*, 1-12
operation of, *Writing I/O Driver*, 2-11
Dual-access device
definition, *System Generation*, 1-9
Dual-access support, *Writing I/O Driver*, 1-11
Dual-port device
placing ports on line separately, *System Management*, 4-27
Dual-port terminal
switching, *System Management*, 4-27
DUDRV driver
activating RCT, *System Management*, 13-3
loading, *System Management*, 13-2
/DUMP, *Crash Dump Analyzer*, 2-4, 2-6
Dump
See PMD
See Postmortem Dump
See Snapshot dump
DUP11 line interface
SYSGEN question, *System Generation*, 3-67
DUPLICATE
RMSDES utility, *RMS-11 Utilities*, 2-40, 2-42
area section, *RMS-11 Utilities*, 2-44
Duplicate key, *RMS-11 User's Guide*, 6-8; *RMS-11 Intro*, 3-10
DV.UMD bit
UCB
set for diagnostic, *I/O Drivers*, 1-34
$DVCER Executive routine, *Error Logging*, 4-22, 4-23
$DVERR Executive routine
See $DVCER Executive routine
$DVMSG routine, *Writing I/O Driver*, 7-17
/DV switch
VFY utility, *Utilities*, 14-3
$DVTMO Executive routine, *Error Logging*, 4-22
Dwell parameter
XRATE: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-23
DYNAMIC_TABLE statement
CFL, *Error Logging*, 5-37
See also FILE statement
Dynamic checkpoint space
allocation, *System Management*, 1-5
Dynamic memory
See Memory
Dynamic region, *Executive*, 3-5; *Task Builder*, 2-18, 2-20
creating, *Executive*, 5-53; *Task Builder*, 5-46
example, *Task Builder*, 5-46 to 5-49
Dynamic storage region
See Pool
DZ11/DZQ11/DZV11 line multiplexer
SYSGEN question, *System Generation*, 3-63
DZ11 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83
remote line, *I/O Drivers*, 2-84
serial line
with modem, *I/O Drivers*, 2-84
DZQ11 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83
DZV11 serial line multiplexer
TTDRV, *I/O Drivers*, 2-83

E

.EXTEND routine
  disk driver, *I/O Drivers*, 4-8
E1144 CPU-level module, *Error Logging*, 4-7, A-6
E117X CPU-level module, *Error Logging*, 4-7, A-6
E118X CPU-level module, *Error Logging*, 4-7, A-6
E11XX CPU-level module, *Error Logging*, 4-7, A-6
/EA switch, *Task Builder*, 10-17
EBCDIC character set, *MCR*, 3-123
/EBC keyword
  SET command, *MCR*, 3-164
  SET command (VMR), *System Management*, 5-54
Echo, *Introduction*, 1-6
/ECHO keyword
  SET command, *MCR*, 3-165
  SET command (VMR), *System Management*, 5-54
Echo loops
  intersystem, *Utilities*, C-2, C-5
E command, *Debugging*, 2-7, 6-2, 6-3
EDI editor, *Program Development*, 1-4; *DCL*, 4-26
  abbreviating strings, *Program Development*, 2-15
  altering text, *Program Development*, 7-4
  asterisk (*), *Program Development*, 2-9; *Utilities*, 7-8
  basic commands, *Utilities*, 7-10
  block mode, *Program Development*, 1-4
  character erase, *Utilities*, 7-7
  close & exit commands, *Utilities*, 7-16
  command line, *Utilities*, A-10
  commands, *Program Development*, 2-11 to 2-17
    Add, *Utilities*, 7-17
    Add & Print, *Utilities*, 7-17
    ALTMODE key, *Utilities*, 7-17
    append, *Program Development*, 2-16
    Begin, *Utilities*, 7-18
    begin, *Program Development*, 2-13
    Block On/Off, *Utilities*, 7-18
    Bottom, *Utilities*, 7-19
    Change, *Utilities*, 7-19
    change, *Program Development*, 2-15, 7-4
    Close, *Utilities*, 7-20
EDI editor
  commands (cont'd.)
    Close & Delete, *Utilities*, 7-20
    Close Secondary, *Utilities*, 7-20
    Concatenation Character, *Utilities*, 7-20
    CTRL/Z, *Utilities*, 7-21
    Delete, *Utilities*, 7-21
    Delete & Print, *Utilities*, 7-22
    delete and print, *Program Development*, 2-16
    descriptions, *Utilities*, 7-17
    End, *Utilities*, 7-22
    end, *Program Development*, 2-13
    Erase, *Utilities*, 7-23
    ESCAPE key, *Utilities*, 7-23
    Exit, *Utilities*, 7-23
    exit, *Program Development*, 2-9
      closing file, *Program Development*, 7-7
      creating new file, *Program Development*, 2-11, 2-17, 7-4
    Exit & Delete, *Utilities*, 7-24
    File, *Utilities*, 7-24
    Find, *Utilities*, 7-24
    Form Feed, *Utilities*, 7-25
    Insert, *Utilities*, 7-25
    insert, *Program Development*, 2-17, 7-7
    Kill, *Utilities*, 7-26
    Line Change, *Utilities*, 7-26
    list, *Program Development*, 2-12
    List on Pseudo Device, *Utilities*, 7-26
    List on Terminal, *Utilities*, 7-27
    Locate, *Utilities*, 7-27
    locate, *Program Development*, 2-13, 2-17, 7-4, 7-5, 7-7
    Macro, *Utilities*, 7-28
    Macro Call, *Utilities*, 7-28
    Macro Execute, *Utilities*, 7-29
    Macro Immediate, *Utilities*, 7-30
    Next, *Utilities*, 7-30
    Next & Print, *Utilities*, 7-31
    Open Secondary, *Utilities*, 7-31
    Output On/Off, *Utilities*, 7-32
    Overlay, *Utilities*, 7-32
    Page, *Utilities*, 7-33
    Page Find, *Utilities*, 7-33
    Page Locate, *Utilities*, 7-33
    page locate, *Program Development*, 2-14
    Paste, *Utilities*, 7-34

EDI editor
commands (cont'd.)
Print, *Utilities*, 7-34
Read, *Utilities*, 7-34
Renew, *Utilities*, 7-35
renew, *Program Development*, 2-14
RETURN key, *Utilities*, 7-7, 7-35
Retype, *Utilities*, 7-36
Save, *Utilities*, 7-36
Search & Change, *Utilities*, 7-37
Select Primary, *Utilities*, 7-37
Select Secondary, *Utilities*, 7-38
Size, *Utilities*, 7-38
Tab On/Off, *Utilities*, 7-38
Top, *Utilities*, 7-39
Top of File, *Utilities*, 7-39
Type, *Utilities*, 7-40
type, *Program Development*, 2-12, 2-13, 2-16
Unsave, *Utilities*, 7-40
Uppercase On/Off, *Utilities*, 7-40
Verify On/Off, *Utilities*, 7-42
Write, *Utilities*, 7-43
control mode, *Utilities*, 7-3
convention
terminal, *Utilities*, 7-6
correcting
source file error, *Program Development*, 7-4
task error, *Program Development*, 4-8, 7-8
creating file, *Program Development*, 2-8, 2-9, 2-11, 7-2
deleting lines, *Program Development*, 2-16
device output commands, *Utilities*, 7-16
displaying text, *Program Development*, 2-12
ellipsis, *Utilities*, 7-8
ellipsis (...), *Program Development*, 2-15
ESCAPE key, *Program Development*, 2-12
example
editing, *Utilities*, 7-44
file editing, *Utilities*, 7-44
Macro commands, *Utilities*, 7-51
Macro Immediate command, *Utilities*, 7-50
Save and Unsave commands, *Utilities*, 7-48
file input commands, *Utilities*, 7-15
file output commands, *Utilities*, 7-15
file specification
default, *Utilities*, 7-3
format, *Utilities*, 7-2
EDI editor (cont'd.)
initiating (invoking), *Utilities*, 7-2
input
initial, *Program Development*, 2-9, 7-3
terminating, *Program Development*, 2-9
inserting
characters, *Program Development*, 2-16
code in source file, *Program Development*, 2-17
lines, *Program Development*, 2-9, 2-17
insert mode, *Program Development*, 2-17
line erase, *Utilities*, 7-7
locating text, *Program Development*, 2-13, 7-4, 7-5
locator commands, *Utilities*, 7-13
Macro commands, *Utilities*, 7-15
messages, *Utilities*, 7-53
error requiring EDI restart, *Utilities*, 7-58
fatal error, *Utilities*, 7-60
file access error, *Utilities*, 7-57
informational, *Utilities*, 7-53
paging, *Utilities*, 7-5
positioning line pointer, *Program Development*, 2-13, 2-14
RETURN key, *Program Development*, 2-9, 2-12, 2-17, 7-7
setup commands, *Utilities*, 7-12
slash (/), *Program Development*, 2-15
text access mode, *Utilities*, 7-4
block mode, *Utilities*, 7-4
line-by-line mode, *Utilities*, 7-4
text file
creating, *Utilities*, 7-2
input, *Utilities*, 7-6
output, *Utilities*, 7-6
secondary, *Utilities*, 7-6
text manipulation commands, *Utilities*, 7-14
text modification commands, *Utilities*, 7-14
usage notes, *Utilities*, 7-43
EDIT command, *DCL*, 4-20 to 4-28; *Introduction*, 3-7
EDIT/EDI, *DCL*, 4-26 to 4-28, 9-16
EDIT/EDT, *DCL*, 4-20 to 4-23
EDIT/SLP, *DCL*, 4-24 to 4-25, 9-16
/OUTPUT qualifier, *Introduction*, 5-9
/RECOVER qualifier, *DCL*, 4-21
/EDIT keyword
SET command, *MCR*, 3-165
SET command (VMR), *System Management*, 5-54

Editor
See also EDT editor
See also SLP utility
See EDI editor
invoking, *Program Development*, 1-3
text, *Program Development*, 1-3 to 1-4
EDI utility
See also EDI editor
$EDMSG (Edit message), *System Library*, 6-8
EDT editor, *Program Development*, 1-3; *DCL*, 4-20 ; *Introduction*, 2-2
Best Reference, *EDT Editor Manual*
deleting text, *Introduction*, 2-8, 2-15
inserting text, *Introduction*, 2-8
moving text, *Introduction*, 2-9, 2-17
undeleting text, *Introduction*, 2-9
EDTINI.EDT file, *Introduction*, 2-2
E error
.END, *MACRO-11*, 5-33
Efn parameter
general (TTDRV), *I/O Drivers*, 2-12
IO.ATA function (TTDRV), *I/O Drivers*, 2-23
IO.ATT function, *I/O Drivers*, 1-27
IO.CCO function (TTDRV), *I/O Drivers*, 2-26
IO.DET function, *I/O Drivers*, 1-28
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.HNG function (TTDRV), *I/O Drivers*, 2-37
IO.KIL function, *I/O Drivers*, 1-29
IO.RAL function (TTDRV), *I/O Drivers*, 2-38
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-42
IO.RST function (TTDRV), *I/O Drivers*, 2-45
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-62
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
Efn parameter (cont'd.)
IO.WBT function (TTDRV), *I/O Drivers*, 2-51
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
IO.XCL function (XEDRV), *I/O Drivers*, 10-19
IO.XIN function (XEDRV), *I/O Drivers*, 10-20
IO.XOP function (XEDRV), *I/O Drivers*, 10-6
IO.XRC function (XEDRV), *I/O Drivers*, 10-15
IO.XSC function (XEDRV), *I/O Drivers*, 10-7
IO.XTL function (XEDRV), *I/O Drivers*, 10-21
IO.XTM function (XEDRV), *I/O Drivers*, 10-12
QIO$ basic syntax, *I/O Drivers*, 1-7
SF.GMC function (TTDRV), *I/O Drivers*, 2-53
WTSE$ macro, *I/O Drivers*, 1-24
ELAW$ directive, *Executive*, 5-74
Element extraction unary suffix operator
CFL expression, *Error Logging*, 5-10
Elevator
definition, *Writing I/O Driver*, 1-17
ELGF$ directive, *Executive*, 5-76
ELI, *Error Logging*, 1-2, 1-4
command line
DCL, *Error Logging*, 2-2
defaults, *Error Logging*, 2-3
MCR, *Error Logging*, 2-2
MCR and DCL equivalents, *Error Logging*, 2-1
control packets, *Error Logging*, 2-6
error messages, *Error Logging*, 2-15 to 2-16
installing, *Error Logging*, 2-2
invoking, *Error Logging*, 2-2
from any terminal, *Error Logging*, 2-2
from privileged terminal, *Error Logging*, 2-2
nonprivileged use, *Error Logging*, 2-2
privileged use, *Error Logging*, 2-2
switches
display, *Error Logging*, 2-3, 2-12
error limiting, *Error Logging*, 2-3, 2-8, 2-9
file-naming, *Error Logging*, 2-3, 2-10
logging, *Error Logging*, 2-3, 2-5
table of, *Error Logging*, 2-3 to 2-5

Eliminate Address Window directive, *Executive*, 5-74
Eliminate Group Global Event Flags directive, *Executive*, 5-76
Eliminate Virtual Terminal directive, *Executive*, 5-78
/ELIM keyword
  CLI command, *MCR*, 3-41
  FLA command, *MCR*, 3-65
Ellipsis
  EDI editor, *Utilities*, 7-8
Ellipsis (...)
  EDI editor, *Program Development*, 2-15
/EL switch, *Task Builder*, 10-18
ELVT$ directive, *Executive*, 5-78
Emit Status directive, *Executive*, 5-80
EML11 device-level module, *Error Logging*, 4-8, A-6
EMST$ directive, *Executive*, 5-80
EMT 377 instruction, *Executive*, 1-1
EMT instruction, *MACRO-11*, 4-8
EMT trap instruction, *XDT*, 1-8, 2-5
Emulation (terminal), *System Management*, 1-19
/EN:nnn switch
  QUE /DEL command, *Batch and Queue*, 2-10
  QUE /LI command, *Batch and Queue*, 2-14
.ENABL AMA directive
  difference between absolute and relative addressing, *MACRO-11*, 4-7
.ENABL directive, *MACRO-11*, 5-13
  summary, *MACRO-11*, 5-2
  table of symbolic arguments, *MACRO-11*, 5-14
Enable AST Recognition directive, *Executive*, 5-82
Enable Checkpointing directive, *Executive*, 5-84
.ENABLE directive, *Indirect*, 2-53
.ENABLE GLOBAL directive, *Indirect*, 2-4
/ENABLE keyword, *MCR*, 3-42
ENABLE statement
  CFL, *Error Logging*, 5-39
.ENABL FPT directive
  enables floating-point truncation, disables rounding, *MACRO-11*, 5-28
.ENABL GBL directive
  effect on undefined symbols, *MACRO-11*, 2-6
.ENABL LCM directive
  effect on .IF IDN/.IF DIF, *MACRO-11*, 5-45
.ENABL LSB directive
  begins local symbol block, *MACRO-11*, 2-10
  may confuse automatic local symbol generation in macro, *MACRO-11*, 6-10
.ENABL MCL directive
  relationship to .LIBRARY, *MACRO-11*, 5-50
ENAR$S directive, *Executive*, 5-82; *I/O Drivers*, 1-11
ENCP$S directive, *Executive*, 5-84
Encryption routine
  user-written support for, *System Management*, 2-1
.ENDC directive
  error if outside conditional block, *MACRO-11*, 5-46
  not required with .IIF, *MACRO-11*, 5-49
  summary, *MACRO-11*, 5-2
End command
  EDI editor, *Program Development*, 2-13; *Utilities*, 7-22
.END directive, *Indirect*, 2-4, 2-58; *Program Development*, 2-8, 3-4, 4-3, 4-8; *Task Builder*, 3-26; *MACRO-11*, 5-33
  summary, *MACRO-11*, 5-2
.ENDM directive, *MACRO-11*, 6-3
  cannot have label, *MACRO-11*, 6-3
  can terminate repeat blocks, *MACRO-11*, 6-3
  summary, *MACRO-11*, 6-1
  terminates macro definition, *MACRO-11*, 6-3
End-of-block indicator
  sequential files, *RMS-11 User's Guide*, 3-2
End-of-file
  sequential files, *RMS-11 User's Guide*, 3-2
End-of-file label
  tape, *I/O Operations*, G-8
End-of-file READ$ macro, *I/O Operations*, 3-33
End of GSD record type, *Task Builder*, A-13
End-of-module record type, *Task Builder*, A-36
End-of-tape handling, *I/O Operations*, G-9
End-of-volume label
  tape, *I/O Operations*, G-8
.ENDR directive, *MACRO-11*, 6-20

.ENDR directive (cont'd.)
summary, *MACRO-11*, 6-1
terminates .IRP, *MACRO-11*, 6-18
terminates .IRPC, *MACRO-11*, 6-19
terminates .REPT, *MACRO-11*, 6-21
/EN switch
PIP utility, *Utilities*, 12-13
ENTER key, *DCL*, 3-13
ENTER operation, *RMS-11 User's Guide*, 1-17
file versions, *RMS-11 User's Guide*, A-3
remote access, *RMS-11 User's Guide*, B-1
.ENTER routine
inserting directory entry, *I/O Operations*, 4-19
/ENTRY:nnn qualifier
DELETE command, *Batch and Queue*, 2-10
SHOW QUEUE command, *Batch and Queue*, 2-14
Entry point, *Program Development*, 6-5, 6-6
table, *Program Development*, 6-5, 6-9
zero entry points, *Program Development*, 6-7
/ENTRY qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-5, 3-10
See also /PACKET switch
Entry type
completion routine definition, *Task Builder*, A-12
complex relocation, *Task Builder*, A-24
control section name, *Task Builder*, A-6
global additive displaced relocation, *Task Builder*, A-19
global additive relocation, *Task Builder*, A-19
global displaced relocation, *Task Builder*, A-18
global relocation, *Task Builder*, A-17
global symbol name, *Task Builder*, A-8
internal displaced relocation, *Task Builder*, A-18
internal relocation, *Task Builder*, A-17
internal symbol name, *Task Builder*, A-7
location counter definition, *Task Builder*, A-20
location counter modification, *Task Builder*, A-20
mapped array declaration, *Task Builder*, A-12
module name, *Task Builder*, A-6
program limits, *Task Builder*, A-21
Entry type (cont'd.)
program section additive displaced relocation, *Task Builder*, A-23
program section additive relocation, *Task Builder*, A-23
program section displaced relocation, *Task Builder*, A-22
program section name, *Task Builder*, A-9
program section relocation, *Task Builder*, A-21
program version identification, *Task Builder*, A-11
resident library relocation, *Task Builder*, A-26
transfer address, *Task Builder*, A-7
EOD command, *Batch and Queue*, 3-2
format, *Batch and Queue*, 3-8
<EOF> symbol, *Indirect*, 2-10
:EOF option
QUE /STO command, *System Management*, 3-33
/EOF switch
PIP utility, *Utilities*, 12-14
EOJ command
format, *Batch and Queue*, 3-6
:EOJ option
QUE /STO command, *System Management*, 3-33
EOL function
EDT editor, *Introduction*, 2-7
/EO switch
RMSCNV utility, *RMS-11 Utilities*, 4-8
EPKDF.MAC system macro, *Error Logging*, C-1
EPKDF$, *Crash Dump Analyzer*, C-17
EPMDF$ macro
XEDRV, *I/O Drivers*, 10-3
/EP switch
LBR utility, *Utilities*, 10-18
EQ conditional assembly test, *MACRO-11*, 5-45
Equality binary operator
CFL expression, *Error Logging*, 5-12
Equal sign (=), *DCL*, 1-8
in cross-reference table, *MACRO-11*, 7-15
special character in MACRO–11, *MACRO-11*, 2-1
use as character string delimiter, *MACRO-11*, 5-20
used in direct assignment statements, *MACRO-11*, 2-6, 2-7

Equal sign colon (=:)
special character in MACRO–11, *MACRO-11*, 2-1
used in direct assignment statements, *MACRO-11*, 2-7
Equal sign command (=), *Debugging*, 2-7; *XDT*, 2-12
ZAP utility, *Utilities*, 15-18
Equal sign operator (=)
See Operator
ER$ACT
asynchronous operations, *RMS-11 User's Guide*, 3-14, 4-14, 7-8
ER$CUR
DELETE operation, *RMS-11 User's Guide*, 4-7
TRUNCATE operation, *RMS-11 User's Guide*, 3-12
UPDATE operation, *RMS-11 User's Guide*, 3-12, 4-12, 7-6
ER$DEL
FIND operation, *RMS-11 User's Guide*, 4-8, 7-3
GET operation, *RMS-11 User's Guide*, 4-11, 7-4
ER$EOF
FIND operation, *RMS-11 User's Guide*, 3-8, 4-8, 7-3
GET operation, *RMS-11 User's Guide*, 3-10, 4-10, 7-5
PUT operation, *RMS-11 User's Guide*, 3-11
ER$-family symbol
declaring, *RMS-11 Macro*, C-3
value, *RMS-11 Macro*, A-1 to A-19
ER$IOP
UPDATE operation, *RMS-11 User's Guide*, 3-12
ER$KEY
FIND operation, *RMS-11 User's Guide*, 3-8
GET operation, *RMS-11 User's Guide*, 3-10
ER$LIB
and resident libraries, *RMS-11 User's Guide*, 7-8
ER$MRN
FIND operation, *RMS-11 User's Guide*, 4-8
GET operation, *RMS-11 User's Guide*, 4-10
ER$NEF
PUT operation, *RMS-11 User's Guide*, 3-10
ER$RAC
PUT operation, *RMS-11 User's Guide*, 3-10
ER$REX
PUT operation, *RMS-11 User's Guide*, 4-11
ER$RFA
FIND operation, *RMS-11 User's Guide*, 3-8, 7-3
GET operation, *RMS-11 User's Guide*, 3-10, 7-5
ER$RFM
UPDATE operation, *RMS-11 User's Guide*, 3-12
ER$RLK
and shared access, *RMS-11 User's Guide*, 2-10
ER$RNF
FIND operation, *RMS-11 User's Guide*, 4-8, 7-3
GET operation, *RMS-11 User's Guide*, 4-10 to 4-11
ER$RSZ
UPDATE operation, *RMS-11 User's Guide*, 3-12
ERASE
wildcard operations, *RMS-11 User's Guide*, A-4
Erase command
EDI editor, *Utilities*, 7-23
.ERASE directive, *Indirect*, 2-59
$ERASE macro, *RMS-11 Macro*, 5-40
example, *RMS-11 Macro*, 7-11
ERASE operation, *RMS-11 Macro*, 3-8, 5-36 to 5-38; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
BDB requirement, *RMS-11 Macro*, 2-8
$ERASE macro, *RMS-11 Macro*, 5-40
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
remote access, *RMS-11 User's Guide*, B-2
wildcard loop, *RMS-11 Macro*, 3-10 to 3-12; *RMS-11 User's Guide*, A-4
E register, *Debugging*, 2-6, 5-4
ERK05 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERK67 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERL12 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERLCFL error messages, *Error Logging*, 5-44 to 5-55
ERLCNF error messages, *Error Logging*, 3-27 to 3-33
ERLRPT error messages, *Error Logging*, 3-33 to 3-49

/ERL switch
FMT utility, *Utilities*, 9-3
ERM05 device-level module, *Error Logging*, 2-8, A-6
ERM23 device-level module, *Error Logging*, 2-8, 4-8, 4-12 to 4-15, 4-36 to 4-50, A-6
ERM80 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERP07 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERP23 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERP456 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERR attribute, *System Management*, 18-37
<ERRCTL> symbol, *Indirect*, 2-12
ERRDEFINE.CFS, *Error Logging*, 3-23
ERRLOG, *Error Logging*, 1-1, 1-3, 1-4
backup file, *Error Logging*, 1-4, 2-3
defaults, *Error Logging*, 2-3
error messages, *Error Logging*, 2-16 to 2-18
installing, *Error Logging*, 2-2
log file, *Error Logging*, 1-3, 1-4
ERRLOG.ULB, *Error Logging*, 2-7, 3-3, 3-29
universal library, *Error Logging*, A-1, A-5
<ERRNUM> symbol, *Indirect*, 2-12
Error
See also Error return
assembly-time, *RMS-11 Macro*, 2-20
codes, *Debugging*, A-2; *XDT*, 2-6, 3-2
file operations, *I/O Drivers*, C-1; *I/O Operations*, 2-45
See also Error code
data compare, *System Management*, 12-13
conditions for, *System Management*, 12-47
detection, *Debugging*, A-1; *XDT*, 3-1
hard receive (TTDRV), *I/O Drivers*, 2-21, 2-78
diagnostic
limiting, *Task Builder*, 10-56, 11-29
double-bit (multiprocessor systems), *System Management*, 11-5
facility codes, *XDT*, 2-6
fatal, *RMS-11 Macro*, 2-16
handler, *RMS-11 Macro*, 2-17
handling, *Task Builder*, 4-12
hard, *System Management*, 10-7, 11-3
hardware (XEDRV)
Ethernet, *I/O Drivers*, 10-3
limit
See also Error limit
Error
limit (cont'd.)
IOX
altering, *System Management*, 12-26
nonrecoverable, *System Management*, 10-7, 11-3
TKTN message, *System Management*, 11-4
parity
uncorrectable, *System Management*, 11-5
queue I/O, *System Management*, 12-13
recoverable, *System Management*, 11-3
retry (tape driver), *I/O Drivers*, 6-13
select (tape driver), *I/O Drivers*, 6-13
soft, *System Management*, 11-3
SYSGEN, *System Generation*, 3-3
system initialization, *System Generation*, 4-14
task image, *Debugging*, A-2; *XDT*, 3-2
T-bit, *XDT*, 2-5
ERROR.MAC, *Error Logging*, 4-21
/ERROR_LIMIT qualifier, *Task Builder*, 11-29
Error code, *RMS-11 User's Guide*, 3-7, 4-7, 7-2; *MACRO-11*, D-1
A
.ASCII, *MACRO-11*, 5-20
.ASCIZ, *MACRO-11*, 5-21
.BLKB/.BLKW, *MACRO-11*, 5-32
.BYTE, *MACRO-11*, 5-17
.ENDM, *MACRO-11*, 6-3
from .ENABL/.DSABL, *MACRO-11*, 5-13
.IF, *MACRO-11*, 5-45
.IIF, *MACRO-11*, 5-49
in bad expression, *MACRO-11*, 2-14
inconsistent current location counter attribute, *MACRO-11*, 2-12
invalid floating-point number, *MACRO-11*, 5-28
invalid forward reference defining global, *MACRO-11*, 2-8
.IRP, *MACRO-11*, 6-18
.IRPC, *MACRO-11*, 6-19
.LIST/.NLIST, *MACRO-11*, 5-8
.MACRO, *MACRO-11*, 6-3
.NARG, *MACRO-11*, 6-13
.NCHR, *MACRO-11*, 6-14
.NTYPE, *MACRO-11*, 6-15
on EMT and TRAP instructions, *MACRO-11*, 4-8

Error code
A (cont'd.)
.PSECT, *MACRO-11*, 5-34, 5-37
.RAD50, *MACRO-11*, 5-22
.REPT, *MACRO-11*, 6-21
.RESTORE, *MACRO-11*, 5-40
.SAVE, *MACRO-11*, 5-40
single or double quotation mark character storage, *MACRO-11*, 5-19
.TITLE, *MACRO-11*, 5-10
B
from odd current location counter, *MACRO-11*, 5-31
block locking, *I/O Operations*, 2-45
D
multiply defined label reference, *MACRO-11*, 1-3
E
.END, *MACRO-11*, 5-33
ER$ACT, *RMS-11 User's Guide*, 3-14, 4-14, 7-8
ER$CUR, *RMS-11 User's Guide*, 3-12, 4-7, 4-12, 7-6
ER$DEL, *RMS-11 User's Guide*, 4-8, 4-11, 7-3, 7-5
ER$EOF, *RMS-11 User's Guide*, 3-8, 3-10 to 3-11, 4-8, 4-10, 7-3, 7-5
ER$IOP, *RMS-11 User's Guide*, 3-12
ER$KEY, *RMS-11 User's Guide*, 3-8, 3-10
ER$LIB, *RMS-11 User's Guide*, 8-1
ER$MRN, *RMS-11 User's Guide*, 4-8, 4-10
ER$NEF, *RMS-11 User's Guide*, 3-10
ER$RAC, *RMS-11 User's Guide*, 3-10
ER$REX, *RMS-11 User's Guide*, 4-11
ER$RFA, *RMS-11 User's Guide*, 3-8, 3-10, 7-3, 7-5
ER$RFM, *RMS-11 User's Guide*, 3-12
ER$RLK, *RMS-11 User's Guide*, 2-10
ER$RNF, *RMS-11 User's Guide*, 4-8, 4-10 to 4-11, 7-3, 7-5
ER$RSZ, *RMS-11 User's Guide*, 3-12
file operations, *I/O Operations*, K-1
I
.ASCII, *MACRO-11*, 5-20
.ASCIZ, *MACRO-11*, 5-21
invalid character, *MACRO-11*, 2-3
.RAD50, *MACRO-11*, 5-22
M
multiply defined label, *MACRO-11*, 1-3
redefine permanently assigned symbol, *MACRO-11*, 2-7

Error code (cont'd.)
MACRO-11
A, *Program Development*, 3-3
E, *Program Development*, 3-4
Q, *Program Development*, 3-4
U, *Program Development*, 3-4
N
number not in current radix, *MACRO-11*, 2-13
O
.END, *MACRO-11*, 5-33
.ENDC, *MACRO-11*, 5-46
.IF directive nesting, *MACRO-11*, 5-46
.MCALL, *MACRO-11*, 6-22
.MDELETE, *MACRO-11*, 6-22
.MEXIT, *MACRO-11*, 6-4
.NARG, *MACRO-11*, 6-13
.NTYPE, *MACRO-11*, 6-15
with .IFF, .IFT, .IFTF, *MACRO-11*, 5-46
P
.ERROR, *MACRO-11*, 6-16
inconsistent program section attribute, *MACRO-11*, 2-12
multiple definition of local symbol, *MACRO-11*, 2-10
when defining local symbols, *MACRO-11*, 5-14
Q
.EVEN, *MACRO-11*, 5-31
for invalid floating-point number, *MACRO-11*, 5-28
in bad expression, *MACRO-11*, 2-14
invalid syntax, *MACRO-11*, 2-3
.ODD, *MACRO-11*, 5-31
.TITLE, *MACRO-11*, 5-10
too many arguments in macro call, *MACRO-11*, 6-9
R
invalid redefinition of default register symbol, *MACRO-11*, 2-9
shared file, *I/O Operations*, 2-45
T
number more than 16 bits long, *MACRO-11*, 2-13
U, *MACRO-11*, 2-6
invalid forward reference, *MACRO-11*, 2-8
.MCALL, *MACRO-11*, 6-22
relationship to .ENABL/.DSABL GBL, *MACRO-11*, 5-14
relationship to .ENABL/.DSABL MCL or GBL, *MACRO-11*, 5-14

Error code
U (cont'd.)
undefined symbol, *MACRO-11*, 2-14
Z
flags inconsistent instructions, *MACRO-11*, 4-1
table of applicable instructions, *MACRO-11*, 4-2
Error code (RMSIFL)
sort routine, *RMS-11 Utilities*, D-1
.ERROR directive, *MACRO-11*, 6-16
summary, *MACRO-11*, 6-1
Error limit
changing, *Error Logging*, 2-3, 2-9
default, *Error Logging*, 2-3
device mount, *Error Logging*, 2-9
error logging, *Error Logging*, 2-1
notification, *Error Logging*, 1-4
resetting, *Error Logging*, 1-4, 2-9, 2-10
starting, *Error Logging*, 2-5, 2-8
stopping, *Error Logging*, 2-5, 2-8
system reboot, *Error Logging*, 2-9
ERRORLIMIT command
IOX, *System Management*, 12-26
example, *System Management*, 12-26
FILES11, SELECT, and VERIFY command lines, *System Management*, 12-26
initial default, *System Management*, 12-26
use with SUMMARYTIME command, *System Management*, 12-26
Error log backup file, *Error Logging*, 2-3
Error log buffer
address of, *Crash Dump Analyzer*, 3-14
Error log command packet, *Error Logging*, 1-2
Error log control code
event-level dispatching, *Error Logging*, 4-15
Error log file, *Error Logging*, 1-1, 2-1, 2-3, 2-10, 5-1; *MCR*, 3-200
appending, *Error Logging*, 2-11
new data, *Error Logging*, 2-5
backup, *Error Logging*, 2-1, 2-12
copying, *Error Logging*, 2-11
creating new version, *Error Logging*, 2-5, 2-11
default, *Error Logging*, 2-3
definition, *Error Logging*, 4-2
format, *Error Logging*, 5-1
processing, *Error Logging*, 5-1
Error Logger, *Executive*, 5-231
RCT and the, *System Management*, 13-6
Error Logger (cont'd.)
use in detecting faults, *System Management*, 11-4
Error Logger task
See ERRLOG
Error logging
code and subcode combinations, *Error Logging*, 4-15
concurrent I/O activity, *Error Logging*, 4-23, 4-25
context information, *Error Logging*, C-1
control events, *Error Logging*, 4-4
CPU errors, *Error Logging*, 2-6
device errors, *Error Logging*, 1-1, 2-6, C-1
displaying information, *Error Logging*, 2-12
error limits, *Error Logging*, 1-4, 2-1, 2-5, 2-8
error processing module, *Error Logging*, 4-6
error types, *Error Logging*, 1-5
event information, *Error Logging*, 2-1
events, *Error Logging*, 1-1, 2-6, 5-2
Executive support, *Error Logging*, 1-1, 2-1
hard errors, *Error Logging*, 1-3, 2-9
I/O completion, *Error Logging*, 4-24
internal I/O operations, *Error Logging*, 1-1, 2-6
interrupt timeouts, *Error Logging*, 1-6
memory errors, *Error Logging*, 1-6, 2-6
non-DIGITAL device, *Error Logging*, 4-7, 4-21, 4-27
nonerror events, *Error Logging*, C-1
nonsense interrupt, *Error Logging*, 4-23
resetting counts, *Error Logging*, 2-9
root module, *Error Logging*, 4-4
soft errors, *Error Logging*, 1-3, 2-10
starting, *Error Logging*, 2-5
status information, *Error Logging*, 2-1
stopping, *Error Logging*, 2-5, 2-7
tasks, *Error Logging*, 1-1
unexpected traps or interrupts, *Error Logging*, 1-6, 2-6
updating, *Error Logging*, 2-6
user-written module
See User-written module
Error logging device
See also Control file module
subpacket information, *Error Logging*, 4-62
table of, *Error Logging*, 2-7 to 2-8
Error logging system, *System Management*, 1-15

Error logging task
subpacket information, *Error Logging*, 4-62
Error Log Interface
See ELI
Error log packet, *Error Logging*, 1-1, 1-3, 1-4, 5-1
creating, *Error Logging*, 4-24, 4-25
definition, *Error Logging*, 4-2
format, *Error Logging*, 5-1, C-1
length word, *Error Logging*, 4-2
processing, *Error Logging*, 5-1
queuing, *Error Logging*, 4-24, 4-26
removing from queue, *Error Logging*, 4-27
selection, *Error Logging*, 2-6
structure, *Error Logging*, 4-3, 4-15, 5-2
Error log packet dump, *Crash Dump Analyzer*, 3-1, 3-14
Error log report generator, *MCR*, 3-200
Error log subpacket, *Error Logging*, 5-2
ERRORM control file module, *Error Logging*, 4-6, 4-11, A-6
Error message format, *System Management*, 5-82
Error messages, *Crash Dump Analyzer*, A-1; *Indirect*, A-1 to A-5; *Introduction*, 1-1
CFL, *Error Logging*, 5-44 to 5-55
DCL, *DCL*, 10-1 to 10-16
ELI, *Error Logging*, 2-15 to 2-16
ERRLOG, *Error Logging*, 2-16 to 2-18
FORTRAN IV, *Program Development*, 7-4
IOX, *System Management*, 12-71
LINK, *Program Development*, 4-2
MACRO-11, *Program Development*, 3-1, 3-5
ODT, *Program Development*, 5-3
RMD, *System Management*, 7-25
RPT
ERLCNF, *Error Logging*, 3-27 to 3-33
ERLRPT, *Error Logging*, 3-33 to 3-49
system messages for IAS/RSX, *MACRO-11*, 7-16
system messages under RT–11, *MACRO-11*, 8-8
TKB, *Program Development*, 4-2; *Task Builder*, H-1 to H-12
TKTN, *Program Development*, 4-8
VMR, *System Management*, 5-82 to 5-105
diagnostic, *System Management*, 5-82
fatal, *System Management*, 5-82
format, *System Management*, 5-82
unmarked, *System Management*, 5-82
Error processing, *Indirect*, 2-12, 2-74
Error report
IOX, *System Management*, 12-13
data compare, *System Management*, 12-13
directing to device, *System Management*, 12-34
disabling, *System Management*, 12-47
enabling, *System Management*, 12-47
I/O error, *System Management*, 12-13
types, *System Management*, 12-47
Error return, *Executive*, 1-3
ACP, *I/O Operations*, H-3
CRDRV, *I/O Drivers*, 9-3, 9-6
EIE.LCK, *I/O Operations*, 2-45
GCMLD$ macro, *I/O Operations*, 6-6
IE.IFC, *I/O Operations*, 2-46
IE.LCK, *I/O Operations*, 2-46
IE.ULK, *I/O Operations*, 2-46
IE.WAC, *I/O Operations*, 2-45
LPDRV, *I/O Drivers*, 7-4
receiver (LRDRV), *I/O Drivers*, 11-11 to 11-12
tape driver, *I/O Drivers*, 6-10
transmitter (LRDRV), *I/O Drivers*, 11-7
UNIBUS switch driver, *I/O Drivers*, 14-7
XEDRV, *I/O Drivers*, 10-5
IO.XCL function, *I/O Drivers*, 10-20
IO.XIN function, *I/O Drivers*, 10-20
IO.XRC function, *I/O Drivers*, 10-18
IO.XTL function, *I/O Drivers*, 10-22
IO.XTM function, *I/O Drivers*, 10-15
Error routine
file macro, *I/O Operations*, 3-2
ERRORS.ACC, *Error Logging*, 2-6, 2-13
ERRORS.LOG, *Error Logging*, 2-6, 2-12
ERRORS.LST, *Error Logging*, 2-13
/ERRORS qualifier
BRU utility, *Utilities*, 3-16
ERROR summary report
processing, *Error Logging*, 4-6, 4-10
RPT, *Error Logging*, 3-21
Error type, *Error Logging*, 1-5
determining with user-written module, *Error Logging*, 4-32
Err parameter
ASTX$ macro, *I/O Drivers*, 1-24
DIR$ macro, *I/O Drivers*, 1-16
ERRSEQ error sequence number, *Error Logging*, 1-3
<ERRSEV> symbol, *Indirect*, 2-12
ERS11 device-level module, *Error Logging*, 2-8, 4-8, A-6

ERS34 device-level module, *Error Logging*, 2-8, 4-8, A-6
<ERSEEN> symbol, *Indirect*, 2-10
/ER switch
  RMSIFL utility, *RMS-11 Utilities*, 3-5 to 3-6
ERX01 device-level module, *Error Logging*, 2-8, 4-8, A-6
ERX02 device-level module, *Error Logging*, A-6
<ESCAPE> symbol, *Indirect*, 2-10
ESCAPE key, *MCR*, 2-15; *DCL*, 3-13
  EDI editor, *Program Development*, 2-12; *Utilities*, 7-23
  requesting list of options
    ACNT, *System Management*, 2-4
  TTDRV, *I/O Drivers*, 2-72
  using to terminate command, *MCR*, 1-3
Escape mode, *Indirect*, 2-54
Escape sequence
  TTDRV, *I/O Drivers*, 2-14, 2-73 to 2-76
    characteristic, *I/O Drivers*, 2-75
    control character, *I/O Drivers*, 2-75
      error, *I/O Drivers*, 2-75
    delete character, *I/O Drivers*, 2-75
    format, *I/O Drivers*, 2-74
    full buffer, *I/O Drivers*, 2-76
    handling, *I/O Drivers*, 2-20
    interrupt, *I/O Drivers*, 2-20
    prerequisite, *I/O Drivers*, 2-74
    rubout character, *I/O Drivers*, 2-75
    syntax exception, *I/O Drivers*, 2-76
    syntax violation, *I/O Drivers*, 2-75
Escape-sequence mode, *Indirect*, 2-55
ESC command
  RMSDES utility, *RMS-11 Utilities*, 2-9, 2-21
/ESCSEQ keyword
  SET command, *MCR*, 3-166
  SET command (VMR), *System Management*, 5-55
/EST=yes switch, *Batch and Queue*, 3-8
ESTATUS command, *System Management*, 4-15
  example, *System Management*, 4-16
  exit status values
    ports, *System Management*, 4-16
    units and controllers, *System Management*, 4-15
/EST keyword
  RUN command, *MCR*, 3-139, 3-143
ET0310 device-level module, *Error Logging*, 2-8, 4-8, A-6
ET1645 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETA11 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETC11 device-level module, *Error Logging*, 2-8, 4-8, A-6
Ethernet
  XEDRV
    address
      auxiliary buffer, *I/O Drivers*, 10-12
    device consideration, *I/O Drivers*, 10-2
    hardware error, *I/O Drivers*, 10-3
    message, *I/O Drivers*, 10-2
      padding, *I/O Drivers*, 10-3
    protocol
      LF$DEF, *I/O Drivers*, 10-3
      LF$EXC, *I/O Drivers*, 10-3
      receive, *I/O Drivers*, 10-3
      transmit, *I/O Drivers*, 10-3
ETK50 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETK70 device-level module, *Error Logging*, 4-8, A-6
ETS11 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETSV05 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETU58 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETU60 device-level module, *Error Logging*, 2-8
ETU77 device-level module, *Error Logging*, 2-8, 4-8, A-6
ETU81 device-level module, *Error Logging*, 2-8, 4-8, A-6
EUNKWN control file module, *Error Logging*, 4-7, A-6
  non-DIGITAL device, *Error Logging*, 4-21
EVEN assembler directive
  control block alignment, *RMS-11 Macro*, 2-8
  pool alignment, *RMS-11 Macro*, 2-4
.EVEN directive, *MACRO-11*, 5-31
  summary, *MACRO-11*, 5-2
Event, *Error Logging*, 1-1
  definition, *Error Logging*, 1-3, 4-2
  significant, *I/O Drivers*, 1-36
Event flag, *Executive*, 2-2; *I/O Drivers*, 1-9; *MCR*, 3-49
  ast, *I/O Drivers*, 1-11

Event flag (cont'd.)
clearing polarity, *Executive*, 5-35
common, *Executive*, 2-2; *I/O Drivers*, 1-9, 1-10
creating, *MCR*, 3-65
displaying, *DCL*, 7-77
eliminating, *MCR*, 3-65
group global, *Executive*, 2-2; *I/O Drivers*, 1-9 ; *MCR*, 3-65
creating, *Executive*, 2-4, 5-51
decrementing use count, *Executive*, 5-290
deleting, *Executive*, 2-4, 5-76
displaying, *Executive*, 2-4
eliminating, *Executive*, 5-290
I/O coordination, *I/O Operations*, 2-40
I/O synchronization, *I/O Operations*, 3-10
IOX, *System Management*, 12-61
local, *MCR*, 3-65
none, *I/O Drivers*, 1-8
number, *I/O Drivers*, 1-9
reading, *Executive*, 5-181, 5-184
setting, *Executive*, 5-228; *DCL*, 7-75 to 7-76
task, *I/O Drivers*, 1-9
testing, *Executive*, 2-3, 5-183
UIC, *MCR*, 3-65
wait after I/O, *I/O Drivers*, 1-16
wait for single, *I/O Drivers*, 1-24
Event information
error logging, *Error Logging*, 2-1
Event-level dispatching, *Error Logging*, 4-5, 4-15 to 4-17
control information code, *Error Logging*, 4-16
CPU-detected error code, *Error Logging*, 4-16
device control information, *Error Logging*, 4-15
device error code, *Error Logging*, 4-15
device information code, *Error Logging*, 4-15
error log control code, *Error Logging*, 4-15
event code, *Error Logging*, 4-17
event type, *Error Logging*, 4-17
format, *Error Logging*, 4-17
modules, *Error Logging*, 4-17
system control information code, *Error Logging*, 4-16
EVNDF$, *Crash Dump Analyzer*, C-25
EXACT_POSITIONING
RMSDES utility, *RMS-11 Utilities*, 2-47
EXAMINE option
ACNT, *System Management*, 2-8
Example
RMSBCK utility, *RMS-11 Utilities*, 6-10
RMSCNV utility, *RMS-11 Utilities*, 4-16
RMSDES utility, *RMS-11 Utilities*, 2-47
RMSIFL utility, *RMS-11 Utilities*, 3-14
RMSRST utility, *RMS-11 Utilities*, 7-12
Examples, *Indirect*, 1-7, 2-104 to 2-110
Exception code
RMSIFL utility, *RMS-11 Utilities*, 3-5 to 3-6, 3-10
Exclamation point (!)
use as comment delimiter, *MCR*, 1-3
Exclamation point (!)
logical inclusive OR operator, *MACRO-11*, 2-4
ODL operator, *Task Builder*, 3-26, 3-29
special character in MACRO–11, *MACRO-11*, 2-2
special meaning within .IF DF/NDF conditional, *MACRO-11*, 5-45
/EXCLUDE qualifier
BRU utility, *Utilities*, 3-16
/EXECUTABLE qualifier, *Task Builder*, 11-30
EXECUTE command
IOX, *System Management*, 12-27
Command mode, *System Management*, 12-27
examples, *System Management*, 12-28
initiating tasks in parallel, *System Management*, 12-27
Interactive mode, *System Management*, 12-27
leading spaces, *System Management*, 12-27
relationship to SPWN$ directive, *System Management*, 12-27
restrictions, *System Management*, 12-27
running BAD utility, *System Management*, 12-27
spawning tasks, *System Management*, 12-27
Execution mode
IOX
description, *System Management*, 12-9
entering, *System Management*, 12-55
Executive, *Writing I/O Driver*, 1-2; *Introduction*, 5-1, 6-3, 6-6
aborting task, *MCR*, 3-2
calling the driver, *Writing I/O Driver*, 1-19

Executive (cont'd.)
checkpointing tasks
definition of, *MCR*, 2-19
copy of task header
installing below task image, *MCR*, 3-100; *System Management*, 5-26
coroutine
$INTSV, *Writing I/O Driver*, 1-6
data space support
running VMR, *System Management*, 5-3
definition, *System Generation*, 1-9
DIC list, *Executive*, C-1
directive dispatcher
DRDSP, *Writing I/O Driver*, 3-2
directive status code, *Executive*, B-1
directive summary, *Executive*, A-1
dispatching to correct driver routine, *Writing I/O Driver*, 2-1
distributing I/O requests, *Writing I/O Driver*, 1-19
fast-mapping, *MCR*, 3-96
Full-functionality, *System Generation*, 1-10
interrupt exit routine, *Writing I/O Driver*, 1-7
interrupts
handling, *Writing I/O Driver*, 2-1
interrupt save routine, *Writing I/O Driver*, 1-7, 1-8
loadable device driver, *MCR*, 3-103; *System Management*, 5-29
macro library
EXEMC.MLB, *Writing I/O Driver*, 5-4
mapping, *Writing I/O Driver*, 1-3
modifying data in UCB, *Writing I/O Driver*, 2-3
module
DVINT, *Writing I/O Driver*, 1-13
options for driver, *Writing I/O Driver*, 5-10
partition
extended, *MCR*, 3-104, 3-212; *System Management*, 8-16
performing processor specific functions, *Writing I/O Driver*, 1-18
predriver initiation, *Writing I/O Driver*, 1-4
priority range, *MCR*, 3-185
queuing to the driver, *Writing I/O Driver*, 1-5
request queue for controller, *Writing I/O Driver*, 1-12
round-robin scheduling, *MCR*, 3-182
routines
handling, *Writing I/O Driver*, 1-5, 1-7

Executive (cont'd.)
running a task, *MCR*, 1-4
service routine, *Writing I/O Driver*, 1-2, 1-3
stack and register dump, *Writing I/O Driver*, 6-11
swapping interval, *MCR*, 3-185
symbol
$CTLST, *Writing I/O Driver*, 2-16
tables
logical device, *MCR*, 2-12
physical device, *MCR*, 2-12
task
allocating space, *MCR*, 2-19
loading, *MCR*, 3-94; *System Management*, 5-20
priority, *MCR*, 2-19
running, *MCR*, 2-21, 3-94; *System Management*, 5-20
User-tailored, *System Generation*, 1-13
vectored, *Writing I/O Driver*, 1-20
Executive data space
SYSGEN question, *System Generation*, 3-24
Executive Debugging Tool
See XDT
Executive directive
ALTP$
support needed for ALTER command, *MCR*, 3-12
support required for ABORT command, *MCR*, 3-2
ALUN$
ASSIGN command, *MCR*, 3-14
assigning LUN at run time, *MCR*, 2-9
CLOG$
ASSIGN command, *MCR*, 3-15
CLON$
ASSIGN command, *MCR*, 3-15
DLOG$
ASSIGN command, *MCR*, 3-15
DLON$
ASSIGN command, *MCR*, 3-15
EXTK$
SET /MAXEXT command, *MCR*, 3-172
GSSW$
SWITCH REGISTER command, *MCR*, 3-201
QIO$
BYE command, *MCR*, 3-36
SET /MAXPKT command, *MCR*, 3-172
soliciting input, *MCR*, 2-14

Executive directive (cont'd.)
RCTS$
UNS command, *MCR*, 2-213
RQST$
effect on default TI, *MCR*, 2-10
running an installed task, *MCR*, 2-21
RUN$
CANCEL command, *MCR*, 3-38
CLOCK QUEUE command, *MCR*, 3-46
effect on task protection UIC, *MCR*, 3-99
running an installed task, *MCR*, 2-21
task activation, *MCR*, 2-10
SCLI$
COMMAND LINE INTERPRETER command, *MCR*, 3-44
SPWN$
effect on default TI, *MCR*, 2-10
running an installed task, *MCR*, 2-21
SREA$
BYE command, *MCR*, 3-36
effect on blocked task, *MCR*, 3-29
SREX$, *MCR*, 3-2
effect on blocked task
BYE command, *MCR*, 3-36
STOP$
UNS command, *MCR*, 2-213
SVBD$
DEBUG command, *MCR*, 3-49
Executive-level dispatching, *Executive*, 5-7
Executive library
macro, *Program Development*, 1-11
Executive pool monitor code, *System Management*, 8-2
Executive routine, *Error Logging*, 1-1, 1-3, 1-5, 1-6 ; *Writing I/O Driver*, 1-12, 1-17, 4-38
See also Executive services
$BMSET, *Error Logging*, 4-21
CALDEV, *Error Logging*, 4-26
$CRPKT, *Error Logging*, 4-25
$DTOER, *Error Logging*, 4-22
$DVCER, *Error Logging*, 4-22
$DVTMO, *Error Logging*, 4-22
$FNERL, *Error Logging*, 4-24
$GTPKT, *Writing I/O Driver*, 1-5, 1-14
$IODON, *Writing I/O Driver*, 1-14
$LOGER, *Error Logging*, 4-24
LOGTST, *Error Logging*, 4-25
$NSIER, *Error Logging*, 4-23
$QERMV, *Error Logging*, 4-27
$QUPKT, *Error Logging*, 4-26
Executive services
summaries of technically used, *Writing I/O Driver*, 7-34
Executive symbol table, *Crash Dump Analyzer*, 2-2, 2-14
EXEMC.MLB, *Program Development*, 1-10
EXEMC.MLB macro library, *Error Logging*, 4-15
EXIF$ directive, *Executive*, 5-85
/EXIT, *Crash Dump Analyzer*, 2-8
EXIT$S directive, *Executive*, 5-87; *Program Development*, 2-6
Exit & Delete command
EDI editor, *Utilities*, 7-24
EXIT command
EDT editor, *Introduction*, 2-10
IOX, *System Management*, 12-29
RMSDES, *RMS-11 Utilities*, 2-9, 2-18, 2-27
RMSDES utility, *RMS-11 Utilities*, 2-3
Exit command, *Debugging*, 2-10; *XDT*, 2-14
EDI editor, *Program Development*, 2-9, 2-11, 2-17, 7-4, 7-7; *Utilities*, 7-23
.EXIT directive, *Indirect*, 2-60
Exit If directive, *Executive*, 5-85
EXIT option
ACNT, *System Management*, 2-13
Exit status, *Indirect*, 2-12
value, *Indirect*, 2-12
Exit status code, *Batch and Queue*, 3-3
Exit status value
ports, *System Management*, 4-15, 4-16
units and controllers, *System Management*, 4-15
Exit switch
See /EXIT
Exit with Status directive, *Executive*, 5-89
/EXP keyword
LOAD command, *MCR*, 3-104; *System Management*, 8-16
UNLOAD command, *MCR*, 3-212
.EXPLG module
logical name expansion, *I/O Operations*, 4-15
Expression, *Debugging*, 2-3
address, *Debugging*, 2-2
CFL, *Error Logging*, 5-9 to 5-15
component of a term, *MACRO-11*, 2-14
definition, *MACRO-11*, 2-14
evaluating, *Debugging*, 2-3, 7-2
evaluation rules, *MACRO-11*, 2-14
format, *Debugging*, 2-3
illegal, *Debugging*, 2-7

Expression (cont'd.)
invalid, *XDT*, 2-12
list, *Error Logging*, 5-38 to 5-39
declaring, *Error Logging*, 5-39
operator, *Error Logging*, 5-9 to 5-16
precedence, *Error Logging*, 5-15
Radix–50
evaluating, *Debugging*, 7-4
register address, *Debugging*, 2-5; *XDT*, 2-11
types of, *Error Logging*, 5-9; *MACRO-11*, 2-14, 2-15
value of global at assembly, *MACRO-11*, 2-15
EXST$ directive, *Executive*, 5-89
<EXSTAT> symbol, *Indirect*, 2-12; *System Management*, 4-16
<EXSTRI> symbol, *Indirect*, 2-23
/EX switch
LBR utility, *Utilities*, 10-19
PIP utility, *Utilities*, 12-15
EXTEND_SIZE parameter
SET ACCOUNTING command, *System Management*, 10-9
START/ACCOUNTING command, *System Management*, 10-5
Extend access, *MCR*, 2-3
common region, *MCR*, 3-98; *System Management*, 5-24
file
initializing volumes with, *MCR*, 3-88
specifying default, *MCR*, 3-80
specifying default for mounted volume, *MCR*, 3-113
specifying personal default, *MCR*, 3-164
UFD
establishing, *MCR*, 3-209
volume
initializing volumes with, *MCR*, 3-91
specifying default, *MCR*, 3-82
specifying default for mounted volume, *MCR*, 3-115
Extend control parameter
F11ACP, *I/O Operations*, H-9
Extended arithmetic element
specifying, *Task Builder*, 10-17, 11-16
Extended attribute block
See XAB
Extended I/O (TTDRV), *I/O Drivers*, 2-21, 2-27
Extended User Control Block
See UCB
$EXTEND macro, *RMS-11 Macro*, 5-46
EXTEND operation, *RMS-11 Macro*, 3-9, 5-47; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
and shared access, *RMS-11 User's Guide*, 2-6
BDB requirement, *RMS-11 Macro*, 2-8
$EXTEND macro, *RMS-11 Macro*, 5-46
I/O buffer requirement, *RMS-11 Macro*, 2-7
/EXTEND qualifier
BRU utility, *Utilities*, 3-16
Extend Task directive, *Executive*, 5-91
SET /MAXEXT command, *MCR*, 3-172
EXTENSION
RMSDES utility
area section, *RMS-11 Utilities*, 2-45
file section, *RMS-11 Utilities*, 2-32
Extension default, *I/O Operations*, 2-19
/EXTENSION qualifier
INITIALIZE command, *System Management*, 1-8
MOUNT command, *System Management*, 1-8
Extent
data caching, *MCR*, 3-111, 3-160
Extent size
data caching
specifying, *MCR*, 3-112
External expression
definition, *MACRO-11*, 2-15
External header, *Writing I/O Driver*, 6-7
/EXTERNAL qualifier, *Task Builder*, 11-31
EXTK$ directive, *Executive*, 5-91
SET /MAXEXT command, *MCR*, 3-172
/EXT keyword
HOME command, *MCR*, 3-80
INI command, *System Management*, 1-8
INITVOLUME command, *MCR*, 3-87
MOUNT command, *MCR*, 3-112; *System Management*, 1-8
.EXTND routine
extending file, *I/O Operations*, 4-24
EXTSCT option, *Task Builder*, 12-14
$EXTSK (Extend task), *System Library*, 8-18
EXTTSK option, *Task Builder*, 12-15

F

F.ACTL field
number of retrieval pointers, *I/O Operations*, A-8

F.ALOC field
number of blocks allocated for extend, *I/O Operations*, A-6
F.BBFS field
block buffer size, *I/O Operations*, A-7
F.BDB field
block buffer descriptor block address, *I/O Operations*, A-7
F.BGBC field
big-buffer block count, *I/O Operations*, A-7
F.BKDN field
AST service routine address, *I/O Operations*, A-6
F.BKDS field
block I/O buffer descriptor, *I/O Operations*, A-5
F.BKEF field
block I/O event flag, *I/O Operations*, A-7
F.BKP1 field
FCS internal control bits, *I/O Operations*, A-7
F.BKST field
I/O status block address, *I/O Operations*, A-6
F.BKVB field
user virtual block number, *I/O Operations*, A-7
F.CHR field
volume characteristics byte, *I/O Operations*, A-8
F.CNTG field
number of blocks to be allocated, *I/O Operations*, A-6
F.DFNB field
default filename block pointer, *I/O Operations*, A-7
F.DSPT field
data-set descriptor pointer, *I/O Operations*, A-7
F.EFBK field
end-of-file block number, *I/O Operations*, A-5
F.EFN field
record I/O event flag, *I/O Operations*, A-7
F.EOBB field
end-of-block buffer, *I/O Operations*, A-6
F.ERR+1 field
F.ERR extension, *I/O Operations*, A-7
F.ERR field
error return code byte, *I/O Operations*, A-7
F.EXT field
FDB extension address, *I/O Operations*, A-8
F.FACC field
file access byte, *I/O Operations*, A-6
F.FFBY field
first free byte in last block, *I/O Operations*, A-5
F.FLG field
flag byte, *I/O Operations*, A-8
F.FNB field
filename block offset, *I/O Operations*, A-8
F.HIBK field
highest allocated virtual block number, *I/O Operations*, A-4
F.LUN field
FDB, *I/O Operations*, 4-16
LUN for FDB, *I/O Operations*, A-6
F.MBC1 field
number of buffers in use, *I/O Operations*, A-7
F.MBCT field
number of multiple buffers, *I/O Operations*, A-7
F.MBFG field
multibuffer flag word, *I/O Operations*, A-7
F.NRBD field
next record buffer descriptor, *I/O Operations*, A-5
F.NREC field
address of next record in block, *I/O Operations*, A-6
F.OVBS field
override block buffer size, *I/O Operations*, A-6
F.RACC field
record access byte, *I/O Operations*, A-5
F.RATT field
record attribute byte, *I/O Operations*, A-4
F.RCNM field
random access record number, *I/O Operations*, A-6
F.RCTL field
device characteristics byte, *I/O Operations*, A-5
.PARSE routine, *I/O Operations*, 4-12
F.RSIZ field
record-size word, *I/O Operations*, A-4
F.RTYP field
record-type byte, *I/O Operations*, A-4

F.SEQN field
  sequence number, *I/O Operations*, A-8
F.STBK field
  statistics block address, *I/O Operations*, A-6
F.URBD field
  user record buffer descriptor, *I/O Operations*, A-5
F.VBN field
  virtual block number, *I/O Operations*, A-7
F.VBSZ field
  device buffer size word, *I/O Operations*, A-7
.PARSE routine, *I/O Operations*, 4-12
F1.xxx bit, *I/O Drivers*, 2-36
F11ACP, *RMS-11 User's Guide*, 8-13
  See also Files–11 ACP
  SYSGEN question, *System Generation*, 3-29
F11ACP stall I/O performance
  disk driver, *I/O Drivers*, 4-12
F11DF$, *Crash Dump Analyzer*, C-28
F2.xxx bit, *I/O Drivers*, 2-36
F4PRES library
  building, *Task Builder*, 5-64
F$-family macro, *RMS-11 Macro*, 2-10
  declaring, *RMS-11 Macro*, C-1
  example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
FA.DLK value
  not lock file, *I/O Operations*, 2-16
FA.EXL value
  block locking, *I/O Operations*, 2-16
FA.LKL value
  block locking, *I/O Operations*, 2-16
FA.NSP value
  opening file no superseding, *I/O Operations*, 3-17
FA.POS value
  file position on close, *I/O Operations*, 2-15
FA.RWD value
  rewinding on close or open, *I/O Operations*, 2-15
FA.SHR value
  opening file shared access, *I/O Operations*, 3-17
FA.TMP value
  opening temporary file, *I/O Operations*, 3-17
FAB, *RMS-11 Intro*, 4-8
  chaining to RAB, *RMS-11 Macro*, 2-14
  declaring, *RMS-11 Macro*, 2-8
  initializing, *RMS-11 Macro*, 2-10
FAB (cont'd.)
  summary, *RMS-11 Macro*, 6-22
FAB$B macro, *RMS-11 Macro*, 2-8, C-1
  example, *RMS-11 Macro*, 7-3, 7-8, 7-11, 7-15
FAB$BT macro, *RMS-11 Macro*, C-1
FAB$E macro, *RMS-11 Macro*, 2-10
  declaring, *RMS-11 Macro*, C-1
  example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
FABOF$ macro, *RMS-11 Macro*, C-1
Facilities-declaration macro, *RMS-11 Macro*, 2-2
  declaring, *RMS-11 Macro*, C-2
Failure
  controller, *System Management*, 11-4
  device unit, *System Management*, 11-4
  intermittent, *System Management*, 11-2
    example, *System Management*, 11-2
    re-creating conditions, *System Management*, 11-2
  media
    definition, *System Management*, 11-2
    detecting, *System Management*, 11-2
  memory, *System Management*, 11-5
  MK11 memory box, *System Management*, 11-5
  processor, *System Management*, 11-5
    recovery from, *System Management*, 11-5
    symptoms, *System Management*, 11-5
  transient, *System Management*, 11-2
Fairness count, *System Management*, 10-8
FAL, *RMS-11 User's Guide*, B-1
  RSTS/E, *RMS-11 User's Guide*, B-1, B-2, B-3
  RSX-11M/M-PLUS, *RMS-11 User's Guide*, B-3
  VAX/VMS, *RMS-11 User's Guide*, B-3
<FALSE> symbol, *Indirect*, 2-10
Fast-mapping facility, *Executive*, 3-19; *System Generation*, 3-26; *Task Builder*, 4-19
  high-level language, *Executive*, 3-22
  installing task for use with, *System Management*, 5-22
  MACRO–11, *Executive*, 3-21
  specifying for memory-resident overlay, *Task Builder*, 10-20, 11-19
  specifying for task, *Task Builder*, 10-19, 11-17
  status returns, *Executive*, 3-23
/FAST qualifier, *Task Builder*, 11-32

/FAST qualifier (cont'd.)
LINK command, *Program Development*, 4-4
Fast Task Builder
See FTB
/FA switch
FLX utility, *Utilities*, 8-6
Fatal error message, *System Management*, 5-82
Fault
codes, *Writing I/O Driver*, 6-11
correction, *System Management*, 11-3
detecting
Error Logger, *System Management*, 11-3
IOX, *System Management*, 11-3
hardware
categories, *System Management*, 11-1
definition, *System Management*, 11-1
intermittent, *System Management*, 11-2
media, *System Management*, 11-2
transient, *System Management*, 11-2
isolating, *System Management*, 11-3
system
definition, *System Management*, 11-1
recovery from, *System Management*, 11-4
tracing, *Writing I/O Driver*, 6-12, 6-13
Fault isolation, *Writing I/O Driver*, 6-5, 6-7
FB$-family symbol
declaring, *RMS-11 Macro*, C-1
$FBCAL macro, *RMS-11 Macro*, C-2
/FB switch
FLX utility, *Utilities*, 8-6
FCB, *MCR*, 3-81, 3-89, 3-114, 3-125; *Writing I/O Driver*, 2-15
F command, *Debugging*, 2-7, 6-4
FCPLRG
See also F11ACP
FCPMDL
See F11ACP
FCS, *I/O Operations*, 1-1
data structure
general, *I/O Operations*, 1-5
default extension block count, *System Management*, 1-8
definition, *System Generation*, 1-9
file access method, *I/O Operations*, 1-6
I/O macro, *I/O Operations*, 2-1
important characteristic, *I/O Operations*, 1-4
library options, *I/O Operations*, L-1
library symbols, *I/O Operations*, I-1
macro
FDB information, *I/O Operations*, 2-2
FCS
macro (cont'd.)
.MCALL directive, *I/O Operations*, 2-2
processing string, *Executive*, 5-157
resident library
types, *Task Builder*, 5-62
term definitions, *I/O Operations*, 1-2
with Task Builder, *I/O Operations*, 1-1
FCS.OBJ FCS library, *I/O Operations*, L-1
FCS-11
sequential file compatibility, *RMS-11 User's Guide*, 3-2
FCSFSL library, *Task Builder*, 5-63
definition, *System Generation*, 1-9
pregenerated kit, *System Generation*, 5-43
tasks supplied, *System Generation*, 4-7
FCS impure area, *I/O Operations*, 2-35
FCS library
FCSFSL, *System Generation*, 3-76
FCSRES, *System Generation*, 3-76
pregenerated kit, *System Generation*, 5-43
FCSMBF.OBJ FCS library, *I/O Operations*, L-1
FCSMTA.OBJ FCS library, *I/O Operations*, L-1
FCSRES library, *Task Builder*, 5-63
building
memory-resident, *Task Builder*, 5-63
non-memory-resident, *Task Builder*, 5-63
definition, *System Generation*, 1-10
pregenerated kit, *System Generation*, 5-43
SYSGEN question, *System Generation*, 3-26
tasks supplied, *System Generation*, 4-7
FCSRES routines, *I/O Operations*, 1-21
/FC switch
FLX utility, *Utilities*, 8-8
.FCTR directive, *Task Builder*, 3-27
arguments, *Task Builder*, 3-28
creating statement, *Task Builder*, 3-41
.FCTYP routine
assembly parameters, *I/O Operations*, L-1
FD.BLK parameter
record attribute, *I/O Operations*, 2-6
block boundary crossing, *I/O Operations*, 3-9
FD.CR parameter
record attribute, *I/O Operations*, 2-6
line-feed character, *I/O Operations*, 3-9
FD.FTN parameter, *I/O Operations*, 3-9
FD.INS parameter
sequential file, *I/O Operations*, 2-10

FD.INS parameter (cont'd.)
sequential mode, *I/O Operations*, 3-6, 3-9
FD.PLC parameter
locate mode, *I/O Operations*, 2-10, 3-6
move mode, *I/O Operations*, 2-10
FD.PRN parameter
record attribute, *I/O Operations*, 2-6
FD.RAH parameter
read-ahead operation, *I/O Operations*, 3-11
FD.RAH value
read-ahead, *I/O Operations*, 2-19
FD.RAN parameter
random access, *I/O Operations*, 2-10, 3-9
random record I/O, *I/O Operations*, 3-6
FD.RTN parameter
record attribute, *I/O Operations*, 2-6
FD.RWM parameter
block I/O operation, *I/O Operations*, 3-6
record access, *I/O Operations*, 2-10
record attribute process with block I/O, *I/O Operations*, 3-9
FD.WBH parameter
write-behind operation, *I/O Operations*, 3-11
FD.WBH value
write behind, *I/O Operations*, 2-19
FDAT$A macro, *I/O Operations*, 2-5
FDAT$R macro, *I/O Operations*, 2-20
FDB, *I/O Operations*, 2-3
address
run-time macro, *I/O Operations*, 2-23
allocating file block, *I/O Operations*, 2-8
as data structure, *I/O Operations*, 1-5
block I/O, *I/O Operations*, 2-9
block locking, *I/O Operations*, 2-16
block size
resetting, *I/O Operations*, 2-18
carriage control, *I/O Operations*, 2-7
definition, *I/O Operations*, 1-2
description, *I/O Operations*, 1-5
extension
logical name translation, *I/O Operations*, 4-14
F.LUN field, *I/O Operations*, 4-16
F.xxxx field, *I/O Operations*, A-4
file identification, *I/O Operations*, 3-10
GET$ macro, *I/O Operations*, 3-20
initialization, *I/O Operations*, 2-3
initializing block access, *I/O Operations*, 2-20
initializing block buffer, *I/O Operations*, 2-17, 2-20
FDB (cont'd.)
initializing block buffer size, *I/O Operations*, 2-17
initializing file attribute, *I/O Operations*, 2-5, 2-20
initializing file-open section, *I/O Operations*, 2-13, 2-20
initializing record access, *I/O Operations*, 2-9, 2-20
initial values, *I/O Operations*, 2-1
largest record size, *I/O Operations*, 2-8
LUN specification, *I/O Operations*, 3-10
macro global symbol, *I/O Operations*, 2-24
macro local symbol, *I/O Operations*, 2-25
macro run-time exceptions, *I/O Operations*, 2-21
macro run-time initialization, *I/O Operations*, 2-20
multibuffering, *I/O Operations*, 2-18
multibuffering type, *I/O Operations*, 2-18
offset
global/local, *I/O Operations*, 2-24
OPEN$x macro requirement, *I/O Operations*, 3-8
PUT$ macro operation, *I/O Operations*, 3-25
record I/O, *I/O Operations*, 2-9
record size, *I/O Operations*, 3-9
sequence number field, *I/O Operations*, 2-7
space allocation, *I/O Operations*, 2-5
WRITE$ macro, *I/O Operations*, 3-36
FDBDF$ macro
FDB space allocation, *I/O Operations*, 2-5
FDBF$A macro, *I/O Operations*, 2-17
example, *I/O Operations*, 2-20
FDBF$R macro, *I/O Operations*, 2-20
FDBK$A macro
block access initialization, *I/O Operations*, 2-11
example, *I/O Operations*, 2-13
record access
block I/O, *I/O Operations*, 2-11
FDBK$R macro
initializing block access, *I/O Operations*, 2-20
FDOP$A macro, *I/O Operations*, 2-13
example, *I/O Operations*, 2-16
FDOP$R macro
initialize file-open section, *I/O Operations*, 2-20
FDRC$A macro, *I/O Operations*, 2-9

FDRC$A macro (cont'd.)
example, *I/O Operations*, 2-10
FDRC$R macro
initializing record access, *I/O Operations*, 2-20
/FDX keyword
SET command, *MCR*, 3-166
SET command (VMR), *System Management*, 5-55
FEAT$ directive, *Executive*, 5-93
$FETCH macro, *RMS-11 Macro*, 2-16
example, *RMS-11 Macro*, 7-3, 7-8, 7-11, 7-15
/FF switch
CMP utility, *Utilities*, 4-3
/FI:n file switch
QUE /MOD command, *Batch and Queue*, 2-19
/FI:n switch
QUE /DEL command, *Batch and Queue*, 2-10
Field
clearing bits in, *RMS-11 Macro*, 2-11
comparing value, *RMS-11 Macro*, 2-16
copying value from, *RMS-11 Macro*, 2-16
copying value into, *RMS-11 Macro*, 2-11
examining, *RMS-11 Macro*, 2-16
initializing, *RMS-11 Macro*, 2-8
mnemonic, *RMS-11 Macro*, 1-2
setting bits in, *RMS-11 Macro*, 2-11
setting up, *RMS-11 Macro*, 2-10
testing bits in, *RMS-11 Macro*, 2-18
Field-access macro
$COMPARE, *RMS-11 Macro*, 2-17
declaring, *RMS-11 Macro*, C-2
$FETCH, *RMS-11 Macro*, 2-16
$OFF, *RMS-11 Macro*, 2-12
$STORE, *RMS-11 Macro*, 2-11
$TESTBITS, *RMS-11 Macro*, 2-18
FIELD data type
CFL, *Error Logging*, 5-7
Field extraction suffix unary operator
CFL expression, *Error Logging*, 5-13
Field-initialization macro
declaring
ALL block, *RMS-11 Macro*, C-3
DAT block, *RMS-11 Macro*, C-3
FAB, *RMS-11 Macro*, C-1
KEY block, *RMS-11 Macro*, C-3
NAM block, *RMS-11 Macro*, C-2
PRO block, *RMS-11 Macro*, C-3
RAB, *RMS-11 Macro*, C-2
Field-initialization macro
declaring (cont'd.)
SUM block, *RMS-11 Macro*, C-3
Field-offset symbol
declaring
ALL block, *RMS-11 Macro*, C-3 to C-4
DAT block, *RMS-11 Macro*, C-3 to C-4
FAB, *RMS-11 Macro*, C-1
KEY block, *RMS-11 Macro*, C-3 to C-4
NAM block, *RMS-11 Macro*, C-2
PRO block, *RMS-11 Macro*, C-3 to C-4
RAB, *RMS-11 Macro*, C-2
SUM block, *RMS-11 Macro*, C-3 to C-4
XAB, *RMS-11 Macro*, C-4
value
DAT block, *RMS-11 Macro*, 6-14
FAB, *RMS-11 Macro*, 6-22
KEY block, *RMS-11 Macro*, 6-67
NAM block, *RMS-11 Macro*, 6-94
PRO block, *RMS-11 Macro*, 6-108
RAB, *RMS-11 Macro*, 6-115
SUM block, *RMS-11 Macro*, 6-145
<FILATR> symbol, *Indirect*, 2-23 to 2-24
File, *RMS-11 User's Guide*, 1-2; *RMS-11 Intro*, 1-1; *Introduction*, 2-1, 3-1
See also Account file
See also Indexed file organization
See also Relative file organization
See also Sequential file organization
accessing, *MCR*, 2-3, 3-99; *System Management*, 5-25
access method
FCS, *I/O Operations*, 1-6
appending, *Utilities*, 12-8; *DCL*, 4-63
area
See ALL block
attributes, *RMS-11 User's Guide*, 1-2
See also File attribute
setting, *DCL*, 4-101
attribute size (F11ACP), *I/O Operations*, H-8
backing up, *RMS-11 User's Guide*, 1-10, 1-12
closing, *I/O Operations*, 3-17
See also CLOSE operation
current command, *I/O Operations*, 6-12
indirect command, *I/O Operations*, 6-11
temporary, *I/O Operations*, 3-12
comparing, *Utilities*, 4-1; *DCL*, 4-65

File (cont'd.)
contiguous, *Introduction*, 5-7
converting, *RMS-11 User's Guide*, 1-10, 1-12
copying, *DCL*, 4-45
BRU utility, *Utilities*, 3-1
DSC utility, *Utilities*, 6-1
Files–11, *Utilities*, 12-35
PIP utility, *Utilities*, 12-35
using MFT, *Utilities*, C-7
count
calculating maximum, *MCR*, 3-89
creating, *RMS-11 User's Guide*, 1-10, 1-12; *DCL*, 4-14, 4-20
See also CREATE operation
FO.WRT value, *I/O Operations*, 3-16
temporary, *I/O Operations*, 3-12
temporary mark for deletion, *I/O Operations*, 3-13
creating source, *Program Development*, 2-8, 2-9
date
See DAT block
declaring number of active, *Task Builder*, 12-7
definition of, *MCR*, 2-1
delete routine, *I/O Operations*, 4-26
deleting, *I/O Operations*, 3-38; *Utilities*, 12-11 ; *DCL*, 4-38
See also ERASE operation
using DELETE command, *Utilities*, C-9
using MFT, *Utilities*, C-8, C-9
deleting routine, *I/O Operations*, 4-26
deleting with wildcard, *MCR*, 2-6
design, *RMS-11 Intro*, 3-15
designing, *RMS-11 User's Guide*, 1-10, 1-12
See also Indexed file organization
See also Relative file organization
See also Sequential file organization
device
data format, *I/O Operations*, 1-6
directory, *I/O Operations*, 5-2
directory listing, *Program Development*, 3-9
displaying, *RMS-11 User's Guide*, 1-10, 1-12
block number, *Utilities*, 12-19
dumping, *Utilities*, 5-1
editing, *Utilities*, 7-1; *DCL*, 4-20
recovering, *DCL*, 4-21
source, *Program Development*, 2-9 to 2-17

File (cont'd.)
EDTINI.EDT, *Introduction*, 2-2
extending, *MCR*, 3-87
extending allocation
See EXTEND operation
extending routine, *I/O Operations*, 4-24
extending WRITE$ macro, *I/O Operations*, 3-35
extension
default, *I/O Operations*, 2-19
default size, *I/O Operations*, 2-9
size, *I/O Operations*, 2-8
virtual block, *I/O Operations*, 2-9
FORTRAN direct access
See FLX utility
I/O coordination, *I/O Operations*, 2-39
I/O status block, *I/O Operations*, 2-41
identification in FNB (F11ACP), *I/O Operations*, H-11
index, *I/O Operations*, 5-3
listing contents, *Utilities*, 14-5
position
in large volumes, *System Management*, 1-8
in small volumes, *System Management*, 1-8
indexed, *RMS-11 User's Guide*, 6-1
indirect command
See Indirect command file
initializing
record access, *I/O Operations*, 2-20
input
See Input file
library, *Utilities*, 10-1; *DCL*, 6-4
listing, *Program Development*, 3-6
FLX utility, *Utilities*, 8-7
LBR utility, *Utilities*, 10-22
PIP utility, *Utilities*, 12-18
loading, *RMS-11 User's Guide*, 1-10, 1-12
location, *DCL*, 4-1
locking, *I/O Operations*, 2-15
maintaining, *RMS-11 User's Guide*, 1-10, 1-12
mapping pointer for file window, *System Management*, 1-9
marking for deletion, *I/O Operations*, 3-13
maximum per volume
calculating, *MCR*, 3-89
merging, *Utilities*, 12-36
name, *Introduction*, 3-1
See also File name

File
name (cont'd.)
specifying, *MCR*, 2-5
name block
See NAM block
name block pointer, *I/O Operations*, H-11
name in FNB (F11ACP), *I/O Operations*, H-11
no locking on close, *I/O Operations*, 2-16
non-RMS-11, *RMS-11 Intro*, 3-4
object, *DCL*, 6-3, 6-8; *Introduction*, 5-6
ODL, *Task Builder*, 3-25
creating, *Task Builder*, 3-39
open
declaring, *Task Builder*, 12-7
opening
See OPEN operation
append, *I/O Operations*, 2-14
by filename block, *I/O Operations*, 3-14
by ID, *I/O Operations*, 2-32, 3-13
for appending FO.APD value, *I/O Operations*, 3-17
for file access, *I/O Operations*, 3-16
for modifying, *I/O Operations*, 3-17
for reading, *I/O Operations*, 3-16
for shared access FA.SHR value, *I/O Operations*, 3-17
for updating and extending, *I/O Operations*, 3-17
for writing FO.WRT value, *I/O Operations*, 3-16
lock on close, *I/O Operations*, 2-15
modify, *I/O Operations*, 2-14
no supersede, *I/O Operations*, 2-14, 3-16, 3-17
on LP for printing, *I/O Operations*, 8-2
processing, *I/O Operations*, 3-4
read access, *I/O Operations*, 2-14
shared access, *I/O Operations*, 2-14
tape position, *I/O Operations*, 2-15
temporary, *I/O Operations*, 2-14, 3-12
temporary FA.TMP value, *I/O Operations*, 3-17
temporary mark for deletion, *I/O Operations*, 3-13
update, *I/O Operations*, 2-14
write access, *I/O Operations*, 2-14
opening for reading, *Indirect*, 2-80
operation
multiple, *I/O Operations*, 5-7
single, *I/O Operations*, 5-7

File (cont'd.)
organization, *DCL*, 4-1
output
omitting, *Task Builder*, 1-3
overlay, *DCL*, 6-5
owner, *DCL*, 4-1
ownership, *MCR*, 2-2
PIP utility, *Utilities*, 12-37
position
by byte, *I/O Operations*, 2-10
on closing, *I/O Operations*, 2-15
printing, *Program Development*, 3-8; *DCL*, 4-73
processing, *RMS-11 User's Guide*, 1-16; *RMS-11 Intro*, 4-1
protection, *MCR*, 2-3 to 2-4, 3-164; *DCL*, 9-35 ; *Introduction*, 3-4, 6-4
changing password, *MCR*, 3-195
default access codes, *MCR*, 3-88
default for mounted volume, *MCR*, 3-115, 3-122
determined by task UIC, *MCR*, 3-99; *System Management*, 5-25
Files–11, *Utilities*, 12-22
specifying default, *MCR*, 3-87
specifying for mounted volume, *MCR*, 3-113, 3-120
protection of, *MCR*, 2-2
purging, *Program Development*, 3-9; *Utilities*, 12-24; *DCL*, 4-42
random I/O, *I/O Operations*, 2-19
recovering lost file, *Utilities*, 14-5
relative, *RMS-11 User's Guide*, 4-2
relative file organization, *RMS-11 Macro*, 2-3
renaming, *I/O Operations*, 4-23; *Utilities*, 12-25 ; *DCL*, 4-50
See RENAME operation
revision date
RMSBCK utility, *RMS-11 Utilities*, 6-8
saving
BRU utility, *Utilities*, 3-1
DSC utility, *Utilities*, 6-1
sequenced, *I/O Operations*, 2-6
reading, *I/O Operations*, 2-7
writing, *I/O Operations*, 2-7
sequence number, *I/O Operations*, 2-7
sequential, *RMS-11 User's Guide*, 3-3
sequential file organization, *RMS-11 Macro*, 2-3
shared access, *I/O Operations*, 1-13
source, *DCL*, 6-2; *Introduction*, 5-6

File
source (cont'd.)
editing, *DCL*, 4-24
space preallocation, *I/O Operations*, 2-19
specification, *RMS-11 Intro*, 4-1; *Utilities*, 1-4
definition, *I/O Operations*, 1-3
specifying within program, *I/O Operations*, 2-26
spooling, *Program Development*, 1-9, 3-8; *Utilities*, 12-30
startup command, *Introduction*, 2-2
symbol definition
See Symbol definition file
system image, *MCR*, 3-147; *System Management*, 8-18
system management, *System Management*, 1-10
task image, *DCL*, 6-3, 6-8; *Introduction*, 2-1, 5-7
testing for, *Indirect*, 2-96
text, *Introduction*, 2-1
transfer
sample session, *Utilities*, C-9
transferring, *Utilities*, 8-1, 8-4, C-3, C-7
DOS–11, *Utilities*, 8-4
RT–11, *Utilities*, 8-4
using VAX–11 RSX systems, *Utilities*, C-1
using MFT, *Utilities*, C-7
using professional personal computer systems, *Utilities*, C-1
truncating, *Utilities*, 12-32
See also TRUNCATE operation
truncating routine, *I/O Operations*, 4-25
truncation, *I/O Operations*, 2-10
type
See also File type
specifying, *MCR*, 2-5
type FNB (F11ACP), *I/O Operations*, H-11
typing, *DCL*, 4-60
universal library
See Universal library file
unlocking, *DCL*, 4-71
updating
PAT utility, *Utilities*, 11-1
PIP utility, *Utilities*, 12-34
SLP utility, *Utilities*, 13-1
ZAP utility, *Utilities*, 15-1
validating contents, *Utilities*, 11-8
version number, *DCL*, 4-3
File
version number (cont'd.)
default, *DCL*, 4-4
version number in FNB (F11ACP), *I/O Operations*, H-11
wildcard search
See SEARCH operation
window pointer number, *I/O Operations*, 2-16
FILE.MAC source code, *Program Development*, 2-17 to 2-19
/FILE_END qualifier
STOP/PROCESSOR command, *System Management*, 3-33
/FILE_POSITION file qualifier
SET QUEUE command, *Batch and Queue*, 2-19
/FILE_POSITION qualifier
DELETE command, *Batch and Queue*, 2-10
FILEA.MAC source code, *Program Development*, 2-19 to 2-21
File access
optimizing, *I/O Operations*, 2-32
types of
initializing volumes with, *MCR*, 3-88
specifying default, *MCR*, 3-80
specifying default for mounted volume, *MCR*, 3-113
specifying personal default, *MCR*, 3-164
File access block
See FAB
File access listener
See FAL
File allocation
See Allocation
File attribute, *Indirect*, 2-23
initializing, *I/O Operations*, 2-5
initializing run-time, *I/O Operations*, 2-20
specifying tape, *I/O Operations*, G-16
File attribute (RMSDSP)
indexed file
detailed display, *RMS-11 Utilities*, 5-4
FILEB.MAC source code, *Program Development*, 2-21 to 2-23
File block
access initialization, *I/O Operations*, 2-11
access initializing run-time, *I/O Operations*, 2-20
allocation, *I/O Operations*, 2-8
buffer initialization, *I/O Operations*, 2-17
run time, *I/O Operations*, 2-20

File block (cont'd.)
locking, *I/O Operations*, 2-16
File characteristic
system-controlled characteristic
SC.BAD, *I/O Operations*, C-4
SC.MDL, *I/O Operations*, C-4
user-controlled
UC.CON
contiguous file, *I/O Operations*, C-4
UC.DLK
file improperly closed, *I/O Operations*, C-4
File command
EDI editor, *Utilities*, 7-24
File Compare Utility
See CMP utility
File Control Block
See FCB
File control directive, *MACRO-11*, 5-49
File control processor, *RMS-11 User's Guide*, 1-16; *RMS-11 Intro*, 2-1
multiple, *System Management*, 1-7
retrieval pointers, *RMS-11 User's Guide*, 8-11
window turning, *RMS-11 User's Guide*, 8-12
File control routine, *I/O Operations*, 4-1
File Control Services
See FCS
File creation (RMSDEF), *RMS-11 Utilities*, A-19
File Descriptor Block
See FDB
File Dump Utility
See DMP utility
File header
allocating, *MCR*, 3-88
calculating preallocated, *MCR*, 3-88
contents of, *MCR*, 2-2
initializing, *MCR*, 3-88
maximum per volume, *MCR*, 3-88
File header block, *I/O Operations*, 5-4
format, *I/O Operations*, C-1
H.XXXX field, *I/O Operations*, C-1, C-2
header area
file characteristics, *I/O Operations*, C-4
file owner information, *I/O Operations*, C-3
file protection code, *I/O Operations*, C-3
File header block (cont'd.)
I.XXXX field, *I/O Operations*, C-2
identification area, *I/O Operations*, C-4
creation date, *I/O Operations*, C-5
creation time, *I/O Operations*, C-5
expiration date, *I/O Operations*, C-5
file name, *I/O Operations*, C-4
file type, *I/O Operations*, C-4
file version number, *I/O Operations*, C-4
revision date, *I/O Operations*, C-4
revision number, *I/O Operations*, C-4
revision time, *I/O Operations*, C-4
M.XXXX field, *I/O Operations*, C-2
map area, *I/O Operations*, C-5
tape, *I/O Operations*, G-9
File header label
ANSI, *I/O Operations*, 5-5
tape, *I/O Operations*, G-4
HDR1, *I/O Operations*, G-4
HDR2, *I/O Operations*, G-5
HDR3, *I/O Operations*, G-5
File identification, *I/O Operations*, 5-4
FDB, *I/O Operations*, 3-10
field, *I/O Operations*, 2-32
File Identification Block
F11ACP, *I/O Operations*, H-7
File identifier processing
by Files–11
tape, *I/O Operations*, G-7
File label
tape, *I/O Operations*, G-1
File macro, *I/O Operations*, 3-1
access privileges, *I/O Operations*, 3-4
error routine, *I/O Operations*, 3-2
File name, *DCL*, 4-3
default, *RMS-11 User's Guide*, A-6; *Indirect*, 2-5
file specifications, *RMS-11 User's Guide*, A-2
.PARSE routine, *I/O Operations*, 4-14
.PRSFN routine, *I/O Operations*, 4-16
specifying, *MCR*, 2-5
tape
Radix–50 conversion, *I/O Operations*, 4-18
Filename block
See also FNB
default, *I/O Operations*, 2-29, 3-15
initialization, *I/O Operations*, 2-14
default directory information
.GTDID routine, *I/O Operations*, 4-20

Filename block (cont'd.)
default file-open, *I/O Operations*, 2-13
default OFNB$x macro, *I/O Operations*, 3-15
deleting file, *I/O Operations*, 4-26
directory information
.GTDIR routine, *I/O Operations*, 4-19
initializing, *I/O Operations*, 2-33
manually, *I/O Operations*, 2-34
local offset definition, *I/O Operations*, 2-31
N.DID field
.PARSE routine, *I/O Operations*, 4-13
N.DVNM field, *I/O Operations*, 4-16
N.NEXT word
.PARSE routine, *I/O Operations*, 4-15
N.STAT word
.PARSE routine, *I/O Operations*, 4-15
NBOF$L macro, *I/O Operations*, 2-31
NMBLK$ macro, *I/O Operations*, 2-29
OPEN$x macro, *I/O Operations*, 2-33
opening file by, *I/O Operations*, 3-14
.PARSE routine
N.DID field, *I/O Operations*, 4-13
N.FID field, *I/O Operations*, 4-13
tape, *I/O Operations*, 4-11
routine, *I/O Operations*, 4-8, 4-19
specifying
default, *I/O Operations*, 2-26
Filename string descriptor, *I/O Operations*, 2-27
File number, *I/O Operations*, 5-4
File operation, *RMS-11 Macro*, 3-7; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
See also Operation
error codes, *I/O Drivers*, C-1; *I/O Operations*, K-1
File-operation macro
$CLOSE, *RMS-11 Macro*, 5-3
$CREATE, *RMS-11 Macro*, 5-9
declaring, *RMS-11 Macro*, C-2
$DISPLAY, *RMS-11 Macro*, 5-29
$ERASE, *RMS-11 Macro*, 5-40
$EXTEND, *RMS-11 Macro*, 5-46
$OPEN, *RMS-11 Macro*, 5-72
File organization, *RMS-11 User's Guide*, 1-11, 1-18 ; *RMS-11 Intro*, 3-1, 3-4
See also Indexed file organization
See also Relative file organization
See also Sequential file organization
and data storage, *RMS-11 User's Guide*, 2-5
and file design, *RMS-11 User's Guide*, 2-11
File organization (cont'd.)
and optimizations, *RMS-11 User's Guide*, 8-10
and record formats, *RMS-11 User's Guide*, 1-20, 2-15
indexed, *RMS-11 User's Guide*, 1-5, 1-11; *RMS-11 Intro*, 3-6
alternate keys, *RMS-11 Intro*, 3-7
changeable keys, *RMS-11 Intro*, 3-10
duplicate keys, *RMS-11 Intro*, 3-10
index, *RMS-11 Intro*, 3-7
keys, *RMS-11 Intro*, 3-6
null keys, *RMS-11 Intro*, 3-10
primary key, *RMS-11 Intro*, 3-7
segmented keys, *RMS-11 Intro*, 3-10
random access
to indexed files, *RMS-11 Intro*, 3-15
to relative files, *RMS-11 Intro*, 3-15
relative, *RMS-11 User's Guide*, 1-4, 1-11; *RMS-11 Intro*, 3-5, 3-6
cell, *RMS-11 Intro*, 3-5
RRN, *RMS-11 Intro*, 3-6
RMSDEF utility, *RMS-11 Utilities*, A-8
selection, *RMS-11 User's Guide*, 2-11
sequential, *RMS-11 User's Guide*, 1-3, 1-11; *RMS-11 Intro*, 3-4
sequential access
to indexed files, *RMS-11 Intro*, 3-12
to relative files, *RMS-11 Intro*, 3-12
to sequential files, *RMS-11 Intro*, 3-12
File ownership, *MCR*, 2-3
File owner word, *I/O Operations*, 4-6
reading, *I/O Operations*, 4-7
writing, *I/O Operations*, 4-7
FILE parameter
SET ACCOUNTING command, *System Management*, 10-9
START/ACCOUNTING command, *System Management*, 10-5
FILE PLACEMENT
RMSDES utility, *RMS-11 Utilities*, 2-30
File pointer routine, *I/O Operations*, 4-21
File position
save, *I/O Operations*, 4-22
to byte
.POINT routine, *I/O Operations*, 4-21
to record
.POSRC routine, *I/O Operations*, 4-22
File processing, *RMS-11 Macro*, 3-1
completion CLOSE$ macro, *I/O Operations*, 2-8

File protection, *MCR*, 2-3 to 2-4; *DCL*, 2-7, 4-9 to 4-12
See also Protection
access codes
specifying default, *MCR*, 3-80
default, *DCL*, 4-113
setting, *DCL*, 4-107 to 4-109, 4-110 to 4-112
system default
in account entry, *System Management*, 2-1, 2-4
File protection word, *I/O Operations*, 4-5, 4-6
<FILER2> symbol, *Indirect*, 2-18
File read-ahead FD.RAH parameter, *I/O Operations*, 3-11
File record
attribute, *I/O Operations*, 2-6
File rename routine, *I/O Operations*, 4-23
<FILERR> symbol, *Indirect*, 2-13 to 2-18
Files-11, *DCL*, 5-4
volume
initializing, *DCL*, 5-67
Files-11 ACP
See also F11ACP
mounting separate, *System Management*, 1-7
Files-11 Ancillary Control Processor
See Files-11 ACP
Files-11 file
copying, *Utilities*, 12-35
FLX utility, *Utilities*, 8-2
protection, *Utilities*, 12-22
verifying structure, *Utilities*, 14-1
Files-11 structure, *I/O Operations*, 5-1; *MCR*, 2-1
preparing volumes for use with, *MCR*, 2-1
types of volumes supported, *MCR*, 2-1
Files-11 volume
dismounting, *MCR*, 3-60
initializing, *MCR*, 2-1, 3-83
modifying home block, *MCR*, 3-79
mounting, *MCR*, 3-110
protecting, *MCR*, 3-115, 3-122
protecting files on, *MCR*, 3-113, 3-120
selecting for IOX exercise, *System Management*, 12-5, 12-30
specifying label for, *MCR*, 3-61
testing with IOX
example, *System Management*, 12-63
verifying with IOX, *System Management*, 12-6
FILES11 command
IOX, *System Management*, 12-30
Command mode, *System Management*, 12-31
default parameters, *System Management*, 12-30
examples, *System Management*, 12-31
function, *System Management*, 12-5
Interactive mode, *System Management*, 12-31
logical names, *System Management*, 12-30
overriding default parameters, *System Management*, 12-30
File sequence number, *I/O Operations*, 5-4
File Set Identifier, *MCR*, 3-109, 3-118, 3-121, 3-124
File sharing
See Shared access
File space (RMSIFL)
calculating, *RMS-11 Utilities*, 3-12
Filespec
See File specification
File specification, *RMS-11 User's Guide*, 1-18 to 1-19 ; *RMS-11 Intro*, 4-1; *DCL*, 4-2 to 4-4; *Introduction*, 1-13 to 1-15
See also File
default
directory, *RMS-11 User's Guide*, A-6
name, *RMS-11 User's Guide*, A-6
node, *RMS-11 User's Guide*, B-2
type, *RMS-11 User's Guide*, A-6
version, *RMS-11 User's Guide*, A-6
default for RSX-11M, *MACRO-11*, 7-3
default name string, *RMS-11 User's Guide*, A-5 to A-6
defaults, *MCR*, 2-6, 3-30; *DCL*, 4-4 to 4-6
defaults for RT-11, *MACRO-11*, 8-2
device, *I/O Operations*, 1-15
magnetic tape, *I/O Operations*, 1-17
.PRSDV routine, *I/O Operations*, 4-15
directory, *I/O Operations*, 1-15
magnetic tape, *I/O Operations*, 1-17
.PRSDI routine, *I/O Operations*, 4-15
dynamic processing
SYSLIB, *I/O Operations*, 2-32
examples, *MCR*, 2-8
file name string, *RMS-11 User's Guide*, A-5
Files-11
assigning logical name, *MCR*, 3-15
format, *MCR*, 2-5; *DCL*, 4-2

File specification (cont'd.)
format in command line, *MCR*, 2-4
fully qualified, *RMS-11 Macro*, 3-4
generation, *I/O Operations*, 1-18
input, *MCR*, 2-4
logical name
expanding, *I/O Operations*, 4-10
merging, *I/O Operations*, 4-10
parsing, *I/O Operations*, 4-10
magnetic tape, *RMS-11 User's Guide*, A-4, A-5; *I/O Operations*, 1-17
device, *RMS-11 User's Guide*, A-4
directory, *RMS-11 User's Guide*, A-4
quoted string, *RMS-11 User's Guide*, A-5
version, *RMS-11 User's Guide*, A-5
merged string, *RMS-11 Macro*, 3-3
multiple, *Batch and Queue*, 3-15
NAM block, *RMS-11 User's Guide*, A-6
name, *I/O Operations*, 1-16
node, *RMS-11 User's Guide*, B-2
output, *MCR*, 2-4
processing, *Executive*, 5-12
quoted string, *RMS-11 User's Guide*, B-2
magnetic tape, *I/O Operations*, 1-18
remote, *RMS-11 User's Guide*, B-1, B-2
RMSBCK utility, *RMS-11 Utilities*, 6-9
RMSDEF utility, *RMS-11 Utilities*, A-7
RMSRST utility, *RMS-11 Utilities*, 7-10
scanning, *Executive*, 5-97
standard, *RMS-11 User's Guide*, A-1
device, *RMS-11 User's Guide*, A-1
directory, *RMS-11 User's Guide*, A-1
name, *RMS-11 User's Guide*, A-2
type, *RMS-11 User's Guide*, A-3
version, *RMS-11 User's Guide*, A-3
syntax description, *I/O Operations*, 1-14
system defaults, *MCR*, 2-6
type, *I/O Operations*, 1-16
UIC, *MCR*, 2-2
unit
.PRSDV routine, *I/O Operations*, 4-15
version, *I/O Operations*, 1-16
magnetic tape, *I/O Operations*, 1-18
VMR
components, *System Management*, 5-5
defaults, *System Management*, 5-5
device name, *System Management*, 5-5
directory, *System Management*, 5-6
file name, *System Management*, 5-6
file type, *System Management*, 5-6
format, *System Management*, 5-5

File specification
VMR (cont'd.)
/IM switch, *System Management*, 5-6
named directory, *System Management*, 5-6
specifying, *System Management*, 5-5
version number, *System Management*, 5-6
wildcard, *RMS-11 Macro*, 3-9
wildcard character, *RMS-11 User's Guide*, A-2 to A-3 ; *RMS-11 Intro*, 4-1
File specification (IAS/RSX), *MACRO-11*, 7-16
File specification (TKB)
defaults, *Task Builder*, 1-15
format, *Task Builder*, 1-15
File specification parsing
See PARSE operation
File Specification Scanner directive, *Executive*, 5-97
/FILES qualifier
SHOW QUEUE command, *Batch and Queue*, 2-14
FILE statement
CFL, *Error Logging*, 5-37
See also DYNAMIC_TABLE statement
File Storage Region
See FSR
File structure, *I/O Operations*, 5-1
See also Structure
tape, *I/O Operations*, G-8
user, *I/O Operations*, 5-2
virtual blocks, *I/O Operations*, 5-2
File Structure Verification Utility
See VFY utility
File system
options, *System Management*, 1-8
File trailer label
tape, *I/O Operations*, G-8
File Transfer Utility Program
See FLX utility
File type, *RMS-11 User's Guide*, A-3; *MCR*, 2-7 ; *DCL*, 4-3; *Introduction*, 2-1
CMD, *DCL*, 6-6
conventional, *MCR*, 2-7
default, *Batch and Queue*, 3-15; *DCL*, 4-4, 4-5 to 4-6
defaults, *MCR*, 2-7
FTN, *Program Development*, 7-3, 7-4
LST, *Program Development*, 3-4, 6-11, 7-3, 7-4

File type (cont'd.)
MAP, *Program Development*, 4-6
MLB, *Program Development*, 6-1
OBJ, *Program Development*, 3-4, 7-5; *DCL*, 6-6
ODL, *DCL*, 6-5
OLB, *Program Development*, 6-4
.PARSE routine, *I/O Operations*, 4-14
PMD, *Program Development*, 5-10
.PRSFN routine, *I/O Operations*, 4-16
specifying, *MCR*, 2-5
system defaults, *MCR*, 2-7
TSK, *Program Development*, 4-1
File version
.PARSE routine, *I/O Operations*, 4-14
.PRSFN routine, *I/O Operations*, 4-16
File version number
specifying, *MCR*, 2-5
File window
definition, *MCR*, 3-117
mapping, *MCR*, 3-117
File window in secondary pool
SYSGEN question, *System Generation*, 3-29
/FIL keyword
HELP command, *MCR*, 3-72
Fill command
See F command
Fill number
RMSCNV utility, *RMS-11 Utilities*, 4-10
RMSDEF utility, *RMS-11 Utilities*, A-16
RMSIFL utility, *RMS-11 Utilities*, 3-6
FILL print fill character option
CFL, *Error Logging*, 5-5
Fill size
See Bucket fill number
<FILSPC> symbol, *Indirect*, 2-25
/FINAL keyword
ASSIGN command, *MCR*, 3-19
DEFINE LOGICALS command, *MCR*, 3-55
FIN argument to ORG$ macro, *RMS-11 Macro*, 2-3
Find and Return Task Information function (GIN$), *Executive*, 5-122
FIND command
EDT editor, *Introduction*, 2-16
Find command
EDI editor, *Utilities*, 7-24
FIND function
EDT editor, *Introduction*, 2-9
$FIND macro
key access, *RMS-11 Macro*, 5-46
RFA access, *RMS-11 Macro*, 5-54
$FIND macro (cont'd.)
sequential access, *RMS-11 Macro*, 5-49
FIND NEXT function
EDT editor, *Introduction*, 2-9
FIND operation,
RMS-11 Macro, 4-10; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and bucket locking, *RMS-11 User's Guide*, 2-8
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-16
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9
$FIND macro
RFA access, *RMS-11 Macro*, 5-49
sequential access, *RMS-11 Macro*, 5-44
indexed files, *RMS-11 User's Guide*, 7-3
key access, *RMS-11 User's Guide*, 7-3
random by key, *RMS-11 User's Guide*, 5-13
RFA access, *RMS-11 User's Guide*, 7-3
sequential access, *RMS-11 User's Guide*, 5-17, 7-3
key access, *RMS-11 Macro*, 5-51; *RMS-11 User's Guide*, 1-16
relative files, *RMS-11 User's Guide*, 4-8
key access, *RMS-11 User's Guide*, 4-8
RFA access, *RMS-11 User's Guide*, 4-8
sequential access, *RMS-11 User's Guide*, 4-8
RFA access, *RMS-11 User's Guide*, 1-16
sequential access, *RMS-11 User's Guide*, 1-16
sequential files, *RMS-11 User's Guide*, 3-7
key access, *RMS-11 User's Guide*, 3-7
RFA access, *RMS-11 User's Guide*, 3-7
sequential access, *RMS-11 User's Guide*, 3-7
.FIND routine
locating directory entry, *I/O Operations*, 4-16
FIND statement
CFL, *Error Logging*, 5-38
FINIT$ macro
FSR initialization run-time, *I/O Operations*, 2-37

.FINIT routine
initializing before .PARSE routine, *I/O Operations*, 4-11
FINLP1 control file module, *Error Logging*, 4-4, 4-6, 4-11, A-6
/FI switch
DMP utility, *Utilities*, 5-5
PIP utility, *Utilities*, 12-16
FIX command, *DCL*, 7-39 to 7-40, 9-17
See also FIX-IN-MEMORY command
VMR, *System Management*, 5-18
definition, *System Management*, 5-18
examples, *System Management*, 5-19
format, *System Management*, 5-18
keywords
/DIR, *System Management*, 5-18
/NSF, *System Management*, 5-19
/REG, *System Management*, 5-19
/RON, *System Management*, 5-19
parameter, *System Management*, 5-18
Fixed control area
RMSDEF utility, *RMS-11 Utilities*, A-8
Fixed-length record
PUT$ macro block buffer, *I/O Operations*, 3-27
Fixed-length record format, *RMS-11 User's Guide*, 1-11, 2-15; *RMS-11 Intro*, 3-2
Fixer task
See FXR task
FIX-IN-MEMORY command, *MCR*, 3-63
brief description, *MCR*, 1-6
examples, *MCR*, 3-63
format, *MCR*, 3-63
keywords
/REG, *MCR*, 3-63
/RON, *MCR*, 3-63
VMR
See FIX command
FLA command
See GROUP GLOBAL EVENT FLAGS command
Flag
See also Event flag
group global event, *MCR*, 3-65
/FLAG_PAGE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-21
PRINT command, *Batch and Queue*, 2-3
Flag page, *DCL*, 4-75
/FLAG qualifier
START/PROCESSOR command, *System Management*, 3-37
/FLAGS keyword
LOAD command, *MCR*, 3-104
Flagwd parameter
device-specific function
transmitting (LRDRV), *I/O Drivers*, 11-4
Floating CSR address, *System Generation*, D-1
assignment algorithm, *System Generation*, D-3
worksheet
blank, *System Generation*, D-6
completed example, *System Generation*, D-8
format, *System Generation*, D-4
instructions, *System Generation*, D-4
Floating-point number
single-word format, *MACRO-11*, 2-13
using ^F operator, *MACRO-11*, 2-13
Floating-point number format, *MACRO-11*, 5-28
Floating-Point Processor
op code
list, *MACRO-11*, C-5
specifying for task, *Task Builder*, 10-21, 11-18
Floating vector, *System Generation*, D-1
/FL option
QUE /STA command, *System Management*, 3-37
/FL switch
PRI command, *Batch and Queue*, 2-3
QUE /SP command, *System Management*, 3-21
FLT16: subroutine
converting unsigned integer to real constant
K-series, *I/O Drivers*, 13-18
LADRV, *I/O Drivers*, 12-15
.FLT2 directive, *MACRO-11*, 5-29
summary, *MACRO-11*, 5-2
.FLT4 directive, *MACRO-11*, 5-29
summary, *MACRO-11*, 5-2
Flush buffer routine, *I/O Operations*, 4-28
$FLUSH macro, *RMS-11 Macro*, 5-56
FLUSH operation, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
$FLUSH macro, *RMS-11 Macro*, 5-56
indexed files, *RMS-11 User's Guide*, 7-5
record stream, *RMS-11 Macro*, 4-8
relative files, *RMS-11 User's Guide*, 4-10

FLUSH operation (cont'd.)
sequential files, *RMS-11 User's Guide*, 3-9
.FLUSH routine
flushing buffer, *I/O Operations*, 4-28
FLX utility, *MCR*, 2-1
cassette, *Utilities*, 8-13
input file, *Utilities*, 8-14
multivolume support, *Utilities*, 8-13
output file, *Utilities*, 8-13
TA11/TU60 support, *Utilities*, 8-13
command line, *Utilities*, 8-3, A-15
control switches, *Utilities*, 8-4
device support, *Utilities*, 8-2
DOS–11 volume, *Utilities*, 8-9
deleting, *Utilities*, 8-10
directory listing, *Utilities*, 8-9
initializing, *Utilities*, 8-10
valid, *Utilities*, 8-1
file
deleting, *Utilities*, 8-7
Files–11, *Utilities*, 8-2
processing, *Utilities*, 8-7
specifying, *Utilities*, 8-3
FORTRAN direct access file, *Utilities*, 8-16
messages, *Utilities*, 8-16
error, *Utilities*, 8-17
informational, *Utilities*, 8-17
warning, *Utilities*, 8-17
paper tape support, *Utilities*, 8-15
RT–11 volume, *Utilities*, 8-10
deleting, *Utilities*, 8-11
directory listing, *Utilities*, 8-11
initializing, *Utilities*, 8-12
valid, *Utilities*, 8-2
switches
/BL, *Utilities*, 8-7
/BS, *Utilities*, 8-7
/CO, *Utilities*, 8-7
/DE, *Utilities*, 8-7
default, *Utilities*, 8-4
/DI, *Utilities*, 8-7
/DNS, *Utilities*, 8-8
/DO, *Utilities*, 8-4
/FA, *Utilities*, 8-6
/FB, *Utilities*, 8-6
/FC, *Utilities*, 8-8
/ID, *Utilities*, 8-8
/IM, *Utilities*, 8-6
/LI, *Utilities*, 8-8
/NU, *Utilities*, 8-8
/RS, *Utilities*, 8-4
/RT, *Utilities*, 8-4
FLX utility
switches (cont'd.)
/RW, *Utilities*, 8-8
/SP, *Utilities*, 8-8
/UI, *Utilities*, 8-8
/VE, *Utilities*, 8-8
/ZE, *Utilities*, 8-9
transfer mode switches, *Utilities*, 8-4
volume
directory listing, *Utilities*, 8-7
file deletion, *Utilities*, 8-7
file transfer, *Utilities*, 8-5
format switches, *Utilities*, 8-4
formatting, *Utilities*, 8-4
initializing, *Utilities*, 8-2
wildcard character, *Utilities*, 8-3
Flying installs, *System Management*, 18-4
/FMAP keyword
INS command (VMR), *System Management*, 5-22
INSTALL command, *MCR*, 3-96
<FMASK> symbol, *Indirect*, 2-25
FMS-11 interface, *Indirect*, 2-61
/FM switch, *Task Builder*, 10-19
FMTBUF option, *Task Builder*, 12-16
FMTNP1 formatter module, *Error Logging*, 4-6, 4-10, 4-11, 4-17, A-6
FMT utility
command line, *Utilities*, 9-1, A-17
device support, *Utilities*, 9-7
error messages, *Utilities*, 9-10
initiating, *Utilities*, 9-1
operation mode, *Utilities*, 9-5
operation range, *Utilities*, 9-7
switches
/BAD, *Utilities*, 9-3
/DENS, *Utilities*, 9-3
/ERL, *Utilities*, 9-3
/MAN, *Utilities*, 9-4
/NOVE, *Utilities*, 9-4
/OVR, *Utilities*, 9-4
/VE, *Utilities*, 9-5
/WLT, *Utilities*, 9-5
/@Y, *Utilities*, 9-4
terminating, *Utilities*, 9-2
FMTWP1 formatter module, *Error Logging*, 4-6, 4-10, 4-11, 4-17, A-6
FNB
See also Filename block
definition, *I/O Operations*, 1-2
F11ACP, *I/O Operations*, H-11

FNB
F11ACP (cont'd.)
directory identification, *I/O Operations*, H-11
file identification, *I/O Operations*, H-11
file name, *I/O Operations*, H-11
file type, *I/O Operations*, H-11
file version number, *I/O Operations*, H-11
pointer, *I/O Operations*, H-11
status word, *I/O Operations*, H-11
wildcard context, *I/O Operations*, H-11
N.XXXX field, *I/O Operations*, B-3
Fnc parameter
QIO$ basic syntax, *I/O Drivers*, 1-6
$FNDPG (Find page), *System Library*, 8-38
$FNERL Executive routine, *Error Logging*, 4-24
FO.APD value
opening file for appending, *I/O Operations*, 3-17
FO.MFY value
opening file for modifying, *I/O Operations*, 3-17
FO.RD value
opening file for reading, *I/O Operations*, 3-16
FO.UPD value
opening file for updating and extending, *I/O Operations*, 3-17
FO.WRT value
opening file for writing and creating, *I/O Operations*, 3-16
/FO job switch
QUE /MOD command, *Batch and Queue*, 2-19
/FO option
QUE /STA command, *System Management*, 3-37
^F operator
1-word floating-point operator, *MACRO-11*, 5-30
<FORATT> symbol, *Indirect*, 2-19
FOR command, *Program Development*, 7-1, 7-4
/DE switch, *Program Development*, 7-7
FOR compiler task
creating object module, *Program Development*, 7-5
debugging statements, *Program Development*, 7-6
FOR compiler task (cont'd.)
diagnostic run, *Program Development*, 7-3, 7-4
FOR command, *Program Development*, 7-1
FORTRAN command, *Program Development*, 7-1, 7-3
FTN file type, *Program Development*, 7-3, 7-4
/FOREIGN qualifier
MOUNT command, *DCL*, 5-10, 5-11, 5-13, 5-48
Shadow Recording preparation, *System Management*, 16-3
Foreign volume
See Volume
$FORK1 routine, *Writing I/O Driver*, 7-19
Fork block, *Writing I/O Driver*, 1-19
storage area, *Writing I/O Driver*, 4-36
/FOR keyword
MOU command
Shadow Recording preparation, *System Management*, 16-3
MOUNT command, *MCR*, 3-113, 3-120
Fork list
head of ($FRKHD), *Writing I/O Driver*, 2-15
Fork process, *Writing I/O Driver*, 1-8, 1-14, 1-19
definition, *Writing I/O Driver*, 1-8
$FORK routine, *Writing I/O Driver*, 1-8, 1-19, 7-18
driver use in I/O processing, *Writing I/O Driver*, 3-5
Form
length
setting, *System Management*, 3-21
types, *System Management*, 3-21
width
setting, *System Management*, 3-21
FORMAT
RMSDES utility, *RMS-11 Utilities*, 2-36
Format
See also Record format
FORTRAN IV
statement, *Program Development*, 7-3
MACRO-11
source file, *Program Development*, 2-1 to 2-3
statement, *Program Development*, 2-3
memory listing, *Debugging*, 6-5
of a MACRO–11 statement, *MACRO-11*, 1-1

Format (cont'd.)
PSW, *Debugging*, B-1
recommended source line format, *MACRO-11*, 1-5
Trace program listing, *Debugging*, 8-2
Format register
See F register
Format string
CFL, *Error Logging*, 5-41
/FORMAT switch
RPT, *Error Logging*, 3-13
arguments, *Error Logging*, 3-13, 3-16, 3-19
processing, *Error Logging*, 4-4
Formatter module, *Error Logging*, 4-5, 4-6, 4-10, 4-11, 4-17, A-6
.FORM directive, *Indirect*, 2-61
commands, *Indirect*, 2-61
parameters, *Indirect*, 2-62
demonstrating, *Indirect*, 2-63
Form feed, *DCL*, 3-21
cannot follow single or double quotation mark, *MACRO-11*, 5-19
effect inside macro definition, *MACRO-11*, 6-4
generates new page in listing, *MACRO-11*, 5-12
TTDRV, *I/O Drivers*, 2-71
Form Feed command
EDI editor, *Utilities*, 7-25
/FORMFEED keyword
SET command, *MCR*, 3-166
SET command (VMR), *System Management*, 5-55
/FORMS qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-21
PRINT command, *Batch and Queue*, 2-3
QUE /LI command, *Batch and Queue*, 2-14
SET QUEUE command, *Batch and Queue*, 2-19
START/PROCESSOR command, *System Management*, 3-37
Form types, *System Management*, 3-21
specifying with /FORMS qualifier, *System Management*, 3-22
FOR string
CON command line, *System Management*, 4-12
FORTRAN
AST service routine, *Executive*, 1-19
common block
FORTRAN
common block (cont'd.)
overlays, *Task Builder*, 3-20
interface
K-series, *I/O Drivers*, 13-6 to 13-28
LADRV, *I/O Drivers*, 12-2
routine list (K-series), *I/O Drivers*, 13-6
sample program (K-series), *I/O Drivers*, 13-30 to 13-33
completion routine, *I/O Drivers*, 13-32
with event flag, *I/O Drivers*, 13-31
subroutine
LADRV, *I/O Drivers*, 12-2
virtual program section, *Task Builder*, 5-70
FORTRAN carriage-control
record attribute, *I/O Operations*, 3-9
FORTRAN command, *Program Development*, 7-1; *Introduction*, 5-12
qualifiers
/D_LINES, *Program Development*, 7-7
/DE, *Program Development*, 7-7
/LIST, *Program Development*, 7-3, 7-7
/NOOBJECT, *Program Development*, 7-3
/OBJECT, *Program Development*, 7-3, 7-7
FORTRAN IV
See also FOR compiler task
compiler task, *Program Development*, 7-1
formatting source statements, *Program Development*, 7-3
source file
blank line, *Program Development*, 7-3
comment line, *Program Development*, 7-3
specifying OTS to TKB, *Program Development*, 7-5
FORTRAN subroutine
integer arguments, *Executive*, 1-12
list, *Executive*, 1-13
unavailable, *Executive*, 1-17
Forward reference
invalid in current location counter assignment, *MACRO-11*, 2-12
Forward referencing
in direct assignments statements, *MACRO-11*, 2-8
/FORWARDSPACE qualifier
START/PROCESSOR command, *System Management*, 3-37

/FO subswitch
PIP utility, *Utilities*, 12-37
/FO switch, *Task Builder*, 4-19, 10-20
PRI command, *Batch and Queue*, 2-3
QUE /LI command, *Batch and Queue*, 2-14
QUE /SP command, *System Management*, 3-21
RMSCNV utility, *RMS-11 Utilities*, 4-9, 4-15
Four-byte signed integer key, *RMS-11 User's Guide*, 6-4
Four-byte unsigned binary key, *RMS-11 User's Guide*, 6-5
/FPRO keyword
HOME command, *MCR*, 3-80
INITVOLUME command, *MCR*, 3-87
MOUNT command, *MCR*, 3-113, 3-120
/FP switch, *Task Builder*, 10-21
FPT argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
Fragmentation
extreme
PMT messages, *System Management*, 8-6
pool
definition, *System Management*, 8-6
setting fragment size, *System Management*, 8-10
$FREE macro, *RMS-11 Macro*, 5-58
FREE operation, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and shared access, *RMS-11 User's Guide*, 2-10
block stream, *RMS-11 Macro*, 4-13
$FREE macro, *RMS-11 Macro*, 5-58
record stream, *RMS-11 Macro*, 4-8
FREE setup command, *System Management*, 7-8
F register, *Debugging*, 2-6, 5-3; *XDT*, 2-12
Frequency
setting clock, *System Generation*, 5-34; *System Management*, 4-2
$FRKHD symbol, *Writing I/O Driver*, 2-15
/FR switch
PIP utility, *Utilities*, 12-17
RMSRST utility, *RMS-11 Utilities*, 7-7
VFY utility, *Utilities*, 14-4
FSR
as data structure, *I/O Operations*, 1-5
block buffer
block boundary, *I/O Operations*, 3-26
FSR
block buffer (cont'd.)
locate mode, *I/O Operations*, 3-21, 3-26
pool space, *I/O Operations*, 2-36
space allocation, *I/O Operations*, 2-19
definition, *I/O Operations*, 1-3
general description, *I/O Operations*, 1-6
increasing size
FORTRAN, *I/O Operations*, 2-39
MACRO-11, *I/O Operations*, 2-38
initialization FINIT$ macro, *I/O Operations*, 2-37
initialization FSRSZ$ macro, *I/O Operations*, 2-35
initializing, *I/O Operations*, 2-35
record I/O, *I/O Operations*, 2-35, 2-36
record I/O multibuffering, *I/O Operations*, 2-36
$$FSR1 program section, *I/O Operations*, 1-6
$$FSR2 program section
default UIC, *I/O Operations*, 4-4
file owner word, *I/O Operations*, 4-6
file protection word, *I/O Operations*, 4-5
general description, *I/O Operations*, 1-6
FSRSZ$ macro
FSR initialization, *I/O Operations*, 2-35
FSS$ directive, *Executive*, 5-97
FSTMAP module
specifying for task, *Task Builder*, 10-20, 11-19
FSTM module, *Task Builder*, 4-16
FSTM routine, *Task Builder*, 4-19
FTB, *Program Development*, 4-4; *Task Builder*, G-1 to G-2
specifying, *Task Builder*, 11-32
FTN file type, *Program Development*, 7-3, 7-4
/FULL_SEARCH qualifier, *Task Builder*, 11-33
Full-duplex I/O, *Writing I/O Driver*, 1-14
Full-duplex operation
TTDRV, *I/O Drivers*, 2-80
Full format report, *Error Logging*, 1-4, 1-5
processing, *Error Logging*, 4-10, 4-17
RPT, *Error Logging*, 3-13, 3-16
Full-functionality Executive
definition, *System Generation*, 1-10
features, *System Generation*, 3-23
SYSGEN question, *System Generation*, 3-23
/FULL qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-13, 3-16

/FULL qualifier
ANALYZE/ERROR_LOG command (cont'd.)
See also /FORMAT switch
LIBRARY command, *Program Development*, 6-10
SHOW QUEUE command, *Batch and Queue*, 2-14
Function commands
IOX
description, *System Management*, 12-6
Function directive, *MACRO-11*, 5-13
Function mask
ACP, *Writing I/O Driver*, 4-18, 4-19
building for mask word, *Writing I/O Driver*, 4-20
control, *Writing I/O Driver*, 4-18, 4-19
establishing, *Writing I/O Driver*, 4-21
layout, *Writing I/O Driver*, 4-18, 4-19
legal
details, *Writing I/O Driver*, 4-19
no-op, *Writing I/O Driver*, 4-18, 4-19
Function switches, *Crash Dump Analyzer*, 2-7 to 2-10
/FU subswitch
PIP utility, *Utilities*, 12-19
/FU switch, *Task Builder*, 10-22
LBR utility, *Program Development*, 6-11; *Utilities*, 10-22
QUE /LI command, *Batch and Queue*, 2-14
RMSDSP utility, *RMS-11 Utilities*, 5-2, 5-4
:FW option
QUE /STA command, *System Management*, 3-37
FXR task, *System Management*, 11-5

G

GBL argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
for .PSECT, *MACRO-11*, 5-35
use for data sharing, *MACRO-11*, 5-38
GBL attribute, *Task Builder*, 3-30
GBLDEF option, *Task Builder*, 5-13, 12-17
GBLINC option, *Task Builder*, 5-13, 12-18
/GBL keyword
ASN command (VMR), *System Management*, 5-9, 5-10
ASSIGN command, *MCR*, 3-19, 3-21
DEFINE LOGICALS command, *MCR*, 3-55, 3-56, 3-57
GBLPAT option, *Task Builder*, 12-19
See also TKB
GBLREF option, *Task Builder*, 5-13, 12-20
GBLXCL option, *Task Builder*, 5-14, 8-4, 12-21
GCCI$ directive, *Executive*, 5-101
GCII$ directive, *Executive*, 5-105
GCML, *I/O Operations*, 6-1, 6-3
control block
allocating, *I/O Operations*, 6-3
defining bit values, *I/O Operations*, 6-5
defining offsets, *I/O Operations*, 6-5
initializing, *I/O Operations*, 6-3
routine
run-time error, *I/O Operations*, 6-9
use, *I/O Operations*, 6-13
GCML$ macro, *I/O Operations*, 6-9
GCMLB$ macro, *I/O Operations*, 6-3
GCMLD$ macro, *I/O Operations*, 6-5, 6-6
G command, *Debugging*, 2-8, 3-3, 3-4; *XDT*, 1-8, 2-13
ODT, *Program Development*, 5-6, 5-8
GDIR$ directive, *Executive*, 5-108
GE conditional assembly test, *MACRO-11*, 5-45
General Information directive, *Executive*, 5-111
General-purpose directive, *Program Development*, 2-6 to 2-7
General register, *Debugging*, 5-1
contents, *Debugging*, 5-2
examining, *Debugging*, 5-1
setting, *Debugging*, 5-1
Generated system
copying, *System Generation*, 4-4
Generic match, *RMS-11 Intro*, 3-12
GEN partition
description, *System Management*, 7-7
GEOMETRY summary report
processing, *Error Logging*, 4-7, 4-10
RPT, *Error Logging*, 3-23
GET$ macro, *I/O Operations*, 1-9, 3-1
example, *I/O Operations*, 3-19
FD.RWM parameter
record I/O, *I/O Operations*, 2-10
FDB
file processing, *I/O Operations*, 3-18, 3-20
locate mode, *I/O Operations*, 3-21
move mode, *I/O Operations*, 3-21
format
file processing, *I/O Operations*, 3-19
GET$R macro, *I/O Operations*, 3-1

GET$R macro (cont'd.)
file processing
read logical record random mode, *I/O Operations*, 3-22
GET$S macro, *I/O Operations*, 3-1
file processing
read logical record sequential mode, *I/O Operations*, 3-23
GETADR subroutine, *Executive*, 1-12
GET argument to ORG$ macro, *RMS-11 Macro*, 2-3
Get Assigned Device Name function (GIN$), *Executive*, 5-111
GET command
RMSDES utility, *RMS-11 Utilities*, 2-10, 2-17, 2-24
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with SAVE, *RMS-11 Utilities*, 2-28
Get Command for Command Interpreter directive, *Executive*, 5-100
Get Command Interpreter Information directive, *Executive*, 5-105
Get command line macro
See GCML
Get Default Directory directive, *Executive*, 5-108
Get Device Information function (GIN$), *Executive*, 5-119
Get Feature Mask Words function (GIN$), *Executive*, 5-116
$GETGSA macro, *RMS-11 Macro*, 2-22
Get LUN Information directive, *Executive*, 5-126
$GET macro
key access, *RMS-11 Macro*, 5-51
RFA access, *RMS-11 Macro*, 5-62
sequential access, *RMS-11 Macro*, 5-49
Get Mapping Context directive, *Executive*, 5-131
Get MCR Command Line directive, *Executive*, 5-129
GET operation, *RMS-11 Macro*, 4-8; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and bucket locking, *RMS-11 User's Guide*, 2-8
and ODL files, *RMS-11 User's Guide*, 8-5
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-16 to 2-17
GET operation (cont'd.)
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9
$GET macro
key access, *RMS-11 Macro*, 5-63
RFA access, *RMS-11 Macro*, 5-67
sequential access, *RMS-11 Macro*, 5-60
indexed files, *RMS-11 User's Guide*, 7-4, 7-5, 7-9
key access, *RMS-11 User's Guide*, 7-5
random by key, *RMS-11 User's Guide*, 5-13
RFA access, *RMS-11 User's Guide*, 7-5
sequential access, *RMS-11 User's Guide*, 5-17, 7-5
key access, *RMS-11 User's Guide*, 1-16, 5-16
locate mode, *RMS-11 User's Guide*, 3-14
indexed files, *RMS-11 User's Guide*, 7-8
relative files, *RMS-11 User's Guide*, 4-13
move mode
indexed files, *RMS-11 User's Guide*, 7-7
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-13
relative files, *RMS-11 User's Guide*, 4-10
key access, *RMS-11 User's Guide*, 4-10
RFA access, *RMS-11 User's Guide*, 4-10
sequential access, *RMS-11 User's Guide*, 4-10
RFA access, *RMS-11 User's Guide*, 1-16
sequential access, *RMS-11 User's Guide*, 1-16
sequential files, *RMS-11 User's Guide*, 3-9
key access, *RMS-11 User's Guide*, 3-9
RFA access, *RMS-11 User's Guide*, 3-9
sequential access, *RMS-11 User's Guide*, 3-9
Get Partition Parameters directive, *Executive*, 5-134
Get Region Parameters directive, *Executive*, 5-136
Get Sense Switches directive, *Executive*, 5-138
SWITCH REGISTER command, *MCR*, 3-201
Get-space routine, *RMS-11 Macro*, 2-20
example, *RMS-11 Macro*, 7-18

Get-space routine (cont'd.)
macro
declaring, *RMS-11 Macro*, C-2
RMS-11-supplied, *RMS-11 Macro*, 2-4
Get System APRs function (GIN$), *Executive*, 5-121
Get System UIC Information function (GIN$), *Executive*, 5-112
Get Task Parameters directive, *Executive*, 5-142
Get Time Parameters directive, *Executive*, 5-140
Get User Account Block function (GIN$), *Executive*, 5-118
GFB, *Executive*, 5-51, 5-76, 5-290
G flag
in assembly listing, *MACRO-11*, 3-1
GIN$ directive, *Executive*, 5-111
GI.APR function, *Executive*, 5-121
GI.DEF function, *Executive*, 5-114
GI.DEV function, *Executive*, 5-119
GI.FMK function, *Executive*, 5-116
GI.GAS function, *Executive*, 5-111
GI.QMC function, *Executive*, 5-117
GI.REN function, *Executive*, 5-115
GI.SPR function, *Executive*, 5-114
GI.UAB function, *Executive*, 5-118
GI.UIC function, *Executive*, 5-112
GI.UPD function, *Executive*, 5-124
$$$GLB, *Executive*, 1-8
Global cross-reference listing, *Program Development*, 4-5, 4-6
Global expression
definition, *MACRO-11*, 2-15
Global logical assignment, *MCR*, 3-14
Global mode, *Indirect*, 2-54
Global reference
including, *Task Builder*, 5-13
/GLOBALS qualifier, *Task Builder*, 11-34
Global switch
RMSBCK utility, *RMS-11 Utilities*, 6-5
RMSIFL utility, *RMS-11 Utilities*, 3-5
Global symbol, *Program Development*, 1-4, 1-5
absolute, *Task Builder*, 2-8
creating with direct assignment statements, *MACRO-11*, 2-7
declaring, *Task Builder*, 12-20, 12-25, 12-38
default
disabling in MACRO-11, *Program Development*, 3-1, 3-2
Global symbol (cont'd.)
defining, *Task Builder*, 5-13, 12-17; *MACRO-11*, 2-6
deleting definition, *Indirect*, 2-59
entry point, *Program Development*, 1-5, 6-5, 6-6, 6-9
excluding, *Task Builder*, 5-14
excluding from symbol definition file, *Task Builder*, 12-21
excluding from symbol table, *Task Builder*, 11-34
FDB macro, *I/O Operations*, 2-24
function, *MACRO-11*, 2-6
including, *Task Builder*, 5-13, 12-18
including in map file, *Task Builder*, 11-66
including in symbol table, *Task Builder*, 10-51, 11-57
relocatable, *Task Builder*, 2-8
reserved, *Task Builder*, E-1 to E-3
resolution, *Program Development*, 4-2, 6-8
resolving, *Task Builder*, 2-8, 3-18, 3-20
undefined, *Program Development*, 6-7, 6-8; *Task Builder*, 2-8
value at assembly time, *MACRO-11*, 2-15
Global symbol directory
See GSD record
.GLOBL directive, *MACRO-11*, 5-42
defines global user symbols, *MACRO-11*, 2-6
summary, *MACRO-11*, 5-2
GLUN$ directive, *Executive*, 5-126
summary, *I/O Operations*, F-1
GLUN$ macro, *I/O Drivers*, 1-15, 1-21
buffer, *I/O Drivers*, 2-9
example, *I/O Drivers*, 1-21, 1-22, 1-23
get information
CRDRV, *I/O Drivers*, 9-1
DDDRV, *I/O Drivers*, 5-2
disk driver, *I/O Drivers*, 4-6
information table (TTDRV), *I/O Drivers*, 2-9
LADRV, *I/O Drivers*, 12-2
LPDRV, *I/O Drivers*, 7-3
LRDRV, *I/O Drivers*, 11-2
tape driver, *I/O Drivers*, 6-5
UNIBUS switch driver, *I/O Drivers*, 14-2
VTDRV, *I/O Drivers*, 3-1
information returned, *I/O Drivers*, 1-22
GMCR$ directive, *Executive*, 5-129
summary, *I/O Operations*, F-1
GMCX$ directive, *Executive*, 5-131

$GNCAL macro, *RMS-11 Macro*, C-2
Go command
  See G command
GOLD function
  EDT editor, *Introduction*, 2-3
.GOSUB directive, *Indirect*, 2-64
GOTO command, *Batch and Queue*, 3-9
  See also ON and IF commands
  example, *Batch and Queue*, 3-9
  format
    label, *Batch and Queue*, 3-9
.GOTO directive, *Indirect*, 2-65
GPRT$ directive, *Executive*, 5-134
Greater-than binary operator
  CFL expression, *Error Logging*, 5-12
Greater-than-or-equal binary operator
  CFL expression, *Error Logging*, 5-12
GREG$ directive, *Executive*, 5-136
G register, *Debugging*, 2-6, 5-4; *XDT*, 2-12
/GR keyword
  ASSIGN command, *MCR*, 3-19, 3-20, 3-21
  DEFINE LOGICALS command, *MCR*, 3-55, 3-56, 3-57
/GRO keyword
  HELP command, *MCR*, 3-72
Group global event flag, *Executive*, 2-2
  creating, *Executive*, 2-4, 5-51
  decrementing use count, *Executive*, 5-290
  deleting, *Executive*, 2-4, 5-76
  displaying, *Executive*, 2-4
  eliminating, *Executive*, 5-290
  reading, *Executive*, 5-184
Group Global Event Flag Control Block
  See GFB
Group global event flag dump, *Crash Dump Analyzer*, 3-1, 3-14
GROUP GLOBAL EVENT FLAGS command, *MCR*, 3-65
  brief description, *MCR*, 1-5
  examples, *MCR*, 3-65
  format, *MCR*, 3-65
  keywords
    /CRE, *MCR*, 3-65
    /ELIM, *MCR*, 3-65
Group logical assignment, *MCR*, 3-14
GSA$ macro, *RMS-11 Macro*, 2-20
  example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
GSD record, *Task Builder*, A-4
$GSPKT routine, *Writing I/O Driver*, 1-14, 7-20
GSSW$ directive
  SWITCH REGISTER command, *MCR*, 3-201
GSSW$S directive, *Executive*, 5-138
$GTBYT routine, *Writing I/O Driver*, 7-19
GT conditional assembly test, *MACRO-11*, 5-45
$GTCOR (Get core), *System Library*, 8-15
.GTDID routine, *I/O Operations*, 4-19
  default directory information, *I/O Operations*, 4-20
.GTDIR routine, *I/O Operations*, 4-19
  inserting directory information, *I/O Operations*, 4-19
GTHIST: subroutine
  gathering interevent time data (K-series), *I/O Drivers*, 13-19
GTIM$ directive, *Executive*, 5-140
GTPKT$ macro call
  arguments, *Writing I/O Driver*, 4-6
$GTPKT routine, *Writing I/O Driver*, 1-5, 1-14, 1-18, 7-20
  usage in driver code, *Writing I/O Driver*, 3-4
GTSK$ directive, *Executive*, 5-142
$GTWRD routine, *Writing I/O Driver*, 7-22

H

H.CKSM offset
  checksum word, *I/O Operations*, C-3
H.FLEV offset
  structure level, *I/O Operations*, C-1
H.FNUM offset
  file number, *I/O Operations*, C-1
H.FOWN offset
  offset to file owner, *I/O Operations*, C-1
H.FPRO offset
  file protection code, *I/O Operations*, C-1
H.FSEQ offset
  file sequence number, *I/O Operations*, C-1
H.IDOF offset
  header area, *I/O Operations*, C-1
H.MPOF offset
  map area offset, *I/O Operations*, C-1
H.PROG offset
  member number, *I/O Operations*, C-1
H.PROJ offset
  group number, *I/O Operations*, C-1
H.SCHA offset
  system-controlled file characteristics, *I/O Operations*, C-1

H.UCHA offset
user-controlled file characteristics, *I/O Operations*, C-1
H.UFAT offset
user file attributes, *I/O Operations*, C-1
Halt indicators, *System Management*, 11-6
Handler routine
CFL signalling, *Error Logging*, 5-39
/HARD_LIMIT qualifier
SET ERROR_LOG command, *Error Logging*, 2-9
See also /HL switch
Hard error, *Error Logging*, 1-3; *System Management*, 10-7
defined, *Error Logging*, 2-9
definition, *System Management*, 11-3
Hardware
program development, *Program Development*, 1-12
Hardware bootstrap
definition, *System Generation*, 1-10
Hardware configuration
K-series, *I/O Drivers*, 13-2
relationship to structures at block level, *Writing I/O Driver*, 2-1
Hardware fault
categories, *System Management*, 11-1
definition, *System Management*, 11-1
intermittent, *System Management*, 11-2
media, *System Management*, 11-2
transient, *System Management*, 11-2
Hardware interrupt
processing, *Executive*, 5-24
/HDR, *Crash Dump Analyzer*, 2-4, 2-6
/HDR3 keyword
MOUNT command, *MCR*, 3-120
HDRDF$, *Crash Dump Analyzer*, C-32
/HD switch, *Task Builder*, 10-23
/AL subswitch, *Utilities*, 14-4
DMP utility, *Utilities*, 5-5
VFY utility, *Utilities*, 14-4
Header
external
specifying for task, *Task Builder*, 10-55, 11-31
specifying for task image, *Task Builder*, 10-23, 11-35
task, *Task Builder*, B-12 to B-15
LUT entry, *Task Builder*, B-17
Header area, *I/O Operations*, 5-4
file header block, *I/O Operations*, C-3
file number, *I/O Operations*, C-3
Header area
file header block (cont'd.)
file owner information, *I/O Operations*, C-3
file protection code, *I/O Operations*, C-3
file sequence number, *I/O Operations*, C-3
identification area, *I/O Operations*, C-3
map area offset, *I/O Operations*, C-3
structure level, *I/O Operations*, C-3
user file attributes, *I/O Operations*, C-4
Header block
file, *I/O Operations*, 5-4
/HEADER qualifier, *Task Builder*, 11-35
/HEADERS qualifier
BRU utility, *System Generation*, 2-10; *Utilities*, 3-16
HEADER subpacket, *Error Logging*, 4-3
listing, *Error Logging*, 4-61
required, *Error Logging*, 4-10
$HEADR, *Writing I/O Driver*, 6-7, 6-9
pointer to first word of task header, *Writing I/O Driver*, 6-7
HELLO command, *MCR*, 3-67; *Introduction*, 1-5
brief description, *MCR*, 1-7
error messages, *MCR*, 3-67
examples, *MCR*, 3-70
formats, *MCR*, 3-69
HELP
RMSBCK utility, *RMS-11 Utilities*, 6-4
RMSCNV utility, *RMS-11 Utilities*, 4-5
RMSDEF utility, *RMS-11 Utilities*, A-5
RMSDES utility, *RMS-11 Utilities*, 2-2, 2-11
RMSDSP utility, *RMS-11 Utilities*, 5-3
RMSIFL utility, *RMS-11 Utilities*, 3-3
RMSRST utility, *RMS-11 Utilities*, 7-3
HELP command, *MCR*, 3-72; *System Management*, 4-17 ; *DCL*, 1-10 to 1-12, 3-23 to 3-26, 9-17; *Introduction*, 1-11, 1-12, 3-9
brief description, *MCR*, 1-7
EDT editor, *Introduction*, 2-6, 2-12
example, *MCR*, 3-74; *System Management*, 4-17
formats, *MCR*, 3-72, 3-76; *System Management*, 4-17
IOX, *System Management*, 12-32
keywords
/CLI, *MCR*, 3-72

HELP command
keywords (cont'd.)
/DCL, *MCR*, 3-72
/FIL, *MCR*, 3-72
/GRO, *MCR*, 3-72
/LOC, *MCR*, 3-73
/MCR, *MCR*, 3-73
/OUT, *MCR*, 3-73
qualifiers, *MCR*, 3-72
Help display
RMD
description, *System Management*, 7-4
Help file, *MCR*, 3-72 to 3-78; *System Generation*, 4-6; *DCL*, 3-26 to 3-31
description, *System Management*, 1-11
format, *MCR*, 3-73
writing, *DCL*, 3-26
HEX argument
for .LIST/.NLIST, *MACRO-11*, 5-7
HEX print radix
CFL, *Error Logging*, 5-5
/HFILL keyword
SET command, *MCR*, 3-167
SET command (VMR), *System Management*, 5-55
/HF switch
DMP utility, *Utilities*, 5-5
/HHT keyword
SET command, *MCR*, 3-167
SET command (VMR), *System Management*, 5-55
Highest precedence class operator
CFL expression, *Error Logging*, 5-15
High-key value
buckets, *RMS-11 User's Guide*, 5-5 to 5-6
/HIGH keyword
LOAD command, *MCR*, 3-104
High-level language, *RMS-11 Intro*, 4-7; *Introduction*, 5-11 to 5-12
access streams, *RMS-11 User's Guide*, 1-15
and asynchronous operations, *RMS-11 User's Guide*, 3-14
and file design, *RMS-11 User's Guide*, 1-19
and ODL files, *RMS-11 User's Guide*, 8-5
and remote access, *RMS-11 User's Guide*, B-1
asynchronous operations, *RMS-11 User's Guide*, 4-14
bucket fill size, *RMS-11 User's Guide*, 6-29
bucket size, *RMS-11 User's Guide*, 4-3, 6-21
defaults, *RMS-11 User's Guide*, 2-2
DEQ, *RMS-11 User's Guide*, 3-5, 4-4, 6-26
High-level language (cont'd.)
file and directory operations, *RMS-11 User's Guide*, 3-15, 4-15, 7-10
file operations, *RMS-11 User's Guide*, 8-10
initial allocation, *RMS-11 User's Guide*, 3-4, 4-4, 6-26
key characteristics, *RMS-11 User's Guide*, 6-8
keys, *RMS-11 User's Guide*, 6-7
locate mode, *RMS-11 User's Guide*, 3-14, 4-13
MRN, *RMS-11 User's Guide*, 4-5
placement control, *RMS-11 User's Guide*, 6-14
populating files, *RMS-11 User's Guide*, 6-26
restrictions, *RMS-11 User's Guide*, 1-13, 1-15, 2-1 ; *Executive*, 1-10
subroutine, *Executive*, 1-9
error conditions, *Executive*, 1-18
optional arguments, *Executive*, 1-11
specifying task names, *Executive*, 1-11
supported, *Executive*, 1-10
High memory limit register
See H register
High pool condition, *System Management*, 8-3, 8-4
High-speed device, *Writing I/O Driver*, 1-18
/HISTORY qualifier
SHOW ERROR_LOG command, *Error Logging*, 2-13
HISTORY summary report
processing, *Error Logging*, 4-7, 4-10
RPT, *Error Logging*, 3-23
HLP attribute, *System Management*, 18-38
/HL switch
ELI, *Error Logging*, 2-3, 2-9
See also /HARD_LIMIT qualifier with /SL switch, *Error Logging*, 2-10
/HO job switch
SUB command, *Batch and Queue*, 3-15
HOLD/ENTRY command, *Introduction*, 3-15
HOLD command
format
entry number, *Batch and Queue*, 2-22
job name, *Batch and Queue*, 2-22
HOLD/ENTRY, *DCL*, 4-93, 9-17
HOLD/JOB, *DCL*, 4-93, 9-18
/HOLD keyword
BYE command, *MCR*, 3-36
SET command, *MCR*, 3-168

/HOLD qualifier
PRINT command, *Batch and Queue*, 2-3
SUBMIT command, *Batch and Queue*, 3-15
HOLD SCREEN command, *Program Development*, 3-6
HOLD SCREEN key, *DCL*, 3-15; *Introduction*, 1-16
HOM command
See HOME command
Home block
changing, *MCR*, 3-79
checking with IOX, *System Management*, 12-6
initializing, *MCR*, 3-79
task
installing, *MCR*, 3-79
HOME command, *MCR*, 3-79
brief description, *MCR*, 1-5
example, *MCR*, 3-82
format, *MCR*, 3-79
keywords
/DENS, *MCR*, 3-80
/EXT, *MCR*, 3-80
/FPRO, *MCR*, 3-80
/LRU, *MCR*, 3-80
/MXF, *MCR*, 3-81
/NAME, *MCR*, 3-81
/OVR, *MCR*, 3-81
/OWNER, *MCR*, 3-81
/PRO, *MCR*, 3-81
/UIC, *MCR*, 3-82
/VI, *MCR*, 3-82
/WIN, *MCR*, 3-82
/HOST keyword
SET command, *MCR*, 3-168
Host system, *Task Builder*, C-1
definition, *System Generation*, 1-10
on line, *System Generation*, 2-5
stand alone, *System Generation*, 2-5
/HO switch
PRI command, *Batch and Queue*, 2-3
Hot backup
See also Online backup
HRC task, *System Management*, 1-12, 4-4
error messages, *System Management*, 4-36 to 4-40
format, *System Management*, 4-33
placing device off line, *System Management*, 4-6
placing device on line, *System Management*, 4-6
H register, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
/HSYNC keyword
SET command, *MCR*, 3-169
SET command (VMR), *System Management*, 5-56
HWDDF$, *Crash Dump Analyzer*, C-34
/HX switch
DMP utility, *Utilities*, 5-5
Hyphen (-)
extending command line with, *MCR*, 1-3
Hyphen (-)
extending command line with, *System Management*, 5-5
ODL operator, *Task Builder*, 3-26

I

I.CRDT offset
creation date, *I/O Operations*, C-2
I.CRTI offset
creation time, *I/O Operations*, C-2
I.EXDT offset
expiration date, *I/O Operations*, C-2
I.FNAM offset
identification area, *I/O Operations*, C-2
I.FTYP offset
file type, *I/O Operations*, C-2
I.FVER offset
file version number, *I/O Operations*, C-2
I.RVDT offset
revision date, *I/O Operations*, C-2
I.RVNO offset
revision number, *I/O Operations*, C-2
I.RVTI offset
revision time, *I/O Operations*, C-2
I/O
and performance, *RMS-11 User's Guide*, 2-3
and record operations, *RMS-11 User's Guide*, 5-17
asynchronous, *Writing I/O Driver*, 1-16
asynchronous (XEDRV), *I/O Drivers*, 10-24
block operation, *I/O Operations*, 1-8
buffer
disable (VTDRV), *I/O Drivers*, 3-5
enable (VTDRV), *I/O Drivers*, 3-5
canceling, *I/O Drivers*, 1-29
VTDRV, *I/O Drivers*, 3-4
cancel in-progress, *Writing I/O Driver*, 2-5
completion, *I/O Drivers*, 1-8, 1-9, 1-11, 1-36

I/O (cont'd.)
completion status (VTDRV), *I/O Drivers*, 3-6
data-transfer mode, *I/O Operations*, 1-10
device
attaching, *I/O Drivers*, 1-27
detaching, *I/O Drivers*, 1-28
device-dependent, *I/O Drivers*, 1-1
directive
condition, *I/O Drivers*, 1-37
status, *I/O Drivers*, 1-37
directive summary, *I/O Operations*, F-1
error
status list, *I/O Drivers*, B-1
extended
subfunction modifier (TTDRV), *I/O Drivers*, 2-28
TTDRV, *I/O Drivers*, 2-21, 2-27
failure, *I/O Drivers*, 1-37
function support
F11ACP, *I/O Operations*, H-1
MTAACP, *I/O Operations*, H-2
high-speed device, *Writing I/O Driver*, 1-16
in progress
disk driver, *I/O Drivers*, 4-7
issuing requests, *I/O Drivers*, 1-4
kill I/O, *I/O Drivers*, 1-29
locate mode, *I/O Operations*, 1-10, 1-11
macro
QIO$C form, *I/O Drivers*, 1-14
QIO$ form, *I/O Drivers*, 1-13
QIO$S form, *I/O Drivers*, 1-14
move mode, *I/O Operations*, 1-10
outstanding
before LUN reassignment, *I/O Drivers*, 1-3
overlapped (disk driver), *I/O Drivers*, 4-8
overview, *I/O Drivers*, 1-1; *Writing I/O Driver*, 3-3
packet, *I/O Drivers*, 1-13
paging operations, *RMS-11 User's Guide*, 8-10
preparation
FCS macro, *I/O Operations*, 2-1
processing requirements, *Writing I/O Driver*, 1-17
read logical block, *I/O Drivers*, 1-30
read virtual block, *I/O Drivers*, 1-31
record
big buffering, *I/O Operations*, 1-12
multibuffering, *I/O Operations*, 1-11

I/O (cont'd.)
record operation, *I/O Operations*, 1-8
related macro, *I/O Drivers*, 1-13
form, *I/O Drivers*, 1-13
request
issuing, *I/O Drivers*, 1-15
return code, *I/O Drivers*, 1-36
second status word (tape driver), *I/O Drivers*, 6-12
slow-speed device, *Writing I/O Driver*, 1-16
stall (RC25), *I/O Drivers*, 4-12
standard function, *I/O Drivers*, 1-26
as a no-op, *I/O Drivers*, 1-26
code list, *I/O Drivers*, B-7
success, *I/O Drivers*, 1-37
status list, *I/O Drivers*, B-5
synchronization, *I/O Operations*, 1-8
terminating (tape driver), *I/O Drivers*, 6-6
window turning, *RMS-11 User's Guide*, 8-11
write logical block, *I/O Drivers*, 1-32, 1-33
I/O buffer, *RMS-11 User's Guide*, 1-14; *RMS-11 Intro*, 4-2
application design, *RMS-11 User's Guide*, 2-5
remote access, *RMS-11 User's Guide*, B-3
indexed files, *RMS-11 User's Guide*, B-3
relative files, *RMS-11 User's Guide*, B-3
sequential files, *RMS-11 User's Guide*, B-3
I/O buffer pool, *RMS-11 Macro*, 2-6
I/O completion
error logging, *Error Logging*, 4-24
overlapped, *System Management*, 1-9; *Writing I/O Driver*, 1-11
I/O coordination
event flag, *I/O Operations*, 2-40
file operation, *I/O Operations*, 2-39
I/O count, *Writing I/O Driver*, 1-12
definition, *System Management*, 10-7
I/O Counts display
RMD
altering from MCR command line, *System Management*, 7-17
altering from setup page, *System Management*, 7-16
contents, *System Management*, 7-16
description, *System Management*, 7-15
DEVICE command, *System Management*, 7-17
example, *System Management*, 7-15

I/O Counts display
RMD (cont'd.)
RATE command, *System Management*, 7-17
I/O database structure
composite arrangement, *Writing I/O Driver*, 2-12
typical arrangements, *Writing I/O Driver*, 2-7, 2-8, 2-12
I/O data structure
details, *Writing I/O Driver*, 4-10
overview, *Writing I/O Driver*, 2-1, 2-2, 2-3
typical arrangements, *Writing I/O Driver*, 2-6
I/O error
IOX error codes, *System Management*, 12-13
I/O error codes, *Indirect*, 2-13 to 2-17
I/O exercise
See also IOX
terminating, *System Management*, 12-15
I/O Exerciser
See IOX
I/O finish
See $IOFIN routine
I/O function
code
basic syntax, *I/O Drivers*, 1-6
identical, *I/O Drivers*, 1-7
list, *I/O Drivers*, B-7
definition of types, *Writing I/O Driver*, 3-3
introduction, *I/O Drivers*, 1-1
mask values, *Writing I/O Driver*, 4-21
mask word bit settings, *Writing I/O Driver*, 4-21, 4-23, 4-24
summary, *I/O Drivers*, A-1
card reader, *I/O Drivers*, A-1
DECtape II, *I/O Drivers*, A-1
DEUNA, *I/O Drivers*, A-2
disk, *I/O Drivers*, A-2
F11ACP, *I/O Operations*, H-12
lab peripheral accelerator, *I/O Drivers*, A-2
line printer, *I/O Drivers*, A-3
magnetic tape, *I/O Drivers*, A-3
MTAACP, *I/O Operations*, H-14
parallel communication, *I/O Drivers*, A-4
terminal, *I/O Drivers*, A-4
UNIBUS switch, *I/O Drivers*, A-6
virtual terminal, *I/O Drivers*, A-6
I/O function mask
establishing, *Writing I/O Driver*, 4-21
I/O initiation
entry point, *Writing I/O Driver*, 4-59
sample use of alternative, *Writing I/O Driver*, 8-15, 8-30
overview, *Writing I/O Driver*, 2-5
I/O macro
AST service routine, *I/O Operations*, 2-42
FCS, *I/O Operations*, 2-1
FDB, *I/O Operations*, 2-2
I/O operation
subpacket information, *Error Logging*, 4-63
I/O packet, *Writing I/O Driver*, 1-5, 8-3, 8-15
building, *Writing I/O Driver*, 4-10
composite arrangement, *Writing I/O Driver*, 2-15
creation of, *Writing I/O Driver*, 3-2
current address, *Writing I/O Driver*, 4-36
fields, *Writing I/O Driver*, 4-10, 4-12, 4-14
handling before it is queued, *Writing I/O Driver*, 8-3, 8-15, 8-30
layout, *Writing I/O Driver*, 4-10
I/O page, *Writing I/O Driver*, 1-3
accessing, *MCR*, 3-175
overmapping, *MCR*, 3-144
specifying, *MCR*, 3-176
specifying for task, *Task Builder*, 10-25, 11-37
I/O parameter
basic, *I/O Drivers*, 1-5
I/O processing, *Writing I/O Driver*, 1-11
I/O program example, *I/O Operations*, J-1
I/O queue optimization, *System Management*, 14-1
Cylinder Scan, *Writing I/O Driver*, 1-17
default settings, *System Management*, 14-4
description, *System Management*, 1-18
displaying status, *System Management*, 14-3
Elevator, *Writing I/O Driver*, 1-17
error messages, *System Management*, 14-5
fairness count
default value, *System Management*, 14-3
maximum, *System Management*, 14-3
modifying, *System Management*, 14-4
specifying limit, *System Management*, 14-3
initiating, *System Management*, 14-2
methods, *System Management*, 14-1
Cylinder Scan, *System Management*, 14-2, 14-5

I/O queue optimization
methods (cont'd.)
default, *System Management*, 14-2
Elevator, *System Management*, 14-2, 14-5
Nearest Cylinder, *System Management*, 14-2, 14-4
selecting, *System Management*, 14-4
Nearest Cylinder, *Writing I/O Driver*, 1-17
supported device types, *System Management*, 14-2
I/O request, *Writing I/O Driver*, 1-4, 1-5, 1-11, 1-18
completing process for an, *Writing I/O Driver*, 3-3
flow of, *Writing I/O Driver*, 3-1, 3-3
issuing I/O for an, *Writing I/O Driver*, 3-3
queuing, *Executive*, 5-168, 5-172
I/O requests, *Writing I/O Driver*, 1-16
I/O routines, *Writing I/O Driver*, 1-16
I/O sequential processing, *Writing I/O Driver*, 1-11
I/O service time
components, *System Management*, 14-2
I/O status, *I/O Drivers*, 1-36
block, *I/O Drivers*, 1-8, 1-11, 1-36, 1-38
CRDRV, *I/O Drivers*, 9-3
error test, *I/O Drivers*, 1-39
example, *I/O Drivers*, 1-38
first word content, *I/O Drivers*, 13-29
LADRV, *I/O Drivers*, 12-28
K-series, *I/O Drivers*, 13-6, 13-29
LADRV, *I/O Drivers*, 12-2, 12-27
LPDRV, *I/O Drivers*, 7-4
LRDRV, *I/O Drivers*, 11-4, 11-5, 11-11
return status (TTDRV), *I/O Drivers*, 2-66
UNIBUS switch driver, *I/O Drivers*, 14-7, 14-8
VTDRV, *I/O Drivers*, 3-8
4-word (LADRV), *I/O Drivers*, 12-27
XEDRV, *I/O Drivers*, 10-21
block
different content (TTDRV), *I/O Drivers*, 2-53, 2-62
SF.GMC different (TTDRV), *I/O Drivers*, 2-53, 2-62
code, *I/O Drivers*, 1-37
binary value, *I/O Drivers*, 1-37
list, *I/O Drivers*, B-1
condition, *I/O Drivers*, 1-38
table, *I/O Drivers*, 1-40
I/O status (cont'd.)
CRDRV, *I/O Drivers*, 9-6
return
completion, *I/O Drivers*, 1-36
DDDRV, *I/O Drivers*, 5-4
disk driver, *I/O Drivers*, 4-9
TTDRV, *I/O Drivers*, 2-66
VTDRV, *I/O Drivers*, 3-5
word
tape driver, *I/O Drivers*, 6-12
I/O status block
See also IOSB
block I/O, *I/O Operations*, 2-12
defined in task, *I/O Operations*, 2-42
file I/O, *I/O Operations*, 2-41
I/O subfunction
bit, *I/O Drivers*, 1-26
example, *I/O Drivers*, 1-26
unsupported, *I/O Drivers*, 1-26
summary
terminal, *I/O Drivers*, A-5
I/O synchronization event flag, *I/O Operations*, 2-17, 3-10
I/O technique
asynchronous operations, *RMS-11 User's Guide*, 3-14
deferred write, *RMS-11 User's Guide*, 2-17
indexed files, *RMS-11 User's Guide*, 7-8
deferred write, *RMS-11 User's Guide*, 7-8
multiple access streams, *RMS-11 User's Guide*, 7-10
multiple buffers, *RMS-11 User's Guide*, 7-9
sequential reads, *RMS-11 User's Guide*, 7-10
mass insertion, *RMS-11 User's Guide*, 2-18
MBC, *RMS-11 User's Guide*, 2-17
multiple buffers, *RMS-11 User's Guide*, 2-18
relative files, *RMS-11 User's Guide*, 4-14
deferred write, *RMS-11 User's Guide*, 4-14
multiple access streams, *RMS-11 User's Guide*, 4-15
multiple buffers, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-14
deferred write, *RMS-11 User's Guide*, 3-14
MBC, *RMS-11 User's Guide*, 3-15

I/O technique
sequential files (cont'd.)
multiple access streams, *RMS-11 User's Guide*, 3-15
multiple buffers, *RMS-11 User's Guide*, 3-14
I/O unit, *RMS-11 User's Guide*, 1-14
blocks, *RMS-11 User's Guide*, 1-16
buckets, *RMS-11 User's Guide*, 1-16
I/O wait for completion block I/O, *I/O Operations*, 3-36
I- and D-space
See also Data space
See also Instruction space
specifying for task, *Task Builder*, 10-24, 11-15
user-mode, *Task Builder*, 7-1
I- and D-space system
privileged task, *Task Builder*, 6-13
mapping, *Task Builder*, 6-13
I- and D-space task
allocating memory, *Task Builder*, 7-10 to 7-19
autoload vector, *Task Builder*, 7-10
identifying, *Task Builder*, 7-2
mapping, *Task Builder*, 7-2, 7-4
multiuser, *Task Builder*, 9-4
overlaid, *Task Builder*, 7-5 to 7-9
symbol definition file, *Task Builder*, 7-10
window, *Task Builder*, 7-5
I argument
for .PSECT, *MACRO-11*, 5-34
<IAS> symbol, *Indirect*, 2-11
IAS command string examples, *MACRO-11*, 7-13
IAS command string format, *MACRO-11*, 7-11
IAS file specification, *MACRO-11*, 7-16
IAS operating procedures, *MACRO-11*, 7-11, 7-13
IAS system error messages, *MACRO-11*, 7-16
IBFSTS: subroutine
get buffer status
K-series, *I/O Drivers*, 13-20
LADRV, *I/O Drivers*, 12-15
Ibufno parameter
IGTBUF: subroutine
K-series, *I/O Drivers*, 13-21
LADRV, *I/O Drivers*, 12-16
INXTBF: subroutine
K-series, *I/O Drivers*, 13-22
Ibufno parameter
INXTBF: subroutine (cont'd.)
LADRV, *I/O Drivers*, 12-17
IWTBUF: subroutine
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17
Ibuf parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-8
LADRV, *I/O Drivers*, 12-3
DASWP: subroutine
K-series, *I/O Drivers*, 13-13
LADRV, *I/O Drivers*, 12-8
DISWP: subroutine
K-series, *I/O Drivers*, 13-15
LADRV, *I/O Drivers*, 12-10
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-13
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
IBFSTS: subroutine
K-series, *I/O Drivers*, 13-20
LADRV, *I/O Drivers*, 12-15
IGTBUF: subroutine
K-series, *I/O Drivers*, 13-21
LADRV, *I/O Drivers*, 12-16
INXTBF: subroutine
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17
ISTADC: subroutine (K-series), *I/O Drivers*, 13-25
IWTBUF: subroutine
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17
RLSBUF: subroutine
K-series, *I/O Drivers*, 13-23
LADRV, *I/O Drivers*, 12-19
RMVBUF: subroutine
K-series, *I/O Drivers*, 13-24
LADRV, *I/O Drivers*, 12-20
SETADC: subroutine (LADRV), *I/O Drivers*, 12-20
SETIBF: subroutine
K-series, *I/O Drivers*, 13-26
LADRV, *I/O Drivers*, 12-21
STPSWP: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-22
ICB, *Writing I/O Driver*, 1-2, 1-7, 1-13
number of controllers allowed, *Writing I/O Driver*, 1-7

ICB (cont'd.)
pool size
SYSGEN question, *System Generation*, 3-26
ICF module, *Error Logging*, 4-2
Ichan parameter
ADINP: subroutine (K-series), *I/O Drivers*, 13-8
Ichn parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-5
DASWP: subroutine
K-series, *I/O Drivers*, 13-14
LADRV, *I/O Drivers*, 12-10
ISTADC: subroutine (K-series), *I/O Drivers*, 13-25
SETADC: subroutine (LADRV), *I/O Drivers*, 12-20
ICLOKB: subroutine
read 16-bit clock (K-series), *I/O Drivers*, 13-21
Icntrl parameter
SCOPE: subroutine (K-series), *I/O Drivers*, 13-24
I command, *Debugging*, 2-8; *XDT*, 2-13
ICP, *Introduction*, 4-1 to 4-2
Idata parameter
DOUT: subroutine (K-series), *I/O Drivers*, 13-18
IDB pool, *RMS-11 Macro*, 2-5
IDENT command, *System Management*, 4-18
example, *System Management*, 4-18
format, *System Management*, 4-18
.IDENT directive, *Program Development*, 2-5; *MACRO-11*, 5-11
summary, *MACRO-11*, 5-2
Identification area, *I/O Operations*, 5-4
file header block, *I/O Operations*, C-4
creation date, *I/O Operations*, C-5
creation time, *I/O Operations*, C-5
expiration date, *I/O Operations*, C-5
file name, *I/O Operations*, C-4
file type, *I/O Operations*, C-4
file version number, *I/O Operations*, C-4
revision date, *I/O Operations*, C-4
revision number, *I/O Operations*, C-4
revision time, *I/O Operations*, C-4
/IDENTIFICATION qualifier
BRU utility, *Utilities*, 3-17
IDENT option, *Task Builder*, 12-22
IDN conditional assembly test, *MACRO-11*, 5-45
effect on .ENABL/.DSABL LCM, *MACRO-11*, 5-45
/ID option
DTE command, *Utilities*, C-5
Id parameter
device-specific function
transmitting (LRDRV), *I/O Drivers*, 11-4
Idsc parameter
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
/ID switch, *Task Builder*, 10-24
DMP utility, *Utilities*, 5-5
FLX utility, *Utilities*, 8-8
PIP utility, *Utilities*, 12-17
RMSBCK utility, *RMS-11 Utilities*, 6-4 to 6-5
RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-9
RMSDEF utility, *RMS-11 Utilities*, A-5
RMSDSP utility, *RMS-11 Utilities*, 5-3, 5-5
RMSIFL utility, *RMS-11 Utilities*, 3-3, 3-5
RMSRST utility, *RMS-11 Utilities*, 7-3
VFY utility, *Utilities*, 14-5
Idsw parameter
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
Idwell parameter
ADSWP: subroutine (LADRV), *I/O Drivers*, 12-4
DASWP: subroutine (LADRV), *I/O Drivers*, 12-9
DISWP: subroutine (LADRV), *I/O Drivers*, 12-11
DOSWP: subroutine (LADRV), *I/O Drivers*, 12-13
IDX argument to ORG$ macro, *RMS-11 Macro*, 2-3
IE.ABO error return, *I/O Drivers*, 1-40
ACP, *I/O Operations*, H-3
CRDRV, *I/O Drivers*, 9-6
disk driver, *I/O Drivers*, 4-9
LPDRV, *I/O Drivers*, 7-5
receiver (LRDRV), *I/O Drivers*, 11-12
tape driver, *I/O Drivers*, 6-10
transmitter (LRDRV), *I/O Drivers*, 11-8
TTDRV, *I/O Drivers*, 2-66
UNIBUS switch driver, *I/O Drivers*, 14-7
VTDRV, *I/O Drivers*, 3-8
XEDRV, *I/O Drivers*, 10-19, 10-22
line error

IE.ABO error return
XEDRV
line error (cont'd.)
initializing, *I/O Drivers*, 10-21
transmitting, *I/O Drivers*, 10-15
IE.ADP error return, *I/O Drivers*, 1-37
IE.ALC error return
ACP, *I/O Operations*, H-3
IE.ALN error return, *I/O Drivers*, 1-40
ACP, *I/O Operations*, H-3
disk driver, *I/O Drivers*, 4-9
XEDRV, *I/O Drivers*, 10-5
IE.BAD error return, *I/O Drivers*, 1-40
ACP, *I/O Operations*, H-3
receiver (LRDRV), *I/O Drivers*, 11-11
transmitter (LRDRV), *I/O Drivers*, 11-7
TTDRV, *I/O Drivers*, 2-66
UNIBUS switch driver, *I/O Drivers*, 14-8
VTDRV, *I/O Drivers*, 3-9
IE.BBE error return, *I/O Drivers*, 1-40
disk driver, *I/O Drivers*, 4-10
receiver (LRDRV), *I/O Drivers*, 11-12
tape driver, *I/O Drivers*, 6-10
transmitter (LRDRV), *I/O Drivers*, 11-8
IE.BCC error return
TTDRV, *I/O Drivers*, 2-67
IE.BDR error return
ACP, *I/O Operations*, H-4
IE.BLK error return, *I/O Drivers*, 1-40
disk driver, *I/O Drivers*, 4-10
IE.BTP error return
ACP, *I/O Operations*, H-4
IE.BVR error return
ACP, *I/O Operations*, H-4
IE.BYT error return, *I/O Drivers*, 1-40
ACP, *I/O Operations*, H-4
disk driver, *I/O Drivers*, 4-10
tape driver, *I/O Drivers*, 6-10
IE.CKS error return
ACP, *I/O Operations*, H-4
IE.CLO error return
ACP, *I/O Operations*, H-4
IE.CNR error return
UNIBUS switch driver, *I/O Drivers*, 14-8
IE.DAA error return, *I/O Drivers*, 1-40
CRDRV, *I/O Drivers*, 9-6
LPDRV, *I/O Drivers*, 7-5
receiver (LRDRV), *I/O Drivers*, 11-12
tape driver, *I/O Drivers*, 6-10
TTDRV, *I/O Drivers*, 2-67
UNIBUS switch driver, *I/O Drivers*, 14-8
IE.DAO error return
tape driver, *I/O Drivers*, 6-10
TTDRV, *I/O Drivers*, 2-67
XEDRV, *I/O Drivers*, 10-19
IE.DFU error return
ACP, *I/O Operations*, H-4
IE.DNA error return, *I/O Drivers*, 1-41
CRDRV, *I/O Drivers*, 9-6
LPDRV, *I/O Drivers*, 7-5
receiver (LRDRV), *I/O Drivers*, 11-11
tape driver, *I/O Drivers*, 6-11
TTDRV, *I/O Drivers*, 2-67
UNIBUS switch driver, *I/O Drivers*, 14-7
IE.DNR error return, *I/O Drivers*, 1-41
DDDRV, *I/O Drivers*, 5-5
diagnostic
device not ready message, *I/O Drivers*, 1-35
disk driver, *I/O Drivers*, 4-10
power failure, *I/O Drivers*, 1-42
receiver (LRDRV), *I/O Drivers*, 11-11
tape driver, *I/O Drivers*, 6-11
transmitter (LRDRV), *I/O Drivers*, 11-7
TTDRV, *I/O Drivers*, 2-67
IE.DOA error return
receiver (LRDRV), *I/O Drivers*, 11-11
IE.DUN error return
VTDRV, *I/O Drivers*, 3-9
IE.DUP error return
ACP, *I/O Operations*, H-4
IE.EOF (end-of-file) code, *MCR*, 2-11
IE.EOF error return, *I/O Drivers*, 1-41
ACP, *I/O Operations*, H-4
CRDRV, *I/O Drivers*, 9-7
tape driver, *I/O Drivers*, 6-11
TTDRV, *I/O Drivers*, 2-67
VTDRV, *I/O Drivers*, 3-9
IE.EOT error return
tape driver, *I/O Drivers*, 6-11
IE.EOV error return
tape driver, *I/O Drivers*, 6-11
IE.FHE error return, *I/O Drivers*, 1-41
DDDRV, *I/O Drivers*, 5-5
disk driver, *I/O Drivers*, 4-10
receiver (LRDRV), *I/O Drivers*, 11-12
tape driver, *I/O Drivers*, 6-11
IE.FLG error return
transmitter (LRDRV), *I/O Drivers*, 11-8
IE.HFU error return
ACP, *I/O Operations*, H-4
IE.IEF error return, *I/O Drivers*, 1-38

IE.IES error return
TTDRV, *I/O Drivers*, 2-67
IE.IFC error return, *I/O Drivers*, 1-41
ACP, *I/O Operations*, H-4
CRDRV, *I/O Drivers*, 9-7
DDDRV, *I/O Drivers*, 5-5
disk driver, *I/O Drivers*, 4-10
LPDRV, *I/O Drivers*, 7-5
receiver (LRDRV), *I/O Drivers*, 11-12
tape driver, *I/O Drivers*, 6-11
transmitter (LRDRV), *I/O Drivers*, 11-8
TTDRV, *I/O Drivers*, 2-67
UNIBUS switch driver, *I/O Drivers*, 14-9
VTDRV, *I/O Drivers*, 3-8, 3-9
XEDRV, *I/O Drivers*, 10-5, 10-15, 10-19, 10-20, 10-22
IO.XIN function, *I/O Drivers*, 10-21
IE.IFU error return
ACP, *I/O Operations*, H-4
IE.ILU error return, *I/O Drivers*, 1-38
IE.LCK error return
ACP, *I/O Operations*, H-5
IE.LUN error return
ACP, *I/O Operations*, H-5
IE.NLN error return, *I/O Drivers*, 1-41
disk driver, *I/O Drivers*, 4-10
XEDRV, *I/O Drivers*, 10-15, 10-19, 10-20
IO.XIN function, *I/O Drivers*, 10-21
IE.NOD error return, *I/O Drivers*, 1-41
ACP, *I/O Operations*, H-5
CRDRV, *I/O Drivers*, 9-7
disk driver, *I/O Drivers*, 4-10
TTDRV, *I/O Drivers*, 2-68
UNIBUS switch driver, *I/O Drivers*, 14-9
IE.NSF error return
ACP, *I/O Operations*, H-5
XEDRV, *I/O Drivers*, 10-5
IE.NTR error return
receiver (LRDRV), *I/O Drivers*, 11-12
IE.OFL error return, *I/O Drivers*, 1-41
ACP, *I/O Operations*, H-5
CRDRV, *I/O Drivers*, 9-7
disk driver, *I/O Drivers*, 4-10
LPDRV, *I/O Drivers*, 7-5
tape driver, *I/O Drivers*, 6-12
TTDRV, *I/O Drivers*, 2-68
UNIBUS switch driver, *I/O Drivers*, 14-9
IE.OVR error return, *I/O Drivers*, 1-41
disk driver, *I/O Drivers*, 4-10
IE.PES error return
TTDRV, *I/O Drivers*, 2-68
IE.PRI error return, *I/O Drivers*, 1-41
IE.PRI error return (cont'd.)
ACP, *I/O Operations*, H-5
disk driver, *I/O Drivers*, 4-11
TTDRV, *I/O Drivers*, 2-68
XEDRV, *I/O Drivers*, 10-22
IE.REJ error return
transmitter (LRDRV), *I/O Drivers*, 11-8
IE.RER error return
ACP, *I/O Operations*, H-5
IE.SDP error return, *I/O Drivers*, 1-38
IE.SNC error return
ACP, *I/O Operations*, H-5
IE.SPC error return, *I/O Drivers*, 1-42
ACP, *I/O Operations*, H-5
CRDRV, *I/O Drivers*, 9-7
disk driver, *I/O Drivers*, 4-11
LPDRV, *I/O Drivers*, 7-5
receiver (LRDRV), *I/O Drivers*, 11-11
tape driver, *I/O Drivers*, 6-12
transmitter (LRDRV), *I/O Drivers*, 11-7
TTDRV, *I/O Drivers*, 2-68
IO.ATA function, *I/O Drivers*, 2-24
UNIBUS switch driver, *I/O Drivers*, 14-8
VTDRV, *I/O Drivers*, 3-8
XEDRV, *I/O Drivers*, 10-15, 10-19, 10-22
IE.SQC error return
ACP, *I/O Operations*, H-5
IE.TMO error return
DDDRV, *I/O Drivers*, 5-5
UNIBUS switch driver, *I/O Drivers*, 14-9
XEDRV, *I/O Drivers*, 10-19
IE.ULN error return, *I/O Drivers*, 1-38
IE.UPN error return, *I/O Drivers*, 1-38
VTDRV, *I/O Drivers*, 3-9
IE.VER error return, *I/O Drivers*, 1-42
DDDRV, *I/O Drivers*, 5-5
disk driver, *I/O Drivers*, 4-11
tape driver, *I/O Drivers*, 6-12
transmitter (LRDRV), *I/O Drivers*, 11-7
TTDRV, *I/O Drivers*, 2-68
IE.WAC error return
ACP, *I/O Operations*, H-5
IE.WAT error return
ACP, *I/O Operations*, H-5
IE.WCK error return, *I/O Drivers*, 1-42
disk driver, *I/O Drivers*, 4-11
IE.WER error return
ACP, *I/O Operations*, H-6
IE.WLK error return, *I/O Drivers*, 1-42
ACP, *I/O Operations*, H-6
DDDRV, *I/O Drivers*, 5-5
disk driver, *I/O Drivers*, 4-11

IE.WLK error return (cont'd.)
tape driver, *I/O Drivers*, 6-12
Iefn parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-9
LADRV, *I/O Drivers*, 12-5
DASWP: subroutine
K-series, *I/O Drivers*, 13-13
LADRV, *I/O Drivers*, 12-9
DISWP: subroutine
K-series, *I/O Drivers*, 13-16
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-14
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
IWTBUF: subroutine
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17
Iemc parameter
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
Iemw parameter
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-19
I error
.ASCII, *MACRO-11*, 5-20
.ASCIZ, *MACRO-11*, 5-21
invalid character, *MACRO-11*, 2-3
.RAD50, *MACRO-11*, 5-22
IFAB pool, *RMS-11 Macro*, 2-5
.IFACT directive, *Indirect*, 2-67
.IF B directive
use to detect missing arguments, *MACRO-11*, 6-9
IF command
See also STOP, CONTINUE, and GOTO commands
example, *Batch and Queue*, 3-12
format, *Batch and Queue*, 3-11
IF conditional declaration
CFL, *Error Logging*, 5-28
.IF DF directive
logical AND, OR operators have special meaning, *MACRO-11*, 5-45
.IFDF directive, *Indirect*, 2-68
.IF DIF directive
effect on .ENABL/.DSABL LCM, *MACRO-11*, 5-14
.IF directive, *Indirect*, 2-66; *MACRO-11*, 5-44
maximum nesting level, *MACRO-11*, 5-46
.IF directive (cont'd.)
summary, *MACRO-11*, 5-2
table of valid condition tests, *MACRO-11*, 5-45
.IFDISABLED directive, *Indirect*, 2-69
.IFENABLED directive, *Indirect*, 2-69
.IFF directive, *Indirect*, 2-70; *MACRO-11*, 5-46
summary, *MACRO-11*, 5-2
.IF IDN directive
effect on .ENABL/.DSABL LCM, *MACRO-11*, 5-14
.IFINS directive, *Indirect*, 2-69
IFLA.TMP (RMSIFL), *RMS-11 Utilities*, 3-11
allocating space, *RMS-11 Utilities*, 3-13
IFLA1.TMP (RMSIFL), *RMS-11 Utilities*, 3-12
allocating space, *RMS-11 Utilities*, 3-14
Iflag parameter
ADINP: subroutine (K-series), *I/O Drivers*, 13-8
ISTADC: subroutine (K-series), *I/O Drivers*, 13-25
SETADC: subroutine (LADRV), *I/O Drivers*, 12-20
XRATE: subroutine
K-series, *I/O Drivers*, 13-28
LADRV, *I/O Drivers*, 12-23
IFLAP.TMP (RMSIFL), *RMS-11 Utilities*, 3-10
allocating space, *RMS-11 Utilities*, 3-13
.IFLOA directive, *Indirect*, 2-70
.IFNACT directive, *Indirect*, 2-67
.IF NB directive
use to detect missing arguments, *MACRO-11*, 6-9
.IF NDF directive
logical AND, OR operators have special meaning, *MACRO-11*, 5-45
.IFNDF directive, *Indirect*, 2-68
.IFNINS directive, *Indirect*, 2-69
.IFNLOA directive, *Indirect*, 2-70
IFORM, *System Management*, 18-20
.IFT directive, *Indirect*, 2-70; *MACRO-11*, 5-46
summary, *MACRO-11*, 5-2
.IFTF directive, *MACRO-11*, 5-46
summary, *MACRO-11*, 5-2
IF-THEN-ELSE statement
CFL, *Error Logging*, 5-33
IGTBUF: subroutine
return buffer number
K-series, *I/O Drivers*, 13-21
LADRV, *I/O Drivers*, 12-16

IHAR$S directive, *Executive*, 5-68
.IIF directive, *MACRO-11*, 5-48
  does not require .ENDC, *MACRO-11*, 5-49
  summary, *MACRO-11*, 5-2
Image file
  for bootable system, *MCR*, 3-30
/IMAGE qualifier
  BRU utility, *Utilities*, 3-17
  option
    RESTORE, *Utilities*, 3-17
    SAVE, *Utilities*, 3-17
/IM switch
  FLX utility, *Utilities*, 8-6
  RMSCNV utility, *RMS-11 Utilities*, 4-9
  VMR
    definition, *System Management*, 5-6, 5-44
    relationship to symbol definition file, *System Management*, 5-6
    uses, *System Management*, 5-6
.INC directive, *Indirect*, 2-72
/INC keyword
  INS command (VMR), *System Management*, 5-22
  INSTALL command, *MCR*, 3-96
  RUN command, *MCR*, 3-143
INCLUDE command
  EDT editor, *Introduction*, 2-19
.INCLUDE directive, *MACRO-11*, 5-50
  default device and file type, *MACRO-11*, 5-51
  does implicit .PAGE, *MACRO-11*, 5-50
  maximum nesting level, *MACRO-11*, 5-51
  restriction on RT-11 systems, *MACRO-11*, 5-51
  summary, *MACRO-11*, 5-2
/INCLUDE qualifier, *Task Builder*, 11-36
  ANALYZE/ERROR_LOG command, *Error Logging*, 3-5, 3-11
    See also /TYPE switch
    arguments, *Error Logging*, 3-11, 3-12
  LINK command, *Program Development*, 6-6, 6-8
  START/ERROR_LOG command, *Error Logging*, 2-6
    See also /LOG switch
Inclusive OR operator
  summary, *MACRO-11*, 2-4
Inc parameter
  ISTADC: subroutine (K-series), *I/O Drivers*, 13-25
Inc parameter (cont'd.)
  SETADC: subroutine (LADRV), *I/O Drivers*, 12-21
Incremental reorganization, *RMS-11 User's Guide*, 5-12
INCREMENT statement
  CFL, *Error Logging*, 5-30
Indefinite repeat directive, *MACRO-11*, 6-17
Index, *RMS-11 User's Guide*, 5-2; *RMS-11 Intro*, 3-7
  See also KEY block
  alternate
    bucket size calculation, *RMS-11 User's Guide*, 6-19
    level 0, *RMS-11 User's Guide*, 5-5
    SIDRs, *RMS-11 User's Guide*, 5-5
  depth, *RMS-11 User's Guide*, 5-5
  levels, *RMS-11 User's Guide*, 5-4, 5-6
    data, *RMS-11 User's Guide*, 5-5
  primary
    bucket size calculation, *RMS-11 User's Guide*, 6-16
    level 0, *RMS-11 User's Guide*, 5-5
  root, *RMS-11 User's Guide*, 5-5
INDEX_AREA
  RMSDES utility, *RMS-11 Utilities*, 2-41
INDEX_FILL
  RMSDES utility, *RMS-11 Utilities*, 2-41
Index bucket, *RMS-11 User's Guide*, 5-6
Indexed file organization, *RMS-11 User's Guide*, 1-5 ; *RMS-11 Intro*, 3-6
  See also Index
  access declarations, *RMS-11 User's Guide*, 7-1
  allocation, *RMS-11 User's Guide*, 6-22
    DEQ, *RMS-11 User's Guide*, 6-26
    initial, *RMS-11 User's Guide*, 6-22
  alternate keys, *RMS-11 User's Guide*, 1-11; *RMS-11 Intro*, 3-7
  and remote access, *RMS-11 User's Guide*, B-3
  areas, *RMS-11 User's Guide*, 5-2, 6-10
    multiarea files, *RMS-11 User's Guide*, 6-12
    single-area files, *RMS-11 User's Guide*, 6-11
  asynchronous operation, *RMS-11 User's Guide*, 7-8
  bucket fill size, *RMS-11 User's Guide*, 6-28
  bucket format, *RMS-11 User's Guide*, 5-2
  bucket size, *RMS-11 User's Guide*, 6-15

Indexed file organization
bucket size (cont'd.)
calculation, *RMS-11 User's Guide*, 6-16, 6-19
prologue, *RMS-11 User's Guide*, 5-2
bucket splitting, *RMS-11 User's Guide*, 5-11
changeable keys, *RMS-11 Intro*, 3-10
compressing deleted records, *RMS-11 User's Guide*, 5-10, 5-16, 6-7, 6-9
CONNECT operation, *RMS-11 User's Guide*, 7-2
contiguity, *RMS-11 User's Guide*, 6-13
data level, *RMS-11 User's Guide*, 5-5
data records, *RMS-11 User's Guide*, 5-2; *RMS-11 Intro*, 3-7
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 6-27, 7-8
DELETE operation, *RMS-11 User's Guide*, 5-15, 6-7, 7-3, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
depth, *RMS-11 User's Guide*, 5-5
design, *RMS-11 User's Guide*, 5-1, 6-1
allocation, *RMS-11 User's Guide*, 6-22
areas, *RMS-11 User's Guide*, 6-10
bucket size, *RMS-11 User's Guide*, 6-15
keys, *RMS-11 User's Guide*, 6-2
placement control, *RMS-11 User's Guide*, 6-13
populating files, *RMS-11 User's Guide*, 6-26
record format, *RMS-11 User's Guide*, 6-1
record size, *RMS-11 User's Guide*, 6-1
directory operations, *RMS-11 User's Guide*, 7-10
DISCONNECT operation, *RMS-11 User's Guide*, 7-3
duplicate keys, *RMS-11 Intro*, 3-10
file operations, *RMS-11 User's Guide*, 7-10
FIND operation, *RMS-11 User's Guide*, 7-3, 7-9
random by key, *RMS-11 User's Guide*, 5-13
sequential access, *RMS-11 User's Guide*, 5-17
GET operation, *RMS-11 User's Guide*, 7-7 to 7-9
random by key, *RMS-11 User's Guide*, 5-13

Indexed file organization
GET operation (cont'd.)
sequential access, *RMS-11 User's Guide*, 5-17
I/O techniques, *RMS-11 User's Guide*, 7-8
incremental reorganization, *RMS-11 User's Guide*, 5-12
index, *RMS-11 Intro*, 3-7
index buckets, *RMS-11 User's Guide*, 5-6
index levels, *RMS-11 User's Guide*, 5-4, 5-6
index records, *RMS-11 User's Guide*, 5-2, 5-6; *RMS-11 Intro*, 3-7
keys, *RMS-11 User's Guide*, 1-5, 6-2; *RMS-11 Intro*, 3-6
changeable, *RMS-11 User's Guide*, 6-9
characteristics, *RMS-11 User's Guide*, 6-8
data type, *RMS-11 User's Guide*, 6-3; *RMS-11 Intro*, 3-7
duplicates, *RMS-11 User's Guide*, 6-8
null, *RMS-11 User's Guide*, 6-10
number of, *RMS-11 User's Guide*, 6-2
position, *RMS-11 User's Guide*, 6-7
size, *RMS-11 User's Guide*, 6-6
level 0
alternate indexes, *RMS-11 User's Guide*, 5-5
primary indexes, *RMS-11 User's Guide*, 5-5
locate mode, *RMS-11 User's Guide*, 7-7
mass insertion, *RMS-11 User's Guide*, 6-28
move mode, *RMS-11 User's Guide*, 7-7
multiple access streams, *RMS-11 User's Guide*, 7-10
multiple buffers, *RMS-11 User's Guide*, 7-9
null keys, *RMS-11 Intro*, 3-10
placement control, *RMS-11 User's Guide*, 6-13
populating files, *RMS-11 User's Guide*, 6-26
primary key order, *RMS-11 User's Guide*, 6-27
random insertions, *RMS-11 User's Guide*, 6-28
primary key, *RMS-11 User's Guide*, 1-11; *RMS-11 Intro*, 3-7
prologue, *RMS-11 User's Guide*, 5-2
PUT operation, *RMS-11 User's Guide*, 6-7, 7-5, 7-7, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
mass insertion, *RMS-11 User's Guide*, 7-9

Indexed file organization
PUT operation (cont'd.)
random by key, *RMS-11 User's Guide*, 5-10
random access, *RMS-11 User's Guide*, 5-7, 6-12
record operations, *RMS-11 User's Guide*, 7-2
random access, *RMS-11 User's Guide*, 5-9
sequential access, *RMS-11 User's Guide*, 5-16
record transfer modes, *RMS-11 User's Guide*, 7-6
locate mode, *RMS-11 User's Guide*, 7-7
move mode, *RMS-11 User's Guide*, 7-7
REWIND operation, *RMS-11 User's Guide*, 7-6
root, *RMS-11 User's Guide*, 1-7, 5-5
search times, *RMS-11 User's Guide*, 5-8
segmented keys, *RMS-11 Intro*, 3-10
sequential reads, *RMS-11 User's Guide*, 7-10
shared access, *RMS-11 User's Guide*, 7-1
block access, *RMS-11 User's Guide*, 7-1
record access, *RMS-11 User's Guide*, 7-1
sharing declarations, *RMS-11 User's Guide*, 7-1
stream operations, *RMS-11 User's Guide*, 7-1
structure
conceptual, *RMS-11 User's Guide*, 5-4
physical, *RMS-11 User's Guide*, 5-2
tree structure, *RMS-11 Intro*, 3-7
UPDATE operation, *RMS-11 User's Guide*, 5-14, 7-6 to 7-9
changeable keys, *RMS-11 User's Guide*, 6-10
duplicate keys, *RMS-11 User's Guide*, 6-9
Index file, *I/O Operations*, 5-3; *MCR*, 3-88
allocating file headers, *MCR*, 3-88
format, *I/O Operations*, E-1
listing contents, *Utilities*, 14-5
position
in large volumes, *System Management*, 1-8
in small volumes, *System Management*, 1-8
/INDEX qualifier
INITIALIZE command, *System Management*, 1-8
Index record, *RMS-11 User's Guide*, 5-6; *RMS-11 Intro*, 3-7
Indicator
See Register indicator
Indirect, *Indirect*, 1-1, 2-1
invoking interactively, *Indirect*, 1-10, 2-104
Indirect command file, *Indirect*, 1-2, 2-1; *Task Builder*, 3-32; *Utilities*, 1-9; *DCL*, 1-23
BACKUP command, *DCL*, 5-124
BAD utility, *Utilities*, 2-6
block-structuring, *Indirect*, 2-4
chaining, *Indirect*, 2-47
CLI, *Indirect*, 2-2
default file type, *Indirect*, 2-2
nesting, *Indirect*, 2-3
comments in, *Task Builder*, 1-14
deleting, *Indirect*, 2-54
example, *Batch and Queue*, 3-13
format, *Batch and Queue*, 3-13
formatting, *Indirect*, 2-36
in batch jobs, *Batch and Queue*, 3-13
IOX, *System Management*, 12-11
LINK command
saving, *Task Builder*, 11-55
multiple, *Task Builder*, 1-13
ODL, *Task Builder*, 3-32
options in, *Task Builder*, 1-12
RMSBCK utility, *RMS-11 Utilities*, 6-2
RMSCNV utility, *RMS-11 Utilities*, 4-4
RMSDES utility, *RMS-11 Utilities*, 2-4
comments, *RMS-11 Utilities*, 2-4
RMSDSP utility, *RMS-11 Utilities*, 5-2
RMSIFL utility, *RMS-11 Utilities*, 3-2
RMSRST utility, *RMS-11 Utilities*, 7-2
searching for, *Indirect*, 2-5
SLP utility, *Utilities*, 13-8
task, *Indirect*, 2-1
default file type, *Indirect*, 2-2
nesting, *Indirect*, 2-2
tracing, *Indirect*, 2-33, 2-55
TUNE.CMD, *Error Logging*, 2-7, A-1
using, *Task Builder*, 1-12
using task name, *Indirect*, 2-5
VMR
number of levels allowed, *System Management*, 5-4
requirements, *System Management*, 5-3
running VMR, *System Management*, 5-3

Indirect command file
VMR (cont'd.)
specifying, *System Management*, 5-3
ZAP utility, *Utilities*, 15-4
Indirect command file processing
delaying, *Indirect*, 2-51
interrupting, *Indirect*, 2-84
IPP, *Indirect*, 3-1
suspending, *Indirect*, 2-101
terminating, *Indirect*, 2-60, 2-73, 2-91
Indirect command file switch
FMT utility, *Utilities*, 9-4
Indirect Command Processor
See Indirect
Indirect Pre-Processor
See IPP
Ind parameter
ADSWP: subroutine (LADRV), *I/O Drivers*, 12-5
CLOCKA: subroutine
K-series, *I/O Drivers*, 13-11
LADRV, *I/O Drivers*, 12-6
CLOCKB: subroutine
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
DASWP: subroutine (LADRV), *I/O Drivers*, 12-10
DINP: subroutine (K-series), *I/O Drivers*, 13-15
DISWP: subroutine (LADRV), *I/O Drivers*, 12-12
DOSWP: subroutine (LADRV), *I/O Drivers*, 12-14
INXTBF: subroutine
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17
ISTADC: subroutine (K-series), *I/O Drivers*, 13-26
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-19
RLSBUF: subroutine
K-series, *I/O Drivers*, 13-23
LADRV, *I/O Drivers*, 12-19
RMVBUF: subroutine
K-series, *I/O Drivers*, 13-24
LADRV, *I/O Drivers*, 12-20
SETADC: subroutine (LADRV), *I/O Drivers*, 12-21
SETIBF: subroutine
K-series, *I/O Drivers*, 13-26
LADRV, *I/O Drivers*, 12-21
Ind parameter (cont'd.)
STPSWP: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-22
/INDX keyword
INI command, *System Management*, 1-8
INITVOLUME command, *MCR*, 3-88
Inequality binary operator
CFL expression, *Error Logging*, 5-12
Infile
RMSBCK utility, *RMS-11 Utilities*, 6-3
RMSCNV utility, *RMS-11 Utilities*, 4-5
RMSDSP utility, *RMS-11 Utilities*, 5-3
RMSIFL utility, *RMS-11 Utilities*, 3-3
RMSRST utility, *RMS-11 Utilities*, 7-3
/INF keyword
INITVOLUME command, *MCR*, 3-88
Information
preventing loss, *System Management*, 1-14
Informational commands, *MCR*, 1-6
Inhibit AST Recognition directive, *Executive*, 5-68
$INIBF routine, *Writing I/O Driver*, 1-16, 7-22
INI command
See also INITIALIZE VOLUME command keywords
/BAD
Shadow Recording preparation, *System Management*, 16-2
/EXT, *System Management*, 1-8
/INDX, *System Management*, 1-8
/WIN, *System Management*, 1-9
$INIDM (Initialize memory), *System Library*, 7-2
$INISI routine, *Writing I/O Driver*, 1-7
Initial allocation
indexed files, *RMS-11 User's Guide*, 6-22
relative files, *RMS-11 User's Guide*, 4-3
sequential files, *RMS-11 User's Guide*, 3-4
Initialization commands, *MCR*, 1-5
Initialization field, *RMS-11 Macro*, 2-10
INITIALIZE/PRINTER command
/SHAREABLE qualifier, *System Management*, 3-8
INITIALIZE/PROCESSOR command, *System Management*, 3-19
processor types, *System Management*, 3-19
qualifiers, *System Management*, 3-19
/BATCH_QUEUE, *System Management*, 3-20
/CONSOLE, *System Management*, 3-20

INITIALIZE/PROCESSOR command
qualifiers (cont'd.)
/FLAG_PAGE, *System Management,* 3-21
/FORMS, *System Management,* 3-21
/LOWERCASE, *System Management,* 3-23
/NOWARNINGS, *System Management,* 3-23
/PRINTER_QUEUE, *System Management,* 3-20
/SHAREABLE, *System Management,* 3-23
/UPPERCASE, *System Management,* 3-24
restrictions, *System Management,* 3-24
INITIALIZE/QUEUE command, *System Management,* 3-17
initializing batch queues, *System Management,* 3-12
initializing print queues, *System Management,* 3-5
qualifiers
/BATCH, *System Management,* 3-17
/PRINT, *System Management,* 3-17
INITIALIZE command, *DCL,* 5-4, 5-11, 5-13, 5-67 to 5-79, 9-18
/BADBLOCKS qualifier
Shadow Recording preparation, *System Management,* 16-2
/EXTENSION qualifier, *System Management,* 1-8
/INDEX qualifier, *System Management,* 1-8
INITIALIZE/FORMAT, *DCL,* 5-80 to 5-86, 9-20
INITIALIZE/PROCESSOR
input, *DCL,* 9-19
output, *DCL,* 9-19
INITIALIZE/QUEUE, *DCL,* 9-20
INITIALIZE/UPDATE, *DCL,* 5-87 to 5-90, 9-20
qualifiers
/BATCH_PROCESSOR
interactive use, *System Management,* 3-11
/WINDOW qualifier, *System Management,* 1-9
/INITIALIZE qualifier
BRU utility, *Utilities,* 3-18
INITIALIZE VOLUME command, *MCR,* 3-83
using to modify file system, *System Management,* 1-8
/INIT keyword
CLI command, *System Management,* 17-2
COMMAND LINE INTERPRETER command, *MCR,* 3-42
subkeywords, *MCR,* 3-42 to 3-44
INITL module
errors from, *Writing I/O Driver,* 6-3
INITM1 control file module, *Error Logging,* 4-4, 4-33, A-6
INITP1 control file module, *Error Logging,* 4-11
INITS macro
calling example (LADRV), *I/O Drivers,* 12-24
special calling (LADRV), *I/O Drivers,* 12-24
special-purpose (K-series), *I/O Drivers,* 13-28
INITVOLUME command
brief description, *MCR,* 1-5
default file protection, *MCR,* 2-3
examples, *MCR,* 3-92
format, *MCR,* 3-83
keywords
/ACCESS, *MCR,* 3-84
/BAD, *MCR,* 3-85
/DENS, *MCR,* 3-87
/EXT, *MCR,* 3-87
/FPRO, *MCR,* 3-87
/INDX, *MCR,* 3-88
/INF, *MCR,* 3-88
/LRU, *MCR,* 3-89
/MXF, *MCR,* 3-89
/OWNER, *MCR,* 3-90
/POS, *MCR,* 3-90
/PRO, *MCR,* 3-91
/SDI, *MCR,* 3-91
/UIC, *MCR,* 3-91
/VI, *MCR,* 3-91
/WIN, *MCR,* 3-92
parameters, *MCR,* 3-84
$INIVM (Initialize virtual memory), *System Library,* 8-5
Input, *Introduction,* 1-4
buffer
intermediate (TTDRV), *I/O Drivers,* 2-81
checkpoint
terminal (TTDRV), *I/O Drivers,* 2-83
default read (TTDRV), *I/O Drivers,* 2-15

Input (cont'd.)
line
delete start (TTDRV), *I/O Drivers*, 2-72
parameter
DINP: subroutine (K-series), *I/O Drivers*, 13-15
procedure for soliciting, *MCR*, 2-14
unsolicited
definition, *MCR*, 2-13
unsolicited (TTDRV), *I/O Drivers*, 2-15, 2-58, 2-70
Input file
reducing processing, *Task Builder*, F-6
Input file switch
RMSBCK utility, *RMS-11 Utilities*, 6-8
RMSDSP utility, *RMS-11 Utilities*, 7-8
RMSIFL utility, *RMS-11 Utilities*, 3-7
/INPUT function
QUE /SP command, *System Management*, 3-20
/INPUT processor type, *System Management*, 3-20
/INQUIRE keyword
SET command, *MCR*, 3-169
/INQUIRE qualifier
SET TERMINAL command, *DCL*, 3-41
INSBLD.CMD file, *MCR*, 3-100
INS command
See also INSTALL command
/CLI keyword, *System Management*, 17-2
VMR
definition, *System Management*, 5-20
examples, *System Management*, 5-27 to 5-28
format, *System Management*, 5-20
keywords
/AFF, *System Management*, 5-21
/CKP, *System Management*, 5-21
/CLI, *System Management*, 5-21
/DFB, *System Management*, 5-22
/FMAP, *System Management*, 5-22
/INC, *System Management*, 5-22
/IOP, *System Management*, 5-23
/PMD, *System Management*, 5-23
/PRI, *System Management*, 5-23
/PRO, *System Management*, 5-23
/RON, *System Management*, 5-24
/ROPAR, *System Management*, 5-24
/SEC, *System Management*, 5-24
/SLV, *System Management*, 5-25
INS command
VMR
keywords (cont'd.)
/SYNC, *System Management*, 5-25
/TASK, *System Management*, 5-25
/UIC, *System Management*, 5-25
/WB, *System Management*, 5-26
/XHR, *System Management*, 5-26
notes, *System Management*, 5-26 to 5-27
parameters, *System Management*, 5-21
INSERT command
EDT editor, *Introduction*, 2-14
Insert command
EDI editor, *Program Development*, 2-17, 7-7; *Utilities*, 7-25
/INSERT qualifier
LIBRARY command, *Program Development*, 6-9
Installation (system), *System Management*, 1-9
INSTALL command, *MCR*, 3-94; *DCL*, 7-28 to 7-36, 9-21; *Introduction*, 5-8
brief description, *MCR*, 1-5
format, *MCR*, 3-94
installing BPR.TSK, *System Management*, 3-10
installing LPP.TSK, *System Management*, 3-6
installing task, *MCR*, 2-19, 2-21
/INTERPRETER qualifier, *System Management*, 17-2
keywords
/AFF, *MCR*, 3-95
/CKP, *MCR*, 3-95
/CLI, *MCR*, 3-96
/DFB, *MCR*, 3-96
/FMAP, *MCR*, 3-96
/INC, *MCR*, 3-96
/IOP, *MCR*, 3-97
/PAR, *MCR*, 3-97
/PMD, *MCR*, 3-97
/PRI, *MCR*, 3-97
/PRO, *MCR*, 3-97
/RON, *MCR*, 3-98
/ROPAR, *MCR*, 3-98
/SEC, *MCR*, 3-98
/SLV, *MCR*, 3-98
/SYNC, *MCR*, 3-99
/TASK, *MCR*, 3-99
/TIME, *MCR*, 3-99
/UIC, *MCR*, 3-99
/WB, *MCR*, 3-99

INSTALL command
keywords (cont'd.)
/XHR, *MCR*, 3-100
loading COT task, *System Management*, 9-2
parameters, *MCR*, 3-95
/TASK qualifier
installing batch processors, *System Management*, 3-11
VMR
See INS command
INSTALL task
build command file, *MCR*, 3-100
Instruction set
commercial
list, *MACRO-11*, C-3
Instruction space, *Debugging*, 3-2, 7-2; *Executive*, 3-1; *XDT*, 2-4
command, *Debugging*, 2-8; *XDT*, 2-13
enabling, *Debugging*, 1-3
mapping, *Executive*, 3-3
moving data, *Executive*, 5-155
/IN switch
LBR utility, *Program Development*, 6-9; *Utilities*, 10-20
Integer key
2-byte signed, *RMS-11 User's Guide*, 6-4
4-byte signed, *RMS-11 User's Guide*, 6-4
Integer routine
divide ($DIV), *System Library*, 3-2
multiply ($MUL), *System Library*, 3-1
Interactive mode
IOX
description, *System Management*, 12-10
valid commands, *System Management*, 12-10
Interactive utility
RMSDES utility, *RMS-11 Utilities*, 2-1
Interface
customizing, *System Management*, 1-18
terminal (TTDRV), *I/O Drivers*, 2-82
INTERLEAVE command
IOX, *System Management*, 12-33
FILES11, SELECT, and VERIFY command lines, *System Management*, 12-33
initial default, *System Management*, 12-33
restrictions, *System Management*, 12-33
sequential testing, *System Management*, 12-33
specifying LBNs, *System Management*, 12-33
Intermittent failure, *System Management*, 11-2
example, *System Management*, 11-2
re-creating conditions, *System Management*, 11-2
Intermodule variable
block number, *Error Logging*, 4-32
cylinder error, *Error Logging*, 4-32
declaration, *Error Logging*, 4-13
device function, *Error Logging*, 4-32
drive serial number, *Error Logging*, 4-32
drive type, *Error Logging*, 4-32
error type, *Error Logging*, 4-32
group error, *Error Logging*, 4-32
head error, *Error Logging*, 4-32
physical unit number, *Error Logging*, 4-32
sector error, *Error Logging*, 4-32
user-written module, *Error Logging*, 4-32
Internal register, *Debugging*, 5-2
accessing, *Debugging*, 5-2
Internal symbol directory
See ISD record type
/INTERPRETER qualifier
INSTALL command, *System Management*, 17-2
Interrupt, *Writing I/O Driver*, 1-1
addresses
overview, *Writing I/O Driver*, 2-6
connect-to directive, *Writing I/O Driver*, 1-1
definition, *System Generation*, 1-11
dispatching, *Writing I/O Driver*, 1-8
for common interrupt devices, *Writing I/O Driver*, 1-13
overview, *Writing I/O Driver*, 2-6
entry address, *Writing I/O Driver*, 2-4
entry point, *Writing I/O Driver*, 4-64, 4-65
for overlapped seek, *Writing I/O Driver*, 1-13
handling, *Writing I/O Driver*, 1-5, 1-8, 1-9, 1-13
protocol, *Writing I/O Driver*, 1-6, 1-9
service routine, *Writing I/O Driver*, 1-5, 1-6
unexpected, *Error Logging*, 1-6
vector, *Writing I/O Driver*, 1-1, 1-13
Interrupt (clock)
rate, *System Management*, 1-6
Interrupt Control Block
See ICB
Interrupt processing, *XDT*, 1-4
by driver, *Writing I/O Driver*, 3-3

Interrupt save
See $INTSV routine
Interrupt Service Routine
See ISR
Interrupt timeout, *Error Logging*, 1-6
Interrupt vector
changing value, *System Management*, 4-29
constructing linkages, *MCR*, 3-103
Intersystem echo loops, *Utilities*, C-2, C-5
Intersystem file transfer, *RMS-11 Utilities*, 1-2, 6-1
RMSCNV utility, *RMS-11 Utilities*, 4-1
RMSRST utility, *RMS-11 Utilities*, 7-1, 7-10
/FR switch, *RMS-11 Utilities*, 7-7
Interval report
IOX
output frequency, *System Management*, 12-56
$INTSE routine, *Writing I/O Driver*, 7-23
$INTSI routine, *Writing I/O Driver*, 1-7
INTSV$ macro call
arguments, *Writing I/O Driver*, 4-7
$INTSV routine, *Writing I/O Driver*, 1-6, 1-7, 7-23
$INTXT routine, *Writing I/O Driver*, 1-7, 7-24
Invalid Login Transaction Block, *System Management*, 10-39
/INVOLUME qualifier
BRU utility, *Utilities*, 3-18
INXTBF: subroutine
set next buffer
K-series, *I/O Drivers*, 13-21
LADRV, *I/O Drivers*, 12-16
IO.ACE function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-14
IO.ACP function
MTAACP, *I/O Operations*, H-16
IO.ACR function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-14
IO.ACW function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-14
IO.APV function
MTAACP, *I/O Operations*, H-16
IO.ATA function
TTDRV, *I/O Drivers*, 2-22
IO.ATF function
receiving (LRDRV), *I/O Drivers*, 11-10
IO.ATT function
before GLUN$, (RX02), *I/O Drivers*, 4-11
standard function, *I/O Drivers*, 1-27
UNIBUS switch driver, *I/O Drivers*, 14-3
VTDRV, *I/O Drivers*, 3-4
IO.ATX function
transmitter (LRDRV), *I/O Drivers*, 11-5
IO.BLS function
DDDRV, *I/O Drivers*, 5-4
IO.CCO function
TTDRV, *I/O Drivers*, 2-25
VFC (TTDRV), *I/O Drivers*, 2-77
IO.CLK function
LADRV, *I/O Drivers*, 12-25
IO.CON function
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-5
IO.CRE function
F11ACP, *I/O Operations*, H-12
MTAACP, *I/O Operations*, H-15
IO.CRX function
receiving (LRDRV), *I/O Drivers*, 11-9
IO.CSR function
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-6
IO.DAC function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-15
IO.DEL function
F11ACP, *I/O Operations*, H-12
IO.DET function
standard function, *I/O Drivers*, 1-28
UNIBUS switch driver, *I/O Drivers*, 14-3, 14-4
VTDRV, *I/O Drivers*, 3-4
IO.DGN function
diagnostic (DDDRV), *I/O Drivers*, 5-4
IO.DIS function
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-5
IO.DPT function
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-5, 14-6
IO.DRX function
receiving (LRDRV), *I/O Drivers*, 11-10
IO.DSE function
tape driver, *I/O Drivers*, 6-8
IO.EIO function
TTDRV, *I/O Drivers*, 2-27
item list 1 buffer, *I/O Drivers*, 2-32

IO.EIO function
TTDRV (cont'd.)
item list 2 buffer, *I/O Drivers*, 2-34
remote terminal, *I/O Drivers*, 2-27
IO.ENA function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-14
IO.ERS function (tape driver), *I/O Drivers*, 6-8
IO.EXT function
F11ACP, *I/O Operations*, H-13
IO.FNA function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-14
IO.GTS function
support
returned (TTDRV), *I/O Drivers*, 2-36
TTDRV, *I/O Drivers*, 2-20, 2-35
VTDRV, *I/O Drivers*, 3-7
IO.HNG function
TTDRV, *I/O Drivers*, 2-37
IO.INI function
LADRV, *I/O Drivers*, 12-26
IO.KIL function
CRDRV, *I/O Drivers*, 9-2
LPDRV, *I/O Drivers*, 7-4
standard function, *I/O Drivers*, 1-29
tape driver, *I/O Drivers*, 6-6
UNIBUS switch driver, *I/O Drivers*, 14-4
VTDRV, *I/O Drivers*, 3-4
IO.LOD function
LADRV, *I/O Drivers*, 12-26
IO.RAL function
Badge Reader (TTDRV), *I/O Drivers*, 2-84
TTDRV, *I/O Drivers*, 2-38
IO.RAT function
F11ACP, *I/O Operations*, H-13
MTAACP, *I/O Operations*, H-16
IO.RLB function
ignoring prompt (TTDRV), *I/O Drivers*, 2-30
standard function, *I/O Drivers*, 1-30
tape driver, *I/O Drivers*, 6-8
VTDRV, *I/O Drivers*, 3-5
IO.RLC function
DDDRV, *I/O Drivers*, 5-4
IO.RNA function
F11ACP, *I/O Operations*, H-13
IO.RNE function
Badge Reader (TTDRV), *I/O Drivers*, 2-84
TTDRV, *I/O Drivers*, 2-40
IO.RPR function
TTDRV, *I/O Drivers*, 2-42
VFC (TTDRV), *I/O Drivers*, 2-77
VTDRV, *I/O Drivers*, 3-7
IO.RST function
TTDRV, *I/O Drivers*, 2-45
successful completion, *I/O Drivers*, 2-45
IO.RTF function
receiving (LRDRV), *I/O Drivers*, 11-10
IO.RTT function
TTDRV, *I/O Drivers*, 2-46
IO.RVB function
F11ACP, *I/O Operations*, H-14
MTAACP, *I/O Operations*, H-15
operation (disk driver), *I/O Drivers*, 4-8
standard function, *I/O Drivers*, 1-31
VTDRV, *I/O Drivers*, 3-5
IO.RWD function
tape driver, *I/O Drivers*, 6-8
IO.RWU function
tape driver, *I/O Drivers*, 6-8
IO.SEC function
before GLUN$ (RX02), *I/O Drivers*, 4-11
tape driver, *I/O Drivers*, 6-8
transmitter (LRDRV), *I/O Drivers*, 11-5
IO.SMC function
TTDRV, *I/O Drivers*, 2-62
IO.SMO function
tape driver, *I/O Drivers*, 6-10
IO.STA function
data transfer start (LADRV), *I/O Drivers*, 12-26
IO.STC function
LRDRV
transmitter, *I/O Drivers*, 11-6
parameters, *I/O Drivers*, 11-6
VTDRV, *I/O Drivers*, 3-5
IO.STP function
data transfer stop (LADRV), *I/O Drivers*, 12-27
IO.SWI function
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-7
IO.ULK function
F11ACP, *I/O Operations*, H-13
IO.WAL function
TTDRV, *I/O Drivers*, 2-48
IO.WBT function
TTDRV, *I/O Drivers*, 2-51
VFC (TTDRV), *I/O Drivers*, 2-77

IO.WLB function
ignoring prompt (TTDRV), *I/O Drivers*, 2-30
standard function, *I/O Drivers*, 1-32, 1-33
VFC (TTDRV), *I/O Drivers*, 2-77
VTDRV, *I/O Drivers*, 3-5
IO.WLC function
DDDRV, *I/O Drivers*, 5-4
IO.WVB function
F11ACP, *I/O Operations*, H-14
operation (disk driver), *I/O Drivers*, 4-8
VFC (TTDRV), *I/O Drivers*, 2-77
VTDRV, *I/O Drivers*, 3-5
IO.XCL function
XEDRV, *I/O Drivers*, 10-4, 10-19
error return, *I/O Drivers*, 10-20
status return, *I/O Drivers*, 10-20
syntax, *I/O Drivers*, 10-19
IO.XIN function
XEDRV, *I/O Drivers*, 10-4, 10-20
error return, *I/O Drivers*, 10-20
status return, *I/O Drivers*, 10-20
syntax, *I/O Drivers*, 10-20
IO.XOP function
XEDRV, *I/O Drivers*, 10-4, 10-5
syntax, *I/O Drivers*, 10-5
IO.XRC function
XEDRV, *I/O Drivers*, 10-4, 10-15
diagnostic, *I/O Drivers*, 10-22
error return, *I/O Drivers*, 10-18
status return, *I/O Drivers*, 10-18
syntax, *I/O Drivers*, 10-15
IO.XSC function
XEDRV, *I/O Drivers*, 10-4, 10-7
syntax, *I/O Drivers*, 10-7
IO.XTL function
XEDRV, *I/O Drivers*, 10-21
error return, *I/O Drivers*, 10-22
status return, *I/O Drivers*, 10-22
syntax, *I/O Drivers*, 10-21
IO.XTM function
XEDRV, *I/O Drivers*, 10-4, 10-11
diagnostic, *I/O Drivers*, 10-22
error return, *I/O Drivers*, 10-15
status return, *I/O Drivers*, 10-15
syntax, *I/O Drivers*, 10-11
IO_ACTIVITY subpacket, *Error Logging*, 4-3
listing, *Error Logging*, 4-64
/IO_PAGE qualifier, *Task Builder*, 11-37
$IOALT routine, *Writing I/O Driver*, 1-14, 1-17, 7-24
$IOALT routine (cont'd.)
driver use in I/O processing, *Writing I/O Driver*, 3-5
$IODON routine, *Writing I/O Driver*, 1-14, 7-24
driver use in I/O processing, *Writing I/O Driver*, 3-5
$IODSA routine, *Writing I/O Driver*, 7-24
IOERR$ macro, *I/O Drivers*, 1-8
I/O completion code, *I/O Drivers*, 1-37
$IOFIN routine, *Writing I/O Driver*, 1-14, 1-16, 3-3, 7-26
/IOP keyword
INS command (VMR), *System Management*, 5-23
INSTALL command, *MCR*, 3-97
RUN command, *MCR*, 3-143
IOSB
validity checks, *Writing I/O Driver*, 3-2
IOSB line termination
TTDRV
control characters, *I/O Drivers*, 2-75
Iosb parameter
K-series
DINP: subroutine, *I/O Drivers*, 13-15
DOUT: subroutine, *I/O Drivers*, 13-18
SCOPE: subroutine, *I/O Drivers*, 13-24
IOT trap instruction, *XDT*, 1-8
Iout parameter
DOUT: subroutine (K-series), *I/O Drivers*, 13-18
IOX, *System Management*, 1-15
aborting tasks, *System Management*, 12-15
clock
turning on, *System Management*, 12-9
command categories
control, *System Management*, 12-6
display, *System Management*, 12-6
function, *System Management*, 12-6
parameter, *System Management*, 12-6
command language
conventions, *System Management*, 12-14
syntax, *System Management*, 12-14
commands
ABORT, *System Management*, 12-15
BADBLOCKS, *System Management*, 12-16
BUFFERSIZE, *System Management*, 12-18
COMPAREDATA, *System Management*, 12-19

IOX
commands (cont'd.)
CONFIGURE, *System Management*, 12-20
CONTROL_C, *System Management*, 12-22
DENSITY, *System Management*, 12-23
descriptions, *System Management*, 12-14 to 12-62
DESELECT, *System Management*, 12-25
ERRORLIMIT, *System Management*, 12-26
EXECUTE, *System Management*, 12-27
EXIT, *System Management*, 12-29
FILES11, *System Management*, 12-30
HELP, *System Management*, 12-32
Indirect Command Processor, *System Management*, 12-11
Interactive mode only (list), *System Management*, 12-10
INTERLEAVE, *System Management*, 12-33
LOGFILE, *System Management*, 12-34
LOOPBACK, *System Management*, 12-35
PARAMETERLIST, *System Management*, 12-36
PATTERN, *System Management*, 12-40
PRINTSUMMARY, *System Management*, 12-42
PROCEED, *System Management*, 12-43
RANDOM, *System Management*, 12-44
RANGE, *System Management*, 12-45
RECORDS, *System Management*, 12-46
REPORTERRORS, *System Management*, 12-47
RESTART, *System Management*, 12-48
restrictions (Interactive mode), *System Management*, 12-10
RETRIES, *System Management*, 12-49
RUNTIME, *System Management*, 12-50
SELECT, *System Management*, 12-51
SPY, *System Management*, 12-54
START, *System Management*, 12-55
summary, *System Management*, 12-6
SUMMARYTIME, *System Management*, 12-56
TEMPORARYFILE, *System Management*, 12-57
VERIFY, *System Management*, 12-58, 12-68
IOX
commands (cont'd.)
VOLUMECHECK, *System Management*, 12-60
WAIT, *System Management*, 12-61
WRITECHECK, *System Management*, 12-62
configuration, *System Management*, 12-20
adding units, *System Management*, 12-4
displaying, *System Management*, 12-4
examples, *System Management*, 12-5
logical names, *System Management*, 12-5
removing units, *System Management*, 12-48
setting up, *System Management*, 12-4
controlling with CTRL/C, *System Management*, 12-22
data pattern
altering, *System Management*, 12-40
displaying, *System Management*, 12-40
data transfer
size, *System Management*, 12-18
definition
file-structured device, *System Management*, 12-1
non-file-structured device, *System Management*, 12-1
deselecting devices, *System Management*, 12-25, 12-48
device-dependent parameters, *System Management*, 12-51
list, *System Management*, 12-58
displaying bad blocks, *System Management*, 12-16
error messages, *System Management*, 12-71
error retries
magnetic tape, *System Management*, 12-49
NFS volumes, *System Management*, 12-49
exercise
device-dependent parameters, *System Management*, 12-51, 12-58
Files–11 volume, *System Management*, 12-30
example, *System Management*, 12-63
NFS device
example, *System Management*, 12-65

IOX (cont'd.)
exercise
NFS volume
SELECT, *System Management*, 12-51
VERIFY, *System Management*, 12-58
removing devices from, *System Management*, 12-25
running, *System Management*, 12-3
selecting devices for, *System Management*, 12-5
specifying time, *System Management*, 12-50
starting, *System Management*, 12-55
terminal, *System Management*, 12-35
exercise procedure
cassettes, *System Management*, 12-2
DECtape, *System Management*, 12-3
disks, *System Management*, 12-2
magnetic tapes, *System Management*, 12-2
terminals, *System Management*, 12-2
exiting, *System Management*, 12-29
home block
checking, *System Management*, 12-60
I/O error codes, *System Management*, 12-13
indirect command file, *System Management*, 12-11
example, *System Management*, 12-11
invoking, *System Management*, 12-11
installing, *System Management*, 12-4
interleaving with Executive, *System Management*, 12-61
invoking, *System Management*, 12-3
installed version, *System Management*, 12-4
uninstalled version, *System Management*, 12-3
log file
contents, *System Management*, 12-34
creating, *System Management*, 12-34
event lines, *System Management*, 12-34
naming, *System Management*, 12-34
maximum number of test units
increasing, *System Management*, 12-2
modes, *System Management*, 12-9
Command, *System Management*, 12-9
Execution, *System Management*, 12-9
Interactive, *System Management*, 12-10

IOX (cont'd.)
NFS volume
displaying block range, *System Management*, 12-45
specifying block range, *System Management*, 12-45
nondestructive read, *System Management*, 12-58
output
See IOX reports
overview, *System Management*, 12-1
parameter
exercising NFS volume, *System Management*, 12-68
setting for Files–11 volumes, *System Management*, 12-63
setting for magnetic tape, *System Management*, 12-65
setting for NFS volumes, *System Management*, 12-65
parameters
displaying default, *System Management*, 12-36
setting, *System Management*, 12-51, 12-58
pattern checking, *System Management*, 12-19
preparing to use, *System Management*, 12-1
prompt, *System Management*, 12-4
protecting Files–11 disk, *System Management*, 12-57
removing tasks, *System Management*, 12-48
report
See IOX reports
resetting parameters, *System Management*, 12-48
restarting, *System Management*, 12-48
selecting device, *System Management*, 12-5
Files–11 volume, *System Management*, 12-5, 12-30
NFS, *System Management*, 12-51, 12-58
NFS volume
using SELECT, *System Management*, 12-5
using VERIFY, *System Management*, 12-5
sequential testing
See RANDOM command IOX
setting parameters
examples, *System Management*, 12-63

IOX (cont'd.)
specifying record number
cassette, *System Management*, 12-46
magnetic tape, *System Management*, 12-46
starting, *System Management*, 12-55
status display, *System Management*, 12-54
steps for exercising a device, *System Management*, 12-2
stopping, *System Management*, 12-15
task-build file, *System Management*, 12-2
terminating, *System Management*, 12-29
PROCEED command, *System Management*, 12-43
wait-for-event flag, *System Management*, 12-61
write-check, *System Management*, 12-62
IOXBLD.BLD file, *System Management*, 12-2
IOX reports
activity, *System Management*, 12-12
accumulated totals, *System Management*, 12-12
content, *System Management*, 12-12
controlling output, *System Management*, 12-13
directing to device, *System Management*, 12-34
example, *System Management*, 12-12
format, *System Management*, 12-12
interval, *System Management*, 12-12
summary, *System Management*, 12-12
generating, *System Management*, 12-42
error, *System Management*, 12-13
data compare, *System Management*, 12-13
directing to device, *System Management*, 12-34
disabling, *System Management*, 12-47
enabling, *System Management*, 12-47
example, *System Management*, 12-13
queue I/O, *System Management*, 12-13
types, *System Management*, 12-47
interval
output frequency, *System Management*, 12-56
types, *System Management*, 12-11
IP11 industrial I/O subsystem
SYSGEN question, *System Generation*, 3-31
IP11 powerfail support
SYSGEN question, *System Generation*, 3-31
IPP, *Indirect*, 3-1
IPP (cont'd.)
invoking, *Indirect*, 3-2
short forms, *Indirect*, 3-3
Iprset parameter
ADSWP: subroutine (K-series), *I/O Drivers*, 13-9
CLOCKA: subroutine
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-6
CLOCKB: subroutine
K-series, *I/O Drivers*, 13-11
LADRV, *I/O Drivers*, 12-7
DASWP: subroutine (K-series), *I/O Drivers*, 13-13
DISWP: subroutine (K-series), *I/O Drivers*, 13-16
DOSWP: subroutine (K-series), *I/O Drivers*, 13-17
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
XRATE: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-23
/IP switch, *Task Builder*, 10-25
IQ.Q function
disk driver, *I/O Drivers*, 4-8
IQ.UMD bit
diagnostic function, *I/O Drivers*, 1-34
IQ.X function
disk driver, *I/O Drivers*, 4-8
IRAB pool, *RMS-11 Macro*, 2-5
Irate parameter
CLOCKA: subroutine
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-6
CLOCKB: subroutine
K-series, *I/O Drivers*, 13-11
LADRV, *I/O Drivers*, 12-7
XRATE: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-23
Irbuf parameter
IO.INI function (LADRV), *I/O Drivers*, 12-26
I register, *Debugging*, 2-6, 5-4; *XDT*, 2-12
.IRPC directive, *MACRO-11*, 6-18
restriction using label, *MACRO-11*, 6-18
summary, *MACRO-11*, 6-1
.IRP directive, *MACRO-11*, 6-17
summary, *MACRO-11*, 6-1
IS.CC status return
TTDRV, *I/O Drivers*, 2-68

IS.CR status return, *I/O Drivers*, 1-39
TTDRV, *I/O Drivers*, 2-68
VTDRV, *I/O Drivers*, 3-6
IS.ESC status return, *I/O Drivers*, 1-39
VTDRV, *I/O Drivers*, 3-6
IS.ESQ status return
TTDRV, *I/O Drivers*, 2-69
VTDRV, *I/O Drivers*, 3-6
IS.PND status return, *I/O Drivers*, 1-40
CRDRV, *I/O Drivers*, 9-6
disk driver, *I/O Drivers*, 4-9
LPDRV, *I/O Drivers*, 7-4
TTDRV, *I/O Drivers*, 2-69
UNIBUS switch driver, *I/O Drivers*, 14-8
IS.RDD status return
disk driver, *I/O Drivers*, 4-9
IS.SEC status return
TTDRV, *I/O Drivers*, 2-68
IS.SUC (success) code, *MCR*, 2-11
IS.SUC success return, *I/O Drivers*, 1-37, 1-40
CRDRV, *I/O Drivers*, 9-6
DDDRV, *I/O Drivers*, 5-5
diagnostic success, *I/O Drivers*, 1-35
disk driver, *I/O Drivers*, 4-9
initializing line
IO.XIN function, *I/O Drivers*, 10-21
line message status
receiving, *I/O Drivers*, 10-19
transmitting, *I/O Drivers*, 10-15
load microcode (XEDRV), *I/O Drivers*, 10-22
LPDRV, *I/O Drivers*, 7-4
receiver (LRDRV), *I/O Drivers*, 11-11
tape driver, *I/O Drivers*, 6-10
transmitter (LRDRV), *I/O Drivers*, 11-7
TTDRV, *I/O Drivers*, 2-69
UNIBUS switch driver, *I/O Drivers*, 14-8
VTDRV, *I/O Drivers*, 3-6, 3-8, 3-9
XEDRV, *I/O Drivers*, 10-5, 10-20
IS.TMO status return
TTDRV, *I/O Drivers*, 2-69
IS.TNC status return
LRDRV
transmitter, *I/O Drivers*, 11-7
IS.TNC status return (LRDRV)
receiver, *I/O Drivers*, 11-11
Isb parameter
general (TTDRV), *I/O Drivers*, 2-12
I/O completion, *I/O Drivers*, 1-36
IO.ATA function (TTDRV), *I/O Drivers*, 2-23
Isb parameter (cont'd.)
IO.ATT function, *I/O Drivers*, 1-27
IO.CCO function (TTDRV), *I/O Drivers*, 2-26
IO.DET function, *I/O Drivers*, 1-28
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.HNG function (TTDRV), *I/O Drivers*, 2-37
IO.KIL function, *I/O Drivers*, 1-29
IO.RAL function (TTDRV), *I/O Drivers*, 2-38
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-42
IO.RST function (TTDRV), *I/O Drivers*, 2-45
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-62
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
IO.WBT function (TTDRV), *I/O Drivers*, 2-51
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
omitted, *I/O Drivers*, 1-38
QIO$ basic syntax, *I/O Drivers*, 1-8
SF.GMC function (TTDRV), *I/O Drivers*, 2-53
ISD record type, *Task Builder*, A-26
format, *Task Builder*, A-27
literal, *Task Builder*, A-36
relocatable, *Task Builder*, A-30 to A-35
TKB-generated, *Task Builder*, A-28 to A-30
I-space
See Instruction space
ISR, *Executive*, 5-24
ISTAT$ macro, *I/O Operations*, 7-1, 7-2
Istat parameter
IBFSTS: subroutine
K-series, *I/O Drivers*, 13-20
LADRV, *I/O Drivers*, 12-15
ITBDF$, *Crash Dump Analyzer*, C-39

Itim parameter
ICLOKB: subroutine (K-series), *I/O Drivers*, 13-21
Iunit parameter
DIGO: subroutine (K-series), *I/O Drivers*, 13-14
DINP: subroutine (K-series), *I/O Drivers*, 13-15
DISWP: subroutine
K-series, *I/O Drivers*, 13-16
LADRV, *I/O Drivers*, 12-12
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-14
DOUT: subroutine (K-series), *I/O Drivers*, 13-18
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
SCOPE: subroutine (K-series), *I/O Drivers*, 13-24
Ival parameter
ADINP: subroutine (K-series), *I/O Drivers*, 13-8
CVADF: subroutine
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
FLT16: subroutine
K-series, *I/O Drivers*, 13-19
LADRV, *I/O Drivers*, 12-15
Iwhen parameter
STPSWP: subroutine
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-22
IWTBUF: subroutine
wait for buffer
K-series, *I/O Drivers*, 13-22
LADRV, *I/O Drivers*, 12-17

J

Job
holding, *Batch and Queue*, 2-1
modifying, *Batch and Queue*, 2-1
releasing, *Batch and Queue*, 2-1
removing from queue, *Batch and Queue*, 2-10
/JOB_END qualifier
STOP/PROCESSOR command, *System Management*, 3-33
/JOB_PAGE qualifier
PRINT command, *Batch and Queue*, 2-3
JOB command, *Batch and Queue*, 3-4
JOB command (cont'd.)
example, *Batch and Queue*, 3-5
format, *Batch and Queue*, 3-4
qualifiers, *Batch and Queue*, 3-4
/JOBCOUNT:n qualifier
SET QUEUE command, *Batch and Queue*, 2-19
/JOBCOUNT qualifier
PRINT command, *Batch and Queue*, 2-3
Jobname job switch
SUB command, *Batch and Queue*, 3-15
Jobname log file switch
SUB command, *Batch and Queue*, 3-15
Jobname parameter
DELETE command, *Batch and Queue*, 2-10
Jobname switch
PRI command, *Batch and Queue*, 2-3
QUE /LI command, *Batch and Queue*, 2-14
/JO switch
PRI command, *Batch and Queue*, 2-3

K

K.STS, *Writing I/O Driver*, 4-43
K command, *Debugging*, 2-8, 7-1; *XDT*, 2-13
ZAP utility, *Utilities*, 15-17
KDA50 disk controller, *I/O Drivers*, 4-4
/KDS, *Crash Dump Analyzer*, 2-4, 2-6
Kernel data space
dump, *Crash Dump Analyzer*, 3-44
switch
See /KDS
Kernel instruction space
dump, *Crash Dump Analyzer*, 3-44
switch
See /KIS
Kernel Mapping Register switch
See /KMR
Kernel stack dump, *Crash Dump Analyzer*, 3-1, 3-4
Key, *RMS-11 User's Guide*, 1-5, 1-19, 6-2; *RMS-11 Intro*, 3-6
alternate, *RMS-11 User's Guide*, 1-7, 1-11; *RMS-11 Intro*, 3-7
changeable, *RMS-11 Intro*, 3-10
characteristics, *RMS-11 User's Guide*, 6-8
changeable, *RMS-11 User's Guide*, 6-9
duplicates, *RMS-11 User's Guide*, 6-8
null, *RMS-11 User's Guide*, 6-10
data type, *RMS-11 User's Guide*, 6-3; *RMS-11 Intro*, 3-7

Key
data type (cont'd.)
2-byte signed integer, *RMS-11 User's Guide*, 6-4
4-byte signed integer, *RMS-11 User's Guide*, 6-4
2-byte unsigned binary, *RMS-11 User's Guide*, 6-5
4-byte unsigned binary, *RMS-11 User's Guide*, 6-5
packed decimal, *RMS-11 User's Guide*, 6-6
string, *RMS-11 User's Guide*, 6-3
duplicate, *RMS-11 Intro*, 3-10
match criterion, *RMS-11 Intro*, 3-12
null, *RMS-11 Intro*, 3-10
number of, *RMS-11 User's Guide*, 6-2
position, *RMS-11 User's Guide*, 6-7
primary, *RMS-11 User's Guide*, 1-7, 1-11; *RMS-11 Intro*, 3-7
RMSDES utility
numbering, *RMS-11 Utilities*, 2-28, 2-38
segment, *RMS-11 User's Guide*, 6-7; *RMS-11 Intro*, 3-10
size, *RMS-11 User's Guide*, 6-6
special (TTDRV), *I/O Drivers*, 2-69
table, *I/O Drivers*, 2-72, 2-73
Key (RMSDES)
numbering, *RMS-11 Utilities*, 2-8
KEY block, *RMS-11 Macro*, 5-71 to 5-72, 5-78, 5-94, 5-102; *RMS-11 Intro*, 4-8
chaining to FAB, *RMS-11 Macro*, 2-13 to 2-14
declaring, *RMS-11 Macro*, 2-8
initializing, *RMS-11 Macro*, 2-10
summary, *RMS-11 Macro*, 6-67
Keyboard, *DCL*, 3-12 to 3-17
keys table, *DCL*, 3-15 to 3-17
Key buffer pool, *RMS-11 Macro*, 2-6
Key information
displaying, *RMS-11 Utilities*, 5-4
Key name
RMSCNV utility, *RMS-11 Utilities*, 4-10
Key of reference
RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
RMSIFL utility, *RMS-11 Utilities*, 3-8 to 3-9
Keypad, *DCL*, 3-17 to 3-18
alternate, *DCL*, 3-17 to 3-18
Keypad (cont'd.)
editing
VT100-series terminal, *DCL*, 3-17
VT200-series terminal, *DCL*, 3-17
EDT editor, *Introduction*, 2-3, 2-4
Key record access, *RMS-11 Intro*, 3-12
to indexed files, *RMS-11 User's Guide*, 5-7, 5-9
to relative files, *RMS-11 User's Guide*, 4-1
to sequential files, *RMS-11 User's Guide*, 3-2
Keyword
appending to file name, *MCR*, 1-2
forms, *MCR*, 1-2
function of, *MCR*, 1-2
negating, *MCR*, 1-2
position in command line, *MCR*, 1-2
recognition
transition table, *I/O Operations*, 7-9
specifying values for, *MCR*, 1-2
Keyword argument, *MACRO-11*, 6-10
order, *MACRO-11*, 6-11
using DIGITAL Multinational Character Set, *MACRO-11*, 6-11
Kill command
EDI editor, *Utilities*, 7-26
/KIS, *Crash Dump Analyzer*, 2-4, 2-6
KMC-11 auxiliary processor, *I/O Drivers*, 7-2
/KMR, *Crash Dump Analyzer*, 2-8, 2-9
/KNLD keyword
OPENREGISTER command, *MCR*, 3-128
/KNLI keyword
OPENREGISTER command, *MCR*, 3-128
/KNL keyword
OPENREGISTER command, *MCR*, 3-128
/KN switch
RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
Kount parameter
DIGO: subroutine (K-series), *I/O Drivers*, 13-14
GTHIST: subroutine (K-series), *I/O Drivers*, 13-20
KRB, *Writing I/O Driver*, 1-4, 1-14
access queue in the, *Writing I/O Driver*, 2-2, 2-16
combined with SCB, *Writing I/O Driver*, 2-2, 4-48
layout, *Writing I/O Driver*, 4-48
composite arrangement, *Writing I/O Driver*, 2-16

KRB (cont'd.)
configuration status in the, *Writing I/O Driver*, 2-2
contiguous with SCB, *Writing I/O Driver*, 2-7, 4-3
defining start of addresses, *Writing I/O Driver*, 4-3
definition, *Writing I/O Driver*, 1-4
details, *Writing I/O Driver*, 4-41, 4-43, 4-48
format, *Writing I/O Driver*, 4-43, 4-48
layout, *Writing I/O Driver*, 4-41
overview, *Writing I/O Driver*, 2-2
subsets, *Writing I/O Driver*, 1-14
use in determining interrupting unit, *Writing I/O Driver*, 2-3
KRB1, *Writing I/O Driver*, 1-14
KRBDF$, *Crash Dump Analyzer*, C-40
/KR switch
RMSCNV utility, *RMS-11 Utilities*, 4-10, 4-16
RMSIFL utility, *RMS-11 Utilities*, 3-8 to 3-9
K-series devices
pregenerated kit, *System Generation*, 5-49
Ksubr parameter
CALLS macro (K-series), *I/O Drivers*, 13-29
k variable, *Debugging*, 2-1; *XDT*, 2-10
KW11-K dual programmable real-time clock, *I/O Drivers*, 13-3

L

L.STS, *Writing I/O Driver*, 4-53
LA100 DECprinter, *I/O Drivers*, 2-5
LA120 DECwriter, *I/O Drivers*, 2-5
LA120 terminal, *Introduction*, 1-1
LA12 portable terminal, *I/O Drivers*, 2-4
LA12 teletypewriter, *I/O Drivers*, 2-4
LA180 DECprinter, *I/O Drivers*, 7-3
LA180S DECprinter, *I/O Drivers*, 2-5
LA210 letter printer, *I/O Drivers*, 2-6
LA30 DECwriter, *I/O Drivers*, 2-5
LA34 DECwriter, *I/O Drivers*, 2-5
LA36 DECwriter, *I/O Drivers*, 2-5
LA38 DECwriter, *I/O Drivers*, 2-5
LA50 personal printer, *I/O Drivers*, 2-6
LA75 personal printer, *I/O Drivers*, 2-6
Label, *Batch and Queue*, 3-3; *Indirect*, 1-5
branching to, *Indirect*, 2-65
defining, *Indirect*, 2-37
Label (cont'd.)
definition of, *MACRO-11*, 1-2
direct-access, *Indirect*, 2-37
if same as macro name, *MACRO-11*, 6-5
maximum length, *MACRO-11*, 1-3
not recommended on .MACRO directive, *MACRO-11*, 6-3
on line containing .PSECT, .ASECT, or .CSECT, *MACRO-11*, 5-38
terminated with colon (:), *MACRO-11*, 1-2
terminated with double colon (::), *MACRO-11*, 1-2
terminates local symbol block, *MACRO-11*, 2-10
user label may confuse automatic local symbol generation in macro, *MACRO-11*, 6-10
valid characters for, *MACRO-11*, 1-3
valid formats, *MACRO-11*, 1-2
Label block group, *Task Builder*, B-6 to B-11
/LABEL keyword
MOUNT command, *MCR*, 3-120
Labels (ICP), *Introduction*, 4-4
Laboratory peripheral
K-series, *I/O Drivers*, 13-1
Laboratory peripheral accelerator
See LADRV
LADRV, *I/O Drivers*, 12-1
unloading, *I/O Drivers*, 12-31
LAINIT microcode loader (LADRV), *I/O Drivers*, 12-30
Lamskb parameter
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
SETIBF: subroutine
K-series, *I/O Drivers*, 13-26
LADRV, *I/O Drivers*, 12-21
LAMSKS: subroutine
set masks buffer (LADRV), *I/O Drivers*, 12-18
Language
assembly, *Program Development*, 1-4 to 1-6
See also MACRO-11
high-level
overlaying program, *Task Builder*, 3-44
programming, *DCL*, 6-1
source, *DCL*, 6-1
Latency
definition, *System Management*, 14-2
LA-type subsystems
SYSGEN question, *System Generation*, 3-56

Layered product
correction files, *System Generation*, 2-26 to 2-27
LB device
as system default, *MCR*, 2-6
default for BOOT, *MCR*, 3-30
pseudo device name, *MCR*, 2-10
required by LOAD command, *MCR*, 3-105
saving system, *MCR*, 3-147
LBN, *RMS-11 User's Guide*, 8-11; *RMS-11 Intro*, 2-4; *Writing I/O Driver*, 1-17
See also Logical block number
See also Placement control
installed task, *System Management*, 5-20
relationship to TCB, *System Management*, 5-26
using to transfer data, *System Management*, 13-4
Lbn parameter
device-specific function
DDDRV, *I/O Drivers*, 5-4
standard function
DDDRV, *I/O Drivers*, 5-3
LBR command
See LBR utility
LBR utility, *Program Development*, 1-9
See also LIBRARY command
adding a module to a library, *Program Development*, 6-9
combining library function, *Utilities*, 10-32
command line, *Utilities*, 10-10, A-17
default, *Utilities*, 10-11
creating macro library, *Program Development*, 6-2
creating object module library, *Program Development*, 6-5
efficiency, *Program Development*, 1-9
library file
creating, *Utilities*, 10-13
deleting, *Utilities*, 10-15
format, *Utilities*, 10-2
listing, *Utilities*, 10-22
module
inserting, *Utilities*, 10-21
replacing, *Utilities*, 10-24
spooling, *Utilities*, 10-29
listing information, *Program Development*, 6-10, 6-11
macro library, *Program Development*, 6-2, 6-3
messages, *Utilities*, 10-32
LBR utility
messages (cont'd.)
diagnostic, *Utilities*, 10-33
fatal, *Utilities*, 10-34
module name requirement, *Error Logging*, 4-16
object module library, *Program Development*, 6-4 to 6-6
OLB file type, *Program Development*, 6-4
replacing a module in a library, *Program Development*, 6-10
restriction, *Utilities*, 10-10
switches
/CO, *Utilities*, 10-12
/CR, *Program Development*, 6-2, 6-5; *Utilities*, 10-13
/DE, *Utilities*, 10-15
/DF, *Utilities*, 10-16
/DG, *Utilities*, 10-17
/EP, *Utilities*, 10-18
/EX, *Utilities*, 10-19
/FU, *Program Development*, 6-11; *Utilities*, 10-22
/IN, *Program Development*, 6-9; *Utilities*, 10-20
/LE, *Program Development*, 6-11; *Utilities*, 10-22
/LI, *Utilities*, 10-22
/MH, *Utilities*, 10-23
/RP, *Program Development*, 6-9, 6-10; *Utilities*, 10-24
/SP, *Program Development*, 6-11; *Utilities*, 10-29
/SS, *Utilities*, 10-29
/SZ, *Utilities*, 10-30
universal library file
module
inserting, *Utilities*, 10-21
replacing, *Utilities*, 10-27
/LB switch, *Indirect*, 2-33; *Task Builder*, 10-26 to 10-27
DMP utility, *Utilities*, 5-6
TKB, *Program Development*, 6-7, 6-8, 7-7
/LB switch (Indirect), *Indirect*, 2-33
Lbuf parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-9
LADRV, *I/O Drivers*, 12-3
DASWP: subroutine
K-series, *I/O Drivers*, 13-13
LADRV, *I/O Drivers*, 12-8

Lbuf parameter (cont'd.)
DISWP: subroutine
K-series, *I/O Drivers*, 13-15
LADRV, *I/O Drivers*, 12-11
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-13
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
LC argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
LCBDF$, *Crash Dump Analyzer*, C-42
$LCKPG (Lock page), *System Library*, 8-42
LCL argument
for .PSECT, *MACRO-11*, 5-35
LCM argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
L command, *Debugging*, 2-8, 6-4; *XDT*, 2-14
/LC switch
DMP utility, *Utilities*, 5-6
LD$xx symbol, *Writing I/O Driver*, 4-9
Ldelay parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-5
DASWP: subroutine
K-series, *I/O Drivers*, 13-14
LADRV, *I/O Drivers*, 12-10
DISWP: subroutine
K-series, *I/O Drivers*, 13-16
LADRV, *I/O Drivers*, 12-12
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-14
LEAVE statement
CFL, *Error Logging*, 5-35
LE conditional assembly test, *MACRO-11*, 5-45
Left angle bracket (<)
argument delimiter, *MACRO-11*, 2-3
invalid as .ASCII string delimiter, *MACRO-11*, 5-20
invalid as .ASCIZ string delimiter, *MACRO-11*, 5-21
invalid as .IDENT string delimiter, *MACRO-11*, 5-11
invalid as .RAD50 string delimiter, *MACRO-11*, 5-22
spaces may increase readability of arguments, *MACRO-11*, 6-6
special character in MACRO–11, *MACRO-11*, 2-2
Left angle bracket (<) (cont'd.)
to enclose expressions, *MACRO-11*, 2-14
Left angle bracket command (<), *Debugging*, 2-5, 4-6; *XDT*, 2-11
Left parenthesis
special character in MACRO–11, *MACRO-11*, 2-2
Legal function mask
details, *Writing I/O Driver*, 4-19
/LE job switch
QUE /MOD command, *Batch and Queue*, 2-19
LENGTH
CFL named variable, *Error Logging*, 5-9
/LENGTH job qualifier
SET QUEUE command, *Batch and Queue*, 2-19
/LENGTH qualifier
BRU utility, *Utilities*, 3-19
PRINT command, *Batch and Queue*, 2-3
Less-than binary operator
CFL expression, *Error Logging*, 5-12
Less-than-or-equal binary operator
CFL expression, *Error Logging*, 5-12
/LE switch
LBR utility, *Program Development*, 6-11; *Utilities*, 10-22
PRI command, *Batch and Queue*, 2-3
Level
indexed files, *RMS-11 User's Guide*, 5-4
data, *RMS-11 User's Guide*, 5-5
level 0, *RMS-11 User's Guide*, 5-5
LEVEL1_INDEX_AREA
RMSDES utility, *RMS-11 Utilities*, 2-41
/LI:B switch
QUE /LI command, *Batch and Queue*, 2-14
/LI:P switch
QUE /LI command, *Batch and Queue*, 2-14
Librarian Utility Program
See LBR utility
Library, *DCL*, 6-32 to 6-34
cluster
See also Cluster library
clustered, *RMS-11 User's Guide*, 8-7 to 8-9
default
specifying, *Task Builder*, 10-16
default system search, *Program Development*, 4-2
DIGITAL-supplied, *Program Development*, 1-10
directory, *MCR*, 3-142

Library
directory (cont'd.)
as default for INSTALL command, *MCR*, 3-95
as default for RUN command, *MCR*, 3-142
extending, *Task Builder*, 10-18
macro, *Program Development*, 6-2 to 6-3; *DCL*, 6-33
maintenance, *Program Development*, 6-10
object module, *RMS-11 User's Guide*, 8-1; *Program Development*, 6-4 to 6-6; *DCL*, 6-33
See also Object module library
designating in TKB, *Program Development*, 6-6 to 6-8
specifying for task, *Task Builder*, 10-26, 11-28, 11-38
using to resolve undefined global symbols, *Program Development*, 6-7, 6-8
obtaining information about a user, *Program Development*, 6-10, 6-11
OTS, *Program Development*, 7-2
resident, *RMS-11 User's Guide*, 8-1, 8-8; *Task Builder*, 5-1
See also Resident library
FCS types, *Task Builder*, 5-62
installing, *MCR*, 3-94; *System Management*, 5-26
linking, *Task Builder*, 5-65 to 5-67
MACRO–11 example, *Task Builder*, 5-36 to 5-45
RMSRES, *RMS-11 User's Guide*, 8-6, 8-9
search
MACRO-11, *Program Development*, 1-5, 1-10, 2-6
TKB, *Program Development*, 1-11
shared
See also Shared library
building, *Task Builder*, 10-28
specifying, *Task Builder*, 5-4
squeezing, *Program Development*, 6-3
supervisor mode, *RMS-11 User's Guide*, 8-9
See also Supervisor-mode library
building with relevant option, *Task Builder*, 8-7
mapping, *Task Builder*, 8-2
overlay restriction, *Task Builder*, 8-25
universal, *DCL*, 6-33
LIBRARY command, *Program Development*, 1-9; *DCL*, 6-32 to 6-56, 9-22
See also LBR utility
LIBRARY/COMPRESS, *DCL*, 6-35 to 6-36, 9-22
LIBRARY/CREATE, *DCL*, 6-37 to 6-39, 9-22
LIBRARY/DELETE, *DCL*, 6-40, 9-23
LIBRARY/EXTRACT, *DCL*, 6-41 to 6-42, 9-23
LIBRARY/INSERT, *DCL*, 6-43 to 6-44, 9-23
LIBRARY/LIST, *DCL*, 6-45 to 6-48, 9-23
LIBRARY/REMOVE, *DCL*, 6-49, 9-24
LIBRARY/REPLACE, *DCL*, 6-50 to 6-51, 9-24
qualifiers
/COMPRESS, *Program Development*, 6-10
/CREATE, *Program Development*, 6-2, 6-4
/FULL, *Program Development*, 6-10
/INSERT, *Program Development*, 6-9
/LIST, *Program Development*, 6-10
/MACRO, *Program Development*, 6-2
/NAMES, *Program Development*, 6-10
/OBJECT, *Program Development*, 6-2, 6-4
/REPLACE, *Program Development*, 6-10
.LIBRARY directive, *MACRO-11*, 5-49
default device and file type, *MACRO-11*, 5-49
limit on number of files, *MACRO-11*, 5-50
relationship to .ENABL MCL, *MACRO-11*, 5-50
relationship to .MCALL, *MACRO-11*, 5-49, 6-21
restriction on RT–11 systems, *MACRO-11*, 5-50
summary, *MACRO-11*, 5-2
Library directory, *DCL*, 7-28 to 7-31
displaying, *DCL*, 8-11
setting, *DCL*, 8-10
Library file
See LBR utility
/LIBRARY qualifier, *Task Builder*, 11-38
LINK command, *Program Development*, 6-7, 6-8
MACRO command, *Program\Development*, 6-3

Library routine
communicating between, *System Library,* 1-1 to 1-2
placing, *System Library,* 1-2
searching, *System Library,* 1-2
storing, *System Library,* 1-2
LIBR option, *Task Builder,* 5-16, 12-12, 12-23
<LIBUIC> symbol, *Indirect,* 2-25
/LIBUIC keyword
SET command, *MCR,* 3-170
SET command (VMR), *System Management,* 5-56
/LIMIT, *Crash Dump Analyzer,* 2-8, 2-9
.LIMIT directive, *MACRO-11,* 5-32
summary, *MACRO-11,* 5-2
/LIMITING qualifier
SET ERROR_LOG command, *Error Logging,* 2-9
See also /LIMIT switch
START/ERROR_LOG command, *Error Logging,* 2-3
See also /LOG switch
Limit register
high memory, *Debugging,* 5-3, 6-2
low memory, *Debugging,* 5-3, 6-2
/-LIMIT switch
ELI, *Error Logging,* 2-9
See also /NOLIMITING qualifier
/LIMIT switch
ELI, *Error Logging,* 2-9
See also /LIMITING qualifier
/LIM switch
DMP utility, *Utilities,* 5-6
Line
dial-up, *MCR,* 3-181
local, *MCR,* 3-182
displaying, *MCR,* 3-182
remote, *MCR,* 3-157, 3-181
Line Change command
EDI editor, *Utilities,* 7-26
Line continuation, *DCL,* 1-20
Line definition
XEDRV, *I/O Drivers,* 10-27
Line feed
cannot follow single or double quotation mark, *MACRO-11,* 5-19
CTRL/R (TTDRV), *I/O Drivers,* 2-71
Line-feed character
record attribute, *I/O Operations,* 3-9
LINE FEED command, *Debugging,* 2-5, 4-4; *XDT,* 2-10
Line frequency
SYSGEN question, *System Generation,* 3-34
LINE function
EDT editor, *Introduction,* 2-7
Line interface
DL11/DLV11
SYSGEN question, *System Generation,* 3-56
Line mode
EDT editor, *Introduction,* 2-5, 2-11
Line printer
controllers
LA180
SYSGEN question, *System Generation,* 3-52
LP11
SYSGEN question, *System Generation,* 3-52
LS11
SYSGEN question, *System Generation,* 3-52
LV11
SYSGEN question, *System Generation,* 3-52
LP-type
SYSGEN question, *System Generation,* 3-52
physical feature list, *I/O Drivers,* 7-1
Line printer driver
See LPDRV
/LINES, *Crash Dump Analyzer,* 2-8, 2-9
/LINES keyword
SET command, *MCR,* 3-170
SET command (VMR), *System Management,* 5-56
Lines per page switch
See /LINES
Line terminator, *DCL,* 3-13
Line Text Editor
See EDI editor
LINK command, *Debugging,* 1-3; *Program Development,* 1-6, 4-1; *System Management,* 4-19; *DCL,* 6-5, 6-7 to 6-31, 9-24 to 9-26; *Introduction,* 5-3, 5-6
See also TKB
command line, *Task Builder,* 1-4
cross-reference listing, *Program Development,* 4-5
/DEBUG qualifier, *Debugging,* 8-1
error messages, *Program Development,* 4-2

LINK command (cont'd.)
example, *System Management*, 4-19
fast version, *Program Development*, 4-4
generating standard map, *Program Development*, 4-5
including ODT in task, *Program Development*, 5-1
indirect command file
saving, *Task Builder*, 11-55
option, *DCL*, 6-26 to 6-28
qualifiers, *Task Builder*, 11-1 to 11-71
abbreviating, *Task Builder*, 1-8
/CROSS_REFERENCE, *Program Development*, 4-5
/DEBUG, *Program Development*, 5-1
/FAST, *Program Development*, 4-4
/INCLUDE, *Program Development*, 6-6, 6-8
/LIBRARY, *Program Development*, 6-7, 6-8
/MAP, *Program Development*, 6-6
/POSTMORTEM, *Program Development*, 5-9
summary, *Task Builder*, 11-3 to 11-9
/SYSTEM_LIBRARY_DISPLAY, *Program Development*, 4-7
/TASK, *Program Development*, 6-6, 6-7, 6-8
specifying a debugger, *Debugging*, 8-1
Linking
discussion, *MACRO-11*, 3-1
LIST command, *System Management*, 4-20
example, *System Management*, 4-21
format, *System Management*, 4-20
storing CON command sequence, *System Management*, 4-20
List command
EDI editor, *Program Development*, 2-12
.LIST directive, *MACRO-11*, 5-6
overriding with command line options, *MACRO-11*, 5-8
summary, *MACRO-11*, 5-2
table of arguments, *MACRO-11*, 5-7
Listing
assembly, *Program Development*, 3-4, 3-5
control, *Program Development*, 1-5, 2-6
directory, *Program Development*, 3-9
examining at a terminal, *Program Development*, 3-6, 7-4
FORTRAN IV, *Program Development*, 7-5
global cross-reference, *Program Development*, 4-5, 4-6
Listing (cont'd.)
printing, *Program Development*, 3-8
sample of cross-reference, *MACRO-11*, H-1
spooling, *Program Development*, 3-8
use in debugging, *Program Development*, 5-4
Listing file
FLX utility, *Utilities*, 8-7
PIP utility, *Utilities*, 12-18
List on Pseudo Device command
EDI editor, *Utilities*, 7-26
List on Terminal command
EDI editor, *Utilities*, 7-27
LIST option
ACNT, *System Management*, 2-10
/LIST qualifier
FORTRAN command, *Program Development*, 7-3, 7-7
LIBRARY command, *Program Development*, 6-10
MACRO command, *Program Development*, 3-1, 3-4, 3-7, 6-3
LIST statement
CFL, *Error Logging*, 5-39
/LIST switch
BAD utility
preparing for Shadow Recording, *System Management*, 16-2
.LIST TTM directive, *Program Development*, 2-6
/LI switch, *Task Builder*, 10-28
BAD utility, *Utilities*, 2-4
CMP utility, *Utilities*, 4-3
FLX utility, *Utilities*, 8-8
LBR utility, *Utilities*, 10-22
PIP utility, *Program Development*, 3-9; *Utilities*, 12-18
subswitches
/BR, *Utilities*, 12-19
/FU, *Utilities*, 12-19
/TB, *Utilities*, 12-19
QUE /LI command, *Batch and Queue*, 2-14
VFY utility, *Utilities*, 14-5
ZAP utility, *Utilities*, 15-2
Literal declaration
compile-time, *Error Logging*, 4-11
LITERAL statement
CFL, *Error Logging*, 5-32
Literal value
CFL, *Error Logging*, 5-9
LN01 laser printer, *I/O Drivers*, 7-3
LN03 laser printer, *I/O Drivers*, 2-6

LN03 PLUS laser printer, *I/O Drivers*, 2-6
LNMDF$, *Crash Dump Analyzer*, C-43
/LN switch
  CMP utility, *Utilities*, 4-3
LOA command
  See also LOAD command
  VMR
    definition, *System Management*, 5-29
    examples, *System Management*, 5-31
    format, *System Management*, 5-29
    keywords
      /CTB, *System Management*, 5-29
      /PAR, *System Management*, 5-30
      /SIZE, *System Management*, 5-30
      /VEC, *System Management*, 5-30
    notes, *System Management*, 5-30
    parameters, *System Management*, 5-29
Loadable database
  See Database
Loadable driver
  See Driver
  SYSGEN question, *System Generation*, 3-26
LOAD command, *MCR*, 3-103; *System Management*, 8-16 ; *Writing I/O Driver*, 1-23, 1-24, 5-6
  allowances, *Writing I/O Driver*, 1-7
  brief description, *MCR*, 1-5
  Executive operation for driver, *Writing I/O Driver*, 5-11
  format, *MCR*, 3-103; *System Management*, 8-16
  keywords
    /CTB, *MCR*, 3-103
    /EXP, *MCR*, 3-104; *System Management*, 8-16
    /FLAGS, *MCR*, 3-104
    /HIGH, *MCR*, 3-104
    /PAR, *MCR*, 3-104
    /SIZE, *MCR*, 3-104; *System Management*, 8-16
    /VEC, *MCR*, 3-104
  loading CODRV driver, *System Management*, 9-3
  operation, *Writing I/O Driver*, 5-11
  overview, *Writing I/O Driver*, 1-23
  parameters, *MCR*, 3-103
  pool space requirements, *MCR*, 3-105
  use of /CTB, *Writing I/O Driver*, 5-14
  VMR
    See LOA command
LOAD module, *Task Builder*, 4-19, 5-62
$LOAD routine, *Task Builder*, 4-8, 4-9
Load sharing, *Writing I/O Driver*, 1-12
<LOCAL> symbol, *Indirect*, 2-11
Local data block, *Program Development*, 2-8
Local event flag
  reading, *Executive*, 5-184
Local logical assignment, *MCR*, 3-14
Local macro definitions, *Program Development*, 2-7
Local symbol, *Program Development*, 1-4, 1-5
  automatic generation limitations, *MACRO-11*, 6-10
  cautions with automatic generation, *MACRO-11*, 6-10
  creating automatically in macros, *MACRO-11*, 6-9
  definition, *MACRO-11*, 2-9
  deleting definition, *Indirect*, 2-59
  FDB macro, *I/O Operations*, 2-25
  generate automatically in macro expansion, *MACRO-11*, 2-10
  range of valid values, *MACRO-11*, 6-9
  range of values, *MACRO-11*, 2-9
  uses, *MACRO-11*, 2-10
Local symbol block
  ways to delimit, *MACRO-11*, 2-9
Local symbol definitions, *Program Development*, 2-7
Local work variable
  user-written module, *Error Logging*, 4-31
LOC argument
  for .LIST/.NLIST, *MACRO-11*, 5-8
Locate command
  EDI editor, *Program Development*, 2-13, 2-17, 7-4, 7-5, 7-7; *Utilities*, 7-27
Locate mode, *RMS-11 Intro*, 4-6; *I/O Operations*, 1-10, 1-11, 2-10
  file processing, *I/O Operations*, 3-26
  FSR block buffer, *I/O Operations*, 3-26
  GET$ macro, *I/O Operations*, 3-18, 3-21
  indexed files, *RMS-11 User's Guide*, 7-7
  PUT$ macro, *I/O Operations*, 3-24, 3-27
  record attribute, *I/O Operations*, 3-9
  relative files, *RMS-11 User's Guide*, 4-13
  sequential files, *RMS-11 User's Guide*, 3-14
  task record buffer, *I/O Operations*, 3-26
Location
  absolute, *Debugging*, 2-5, 4-4; *XDT*, 2-11
  altering, *Debugging*, 4-1
  branch, *Debugging*, 4-5
  closing, *Debugging*, 4-2
  displaying, *Debugging*, 4-1
    format, *Debugging*, 4-1

Location (cont'd.)
indicator, *Debugging*, 7-3
opening, *Debugging*, 4-1
ASCII, *Debugging*, 4-6
branch offset, *Debugging*, 4-5
byte, *Debugging*, 4-2
next sequential, *Debugging*, 4-4
preceding, *Debugging*, 4-4
Radix–50, *Debugging*, 4-7
word, *Debugging*, 4-2
PC-relative, *Debugging*, 4-5
reopening last opened, *Debugging*, 4-3
returning from, *Debugging*, 4-6
RMSDEF utility, *RMS-11 Utilities*, A-14
Location addressing
ZAP utility, *Utilities*, 15-7
Location counter, *Program Development*, 1-6
See also Current location counter
use in debugging, *Program Development*, 5-4
Location indicator
See Register indicator
/LOC keyword
HELP command, *MCR*, 3-73
/LOCK keyword
DISMOUNT command, *MCR*, 3-61
Nounload option, *MCR*, 3-61
Unload option, *MCR*, 3-61
Virtual option, *MCR*, 3-62
MOUNT command, *MCR*, 3-113, 3-120
Nounload option, *MCR*, 3-113, 3-121
Unload option, *MCR*, 3-114, 3-121
Virtual option, *MCR*, 3-114, 3-121
LOG.ERR, *Error Logging*, 2-3
error log file, *Error Logging*, 2-5
RPT input file, *Error Logging*, 3-3
LOG.ERR file, *MCR*, 3-200
LOG command
See LOGIN command
<LOGDEV> symbol, *Indirect*, 2-25
$LOGER Executive routine, *Error Logging*, 4-24
Log file, *Batch and Queue*, 3-1
Console Logging
displaying assignment, *System Management*, 9-5
enabling, *System Management*, 9-6
reassigning, *System Management*, 9-6
LOGFILE command
IOX, *System Management*, 12-34
creating log file, *System Management*, 12-34
LOGFILE command
IOX (cont'd.)
default action, *System Management*, 12-34
naming log file, *System Management*, 12-34
summary reports, *System Management*, 12-34
/LOGFILE option
SET /COLOG command, *System Management*, 9-6
/LOGFILE qualifier
SUBMIT command, *Batch and Queue*, 3-15
Logging in, *Introduction*, 1-5 to 1-6, 1-6
Logical/physical association, *I/O Drivers*, 1-2
Logical address space, *Task Builder*, 2-15
Logical AND, *System Management*, 18-29
Logical AND binary operator
CFL expression, *Error Logging*, 5-11
Logical AND operator
summary, *MACRO-11*, 2-4
Logical assignment, *MCR*, 3-14 to 3-23, 3-53 to 3-59
assigning, *MCR*, 3-18; *System Management*, 5-9
deleting, *MCR*, 3-15, 3-18, 3-20, 3-23; *System Management*, 5-10
displaying, *MCR*, 3-21; *System Management*, 5-10
global, *MCR*, 2-11, 3-14
group, *MCR*, 2-11, 3-14
local, *MCR*, 2-11, 3-14
logical device table, *MCR*, 2-12
login, *MCR*, 2-11, 3-14
system, *MCR*, 3-14
task, *MCR*, 2-11, 3-14
Logical block, *RMS-11 Intro*, 2-3; *I/O Operations*, 5-2
file device, *I/O Operations*, 1-7
reading (TTDRV), *I/O Drivers*, 2-45
Logical block number, *MCR*, 3-88, 3-94, 3-148
See also LBN
LOGICAL data type
CFL, *Error Logging*, 5-4
Logical device, *DCL*, 5-6, 5-9 to 5-10, 5-24 to 5-30, 5-34 to 5-36
assigning, *DCL*, 5-9, 5-24 to 5-30
deleting, *DCL*, 5-34 to 5-36
displaying, *DCL*, 5-130 to 5-133

Logical device assignment, *Crash Dump Analyzer*, 3-14 ; *Indirect*, 2-96; *MCR*, 2-11, 3-14 to 3-23
assigning, *MCR*, 3-15
device name tables, *MCR*, 3-15
Logical device name, *Crash Dump Analyzer*, 3-14; *MCR*, 2-11; *DCL*, 5-9 to 5-10
assigning, *MCR*, 3-14
syntax, *MCR*, 2-11, 3-15
Logical end-of-file directive, *Indirect*, 2-73
Logical I/O, *I/O Drivers*, 1-2
definition, *System Management*, 15-6
Logical inclusive OR operator
summary, *MACRO-11*, 2-4
Logical name, *I/O Operations*, 1-19; *DCL*, 5-6
assigning, *MCR*, 3-22; *DCL*, 5-24 to 5-30
creating, *Executive*, 5-36
defining, *DCL*, 5-37 to 5-40
deleting, *Executive*, 5-65; *DCL*, 5-34 to 5-36
described, *DCL*, 5-14 to 5-17
displaying, *DCL*, 5-15, 5-130 to 5-133
extended support for, *MCR*, 2-11
format, *DCL*, 5-15
specifying, *I/O Operations*, 1-20
translating, *Executive*, 5-286
iteratively, *Executive*, 5-186
translation, *I/O Operations*, 4-8
ASSIGN command, *I/O Operations*, 4-9
expanding file specification string, *I/O Operations*, 4-10
FDB extension, *I/O Operations*, 4-14
iterative, *I/O Operations*, 4-9
merging file specification, *I/O Operations*, 4-10
name expansion
.EXPLG module, *I/O Operations*, 4-15
parse file specification, *I/O Operations*, 4-10
.PARSE routine
device and unit, *I/O Operations*, 4-12
process, *I/O Operations*, 4-10
.PRSDV routine, *I/O Operations*, 4-15
translation, *DCL*, 5-16
use, *I/O Operations*, 1-20
Logical name assignment, *MCR*, 3-14, 3-15, 3-53 to 3-59
assigning, *MCR*, 3-53, 3-54
Logical name assignment (cont'd.)
deleting, *MCR*, 3-54, 3-55
displaying, *MCR*, 3-54, 3-56, 3-58
expanding, *Indirect*, 2-99
global, *MCR*, 3-14, 3-53
group, *MCR*, 3-14, 3-53
local, *MCR*, 3-14
login, *MCR*, 3-14
tables, *MCR*, 3-15 to 3-16
task, *MCR*, 3-14
translation, *MCR*, 3-53
using, *Indirect*, 2-2
Logical name support
SYSGEN question, *System Generation*, 3-25
Logical name table, *DCL*, 5-14
Logical NOT unary prefix operator
CFL expression, *Error Logging*, 5-11
Logical operator, *Indirect*, 2-26, 2-29
CFL expression, *Error Logging*, 5-11, 5-16
LOGICAL option, *System Management*, 15-6
default extent size for, *System Management*, 15-6
MOUNT /CACHE command, *MCR*, 3-111
SET /CACHE command, *MCR*, 3-160
Logical OR
changing mode (XEDRV), *I/O Drivers*, 10-24
Logical OR binary operator
CFL expression, *Error Logging*, 5-11
Logical SHIFT binary operator
CFL expression, *Error Logging*, 5-13
Logical symbol, *Indirect*, 2-9
defining, *Indirect*, 2-39
setting, *Indirect*, 2-87
testing, *Indirect*, 2-68, 2-70
Logical test, *Indirect*, 2-66
Logical unit, *I/O Drivers*, 1-2
Logical unit number
See LUN
LOGICAL UNIT NUMBERS command, *MCR*, 3-107
See also LUN command
brief description, *MCR*, 1-6
example, *MCR*, 3-107
format, *MCR*, 3-107
Logical Unit Table
See LUT
Logical XOR binary operator
CFL expression, *Error Logging*, 5-11
Login
default logical device, *MCR*, 3-67

Login (cont'd.)
default logical directory, *MCR*, 3-67
logical assignment, *MCR*, 3-14
UIC, *MCR*, 2-3
LOGIN.CMD file
function, *System Management*, 1-10
pregenerated kit, *System Generation*, 5-38
LOGIN.TXT file
description, *System Management*, 1-10
LOGIN command, *MCR*, 3-67; *DCL*, 3-4 to 3-7, 9-26 ; *Introduction*, 1-5 to 1-6
brief description, *MCR*, 1-7
error messages, *MCR*, 3-67
examples, *MCR*, 3-70
password, *DCL*, 3-4
UIC, *DCL*, 3-4
Login information file
See LOGIN.TXT file
/LOGIN keyword
ASSIGN command, *MCR*, 3-19, 3-20
Login message file
BATCH.TXT, *System Generation*, 4-5
LOGIN.TXT, *System Generation*, 4-5
Login messages
suppressing, *Batch and Queue*, 3-4
Login Transaction Block, *System Management*, 10-38
/LOG keyword
DEVICES command, *MCR*, 3-50
Loglabel, *Batch and Queue*, 3-4
/LOGON keyword
SET command, *MCR*, 3-171
SET command (VMR), *System Management*, 5-56
LOGOUT.CMD file
function, *System Management*, 1-10
pregenerated kit, *System Generation*, 5-39
LOGOUT command, *DCL*, 3-8 to 3-9, 5-14, 7-20, 9-26; *Introduction*, 1-19
/LOG subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-43
/LOG switch
ELI, *Error Logging*, 2-3, 2-5, 2-10
See also START/ERROR_LOG command
error limiting, *Error Logging*, 2-3, 2-5
file naming, *Error Logging*, 2-10
starting logging, *Error Logging*, 2-5
subswitches, *Error Logging*, 2-5, 2-6, 2-7, 2-13
LOGTST Executive routine, *Error Logging*, 4-25
<LOGUIC> symbol, *Indirect*, 2-25
%LOK$BYTE
CFL look-ahead function, *Error Logging*, 5-21
%LOK$LENGTH
CFL look-ahead function, *Error Logging*, 5-22
%LOK$LONGWORD
CFL look-ahead function, *Error Logging*, 5-21
%LOK$WORD
CFL look-ahead function, *Error Logging*, 5-21
/LO log file switch
SUB command, *Batch and Queue*, 3-15
/LONG qualifier, *Task Builder*, 11-39
LONGWORD numeric data type
CFL, *Error Logging*, 5-5
LONGWORD value
equivalent string, *Error Logging*, 5-4
Loop, *Debugging*, 3-4
LOOPBACK command
IOX, *System Management*, 12-35
loopback connector, *System Management*, 12-35
restriction, *System Management*, 12-35
/LO switch, *Indirect*, 2-4, 2-35
RMSCNV utility, *RMS-11 Utilities*, 4-10
RMSIFL utility, *RMS-11 Utilities*, 3-6
VFY utility, *Utilities*, 14-5
/LO switch (Indirect), *Indirect*, 2-4, 2-35
Low core memory
dump, *Crash Dump Analyzer*, 3-1, 3-4
labels, *Crash Dump Analyzer*, 3-5
Lowercase mode, *Indirect*, 2-54
/LOWERCASE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-23
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
/LOWER keyword
SET command, *MCR*, 3-171
SET command (VMR), *System Management*, 5-57
/LOW job switch
QUE /MOD command, *Batch and Queue*, 2-19
Low limit register
See L register

Low pool condition, *System Management*, 8-3, 8-4
/LOW switch
PRI command, *Batch and Queue*, 2-3
QUE /SP command, *System Management*, 3-23
LP11 line printer, *I/O Drivers*, 7-2
LPA11-K laboratory subsystem, *Writing I/O Driver*, 1-14
LPA11-K laboratory subsystems
pregenerated kit, *System Generation*, 5-49
SYSGEN question, *System Generation*, 3-56
LPA11 laboratory subsystem
22-bit addressing, *I/O Drivers*, 12-31, 12-32
data transfer start (LADRV), *I/O Drivers*, 12-26
data transfer stop (LADRV), *I/O Drivers*, 12-27
initializing, *I/O Drivers*, 12-26
IO.STA function (LADRV), *I/O Drivers*, 12-26
IO.STP function (LADRV), *I/O Drivers*, 12-27
sample programs, *I/O Drivers*, 12-32 to 12-37
LPDRV, *I/O Drivers*, 7-1
programming hint, *I/O Drivers*, 7-6
LPP, *System Management*, 3-2
source files, *System Management*, 3-2
LPPBLD.CMD build file
modifying forms, *System Management*, 3-21
LQP02 letter-quality printer, *I/O Drivers*, 2-5
LQP03 letter-quality printer, *I/O Drivers*, 2-6
LRDRV
device-specific QIO$
transmitting, *I/O Drivers*, 11-3
message
receiving, *I/O Drivers*, 11-11
rejecting, *I/O Drivers*, 11-10
transmitting, *I/O Drivers*, 11-5
standard function
transmitting, *I/O Drivers*, 11-3
timeslice constraints
transmitting, *I/O Drivers*, 11-6
L register, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
/LRU keyword
HOME command, *MCR*, 3-80
INITVOLUME command, *MCR*, 3-89
MOU command, *System Management*, 1-8
MOUNT command, *MCR*, 3-114
LS11 line printer, *I/O Drivers*, 7-2
LSB argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
LST file type, *Program Development*, 3-4, 6-11, 7-3, 7-4
LST module, *Error Logging*, 4-2
Lsubr parameter
CALLS calling macro (LADRV), *I/O Drivers*, 12-24
LT conditional assembly test, *MACRO-11*, 5-45
LUN, *I/O Drivers*, 1-2; *MCR*, 3-31; *DCL*, 5-6, 5-8 to 5-9, 7-42 to 7-43, 7-68 to 7-69
See also LOGICAL UNIT NUMBERS command
assigning, *Executive*, 5-12, 5-17; *I/O Drivers*, 1-17; *MCR*, 2-9
assigning to physical device, *Task Builder*, 12-8
assigning with .ASLUN routine, *I/O Operations*, 4-16
assignment
ALUN$ directive, *I/O Drivers*, 1-4
ASSIGN command, *I/O Drivers*, 1-4
change, *I/O Drivers*, 1-4
dynamic change, *I/O Drivers*, 1-4
REASSIGN command, *I/O Drivers*, 1-4
calculation, *Error Logging*, 4-26
default by TKB, *Program Development*, 4-5
definition of, *MCR*, 2-9
get information, *I/O Drivers*, 1-21
CRDRV, *I/O Drivers*, 9-1
DDDRV, *I/O Drivers*, 5-2
disk driver, *I/O Drivers*, 4-6
LADRV, *I/O Drivers*, 12-2
LPDRV, *I/O Drivers*, 7-3
LRDRV
receiving, *I/O Drivers*, 11-3
transmitting, *I/O Drivers*, 11-2
tape driver, *I/O Drivers*, 6-5
UNIBUS switch driver, *I/O Drivers*, 14-2
VTDRV, *I/O Drivers*, 3-1
identical
IO.DET/IO.ATT, *I/O Drivers*, 1-29
information table, *I/O Drivers*, 1-22
logical/physical association, *I/O Drivers*, 1-17
number, *I/O Drivers*, 1-7
ODT
assigning, *Debugging*, 1-4

LUN (cont'd.)
physical
logical, *I/O Drivers*, 1-21
QIO$ basic syntax, *I/O Drivers*, 1-5
REASSIGN command, *MCR*, 3-133
reassigning, *I/O Drivers*, 1-3; *MCR*, 3-133
redirection
ASSIGN command, *I/O Drivers*, 1-3
specifying number of, *Task Builder*, 12-40
table, *I/O Drivers*, 1-3
TTDRV
get information, *I/O Drivers*, 2-9
valid number, *I/O Drivers*, 1-3
LUN command
See also LOGICAL UNIT NUMBERS command
VMR, *System Management*, 5-32
definition, *System Management*, 5-32
example, *System Management*, 5-32
format, *System Management*, 5-32
parameter, *System Management*, 5-32
Lun parameter
ALUN$, *I/O Drivers*, 1-17
CLOCKA: subroutine
K-series, *I/O Drivers*, 13-11
LADRV, *I/O Drivers*, 12-6
CLOCKB: subroutine
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
general (TTDRV), *I/O Drivers*, 2-12
GLUN$ macro, *I/O Drivers*, 1-22
IO.ATA function (TTDRV), *I/O Drivers*, 2-23
IO.ATT function, *I/O Drivers*, 1-27
IO.CCO function (TTDRV), *I/O Drivers*, 2-25
IO.DET function, *I/O Drivers*, 1-28
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.HNG function (TTDRV), *I/O Drivers*, 2-37
IO.KIL function, *I/O Drivers*, 1-29
IO.RAL function (TTDRV), *I/O Drivers*, 2-38
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-42
Lun parameter (cont'd.)
IO.RST function (TTDRV), *I/O Drivers*, 2-45
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-62
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
IO.WBT function (TTDRV), *I/O Drivers*, 2-51
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
IO.XCL function (XEDRV), *I/O Drivers*, 10-19
IO.XIN function (XEDRV), *I/O Drivers*, 10-20
IO.XOP function (XEDRV), *I/O Drivers*, 10-6
IO.XRC function (XEDRV), *I/O Drivers*, 10-15
IO.XSC function (XEDRV), *I/O Drivers*, 10-7
IO.XTL function (XEDRV), *I/O Drivers*, 10-21
IO.XTM function (XEDRV), *I/O Drivers*, 10-12
LAMSKS: subroutine (LADRV), *I/O Drivers*, 12-18
QIO$ basic syntax, *I/O Drivers*, 1-7
SF.GMC function (TTDRV), *I/O Drivers*, 2-53
LUT, *I/O Drivers*, 1-7; *Writing I/O Driver*, 2-12, 3-2
contents, *I/O Drivers*, 1-3
defined, *I/O Drivers*, 1-3
specifying, *I/O Drivers*, 1-3
LV11 line printer, *I/O Drivers*, 7-2
/LW switch
DMP utility, *Utilities*, 5-6

M

M.CTSZ offset
retrieval pointer block count field size, *I/O Operations*, C-2
M.EFNU offset
extension file number, *I/O Operations*, C-2
M.EFSQ offset
extension file sequence number, *I/O Operations*, C-2

M.ERVN offset
extension relative volume number, *I/O Operations*, C-2
M.ESQN offset
map area, *I/O Operations*, C-2
M.LBSZ offset
retrieval pointer logical block number field size, *I/O Operations*, C-2
M.MAX offset
available retrieval pointer words, *I/O Operations*, C-2
M.RTRV offset
retrieval pointer start, *I/O Operations*, C-2
M.USE offset
retrieval pointer word count, *I/O Operations*, C-2
MAC command, *Program Development*, 1-4, 3-5
See also MACRO-11
including a library, *Program Development*, 6-4
switches
/CR, *Program Development*, 3-7
/DS, *Program Development*, 3-2
/ML, *Program Development*, 6-4
/SP, *Program Development*, 3-5, 3-7, 6-4
MAC file type, *Program Development*, 3-1
Machine code
binary, *Introduction*, 5-5
MACHINE radix
CFL, *Error Logging*, 5-6
Macro, *RMS-11 Intro*, 4-7
argument concatenation example, *MACRO-11*, 6-8
arguments in definitions and calls, *MACRO-11*, 6-5
attribute directives, *MACRO-11*, 6-13, 6-14
begin with .MACRO, *MACRO-11*, 6-2
block-declaration, *RMS-11 Macro*, 2-8 to 2-10
block-operation, *RMS-11 Macro*, 5-90, 5-110
call
cross-reference of symbols, *Program Development*, 3-7
resolution, *Program Development*, 1-5, 1-11, 2-6
unrecognized, *Program Development*, 2-6
CALL (K-series), *I/O Drivers*, 13-28
calling, *MACRO-11*, 6-5
Macro (cont'd.)
CALLS (LADRV), *I/O Drivers*, 12-24
concatenation of arguments, *MACRO-11*, 6-12
creating local symbols automatically, *MACRO-11*, 6-9
defining, *MACRO-11*, 6-2
definition of terms, *MACRO-11*, 6-2
directory-operation, *RMS-11 Macro*, 5-78, 5-94, C-2
dummy arguments in definition, *MACRO-11*, 6-2
facilities-declaration, *RMS-11 Macro*, 2-2, C-2
field-access, *RMS-11 Macro*, 2-11 to 2-12, 2-16 to 2-18, C-2
field-initialization, *RMS-11 Macro*, 2-10, C-2
file-operation, *RMS-11 Macro*, 5-3, 5-9, 5-29, 5-35, 5-40 to 5-41, 5-46, 5-65, 5-72, C-2
formatting of definitions, *MACRO-11*, 6-4
if name is same as user label, *MACRO-11*, 6-5
INITS
K-series, *I/O Drivers*, 13-28
LADRV, *I/O Drivers*, 12-24
keyword arguments, *MACRO-11*, 6-10
keywords can override positional relationship, *MACRO-11*, 6-5
library, *Program Development*, 6-2
creating a user, *Program Development*, 6-2, 6-3
replacing modules, *Program Development*, 6-10
search of system, *Program Development*, 1-5, 1-10, 2-6
macro-declaration, *RMS-11 Macro*, 2-2
nesting
maximum level, *MACRO-11*, 6-7
number of arguments in calls, *MACRO-11*, 6-9
operation, *RMS-11 Macro*, 2-9
passing numeric arguments as symbols, *MACRO-11*, 6-8
pool-declaration, *RMS-11 Macro*, 2-4, C-2
record-operation, *RMS-11 Macro*, 5-25, 5-49, 5-51, 5-54, 5-58, 5-60, 5-62 to 5-63, 5-67, 5-83, 5-87, 5-91, 5-95, 5-106, 5-108, 5-122, 5-124, C-3
relationship of dummy and real arguments, *MACRO-11*, 6-5

Macro (cont'd.)
separators for arguments, *MACRO-11*, 6-5
special characters in arguments, *MACRO-11*, 6-7
special treatment of DIGITAL multinational characters in arguments, *MACRO-11*, 6-6
stream-operation, *RMS-11 Macro*, 5-6, 5-27, 5-51, 5-53, 5-56, 5-58, 5-70, 5-100, 6-114, 6-126, C-3
symbol
definition, *Program Development*, 1-4, 1-10, 2-6, 6-4
symbol-declaration, *RMS-11 Macro*, 2-2
macro, *Introduction*, 5-12
MACRO-11, *RMS-11 User's Guide*, 1-13
and ODL files, *RMS-11 User's Guide*, 8-5
assembling source file, *Program Development*, 3-1, 3-2
cross-reference listing, *Program Development*, 1-5, 1-7, 3-7
data storage
definition, *Program Development*, 2-8
default search of system library, *Program Development*, 1-5, 1-10, 2-6
defining local symbols, *Program Development*, 2-7
directives, *Program Development*, 1-4, 1-5
disabling global default, *Program Development*, 3-1, 3-2
error, *Program Development*, 3-2, 3-4
error code
A, *Program Development*, 3-3
E, *Program Development*, 3-4
Q, *Program Development*, 3-4
U, *Program Development*, 3-4
error message, *Program Development*, 3-2, 3-5
interface
K-series, *I/O Drivers*, 13-28 to 13-29
LADRV, *I/O Drivers*, 12-23
key segments, *RMS-11 User's Guide*, 6-7
listing, *Program Development*, 3-4, 3-5
generation, *Program Development*, 3-5
location counter, *Program Development*, 1-6
MAC command, *Program Development*, 1-4, 3-2, 3-5, 6-4
macro
cross-reference, *Program Development*, 3-7
library usage, *Program Development*, 6-3, 6-4
MACRO-11
macro (cont'd.)
symbol, *Program Development*, 1-4, 2-6, 6-4
MACRO command, *Program Development*, 1-4, 3-1, 3-4, 3-7, 6-3
object module, *Program Development*, 3-4, 3-5, 3-6
placement control, *RMS-11 User's Guide*, 6-14
populating files, *RMS-11 User's Guide*, 6-27
source file, *Program Development*, 2-1
cross-reference symbols
CRF utility, *Utilities*, B-2
format, *Program Development*, 2-1 to 2-3
source input, *Program Development*, 1-4
statement format, *Program Development*, 2-3
support routine (LADRV), *I/O Drivers*, 12-23
symbol
cross-reference, *Program Development*, 3-7
evaluation, *Program Development*, 1-5, 3-1, 3-2, 6-4
table of contents generation, *Program Development*, 2-6
MACRO-11 assembler, *Introduction*, 5-4, 5-11
Macro argument delimiters
table of, *MACRO-11*, 2-3
Macro Call command
EDI editor, *Utilities*, 7-28
MACRO command, *Program Development*, 1-4, 3-4; *Introduction*, 5-4
See also MACRO-11
qualifiers
/CROSS_REFERENCE, *Program Development*, 1-9, 3-7
/DISABLE, *Program Development*, 3-1
/LIBRARY, *Program Development*, 6-3
/LIST, *Program Development*, 3-1, 3-4, 3-7, 6-3
/NOOBJECT, *Program Development*, 3-1, 3-7
/OBJECT, *Program Development*, 3-4
Macro command
EDI editor, *Utilities*, 7-28
.MACRO directive, *MACRO-11*, 6-2
label not recommended, *MACRO-11*, 6-3
summary, *MACRO-11*, 6-1
Macro directive, *MACRO-11*, 6-1

Macro directive (cont'd.)
.ENDM, *MACRO-11*, 6-3
.MACRO, *MACRO-11*, 6-2
.MEXIT, *MACRO-11*, 6-4
table, *MACRO-11*, 6-1
Macro Execute command
EDI editor, *Utilities*, 7-29
$ macro form, *Executive*, 1-5
Macro global symbol, *I/O Operations*, 2-24
Macro Immediate command
EDI editor, *Utilities*, 7-30
Macro library, *Program Development*, 6-3; *DCL*, 6-33
adding modules, *Program Development*, 6-9
definitions, *Program Development*, 6-3, 6-4
DIGITAL-supplied, *Program Development*, 1-10
EXEMC.MLB, *Program Development*, 1-10
listing information, *Program Development*, 6-10, 6-11
replacing modules, *Program Development*, 6-10
RMSMAC.MLB, *RMS-11 Macro*, 2-22; *Program Development*, 1-10
RSXMAC.SML, *Program Development*, 1-10
Macro local symbol, *I/O Operations*, 2-25
Macro Metalanguage
See MML
/MACRO qualifier
LIBRARY command, *Program Development*, 6-2
Macro run time
exceptions, *I/O Operations*, 2-21
FDB address, *I/O Operations*, 2-23
initialization, *I/O Operations*, 2-20
MAC task, *Program Development*, 1-4
See MACRO-11
MAG, *I/O Operations*, G-9
task error messages, *I/O Operations*, G-14
Magnetic tape, *DCL*, 5-13
See also Tape
See Medium
blank, *DCL*, 5-13
density
displaying in IOX, *System Management*, 12-23
specifying in IOX, *System Management*, 12-23
dismounting, *MCR*, 3-61
driver, *I/O Drivers*, 6-1
error retries, *System Management*, 12-49
Magnetic tape (cont'd.)
Files–11 structure
ANSI standard for, *MCR*, 2-1
function code list, *I/O Drivers*, B-8
initializing, *MCR*, 3-83
IOX exercise
example, *System Management*, 12-65
using SELECT, *System Management*, 12-65
label, *MCR*, 3-61, 3-84
mounting, *MCR*, 3-109; *DCL*, 5-58 to 5-62
MS-type
SYSGEN question, *System Generation*, 3-49
MT-type
SYSGEN question, *System Generation*, 3-54
MU-type
SYSGEN question, *System Generation*, 3-47
new, *DCL*, 5-13
record, *MCR*, 3-122
records tested, *System Management*, 12-46
RMSCNV utility, *RMS-11 Utilities*, 4-8
RMSDCK utility, *RMS-11 Utilities*, 6-7
RMSDEF utility, *RMS-11 Utilities*, A-8, A-10
RMSDES utility, *RMS-11 Utilities*, 2-34
RMSRST utility, *RMS-11 Utilities*, 7-8 to 7-9
TA11 cassette
SYSGEN question, *System Generation*, 3-48
testing
altering record count, *System Management*, 12-46
TK25
SYSGEN question, *System Generation*, 3-49
TK50
SYSGEN question, *System Generation*, 3-47
TMSCP
SYSGEN question, *System Generation*, 3-47
TS11
SYSGEN question, *System Generation*, 3-49
TSV05
SYSGEN question, *System Generation*, 3-49

Magnetic tape (cont'd.)
TU80
SYSGEN question, *System Generation*, 3-49
TU81
SYSGEN question, *System Generation*, 3-47
Magnetic tape formatter
TM02/03
SYSGEN question, *System Generation*, 3-39
Magnetic tape kit
contents, *System Generation*, 2-4
copying
on line, *System Generation*, 2-15 to 2-17
stand alone, *System Generation*, 2-8 to 2-11
under VAX–11 RSX, *System Generation*, 2-22 to 2-24
Magtape, *RMS-11 Macro*, 3-2, 5-43, 5-77, 5-88, 5-104, 5-111, 5-117
See also Magnetic tape
See also Medium
ANSI, *RMS-11 Macro*, 5-20, 5-37
MAGTAPE_BLOCK_SIZE
RMSDES utility, *RMS-11 Utilities*, 2-34
.MAIN.
default of .TITLE, *MACRO-11*, 5-10
/MAIN keyword
SET command, *MCR*, 3-171
MAN option
INI keyword /BAD, *MCR*, 3-85
/MAN switch
BAD utility, *Utilities*, 2-4
FMT utility, *Utilities*, 9-4
Map
debugging use, *Program Development*, 5-2, 5-8
examining at terminal, *Program Development*, 4-6
full, *Program Development*, 4-7
generating, *Program Development*, 4-5 to 4-7
reducing width, *Program Development*, 4-5, 4-6
stack limits, *Program Development*, 5-8
standard, *Program Development*, 4-5, 4-6
MAP$ directive, *Executive*, 5-146
Map Address Window directive, *Executive*, 5-145
Map area, *I/O Operations*, 5-5
file header block, *I/O Operations*, C-5
MAP attribute, *System Management*, 18-39 to 18-42
examples, *System Management*, 18-41
secondary mappings, *System Management*, 18-40
Map file
cross-reference listing, *Task Builder*, 10-12, 11-24
example, *Task Builder*, 10-12 to 10-14, 11-25 to 11-26
including global symbol, *Task Builder*, 11-66
long
specifying, *Task Builder*, 11-39
printing, *Task Builder*, 1-3, 1-7, 10-49, 11-51
short
example, *Task Builder*, 10-41 to 10-47, 11-40 to 11-42
specifying, *Task Builder*, 10-41
specifying, *Task Builder*, 10-29, 11-46
wide
specifying, *Task Builder*, 10-54, 11-71
MAP file type, *Program Development*, 4-6
<MAPPED> symbol, *Indirect*, 2-11
Mapped system, *Task Builder*, 2-15
addressing memory, *Task Builder*, 2-15
definition, *System Generation*, 1-11
Mapping, *Executive*, 3-2
data space, *Executive*, 3-3
directive
virtual program section, *Task Builder*, 5-67
instruction space, *Executive*, 3-3
privileged tasks, *Executive*, 3-19
supervisor mode, *Task Builder*, 2-25
window-to-region
returning current assignment, *Executive*, 5-131
Mapping pointer
file window, *System Management*, 1-9
Map-privileged task build
SYSGEN question, *System Generation*, 3-75
/MAP qualifier, *Task Builder*, 11-46
LINK command, *Program Development*, 6-6
Map Supervisor D-Space directive, *Executive*, 5-152
Map-supplied system task build
SYSGEN question, *System Generation*, 3-79

.MARK routine
save file position, *I/O Operations*, 4-22
MARKS routine, *Task Builder*, 4-19
Mark Time directive, *Executive*, 5-148
Mark time request
canceling, *Executive*, 5-40
Mask parameter
DIGO: subroutine (K-series), *I/O Drivers*, 13-14
DINP: subroutine (K-series), *I/O Drivers*, 13-15
DOUT: subroutine (K-series), *I/O Drivers*, 13-18
Mask register
See M register
Mask symbol
See Code and mask symbol
Mask word
creating, *Writing I/O Driver*, 4-20
I/O function, *Writing I/O Driver*, 4-20
MASSBUS
controller, *Writing I/O Driver*, 1-14
device-level module, *Error Logging*, 4-35
mixed configuration, *Error Logging*, 4-35
mixed device, *Writing I/O Driver*, 1-13
status flag, *System Management*, 4-13
Mass insertion, *RMS-11 User's Guide*, 2-18, 6-28, 7-9
populating indexed files, *RMS-11 User's Guide*, 6-29
Mass-insertion mode
RMSCNV utility, *RMS-11 Utilities*, 4-10
Mass Storage Control Protocol
See MSCP device
See MSCP-type controller
Master Command Table
See MCT
Master File Directory, *MCR*, 2-2, 3-81, 3-88, 3-89, 3-114, 3-208
See also MFD
/MA switch, *Task Builder*, 10-29
RMSCNV utility, *RMS-11 Utilities*, 4-10
TKB, *Program Development*, 4-7
Match criterion, *RMS-11 Intro*, 3-12
random access, *RMS-11 User's Guide*, 5-13
MAXBUF option, *Task Builder*, 12-24
/MAXEXT keyword
SET command, *MCR*, 3-172
SET command (VMR), *System Management*, 5-57
/MAXIMUM qualifier
BRU utility, *System Generation*, 2-10; *Utilities*, 3-19
Maximum record number
See also MRN
RMSDEF utility, *RMS-11 Utilities*, A-9
Maximum record size
RMSDEF utility, *RMS-11 Utilities*, A-9
/MAXPKT keyword
SET command, *MCR*, 3-172
MBC, *RMS-11 User's Guide*, 2-17
sequential files, *RMS-11 User's Guide*, 3-15
/MB switch
CMP utility, *Utilities*, 4-3
Mbuf parameter
IO.LOD function (LADRV), *I/O Drivers*, 12-26
.MCALL assembler directive, *RMS-11 Macro*, 2-2; *Executive*, 1-4
.MCALL directive, *I/O Drivers*, 1-17; *I/O Operations*, 2-2; *Program Development*, 1-10, 2-6, 3-4; *MACRO-11*, 6-21
for QIO, *I/O Drivers*, 1-4
overriding permanent symbol definitions, *MACRO-11*, 6-21
relationship to .LIBRARY, *MACRO-11*, 5-49, 6-21
summary, *MACRO-11*, 6-1
using with user macro library, *Program Development*, 6-3, 6-4
when required, *MACRO-11*, 6-21
.MCALL macro, *I/O Drivers*, 1-15
example, *I/O Drivers*, 1-17
MC argument
for .LIST/.NLIST, *MACRO-11*, 5-8
MCL argument
for .ENABL/.DSABL, *MACRO-11*, 5-14
MCR, *Program Development*, 1-2, 1-3; *System Management*, 17-2; *DCL*, 1-1 to 1-2; *Introduction*, 1-5, 5-1; *MACRO-11*, 7-1
as default CLI, *System Management*, 2-4
CLI commands
list of, *MCR*, 1-7
default prompt, *MCR*, 1-1, 2-13
description of keywords for, *MCR*, 1-2
explicit prompt, *MCR*, 1-1, 2-13
invoking, *MCR*, 2-13
function of, *MCR*, 1-1
initialization commands
list of, *MCR*, 1-5
input prompts, *MCR*, 2-13

MCR (cont'd.)
multiuser protection commands
list of, *MCR*, 1-7
processing command line, *MCR*, 1-4
QMG
command format, *System Management*, 3-15
naming conventions, *System Management*, 3-15
summary of commands, *MCR*, 1-5 to 1-7
system maintenance commands
list of, *MCR*, 1-7
task control commands
list of, *MCR*, 1-6
translator table
example, *System Management*, 18-16
MCR command, *System Management*, 18-4; *DCL*, 9-26
linking
ODT, *Debugging*, 1-2
ODTID, *Debugging*, 1-3
explicitly, *Debugging*, 1-4
supervisor-mode libraries, *Debugging*, 1-4
MCR command string format, *MACRO-11*, 7-4
MCR interface, *MCR*, 1-4
/MCR keyword
HELP command, *MCR*, 3-73
SET command, *MCR*, 3-172
MCR mode, *Indirect*, 2-54
MCR prompt, *MCR*, 2-16
/MC switch, *Indirect*, 2-33
/MC switch (Indirect), *Indirect*, 2-33
MCT
contents, *System Management*, 18-7
creating entry, *System Management*, 18-23
MD argument
for .LIST/.NLIST, *MACRO-11*, 5-8
.MDELETE directive, *MACRO-11*, 6-22
summary, *MACRO-11*, 6-1
/MD switch
DMP utility, *Utilities*, 5-6
ME argument
for .LIST/.NLIST, *MACRO-11*, 5-8
MEB argument
for .LIST/.NLIST, *MACRO-11*, 5-8
Media, *Introduction*, 6-8
Media failure
definition, *System Management*, 11-2
detecting, *System Management*, 11-2
Medium
and I/O time, *RMS-11 User's Guide*, 2-3
and record formats
file organizations, *RMS-11 User's Guide*, 1-20
and variable-length format, *RMS-11 User's Guide*, 2-15
disk
retrieval pointers, *RMS-11 User's Guide*, 8-11
usage, *RMS-11 User's Guide*, 8-13
magnetic tape, *RMS-11 User's Guide*, 1-18
file specification, *RMS-11 User's Guide*, A-4 to A-5
placement control, *RMS-11 User's Guide*, 6-13
sequential files, *RMS-11 User's Guide*, 3-3
Memory, *Introduction*, 6-5
See also Virtual memory management
address, *MCR*, 3-126
allocation, *System Management*, 1-2
cache, *Crash Dump Analyzer*, 3-44
compacting space
See SHF
dumping, *Task Builder*, D-1 to D-15
dynamic, *MCR*, 3-103, 3-143; *System Management*, 5-29, 8-1
allocating, *MCR*, 3-96
system requirements, *System Management*, 8-1
E command, *Debugging*, 6-2
examining memory location, *XDT*, 2-3
extending for task, *Task Builder*, 12-15
F command, *Debugging*, 6-4
fill command, *Debugging*, 2-7
fixing tasks in, *MCR*, 3-63
H register, *Debugging*, 2-6
L command, *Debugging*, 2-8, 6-4
limit register
high, *Debugging*, 5-3, 6-2
low, *Debugging*, 5-3, 6-2
listing
format, *Debugging*, 6-5
listing contents of
See L command
location
closing, *MCR*, 3-127
displaying, *MCR*, 3-126
inserting values in, *MCR*, 3-126
opening, *MCR*, 3-126
L register, *Debugging*, 2-6

Memory (cont'd.)
mapping, *MCR*, 2-19
N command, *Debugging*, 6-2
paging, *System Library*, 8-30
partition, *MCR*, 2-19; *Introduction*, 6-5
physical
addressing, *Task Builder*, 2-15
reducing use, *Task Builder*, 3-1
search command, *Debugging*, 2-7, 2-8, 2-9, 6-2
using efficiently, *MACRO-11*, F-1
W command, *Debugging*, 6-2
/MEMORY_MANAGEMENT qualifier, *Task Builder*, 11-47
Memory allocation, *MACRO-11*, 5-39
Memory allocation file
See Map file
Memory box
adding to configuration, *System Management*, 4-28
Memory compaction
definition, *System Management*, 1-4
Memory display
altering from MCR command line, *System Management*, 7-8
RMD
accessing, *System Management*, 7-4
description, *System Management*, 7-4
FREE command, *System Management*, 7-8
modifying, *System Management*, 7-8
RATE command, *System Management*, 7-8
setup commands, *System Management*, 7-8
symbols, *System Management*, 7-7
Memory error, *Error Logging*, 1-6
Memory failure, *System Management*, 11-5
Memory management, *System Library*, 7-1
See also Virtual memory management
core blocks release ($RLCB), *System Library*, 7-4
core blocks request ($RQCB), *System Library*, 7-3
directives, *Executive*, 3-1
data structures, *Executive*, 3-10
summary, *Executive*, 3-8
fixing tasks, *System Management*, 5-19
initialize ($INIDM), *System Library*, 7-2
system
specifying, *Task Builder*, 10-30, 11-47
Memory management (cont'd.)
use by task, *Task Builder*, 2-16
Memory management unit, *Task Builder*, 2-15
Memory parity error event
subpacket information, *Error Logging*, 4-66
Memory parity support, *System Management*, 1-7
Memory partition, *System Management*, 1-1
definition, *System Management*, 1-1
Memory region, *System Management*, 1-1
Memory-resident overlays, *RMS-11 User's Guide*, 1-13, 8-3, 8-6
/MEMSIZ, *Crash Dump Analyzer*, 2-8, 2-9
<MEMSIZ> symbol, *Indirect*, 2-19
M error
multiply defined label, *MACRO-11*, 1-3
redefine permanently assigned symbol, *MACRO-11*, 2-7
Message
See also Error messages
BPR, *System Management*, 3-51
command utilities, *RMS-11 Utilities*, C-1
Console Logging, *System Management*, 9-14
diagnostic
controlling, *Task Builder*, 10-33, 11-70
DTE, *Utilities*, C-10
EDI editor, *Utilities*, 7-53
invocation, *Debugging*, 1-5
MFT, *Utilities*, C-13
output despooler, *System Management*, 3-50
QMG command, *System Management*, 3-43
RMSDEF utility, *RMS-11 Utilities*, A-20
RMSDES utility, *RMS-11 Utilities*, 2-52
sending to task, *Task Builder*, 10-39, 11-53
system service, *MCR*, 3-200
utility
BAD, *Utilities*, 2-9
BRU, *Utilities*, 3-39
CMP, *Utilities*, 4-8
CRF, *Utilities*, B-6
DMP, *Utilities*, 5-10
DSC, *Utilities*, 6-21
FLX, *Utilities*, 8-16
LBR, *Utilities*, 10-32
PAT, *Utilities*, 11-8
SLP, *Utilities*, 13-20
VFY, *Utilities*, 14-9
warning
SHUTUP program, *System Management*, 6-2

Message formatting, *System Library*, 6-1
carriage return/line feed insertion, *System Library*, 6-12
date conversion ($DAT)
alternate format, *System Library*, 6-4
standard format, *System Library*, 6-3
edit directive ($EDMSG), *System Library*, 6-8
extended ASCII, *System Library*, 6-11
field mark, *System Library*, 6-14
filename string, *System Library*, 6-14
form-feed insertion, *System Library*, 6-11
general, *System Library*, 6-8
space insertion, *System Library*, 6-13
time conversion ($TIM), *System Library*, 6-6
uppercase text ($CVTUC), *System Library*, 6-1
/MESSAGE keyword
CLI command, *MCR*, 3-44
MESSAGE statement
CFL, *Error Logging*, 5-40
/MESSAGE subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-43
setting for /MESSAGE keyword, *MCR*, 3-44
/ME switch
PIP utility, *Program Development*, 4-4; *Utilities*, 12-21, 12-36
subswitches
/BL, *Utilities*, 12-37
/CO, *Utilities*, 12-37
/FO, *Utilities*, 12-37
/NV, *Utilities*, 12-37
/SU, *Utilities*, 12-37
Metalanguage, *System Management*, 18-8
category references, *System Management*, 18-9
exclusive-OR, *System Management*, 18-10
optional syntax indicators, *System Management*, 18-10
production rule, *System Management*, 18-9
adjective, *System Management*, 18-9
subject, *System Management*, 18-9
syntax tree, *System Management*, 18-9
.MEXIT directive, *MACRO-11*, 6-4
exit .IRP before normal completion, *MACRO-11*, 6-18
exit .IRPC before normal completion, *MACRO-11*, 6-19
.MEXIT directive (cont'd.)
exit .REPT before normal completion, *MACRO-11*, 6-21
summary, *MACRO-11*, 6-1
terminates macro before completion, *MACRO-11*, 6-4
valid in repeat blocks, *MACRO-11*, 6-4
MFD, *I/O Operations*, 5-2; *DCL*, 4-1, 4-2, 5-11
See also Master File Directory
use with separate Files–11 ACPs, *System Management*, 1-7
MFT, *System Management*, 1-19
copying files, *Utilities*, C-7
deleting files, *Utilities*, C-8
dependence on CLI, *Utilities*, C-7
file transfer algorithm, *Utilities*, C-7
installing for use with PFT, *Utilities*, C-7
messages, *Utilities*, C-13
performing file operations, *Utilities*, C-7
requirements, *Utilities*, C-1
use with DTE, *Utilities*, C-7
using MCR command syntax, *Utilities*, C-7
using with Professional 300 Series, *Utilities*, C-7
MFT/FORM command, *Utilities*, C-7
MFT command, *Utilities*, C-7
deleting files, *Utilities*, C-9
/DE option, *Utilities*, C-8
example, *Utilities*, C-8, C-9
option
/DE, *Utilities*, C-8
/REM, *Utilities*, C-7, C-8
/MH switch
LBR utility, *Utilities*, 10-23
Microcode loading
LADRV, *I/O Drivers*, 12-30
LPA11 (LADRV), *I/O Drivers*, 12-30
XEDRV, *I/O Drivers*, 10-21
Micro/RSX
incorporating a driver, *Writing I/O Driver*, 1-22, 5-15
Micro/RSX File Transfer Utility
See MFT
Minus sign (-)
complements switch in RSX command string, *MACRO-11*, 7-5
special character in MACRO–11, *MACRO-11*, 2-2
Minus sign operator (-), *MACRO-11*, 2-4
See Operator

Minus sign operator (-) (cont'd.)
subtraction operator, *MACRO-11*, 2-4
unary minus, *MACRO-11*, 2-4
Mixed MASSBUS
definition, *System Generation*, 1-11
SYSGEN question, *System Generation*, 3-36
MK11 memory box
excluding from system, *System Management*, 11-5
failure, *System Management*, 11-5
ML-11 disk emulator, *I/O Drivers*, 4-4
MLB file type, *Program Development*, 6-1
/ML switch
MAC command, *Program Development*, 6-4
RMSCNV utility, *RMS-11 Utilities*, 4-10
MML, *System Management*, 18-11
features, *System Management*, 18-8
literals, *System Management*, 18-14
nonliterals, *System Management*, 18-15
parser functions, *System Management*, 18-15
handling of literals, *System Management*, 18-14
handling of nonliterals, *System Management*, 18-15
translator functions, *System Management*, 18-15
handling of literals, *System Management*, 18-14
handling of nonliterals, *System Management*, 18-15
/MM switch, *Task Builder*, 10-30
Mnemonic device, *System Generation*, 2-3
MNLOAD subroutine, *Task Builder*, 4-9
Mode
See also Access mode
See also Addressing mode
See also Record transfer mode
change (XEDRV), *I/O Drivers*, 10-24
default bit (XEDRV), *I/O Drivers*, 10-25
user, *XDT*, 2-2
Modem
connecting computer systems, *Utilities*, C-1
dial command string, *Utilities*, C-5
null cable, *Utilities*, C-1
TTDRV, *I/O Drivers*, 2-84
autobaud, *I/O Drivers*, 2-84
autocall enable, *I/O Drivers*, 2-55
default answer speed, *I/O Drivers*, 2-21, 2-84
DZ11 remote line, *I/O Drivers*, 2-84
Modem
TTDRV (cont'd.)
setting answer speed, *I/O Drivers*, 2-84
Mode parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-9
LADRV, *I/O Drivers*, 12-4
CLOCKB: subroutine
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-7
DASWP: subroutine
K-series, *I/O Drivers*, 13-13
LADRV, *I/O Drivers*, 12-9
device-specific function
transmit (LRDRV), *I/O Drivers*, 11-5
DISWP: subroutine
K-series, *I/O Drivers*, 13-16
LADRV, *I/O Drivers*, 12-11
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-13
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
IO.CLK function (LADRV), *I/O Drivers*, 12-26
IO.STC function
transmitter (LRDRV), *I/O Drivers*, 11-6
MODIFY option
ACNT, *System Management*, 2-11
Module
control file
See Control file module
CPU-level
See CPU-level module
device-level
See Device-level module
dispatcher
See Dispatcher module
formatter
See Formatter module
notes
See Notes module
user-written
See User-written module
Module name, *Program Development*, 2-5, 6-5, 6-6
LBR requirement, *Error Logging*, 4-16
table, *Program Development*, 6-9
macro library, *Program Development*, 6-3

Module name
table (cont'd.)
object library, *Program Development*, 6-5, 6-6
MODULE statement
CFL, *Error Logging*, 5-31
NOTES module, *Error Logging*, 4-34
user-written module, *Error Logging*, 4-28
Module version, *Program Development*, 2-5
Modulus binary operator
CFL expression, *Error Logging*, 5-14
Monitor Console Routine
See MCR
MOU command
See also MOUNT command
keywords
/EXT, *System Management*, 1-8
/FOR
Shadow Recording preparation, *System Management*, 16-3
/LRU, *System Management*, 1-8
/WIN, *System Management*, 1-9
/MOU keyword
SAVE command, *MCR*, 3-149; *System Management*, 1-9
MOUNT command, *Batch and Queue*, 3-14; *MCR*, 3-108 ; *DCL*, 5-4, 5-12, 5-13, 5-46 to 5-62, 9-26 to 9-28
accessing a volume, *MCR*, 2-12
brief description, *MCR*, 1-5
default file protection and, *MCR*, 2-4
format, *MCR*, 3-110, 3-118; *System Management*, 15-2
function, *System Management*, 15-2
keywords
/ACP, *MCR*, 3-111, 3-119
/BS, *MCR*, 3-119
/CACHE, *MCR*, 3-111
/CC, *MCR*, 3-120
/DENS, *MCR*, 3-112, 3-120
/EXT, *MCR*, 3-112
/FOR, *MCR*, 2-12, 3-113, 3-120
/FPRO, *MCR*, 3-113, 3-120
/LOCK, *MCR*, 3-113, 3-120
/LRU, *MCR*, 3-114
/[NO]HDR3, *MCR*, 3-120
/[NO]LABEL, *MCR*, 3-120
/[NO]SHARE, *MCR*, 3-115, 3-122
/[NO]WAIT, *MCR*, 3-117, 3-124
/[NO]WRITE, *MCR*, 3-117, 3-124
/OVR, *MCR*, 3-114, 3-121
/OVRACC, *MCR*, 3-121
MOUNT command
keywords (cont'd.)
/OVREXP, *MCR*, 3-121
/OVRFSID, *MCR*, 3-121
/PARM, *MCR*, 3-114, 3-121
/PRO, *MCR*, 3-115, 3-122
/PUB, *MCR*, 3-115, 3-122
/RS, *MCR*, 3-122
/TR, *MCR*, 3-122
/UIC, *MCR*, 3-116, 3-123
/UNL, *MCR*, 3-116
/VI, *MCR*, 3-116, 3-123
/VOL, *MCR*, 3-123
/WIN, *MCR*, 3-117
parameters, *MCR*, 3-110; *System Management*, 15-2
qualifiers
/ACCESSED, *System Management*, 1-8
/CACHE, *System Management*, 15-2
/EXTENSION, *System Management*, 1-8
/FOREIGN, *DCL*, 5-10, 5-11, 5-13, 5-48
Shadow Recording preparation, *System Management*, 16-3
/[NO]SHAREABLE, *DCL*, 5-13, 5-50
/NOCACHE, *System Management*, 15-2
/NOLABEL, *DCL*, 5-55
/WINDOW, *System Management*, 1-9
using to modify file system, *System Management*, 1-8
Mount Device Transaction Block, *System Management*, 10-42
/MOUNTED qualifier
BRU utility, *Utilities*, 3-20
MOVE command
EDT editor, *Introduction*, 2-17
Move mode, *RMS-11 Intro*, 4-6; *I/O Operations*, 1-10
GET$ macro, *I/O Operations*, 3-18, 3-21
indexed files, *RMS-11 User's Guide*, 7-7
PUT$ macro, *I/O Operations*, 3-24, 3-26
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-13
Move to/from User/Supervisor I/D-Space directive, *Executive*, 5-155
/MP switch, *Task Builder*, 10-31
$MPUB1 routine, *Writing I/O Driver*, 7-27
$MPUBM routine, *Writing I/O Driver*, 7-27
M register, *Debugging*, 2-6, 5-3, 6-2

.MRKDL routine
marking temporary file for deletion, *I/O Operations*, 4-26
MRKS module, *Task Builder*, 4-16
MRKT$ directive, *Executive*, 5-148
MRN, *RMS-11 User's Guide*, 1-19
relative files, *RMS-11 User's Guide*, 4-4 to 4-5
MS.ADS address silo
transmitter (LRDRV), *I/O Drivers*, 11-5
MS.AUT autoaddressing
transmitter (LRDRV), *I/O Drivers*, 11-5
MSCP5X device-level module, *Error Logging*, 2-7, 2-8, 4-8, A-6
MSCP60 device-level module, *Error Logging*, 2-7, 4-8, A-6
MSCP80 device-level module, *Error Logging*, 4-8, A-6
MSCPAT device-level module, *Error Logging*, 2-7, 4-8, A-6
MSCPCE device-level module, *Error Logging*, 2-7, 4-9, A-6
MSCP device
bad block
handling, *System Management*, 13-3
replacement, *System Management*, 13-1
configuration, *System Management*, 13-3
MSCP DU-type devices, *Error Logging*, 4-6
MSCPEN device-level module, *Error Logging*, 2-7, 4-9, A-6
MSCPSD device-level module, *Error Logging*, 2-7, 4-9, A-6
MSCPTO device-level module, *Error Logging*, 2-7, 4-9, A-6
MSCP-type controller
SYSGEN question, *System Generation*, 3-45
MSDS$ directive, *Executive*, 5-153
MTADF$, *Crash Dump Analyzer*, C-46
$MUL (Integer multiply), *System Library*, 3-1
Multiblock count
See MBC
Multifile operation, *I/O Operations*, 5-7
Multinational character set, *MCR*, 3-4
Multiple access operation
database structures, *Writing I/O Driver*, 2-8, 2-12
Multiple access stream
and shared access, *RMS-11 User's Guide*, 2-9 to 2-10
I/O techniques, *RMS-11 User's Guide*, 2-17
indexed files, *RMS-11 User's Guide*, 7-10
relative files, *RMS-11 User's Guide*, 4-15
Multiple access stream (cont'd.)
sequential files, *RMS-11 User's Guide*, 3-15
Multiple buffers, *RMS-11 User's Guide*, 2-18
indexed files, *RMS-11 User's Guide*, 7-9
relative files, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-14
Multiple controller, *Writing I/O Driver*, 1-8
Multiplexer, *MCR*, 3-181, 3-184
DH11
SYSGEN question, *System Generation*, 3-58
Multiplication binary operator
CFL expression, *Error Logging*, 5-13
Multiplication operator
summary, *MACRO-11*, 2-4
Multiplication precedence class operator
CFL expression, *Error Logging*, 5-16
Multiply routine
double-precision multiply ($DMUL), *System Library*, 3-3
multiply ($MUL), *System Library*, 3-1
Multiport status flag, *System Management*, 4-13
Multiprocessor system
task issuing I/O request, *Writing I/O Driver*, 1-18
Multiprogramming, *MCR*, 2-19
Multirequest mode
LADRV, *I/O Drivers*, 12-1
Multistream spooling, *System Management*, 3-1
Multiuser protection commands, *MCR*, 1-7
Multiuser system, *Introduction*, 6-2
/MU switch, *Task Builder*, 10-32
/MUTE option
command
SET HOST/DTE, *Utilities*, C-5
Mutiprocessor system
standalone maintenance, *System Management*, 11-6
m variable, *Debugging*, 2-1
MVTS$ directive, *Executive*, 5-155
/MXF keyword
HOME command, *MCR*, 3-81
INITVOLUME command, *MCR*, 3-89

N

N.ANM1 field
ANSI filename string, *I/O Operations*, B-5

N.ANM2 field
remainder of ANSI filename string, *I/O Operations*, B-5
N.DID field
directory identification, *I/O Operations*, B-3
.PARSE routine, *I/O Operations*, 4-13
N.DVNM field, *I/O Operations*, 4-16
ASCII device name, *I/O Operations*, B-3
ASCII tape device name, *I/O Operations*, B-5
N.FID field
file identification, *I/O Operations*, B-3, B-5
.FIND routine, *I/O Operations*, 4-16
.PARSE routine, *I/O Operations*, 4-13
N.FNAM field
file name, *I/O Operations*, B-3
N.FTYP field
file type, *I/O Operations*, B-3
N.FVER field
file version number, *I/O Operations*, B-3
tape file version number, *I/O Operations*, B-5
N.NEXT field
context for next .FIND, *I/O Operations*, B-3
tape context for next .FIND, *I/O Operations*, B-5
N.STAT field
filename block status word, *I/O Operations*, B-3
tape filename block status word, *I/O Operations*, B-5
N.UNIT field
FNB (tape), *I/O Operations*, B-5
unit number field, *I/O Operations*, B-3
N0 parameter
RLSBUF: subroutine
K-series, *I/O Drivers*, 13-23
LADRV, *I/O Drivers*, 12-19
N$-family macro, *RMS-11 Macro*, 2-10
declaring, *RMS-11 Macro*, C-2
example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
NAM$B macro, *RMS-11 Macro*, 2-8, C-2
example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
NAM$E macro, *RMS-11 Macro*, 2-10
declaring, *RMS-11 Macro*, C-2
example, *RMS-11 Macro*, 7-3, 7-7, 7-11
NAM block, *RMS-11 Macro*, 5-73, 5-80, 5-95 to 5-96; *RMS-11 Intro*, 4-8
NAM block (cont'd.)
chaining to FAB, *RMS-11 Macro*, 2-11
declaring, *RMS-11 Macro*, 2-7
file specification, *RMS-11 User's Guide*, A-6
initializing, *RMS-11 Macro*, 2-9
PARSE operation, *RMS-11 Macro*, 5-87
summary, *RMS-11 Macro*, 6-94 to 6-107
NAME
file section, *RMS-11 Utilities*, 2-31
key section, *RMS-11 Utilities*, 2-38
/NAME:jobname qualifier
PRINT command, *Batch and Queue*, 2-3
NAME argument
for .PSECT, *MACRO-11*, 5-34
.NAME directive, *Task Builder*, 3-30
example, *Task Builder*, 3-31
/NAMED keyword
SET command, *MCR*, 3-173
Named variable
CFL, *Error Logging*, 5-8 to 5-9
/NAME keyword
HOME command, *MCR*, 3-81
/NAME log file qualifier
SUBMIT command, *Batch and Queue*, 3-15
/NAME qualifier
$PRINT card, *Batch and Queue*, 3-24
SHOW QUEUE command, *Batch and Queue*, 2-14
$SUBMIT card, *Batch and Queue*, 3-24
SUBMIT command, *Batch and Queue*, 3-15
/NAMES qualifier
LIBRARY command, *Program Development*, 6-10
Naming conventions
DCL, *System Management*, 3-15
MCR, *System Management*, 3-15
NAMOF$ macro, *RMS-11 Macro*, C-2
.NARG directive, *MACRO-11*, 6-13
summary, *MACRO-11*, 6-1
use to detect missing arguments, *MACRO-11*, 6-9
NB$-family symbol
declaring, *RMS-11 Macro*, C-2
NB conditional assembly test, *MACRO-11*, 5-45
only comma valid as separator, *MACRO-11*, 5-49
NBOF$L macro, *I/O Operations*, 2-31
Nbs parameter
device-specific function (tape driver), *I/O Drivers*, 6-7

Nbuf parameter
ADSWP: subroutine (K-series), *I/O Drivers*, 13-9
DASWP: subroutine
K-series, *I/O Drivers*, 13-13
LADRV, *I/O Drivers*, 12-9
DISWP: subroutine
K-series, *I/O Drivers*, 13-15
LADRV, *I/O Drivers*, 12-11
DOSWP: subroutine
K-series, *I/O Drivers*, 13-17
LADRV, *I/O Drivers*, 12-13
GTHIST: subroutine (K-series), *I/O Drivers*, 13-19
Nbu parameter
ADSWP: subroutine (LADRV), *I/O Drivers*, 12-3
Nchn parameter
ADSWP: subroutine
K-series, *I/O Drivers*, 13-10
LADRV, *I/O Drivers*, 12-5
DASWP: subroutine
K-series, *I/O Drivers*, 13-14
LADRV, *I/O Drivers*, 12-10
DISWP: subroutine (LADRV), *I/O Drivers*, 12-12
DOSWP: subroutine (LADRV), *I/O Drivers*, 12-14
ISTADC: subroutine (K-series), *I/O Drivers*, 13-25
SETADC: subroutine (LADRV), *I/O Drivers*, 12-20
.NCHR directive, *MACRO-11*, 6-14
summary, *MACRO-11*, 6-1
N command, *Debugging*, 2-8, 6-2, 6-3
NCT
TTDRV, *I/O Drivers*, 2-21
NDF conditional assembly test, *MACRO-11*, 5-45
Nearest Cylinder
definition, *Writing I/O Driver*, 1-17
NE conditional assembly test, *MACRO-11*, 5-45
Negation unary prefix operator
CFL expression, *Error Logging*, 5-14
:NE option
QUE /STA command, *System Management*, 3-37
N error
number not in current radix, *MACRO-11*, 2-13
Nes parameter
device-specific function (tape driver), *I/O Drivers*, 6-7
<NETNOD> symbol, *Indirect*, 2-25
<NETUIC> symbol, *Indirect*, 2-25
/NETUIC keyword
SET command, *MCR*, 3-173
SET command (VMR), *System Management*, 5-57
Network, *DCL*, 1-15
connecting to, *MCR*, 3-181
dial-up, *MCR*, 3-181
Network Command Terminal
See NCT
Network facility
RMSCNV utility, *RMS-11 Utilities*, 4-1
/NEW_LOG_FILE qualifier
SET ERROR_LOG command
SET ERROR_LOG command, *Error Logging*, 2-11
/NEW_VERSION qualifier
BRU utility, *Utilities*, 3-20
SET ERROR_LOG command, *Error Logging*, 2-4
SET ERROR-LOG command, *Error Logging*, 2-11
START/ERROR_LOG command, *Error Logging*, 2-4, 2-5
Next & Print command
EDI editor, *Utilities*, 7-31
/NEXT_JOB qualifier
START/PROCESSOR command, *System Management*, 3-37
Next command
EDI editor, *Utilities*, 7-30
Next command entry point, *Writing I/O Driver*, 4-60
Next-record context
See Context
NFS volume
error retries, *System Management*, 12-49
selecting for testing
IOX, *System Management*, 12-51, 12-58
NI definition
XEDRV, *I/O Drivers*, 10-27
NL device, *MCR*, 2-10, 2-11; *System Management*, 5-37
assigning CO to, *System Management*, 9-6
spooling to, *System Management*, 3-23
NLDRV, *I/O Drivers*, 8-1
example, *I/O Drivers*, 8-1
function, *I/O Drivers*, 8-1

.NLIST BEX directive, *Program Development*, 2-6
.NLIST directive, *MACRO-11*, 5-6
  overriding with command line options, *MACRO-11*, 5-8
  summary, *MACRO-11*, 5-2
  table of arguments, *MACRO-11*, 5-7
.NLIST TOC directive
  suppresses table of contents, *MACRO-11*, 5-11
NMBLK$ macro
  default filename block, *I/O Operations*, 2-29
  example, *I/O Operations*, 2-31
NML11 notes module, *Error Logging*, 4-9, A-7
/NM switch, *Task Builder*, 10-33
  PIP utility, *Utilities*, 12-21
  QUE /SP command, *System Management*, 3-23
/[NO]SERIAL qualifier
  SET TERMINAL command, *DCL*, 3-48
/[NO]SHAREABLE qualifier
  MOUNT command, *DCL*, 5-50
/[NO]CV switch
  RMSRST utility, *RMS-11 Utilities*, 7-10
/[NO]QU switch
  RMSBCK utility, *RMS-11 Utilities*, 6-5 to 6-7, 6-10
  RMSRST utility, *RMS-11 Utilities*, 7-6 to 7-8, 7-12
NO attribute, *System Management*, 18-43
NOAUTO option
  INI keyword /BAD, *MCR*, 3-85
/NOCACHE qualifier
  use with MOUNT command, *System Management*, 15-2
/NOCEX keyword
  SET command, *MCR*, 3-174
/NOCOPY qualifier
  DATA command, *Batch and Queue*, 3-6
NOCOTERM option
  SET /COLOG command, *System Management*, 9-6
.NOCROSS directive, *MACRO-11*, 5-16
  relationship to /C[R] or /CROSS option, *MACRO-11*, 5-16
  summary, *MACRO-11*, 5-2
Node, *DCL*, 1-15
  remote file specification, *RMS-11 User's Guide*, B-2
NODEFER_WRITES option, *System Management*, 15-5
/NODETAIL qualifier
  ANALYZE/ERROR_LOG command, *Error Logging*, 3-13, 3-19
    See also /FORMAT switch
NODIRECTORY option, *System Management*, 15-6
NODSK attribute, *Task Builder*, 3-30
/NOECHO option
  SET TERMINAL command, *Utilities*, C-3
/NOER switch
  RMSIFL utility, *RMS-11 Utilities*, 3-6
NOGBL attribute, *Task Builder*, 3-30
/NOINITIALIZE qualifier
  BRU utility, *Utilities*, 3-21
/NOLABEL qualifier
  MOUNT command, *DCL*, 5-55
Nolabel tape block size
  tape driver, *I/O Drivers*, 6-17
/NOLIMITING qualifier
  SET ERROR_LOG command, *Error Logging*, 2-9
    See also /-LIMIT switch
  START/ERROR_LOG command, *Error Logging*, 2-5
    See also /LOG switch
/NOLOGFILE option
  SET /COLOG command, *System Management*, 9-8
NOLOGICAL option, *System Management*, 15-6
/NOLOG switch
  ELI, *Error Logging*, 2-7, 2-9
    See also STOP/ERROR_LOG command
/NOLO switch
  QUE /SP command, *System Management*, 3-24
/NOLOW job switch
  QUE /MOD command, *Batch and Queue*, 2-19
/NOLOW switch
  PRI command, *Batch and Queue*, 2-3
Non-DIGITAL device
  driver support, *Error Logging*, 4-21
  error logging, *Error Logging*, 4-27
Nonexternal header, *Writing I/O Driver*, 6-7
Nonoverlaid routines, *RMS-11 User's Guide*, 1-13, 8-2, 8-8 to 8-9
Non-pool-resident, *Writing I/O Driver*, 6-7
  header, *Writing I/O Driver*, 6-9

Nonrecoverable error, *System Management*, 11-3
Non-RMS-11 files, *RMS-11 Intro*, 3-4
Nonsense interrupt logging, *Error Logging*, 4-23
/NOOBJECT qualifier
  FORTRAN command, *Program Development*, 7-3
  MACRO command, *Program Development*, 3-1, 3-7
No-op function mask, *Writing I/O Driver*, 4-18, 4-19
NOOVERLAY option, *System Management*, 15-6
/NOPRESERVE qualifier
  BRU utility, *Utilities*, 3-21
NOREAD_AHEAD option, *System Management*, 15-6
No report format
  RPT, *Error Logging*, 3-19
NOSAV argument
  for .PSECT, *MACRO-11*, 5-36
NO SCROLL command, *Program Development*, 3-6
NO SCROLL key, *DCL*, 3-15; *Introduction*, 1-16
/NOSO switch
  RMSIFL utility, *RMS-11 Utilities*, 3-8 to 3-10
No spool switch
  See /-SP
/NOSUPERSEDE qualifier
  BRU utility, *Utilities*, 3-21
Notes module
  device name, *Error Logging*, 4-34
  example, *Error Logging*, 4-60 to 4-61
  exiting, *Error Logging*, 4-35
  flow of, *Error Logging*, 4-34
  heading, *Error Logging*, 4-35
  MODULE statement, *Error Logging*, 4-34
  naming requirements, *Error Logging*, 4-34
  printing, *Error Logging*, 4-35
  procedures, *Error Logging*, 4-34 to 4-35
  PROCEDURE statement, *Error Logging*, 4-34
  table of, *Error Logging*, 4-9
  trapping unknown numbers, *Error Logging*, 4-35
  writing, *Error Logging*, 4-34 to 4-35
/NOVE switch
  FMT utility, *Utilities*, 9-4
NOVIRTUAL option, *System Management*, 15-6
/NOWARNINGS qualifier
  INITIALIZE/PROCESSOR command, *System Management*, 3-23
N parameter
  RMVBUF: subroutine
    K-series, *I/O Drivers*, 13-24
    LADRV, *I/O Drivers*, 12-20
NPR device
  drivers for (on PDP–11), *Writing I/O Driver*, 7-2
NRK67 notes module, *Error Logging*, 4-9, A-7
NRM05 notes module, *Error Logging*, 4-9, A-7
NRM23 notes module, *Error Logging*, 4-9, 4-60 to 4-61, A-7
NRZI even parity (tape driver), *I/O Drivers*, 6-15
/NSF keyword
  FIX command (VMR), *System Management*, 5-19
$NSIER Executive routine, *Error Logging*, 4-23
/NS switch
  SLP utility, *Utilities*, 13-15
NT0310 notes module, *Error Logging*, 4-9, A-7
NTS11 notes module, *Error Logging*, 4-9, A-7
.NTYPE directive, *MACRO-11*, 6-15
  summary, *MACRO-11*, 6-2
NULL_KEY
  RMSDES utility, *RMS-11 Utilities*, 2-39
NULL_VALUE
  RMSDES utility, *RMS-11 Utilities*, 2-39
Null character
  cannot follow single or double quotation mark, *MACRO-11*, 5-19
Null device
  See NL device
Null device driver
  See NLDRV
Null key, *RMS-11 User's Guide*, 6-10; *RMS-11 Intro*, 3-10
/NULL qualifier
  initializing CLI with, *System Management*, 17-3
/NULL subkeyword
  COMMAND LINE INTERPRETER command, *MCR*, 3-43
<NUMBER> symbol, *Indirect*, 2-11
Number sign (#)
  in cross-reference table, *MACRO-11*, 7-15

Number sign (#) (cont'd.)
signifies octal number in RSX command string, *MACRO-11*, 7-5
special character in MACRO–11, *MACRO-11*, 2-2
used in absolute addressing mode, *MACRO-11*, 4-6
used in immediate addressing mode, *MACRO-11*, 4-5
Numeric data type
CFL, *Error Logging*, 5-5 to 5-7
Numeric expression, *Indirect*, 2-26
Numeric literal
CFL, *Error Logging*, 5-6
Numeric operator
CFL expression, *Error Logging*, 5-13 to 5-16
binary, *Error Logging*, 5-16
Numeric symbol, *Indirect*, 2-9, 2-26
comparing, *Indirect*, 2-66
decrementing, *Indirect*, 2-50
defining, *Indirect*, 2-41
incrementing, *Indirect*, 2-72
radix, *Indirect*, 2-27
setting, *Indirect*, 2-89
setting, *Indirect*, 2-88
substituting, *Indirect*, 2-27
testing, *Indirect*, 2-68
Numeric to ASCII conversion, *System Library*, 5-2
See also ASCII number conversion
binary byte to octal ($CBTMG), *System Library*, 5-10
binary date to decimal ($CBDAT), *System Library*, 5-2
binary to signed decimal ($CBDSG), *System Library*, 5-5
binary to signed octal ($CBOSG), *System Library*, 5-9
binary to unsigned decimal ($CBDMG), *System Library*, 5-3
binary to unsigned octal ($CBOMG), *System Library*, 5-8
double-precision binary to decimal ($CDDMG), *System Library*, 5-6
general purpose binary to ASCII ($CBTA), *System Library*, 5-12
Radix-50 to ASCII ($C5TA), *System Library*, 5-13
/NU switch
FLX utility, *Utilities*, 8-8
n variable, *Debugging*, 2-1; *XDT*, 2-10
/NV subswitch
/NV subswitch (cont'd.)
PIP utility, *Utilities*, 12-37
<NXTSYM> symbol, *Indirect*, 2-25

O

O$-family symbol
declaring
ALL block, *RMS-11 Macro*, C-3 to C-4
DAT block, *RMS-11 Macro*, C-3 to C-4
FAB field offset, *RMS-11 Macro*, C-1
KEY block, *RMS-11 Macro*, C-3 to C-4
NAM block field offset, *RMS-11 Macro*, C-2
PRO block, *RMS-11 Macro*, C-3 to C-4
RAB, *RMS-11 Macro*, C-2
SUM block, *RMS-11 Macro*, C-3 to C-4
XAB, *RMS-11 Macro*, C-4
value
ALL block, *RMS-11 Macro*, 6-2
NAM block, *RMS-11 Macro*, 6-94
PRO block, *RMS-11 Macro*, 6-108
RAB, *RMS-11 Macro*, 6-103
SUM block, *RMS-11 Macro*, 6-145
/OA switch
RMSRST utility, *RMS-11 Utilities*, 7-9 to 7-10
Object code
assembling, *RMS-11 User's Guide*, 1-13, 8-1
compiling, *RMS-11 User's Guide*, 1-13, 8-1
Object file, *DCL*, 6-4
Object library
adding modules, *Program Development*, 6-9
creating a user, *Program Development*, 6-4, 6-6
default search of system, *Program Development*, 1-11, 4-2
DIGITAL-supplied, *Program Development*, 1-11
dual use, *Program Development*, 6-8
EXELIB.OLB, *Program Development*, 1-11
listing information, *Program Development*, 6-10, 6-11
OTS, *Program Development*, 7-1, 7-2
RMSLIB.OLB, *Program Development*, 1-11
SYSLIB.OLB, *Program Development*, 1-11
using to resolve undefined global symbols, *Program Development*, 6-7, 6-8
VMLIB.OLB, *Program Development*, 1-11
Object module, *Introduction*, 5-3, 5-5, 5-10
concatenated, *Program Development*, 4-3, 4-4

Object module (cont'd.)
creating, *Task Builder*, A-1 to A-36
FORTRAN IV, *Program Development*, 7-5
including, *Task Builder*, 11-36
input to TKB, *Program Development*, 4-1
linking, *Task Builder*, 2-2
MACRO-11, *Program Development*, 1-5, 3-4, 3-5, 3-6
patching, *Utilities*, 11-1
record types, *Task Builder*, A-1
relocatable, *Task Builder*, 2-2
specifying concatenated, *Task Builder*, 10-7, 11-23
storing in library, *Utilities*, 10-20
system library, *Introduction*, 5-10
Object module library, *I/O Drivers*, 1-7; *DCL*, 6-33
specifying for task, *Task Builder*, 10-26, 11-28, 11-38
Object Module Patch Utility
See PAT utility
/OBJECT qualifier
FORTRAN command, *Program Development*, 7-3, 7-7
LIBRARY command, *Program Development*, 6-2, 6-4
MACRO command, *Program Development*, 3-4
Object Time System
See OTS
OBJ file type, *Program Development*, 3-4, 7-5
Obsolete
command line options, *MACRO-11*, I-1
directives, *MACRO-11*, I-1
O command, *Debugging*, 2-9, 7-2; *XDT*, 2-14
ZAP utility, *Utilities*, 15-18
OCOP attribute, *System Management*, 18-35
<OCTAL> symbol, *Indirect*, 2-11
Octal conversion
octal to binary
doubleword(.OD2CT), *System Library*, 4-3
octal to binary($COTB), *System Library*, 4-6
Octal number
specifying, *MCR*, 1-2
Octal operator, *Debugging*, 2-3, 2-6, 2-7
byte mode, *XDT*, 2-12
word mode, *XDT*, 2-12
OCTAL print radix
CFL, *Error Logging*, 5-5
Octal radix
initial default for numbers, *MACRO-11*, 2-13
/OCT switch
DMP utility, *Utilities*, 5-6
.OD2CT (Octal to binary doubleword), *System Library*, 4-3
Odd address
at end of program sections, *MACRO-11*, 5-39
.ODD directive, *MACRO-11*, 5-31
changes current location counter, *MACRO-11*, 5-31
summary, *MACRO-11*, 5-2
ODL, *Task Builder*, 3-25 to 3-32
directives, *Task Builder*, 3-25
file, *Task Builder*, 3-25
command line, *Task Builder*, 3-25
creating, *Task Builder*, 3-39
specifying, *Task Builder*, 10-31, 11-49
indirect command file, *Task Builder*, 3-32
multiple tree
example, *Task Builder*, 3-33
operators, *Task Builder*, 3-26, 3-29
summary, *Task Builder*, 3-54 to 3-56
ODT, *MCR*, 3-49; *Program Development*, 1-7
assigning device LUN, *Debugging*, 1-4
at sign, *Program Development*, 5-8
backslash (\), *Program Development*, 5-5
B command, *Program Development*, 5-6
breakpoint register, *Program Development*, 5-6
changing location contents, *Program Development*, 5-7
correcting input, *Program Development*, 5-3
dollar sign ($), *Program Development*, 5-6, 5-7, 5-8
error conditions in task, *Program Development*, 5-8
examining locations, *Program Development*, 5-4
exiting, *Debugging*, 1-5
forming address, *Program Development*, 5-4
G command, *Program Development*, 5-6, 5-8
including in a task, *Program Development*, 5-1, 5-2
invoking, *Debugging*, 1-5
LINE FEED key
closing location, *Program Development*, 5-5, 5-7

ODT
LINE FEED key (cont'd.)
displaying word on stack, *Program Development*, 5-8
opening location, *Program Development*, 5-5, 5-7
linking, *Debugging*, 1-2
map use, *Program Development*, 5-2
ODT.OBJ file, *Program Development*, 5-1
overview, *Debugging*, 1-1
P command, *Program Development*, 5-7
question mark (?), *Program Development*, 5-3
R command, *Program Development*, 5-3
redirecting output, *Debugging*, 1-4
relocation register, *Program Development*, 5-2
setting breakpoints, *Program Development*, 5-6
setting up a task with, *Program Development*, 1-7
slash (/), *Program Development*, 5-4
source listing use, *Program Development*, 5-4
SST vector
declaring address, *Task Builder*, 12-25
SST within, *Program Development*, 5-8
terminating task execution, *Program Development*, 5-8
underline (_) prompt, *Program Development*, 5-2
X command, *Program Development*, 5-8
ZAP utility, *Utilities*, 15-1
ODTID module, *Debugging*, 1-3
ODTV option, *Task Builder*, 12-25
O error
.END, *MACRO-11*, 5-33
.ENDC, *MACRO-11*, 5-46
.IF directive nesting, *MACRO-11*, 5-46
.IFF, .IFT, .IFTF, *MACRO-11*, 5-46
.MCALL, *MACRO-11*, 6-22
.MDELETE, *MACRO-11*, 6-22
.MEXIT, *MACRO-11*, 6-4
.NARG, *MACRO-11*, 6-13
.NTYPE, *MACRO-11*, 6-15
OFFLINE ALL command, *System Management*, 4-23
OFFLINE command, *System Management*, 4-22
example, *System Management*, 4-24, 4-25
format, *System Management*, 4-23, 4-25
requirements, *System Management*, 4-24
OFFLINE MEMORY command, *System Management*, 4-25
Offline state
definition, *System Management*, 4-5
Offline status flag, *System Management*, 4-13
$OFF macro, *RMS-11 Macro*, 2-11
OFF option
SET /COLOG command, *System Management*, 9-5
Offset, *Debugging*, 2-3
branch, *Debugging*, 7-2
calculating, *Debugging*, 2-9, 7-2; *XDT*, 2-14
instruction and data space, *Debugging*, 7-2
negative, *Debugging*, 7-2
PC-relative, *Debugging*, 7-2; *XDT*, 2-14
positive, *Debugging*, 7-2
symbolic
establishing, *Task Builder*, 5-19
Offset mode, *Crash Dump Analyzer*, 3-1
Offspring task
enabling (VTDRV), *I/O Drivers*, 3-5
VTDRV, *I/O Drivers*, 3-1
OFID$ macro, *I/O Operations*, 3-1
OFID$x macro
file processing, *I/O Operations*, 3-13
OFNB$ macro, *I/O Operations*, 3-1
OFNB$x macro
data-set descriptor, *I/O Operations*, 3-15
default filename block, *I/O Operations*, 3-15
file processing, *I/O Operations*, 3-14
OLB file type, *Program Development*, 6-4
See also LBR utility
OLRDF$, *Crash Dump Analyzer*, C-49
ON command
See also STOP, CONTINUE, and GOTO commands
default setting, *Batch and Queue*, 3-10
example, *Batch and Queue*, 3-10
format, *Batch and Queue*, 3-10
.ONERR directive, *Indirect*, 2-74
ONLINE ALL command, *System Management*, 4-26
Online backup
description, *System Management*, 16-1
ONLINE command, *System Management*, 4-26
examples, *System Management*, 4-27
formats, *System Management*, 4-26
restrictions, *System Management*, 4-27

On-Line Debugging Tool
See ODT
Online help file
See Help file
ONLINE MEMORY command, *System Management*, 4-28
example, *System Management*, 4-28
format, *System Management*, 4-28
Online state
definition, *System Management*, 4-5
status flag, *System Management*, 4-13
transition to, *System Management*, 4-26
Online system
definition, *System Generation*, 1-11
ON option
SET /COLOG command, *System Management*, 9-5
OOB
TTDRV
clear, *I/O Drivers*, 2-64
hello, *I/O Drivers*, 2-64
include, *I/O Drivers*, 2-64
^O operator
for temporary octal radix, *MACRO-11*, 5-26
OPE command
See OPENREGISTER command
OPEN$ macro, *I/O Operations*, 3-1
example, *I/O Operations*, 5-10
file processing, *I/O Operations*, 3-16
OPEN$R macro
example, *I/O Operations*, 5-9
shared access, *I/O Operations*, 1-14
OPEN$x macro
file processing, *I/O Operations*, 3-3, 3-8
format
file operations, *I/O Operations*, 3-5
.OPENA directive, *Indirect*, 2-78
OPEN command, *XDT*, 1-9
.OPEN directive, *Indirect*, 2-76
Open file processing, *I/O Operations*, 3-4
Open file routine
by filename block, *I/O Operations*, 3-14
by ID, *I/O Operations*, 3-13
existing, *I/O Operations*, 3-9
for access, *I/O Operations*, 3-16
for modifying, *I/O Operations*, 3-17
for reading, *I/O Operations*, 3-16
for updating and extending, *I/O Operations*, 3-17
new, *I/O Operations*, 3-9
no supersede, *I/O Operations*, 3-16, 3-17
Open line
XEDRV, *I/O Drivers*, 10-5
OPEN LINE function
EDT editor, *Introduction*, 2-8
$OPEN macro, *RMS-11 Macro*, 5-72
OPEN operation, *RMS-11 Macro*, 3-8, 5-66, 5-68 to 5-71, 5-73; *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
BDB requirement, *RMS-11 Macro*, 2-8
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
$OPEN macro, *RMS-11 Macro*, 5-72
remote access, *RMS-11 User's Guide*, B-2 to B-3
wildcard loop, *RMS-11 Macro*, 3-11
.OPENR directive, *Indirect*, 2-80
OPENREGISTER command, *MCR*, 3-126
brief description, *MCR*, 1-7
format, *MCR*, 3-126
keywords
/AFF, *MCR*, 3-127
/CPU, *MCR*, 3-127
/DRV, *MCR*, 3-128
/KNL, *MCR*, 3-128
/KNLD, *MCR*, 3-128
/KNLI, *MCR*, 3-128
/REG, *MCR*, 3-128
/TASK, *MCR*, 3-128
/TASKD, *MCR*, 3-128
/TASKI, *MCR*, 3-128
parameters, *MCR*, 3-126
Open Secondary command
EDI editor, *Utilities*, 7-31
Operand field
definition of, *MACRO-11*, 1-4
valid formats, *MACRO-11*, 1-4
valid terminators, *MACRO-11*, 1-4
Operating mode
defaults, *Indirect*, 2-53
disabling, *Indirect*, 2-52
enabling, *Indirect*, 2-53
list, *Indirect*, 2-53
testing, *Indirect*, 2-69
Operating procedure (RSTS/RT-11), *MACRO-11*, 8-1
Operating system, *RMS-11 User's Guide*, 1-13; *Introduction*, 1-1, 5-1
See also System
allocating system resources, *RMS-11 User's Guide*, 8-13
block locking, *RMS-11 User's Guide*, 3-6

Operating system (cont'd.)
compatibility, *RMS-11 User's Guide*, 3-4
defaults, *RMS-11 User's Guide*, 2-2
FALs, *RMS-11 User's Guide*, B-3
multiuser, *Introduction*, 6-2
protection codes
and shared access, *RMS-11 User's Guide*, 2-5
real-time, *Introduction*, 6-2
remote access
RSTS/E, *RMS-11 User's Guide*, B-3
RSX-11M/M-PLUS, *RMS-11 User's Guide*, B-3
VAX/VMS, *RMS-11 User's Guide*, B-1 to B-3
return to, *Debugging*, 2-10
Operation, *RMS-11 Macro*, 1-2; *RMS-11 Intro*, 4-1
asynchronous, *RMS-11 User's Guide*, 2-17, 3-14, 4-14, 7-8, 8-2, 8-4, 8-7 to 8-8
block, *RMS-11 Intro*, 4-7
block stream, *RMS-11 Macro*, 4-12
CLOSE, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
CONNECT, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
indexed files, *RMS-11 User's Guide*, 7-2
relative files, *RMS-11 User's Guide*, 4-7
sequential files, *RMS-11 User's Guide*, 3-7
CREATE, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
and shared access, *RMS-11 User's Guide*, 2-6
file versions, *RMS-11 User's Guide*, A-3
remote access, *RMS-11 User's Guide*, B-2 to B-3
DELETE, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and key position, *RMS-11 User's Guide*, 6-7
and shared access, *RMS-11 User's Guide*, 2-6
deferred write, *RMS-11 User's Guide*, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 5-15, 7-3
relative files, *RMS-11 User's Guide*, 4-7
directory, *RMS-11 User's Guide*, 1-17; *RMS-11 Intro*, 4-1

Operation
directory (cont'd.)
indexed files, *RMS-11 User's Guide*, 7-10
relative files, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-15
DISCONNECT, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
indexed files, *RMS-11 User's Guide*, 7-3
relative files, *RMS-11 User's Guide*, 4-8
sequential files, *RMS-11 User's Guide*, 3-7
DISPLAY, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
ERASE, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
remote access, *RMS-11 User's Guide*, B-2
EXTEND, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
and shared access, *RMS-11 User's Guide*, 2-6
file, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
indexed files, *RMS-11 User's Guide*, 7-10
optimizations, *RMS-11 User's Guide*, 8-10
relative files, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-15
FIND, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and bucket locking, *RMS-11 User's Guide*, 2-8
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-16
deferred write, *RMS-11 User's Guide*, 7-9
indexed files, *RMS-11 User's Guide*, 5-13, 5-17, 7-3
key access, *RMS-11 User's Guide*, 1-16
relative files, *RMS-11 User's Guide*, 4-8
RFA access, *RMS-11 User's Guide*, 1-16
sequential access, *RMS-11 User's Guide*, 1-16

Operation
FIND (cont'd.)
sequential files, *RMS-11 User's Guide*, 3-7
FLUSH, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
relative files, *RMS-11 User's Guide*, 4-10
sequential files, *RMS-11 User's Guide*, 3-9
FREE, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and shared access, *RMS-11 User's Guide*, 2-10
from high-level languages, *RMS-11 Intro*, 4-7
GET, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and bucket locking, *RMS-11 User's Guide*, 2-8
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-16 to 2-17
deferred write, *RMS-11 User's Guide*, 7-9
indexed files, *RMS-11 User's Guide*, 5-13, 5-17
key access, *RMS-11 User's Guide*, 1-16
locate mode, *RMS-11 User's Guide*, 3-14, 4-13, 7-8
move mode, *RMS-11 User's Guide*, 3-13, 4-12, 7-7
relative files, *RMS-11 User's Guide*, 4-10
RFA access, *RMS-11 User's Guide*, 1-16
sequential access, *RMS-11 User's Guide*, 1-16
sequential files, *RMS-11 User's Guide*, 3-9
OPEN, *RMS-11 User's Guide*, 1-18; *RMS-11 Intro*, 4-2
remote access, *RMS-11 User's Guide*, B-1 to B-2
optimizations, *RMS-11 User's Guide*, 8-10
PARSE, *RMS-11 Intro*, 4-1
PUT, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and key position, *RMS-11 User's Guide*, 6-7

Operation
PUT (cont'd.)
and shared access, *RMS-11 User's Guide*, 2-6
and stream records, *RMS-11 User's Guide*, 2-17
deferred write, *RMS-11 User's Guide*, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 5-10, 5-17, 7-5, 7-9
initial allocation, *RMS-11 User's Guide*, 4-4
key access, *RMS-11 User's Guide*, 1-16
locate mode, *RMS-11 User's Guide*, 3-14
mass insertion, *RMS-11 User's Guide*, 7-9
move mode, *RMS-11 User's Guide*, 3-13, 4-12, 7-7
relative files, *RMS-11 User's Guide*, 4-11
sequential access, *RMS-11 User's Guide*, 1-16
sequential files, *RMS-11 User's Guide*, 3-10
READ, *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
record, *RMS-11 User's Guide*, 1-10, 1-15; *RMS-11 Intro*, 4-4
and I/O costs, *RMS-11 User's Guide*, 5-17
and indexed files, *RMS-11 User's Guide*, 5-16
indexed files, *RMS-11 User's Guide*, 7-2
optimizations, *RMS-11 User's Guide*, 8-10
relative files, *RMS-11 User's Guide*, 4-7
sequential files, *RMS-11 User's Guide*, 3-7
REWIND, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
indexed files, *RMS-11 User's Guide*, 7-6
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-11
routine
calling, *RMS-11 Macro*, 2-14
return, *RMS-11 Macro*, 2-15
SEARCH, *RMS-11 Intro*, 4-1

Operation (cont'd.)
SPACE, *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
stream, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
indexed files, *RMS-11 User's Guide*, 7-2
relative files, *RMS-11 User's Guide*, 4-7
sequential files, *RMS-11 User's Guide*, 3-7
synchronous, *RMS-11 User's Guide*, 8-2
TRUNCATE, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and shared access, *RMS-11 User's Guide*, 2-6
sequential files, *RMS-11 User's Guide*, 3-12
UPDATE, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and record size, *RMS-11 User's Guide*, 2-16
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-17
changeable keys, *RMS-11 User's Guide*, 6-10
deferred write, *RMS-11 User's Guide*, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 5-14, 7-6
move mode, *RMS-11 User's Guide*, 3-13 to 3-14, 4-12 to 4-13, 7-7 to 7-8
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-12
using, *RMS-11 Macro*, 2-10
WRITE, *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
and shared access, *RMS-11 User's Guide*, 2-6
Operation macro, *RMS-11 Macro*, 1-2, 2-10
Operator, *Debugging*, 2-3, 2-4
See also SLP utility
apostrophe ('), *Debugging*, 2-6, 4-6; *XDT*, 2-12
arithmetic, *Debugging*, 2-3
ASCII
byte mode, *Debugging*, 4-6
Operator
ASCII (cont'd.)
word mode, *Debugging*, 4-6
backslash (\ ), *Debugging*, 2-7, 4-2, 4-3; *XDT*, 2-12
byte mode
ASCII, *Debugging*, 2-6; *XDT*, 2-12
octal, *Debugging*, 2-7, 4-2; *XDT*, 2-12
CFL expression, *Error Logging*, 5-9 to 5-16
equal sign (=), *Debugging*, 7-2
minus sign (-), *Debugging*, 2-3, 2-4; *XDT*, 2-10
ODL, *Task Builder*, 3-26
comma (,), *Task Builder*, 3-26
exclamation point (!), *Task Builder*, 3-26, 3-29
hyphen (-), *Task Builder*, 3-26
percent sign (%), *Debugging*, 2-6, 4-7; *XDT*, 2-12
plus sign (+), *Debugging*, 2-3, 2-4; *XDT*, 2-10
quotation mark ("), *Debugging*, 2-6, 4-6; *XDT*, 2-12
Radix–50
word mode, *Debugging*, 4-7
slash, *Debugging*, 4-3
slash (/), *Debugging*, 2-6, 4-2; *XDT*, 2-12
space, *XDT*, 2-10
word mode
ASCII, *Debugging*, 2-6; *XDT*, 2-12
octal, *Debugging*, 2-6, 4-2; *XDT*, 2-12
Radix–50, *Debugging*, 2-6; *XDT*, 2-12
Operator field
definition of, *MACRO-11*, 1-3
implicit .WORD if blank, *MACRO-11*, 5-18
valid formats, *MACRO-11*, 1-3
valid terminators, *MACRO-11*, 1-3
OPNS$ macro, *I/O Operations*, 3-1
OPNS$R macro
shared access, *I/O Operations*, 1-13
OPNS$x macro
file processing, *I/O Operations*, 3-11
OPNT$D macro, *I/O Operations*, 3-13
OPNT$ macro, *I/O Operations*, 3-1
OPNT$W macro
file processing, *I/O Operations*, 3-12
Optimization
allocating system resources, *RMS-11 User's Guide*, 8-13
application design, *RMS-11 User's Guide*, 2-11

Optimization (cont'd.)
DELETE operation, *RMS-11 User's Guide*, 6-7
disk usage, *RMS-11 User's Guide*, 8-13
operations, *RMS-11 User's Guide*, 8-10
overlays, *RMS-11 User's Guide*, 8-1
program development, *RMS-11 User's Guide*, 8-9
PUT operation, *RMS-11 User's Guide*, 6-7
task building, *RMS-11 User's Guide*, 8-10
virtual-to-logical block mapping, *RMS-11 User's Guide*, 8-11
window turning, *RMS-11 User's Guide*, 8-12
Option, *Task Builder*, 1-9
See also individual option entries
entering, *Task Builder*, 1-9
general form, *Task Builder*, 1-10
including in indirect command file, *Task Builder*, 1-12
list of obsolete, *MACRO-11*, I-1
TKB
categories, *Task Builder*, 12-1
prompting for, *Task Builder*, 11-48
/OPTION qualifier, *Task Builder*, 11-48
/OPT keyword
SET command, *MCR*, 3-174
SET command (VMR), *System Management*, 5-57
ORG$ macro, *RMS-11 Macro*, 2-2
ORGANIZATION
RMSDES utility, *RMS-11 Utilities*, 2-31
Organization
See File organization
OR operator
special meaning within .IF/NDF conditional, *MACRO-11*, 5-45
summary, *MACRO-11*, 2-4
OTS
Fast Map routine, *Task Builder*, 4-19
library, *Program Development*, 7-1, 7-2
Outfile
RMSBCK utility, *RMS-11 Utilities*, 6-3
RMSCNV utility, *RMS-11 Utilities*, 4-4
RMSDSP utility, *RMS-11 Utilities*, 5-3
RMSIFL utility, *RMS-11 Utilities*, 3-3
RMSRST utility, *RMS-11 Utilities*, 7-3
/OUT keyword
HELP command, *MCR*, 3-73
Out-of-band character set
See OOB
Output
buffer
intermediate (TTDRV), *I/O Drivers*, 2-81
initiating
single analog (K-series), *I/O Drivers*, 13-7
resuming by CTRL/Q (TTDRV), *I/O Drivers*, 2-71
suppressing (TTDRV), *I/O Drivers*, 2-71
suspending by CTRL/S (TTDRV), *I/O Drivers*, 2-71
Output file switch
RMSBCK utility, *RMS-11 Utilities*, 6-6
RMSIFL utility, *RMS-11 Utilities*, 3-5
RMSRST utility, *RMS-11 Utilities*, 7-7
Output listing limit switch
See /LIMIT
Output On/Off command
EDI editor, *Utilities*, 7-32
/OUTPUT qualifier
SHOW ERROR_LOG command, *Error Logging*, 2-13
See also /SHOW switch
/OUTVOLUME qualifier
BRU utility, *Utilities*, 3-21
OVCTC module, *Task Builder*, 4-17, 5-61
OVCTL module, *Task Builder*, 4-17, 5-61
OVCTR module, *Task Builder*, 4-17, 5-61
OVDAT module, *Task Builder*, 4-17, 5-62
Overflow mode, *Indirect*, 2-55
Overhead system TF.RPR
TTDRV, *I/O Drivers*, 2-16
Overlapped I/O
completion, *System Management*, 1-9
disk driver, *I/O Drivers*, 4-8
Overlapped Seek I/O, *Writing I/O Driver*, 1-10
database structures, *Writing I/O Driver*, 2-8
data transfers, *Writing I/O Driver*, 1-10
difficulty factor, *Writing I/O Driver*, 1-10
executing parallel operations, *Writing I/O Driver*, 1-10
Overlay, *RMS-11 User's Guide*, 8-2; *Task Builder*, 2-11
and disk use, *RMS-11 User's Guide*, 8-14
building, *Task Builder*, 3-44 to 3-54
cross-referencing, *Task Builder*, 4-13
data caching, *MCR*, 3-112, 3-160
defining a multiple tree, *Task Builder*, 3-33

Overlay (cont'd.)
disk-resident, *RMS-11 User's Guide*, 1-13, 8-3, 8-8 to 8-9; *Task Builder*, 3-2 to 3-7, 4-1
loading, *Task Builder*, 3-17, 4-1
automatically, *Task Builder*, 4-2 to 4-7
manually, *Task Builder*, 4-8 to 4-12
MCR
processing a command line, *MCR*, 1-4
memory-resident, *RMS-11 User's Guide*, 1-13, 8-3, 8-6 ; *MCR*, 3-143; *Task Builder*, 3-7 to 3-16, 4-1
fast-mapping, *Task Builder*, 4-19
mapping, *Task Builder*, 10-20, 11-19
shared region, *Task Builder*, 5-15
specifying for task, *Task Builder*, 10-37, 11-54
multiple
example, *Task Builder*, 3-33 to 3-37
path loading, *Task Builder*, 4-4
run-time
Fast Map routine, *Task Builder*, 4-19 to 4-20
run-time routines, *Task Builder*, 3-21, 4-15
comparing, *Task Builder*, 4-17
segment, *Task Builder*, 3-2
naming, *Task Builder*, 3-30
structure, *Task Builder*, 3-1, 3-2, 3-21
tree, *Task Builder*, 3-17
multiple, *Task Builder*, 3-32
defining, *Task Builder*, 3-33
example, *Task Builder*, 3-33 to 3-37
window block, *Task Builder*, 3-54
/OVERLAY_DESCRIPTION qualifier, *Task Builder*, 11-49
Overlay and disk usage, *RMS-11 User's Guide*, 8-2
Overlay command
EDI editor, *Utilities*, 7-32
Overlay Description Language
See ODL
OVERLAY option, *System Management*, 15-6
default extent size for, *System Management*, 15-6
MOUNT /CACHE command, *MCR*, 3-112
SET /CACHE command, *MCR*, 3-160
Overlay run-time system
See also OTS
cluster library, *Task Builder*, 5-61
database, *Task Builder*, 5-15
Overprint
VFC (LPDRV), *I/O Drivers*, 7-6
OVFCTC module, *Task Builder*, 4-17
OVFCTL module, *Task Builder*, 4-17
OVFCTR module, *Task Builder*, 4-17
OVFIDC module, *Task Builder*, 4-17
OVFIDL module, *Task Builder*, 4-17
OVFIDR module, *Task Builder*, 4-17
OVIDC module, *Task Builder*, 4-17, 5-62
OVIDL module, *Task Builder*, 4-17, 5-61
OVIDR module, *Task Builder*, 4-17, 5-61
/OVLP keyword
SET command, *MCR*, 3-174
/OVRACC keyword
MOUNT command, *MCR*, 3-121
OVR argument
for .PSECT, *MACRO-11*, 5-35
if section ends with odd address, *MACRO-11*, 5-39
use for data sharing, *MACRO-11*, 5-38
/OVREXP keyword
MOUNT command, *MCR*, 3-121
/OVRFSID keyword
MOUNT command, *MCR*, 3-121
/OVR keyword
HOME command, *MCR*, 3-81
MOUNT command, *MCR*, 3-114, 3-121
OVR option
INI keyword /BAD, *MCR*, 3-86
/OVR switch
BAD utility, *Utilities*, 2-5
FMT utility, *Utilities*, 9-4
OWNER
RMSDES utility, *RMS-11 Utilities*, 2-34
/OWNER_UIC qualifier
SHOW QUEUE command, *Batch and Queue*, 2-14
Owner ID field tape, *I/O Operations*, G-2
/OWNER keyword
HOME command, *MCR*, 3-81
INITVOLUME command, *MCR*, 3-90
USER FILE DIRECTORY command, *MCR*, 3-209
OWNER setup command, *System Management*, 7-11

P

P1 conditional assembly test, *MACRO-11*, 5-45

P1 parameter
XEDRV
IO.XIN function, *I/O Drivers*, 10-20
IO.XOP function, *I/O Drivers*, 10-6
IO.XRC function, *I/O Drivers*, 10-16
IO.XSC function, *I/O Drivers*, 10-7
IO.XTM function, *I/O Drivers*, 10-12
P2 conditional assembly test, *MACRO-11*, 5-45
P2 parameter
XEDRV
IO.XOP function, *I/O Drivers*, 10-6
IO.XRC function, *I/O Drivers*, 10-16
IO.XSC function, *I/O Drivers*, 10-7
IO.XTM function, *I/O Drivers*, 10-12
P3 parameter
XEDRV
IO.XOP function, *I/O Drivers*, 10-6
IO.XRC function, *I/O Drivers*, 10-16
IO.XTM function, *I/O Drivers*, 10-12
P4 parameter
XEDRV
IO.XRC function, *I/O Drivers*, 10-16
IO.XTM function, *I/O Drivers*, 10-12
P5 parameter
XEDRV
IO.XRC function, *I/O Drivers*, 10-16
IO.XTM function, *I/O Drivers*, 10-12
P6 parameter
XEDRV
IO.XRC function, *I/O Drivers*, 10-16
IO.XTM function, *I/O Drivers*, 10-12
P$BDB macro
argument computation, *RMS-11 Macro*, 2-8
format, *RMS-11 Macro*, 2-4
P$BUF macro
argument computation, *RMS-11 Macro*, 2-7
format, *RMS-11 Macro*, 2-4
P$FAB macro
argument computation, *RMS-11 Macro*, 2-5
format, *RMS-11 Macro*, 2-4
P$-family macro
declaring, *RMS-11 Macro*, C-2
P$IDX macro
argument computation, *RMS-11 Macro*, 2-5
format, *RMS-11 Macro*, 2-4
P$RAB macro
argument computation, *RMS-11 Macro*, 2-5
format, *RMS-11 Macro*, 2-4
P$RABX macro
argument computation, *RMS-11 Macro*, 2-5 to 2-6
P$RABX macro (cont'd.)
format, *RMS-11 Macro*, 2-4
Packed decimal key, *RMS-11 User's Guide*, 6-6
.PACKED directive, *MACRO-11*, 5-24
changes current location counter, *MACRO-11*, 5-31
summary, *MACRO-11*, 5-2
Packet identification number, *Error Logging*, 3-1, 3-4, 3-6, 3-10
Packet selection
ELI, *Error Logging*, 2-6
all packets, *Error Logging*, 2-6
control packets, *Error Logging*, 2-6
CPU events, *Error Logging*, 2-6
default, *Error Logging*, 2-6
memory events, *Error Logging*, 2-6
peripheral devices, *Error Logging*, 2-6
system events, *Error Logging*, 2-6
RPT, *Error Logging*, 3-8, 3-11
PACKET statement
CFL, *Error Logging*, 5-27
/PACKET switch
RPT, *Error Logging*, 3-5, 3-10
See also /ENTRY qualifier
multiple arguments, *Error Logging*, 3-5
processing, *Error Logging*, 4-4
Pad character
RMSIFL utility, *RMS-11 Utilities*, 3-6
tape driver, *I/O Drivers*, 6-17
Padding character
RMSCNV utility, *RMS-11 Utilities*, 4-12
Pad enable bit
XEDRV
transmitting, *I/O Drivers*, 10-3
Page
RMD
definition, *System Management*, 7-1
display, *System Management*, 7-1
setup, *System Management*, 7-2
/PAGE_COUNT qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
Page Address Register
See PAR
Page command
EDI editor, *Utilities*, 7-33
Page Description Register
See PDR

.PAGE directive, *Program Development*, 2-6; *MACRO-11*, 5-12
implicit with .INCLUDE, *MACRO-11*, 5-50
inside macro definition, *MACRO-11*, 6-4
summary, *MACRO-11*, 5-2
Page eject
if .PAGE directive encountered, *MACRO-11*, 5-12
if form feed encountered, *MACRO-11*, 5-12
if more than 58 lines, *MACRO-11*, 5-12
if new source file, *MACRO-11*, 5-12
operation of form feed inside macro definition, *MACRO-11*, 6-4
VFC (LPDRV), *I/O Drivers*, 7-6
Page Find command
EDI editor, *Utilities*, 7-33
PAGE function
EDT editor, *Introduction*, 2-7
Page Locate command
EDI editor, *Utilities*, 7-33
Page locate command
EDI editor, *Program Development*, 2-14
/PAGE qualifier
START/PROCESSOR command, *System Management*, 3-37
Paging, *RMS-11 User's Guide*, 8-10
memory
See Virtual memory management
/PA job switch
QUE /MOD command, *Batch and Queue*, 2-19
:PA option
QUE /STA command, *System Management*, 3-37, 3-38
/PAR, *Crash Dump Analyzer*, 2-4, 2-6
PAR, *Task Builder*, 2-16; *Writing I/O Driver*, 1-2
Parallel communication link driver
See PCL11
Parallel unit operation
database structures, *Writing I/O Driver*, 2-8
Parameter
displaying system, *DCL*, 8-8 to 8-9
IOX
displaying default, *System Management*, 12-36
exercising
NFS volume, *System Management*, 12-68
setting, *System Management*, 12-51, 12-58
Parameter
IOX
setting (cont'd.)
Files-11 volumes, *System Management*, 12-63
magnetic tape, *System Management*, 12-65
NFS volumes, *System Management*, 12-65
QIO$ basic syntax
function-dependent, *I/O Drivers*, 1-6
optional, *I/O Drivers*, 1-6
required argument, *I/O Drivers*, 1-6
setting system, *DCL*, 8-5 to 8-7
syntax, *DCL*, 1-14
use in command line, *MCR*, 1-2
Parameter2 parameter
TTDRV, *I/O Drivers*, 2-12
IO.ATA function, *I/O Drivers*, 2-23
Parameter commands
IOX
description, *System Management*, 12-6
PARAMETERLIST command
IOX, *System Management*, 12-36
displaying buffer space statistics, *System Management*, 12-36
displaying default parameters, *System Management*, 12-36
examples, *System Management*, 12-36 to 12-39
format of display, *System Management*, 12-36
Parameters
VMR, *System Management*, 5-4
PAR command, *System Management*, 8-15
See also PARTITION DEFINITIONS command
format, *System Management*, 8-15
VMR
definition, *System Management*, 5-33
example, *System Management*, 5-34
format, *System Management*, 5-33
Parent/offspring tasking, *Executive*, 4-1
chaining, *Executive*, 4-2, 5-191, 5-225
connecting, *Executive*, 4-1, 5-304
directives, *Executive*, 4-1
requesting task, *Executive*, 5-241, 5-304
returning status, *Executive*, 4-2, 4-3
sending data, *Executive*, 5-304
sending send-data packet, *Executive*, 5-225
spawning, *Executive*, 4-1, 4-4
synchronizing, *Executive*, 5-42

Parent task
VTDRV, *I/O Drivers*, 3-1
Parity checking, *MCR*, 3-177
Parity error
uncorrectable, *System Management*, 11-5
/PARITY keyword
SET command, *MCR*, 3-176
SET command (VMR), *System Management*, 5-60
Parity support, *System Management*, 1-7
/PAR keyword
INSTALL command, *MCR*, 3-97
LOA command (VMR), *System Management*, 5-30
LOAD command, *MCR*, 3-104
RUN command, *MCR*, 3-144
SET command, *MCR*, 3-175
SET command (VMR), *System Management*, 5-58 to 5-60
/PAR keyword (VMR)
SET command
saving secondary pool, *System Management*, 8-18
/PARM keyword
MOUNT command, *MCR*, 3-114, 3-121
PAR option, *Task Builder*, 5-3, 12-26
PARS1M control file module, *Error Logging*, 4-4, 4-11, A-7
PARS2M control file module, *Error Logging*, 4-4, 4-11, A-7
PARS3M control file module, *Error Logging*, 4-4, 4-11, A-7
PARSE
remote access, *RMS-11 User's Guide*, B-1
Parse block
format, *Executive*, 5-98
returning, *Executive*, 5-97, 5-157, 5-163
.PARSE directive, *Indirect*, 2-82
Parse FCS directive, *Executive*, 5-157
$PARSE macro, *RMS-11 Macro*, 5-86
example, *RMS-11 Macro*, 7-3, 7-7, 7-11, 7-15
PARSEM control file module, *Error Logging*, 3-23, 4-4, 4-11, A-7
PARSE operation, *RMS-11 Macro*, 3-6; *RMS-11 User's Guide*, 1-17; *RMS-11 Intro*, 4-1
BDB requirement, *RMS-11 Macro*, 2-8
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
$PARSE macro, *RMS-11 Macro*, 5-86
PARSE operation (cont'd.)
remote access, *RMS-11 User's Guide*, B-1
wildcard initialization, *RMS-11 Macro*, 3-10
Parse RMS directive, *Executive*, 5-163
.PARSE routine
device and unit translation, *I/O Operations*, 4-12
logical name translation, *I/O Operations*, 4-10
Parser processing, *System Management*, 18-13
Parser program
TPARS, *I/O Operations*, 7-12
processing steps, *I/O Operations*, 7-12
Partition
address, *MCR*, 2-19
accessing, *MCR*, 3-128
allocating space in, *MCR*, 3-96
base address, *Crash Dump Analyzer*, 3-15
cache
specifying, *MCR*, 3-111, 3-159
common, *MCR*, 3-94, 3-130; *System Management*, 5-26
conventions, *System Management*, 1-1
creating, *MCR*, 3-175; *System Management*, 5-51
definition, *MCR*, 2-19
displaying, *MCR*, 3-175
fragmentation, *System Management*, 1-3
causes, *System Management*, 1-3
GEN, *MCR*, 3-97, 3-104
description, *System Management*, 7-7
getting parameters, *Executive*, 5-134
information, *Indirect*, 2-98
loading device driver, *MCR*, 3-104
loading region in, *System Management*, 5-18
main, *System Management*, 15-5
memory, *MCR*, 2-19; *System Management*, 1-1
modifying, *System Management*, 5-52
name, *Crash Dump Analyzer*, 3-15; *MCR*, 2-19
naming, *MCR*, 3-97
overriding, *System Management*, 5-23
PCB address, *Crash Dump Analyzer*, 3-15
read-only
specifying, *Task Builder*, 12-34
regions, *System Management*, 1-1
SECPOL
description, *System Management*, 7-7
size, *MCR*, 2-19, 3-175
setting, *MCR*, 3-186

Partition (cont'd.)
size and location
RMD Memory display, *System Management*, 7-8
status flags, *Crash Dump Analyzer*, 3-26
SYSPAR
description, *System Management*, 7-7
system, *MCR*, 3-143, 3-190
system memory, *DCL*, 7-46 to 7-52
task, *MCR*, 2-19
allocating, *MCR*, 2-19
increasing dynamic region, *MCR*, 3-96
installing, *MCR*, 3-144
relationship between, *MCR*, 2-19
specifying, *Task Builder*, 12-26
type, *MCR*, 2-19; *System Management*, 5-59
DEV, *MCR*, 3-175
DIAG, *MCR*, 3-175
SYS, *MCR*, 3-175
user, *MCR*, 3-157
waiting tasks, *System Management*, 1-1
Partition Control Block, *Crash Dump Analyzer*, 3-26 ; *MCR*, 3-24, 3-106
See also PCB
address, *Crash Dump Analyzer*, 3-24; *MCR*, 3-39
pointer to, *Crash Dump Analyzer*, 3-26
switch
See /PCB, /PAR
PARTITION DEFINITIONS command, *MCR*, 3-130
See also PAR command
brief description, *MCR*, 1-6
format, *MCR*, 3-130
Partition display
contents, *System Management*, 5-33
Partition information dump
attachment descriptor, *Crash Dump Analyzer*, 3-27
individual, *Crash Dump Analyzer*, 3-26
system, *Crash Dump Analyzer*, 3-24
wait queue, *Crash Dump Analyzer*, 3-27
Pass 1
what happens, *MACRO-11*, 1
Pass 2
what happens, *MACRO-11*, 2
Password, *DCL*, 3-4; *Introduction*, 1-5, 3-11
account, *MCR*, 3-177
adding to account entry, *System Management*, 2-4
Password (cont'd.)
changing, *MCR*, 2-22, 3-177; *System Management*, 2-2, 2-11; *DCL*, 3-10
characters, *System Management*, 2-4
contained in account entry, *System Management*, 2-1
displaying, *System Management*, 2-8, 2-10
encryption, *MCR*, 3-177
maximum length, *MCR*, 3-177
task, *MCR*, 3-177
$PASSWORD card
format, *Batch and Queue*, 3-26
/PASSWORD keyword
SET command, *MCR*, 3-177
Paste command
EDI editor, *Utilities*, 7-34
PASTE function
EDT editor, *Introduction*, 2-9
/PASTHRU keyword
SET command, *MCR*, 3-177
SET command (VMR), *System Management*, 5-61
/PA switch
PRI command, *Batch and Queue*, 2-3
Patch
declaring, *Task Builder*, 12-6, 12-13, 12-19
Patch level
RMSBCK utility, *RMS-11 Utilities*, 6-5
RMSCNV utility, *RMS-11 Utilities*, 4-9
RMSDEF utility, *RMS-11 Utilities*, A-5
RMSDSP utility, *RMS-11 Utilities*, 5-5
RMSIFL utility, *RMS-11 Utilities*, 3-5
Path loading, *Task Builder*, 4-4
/PAT switch
BAD utility, *Utilities*, 2-5
Pattern
IOX
altering, *System Management*, 12-40
displaying, *System Management*, 12-40
PATTERN command
IOX, *System Management*, 12-40
data patterns, *System Management*, 12-40
examples, *System Management*, 12-41
initial default pattern, *System Management*, 12-41
Interactive mode
restriction, *System Management*, 12-10
restrictions, *System Management*, 12-40
Command mode, *System Management*, 12-40

PATTERN command
IOX
restrictions (cont'd.)
logical assignments, *System Management*, 12-40
PAT utility
checksum, *Utilities*, 11-8
Checksum switch
See /CS switch
command line, *Utilities*, 11-1, A-24
/CS switch, *Utilities*, 11-2, 11-8
file
correction, *Utilities*, 11-4
input, *Utilities*, 11-4
messages, *Utilities*, 11-8
error, *Utilities*, 11-9
informational, *Utilities*, 11-9
Task Builder, *Utilities*, 11-5
validating file content, *Utilities*, 11-8
.PAUSE directive, *Indirect*, 2-84
/PAUSE qualifier
STOP/PROCESSOR command, *System Management*, 3-33
Pbn parameter
device-specific (disk driver), *I/O Drivers*, 4-9
PC
See Program counter
PC11 paper tape reader/punch
SYSGEN question, *System Generation*, 3-54
/PCB, *Crash Dump Analyzer*, 2-4, 2-6
PCB
See also Partition Control Block
composite arrangement, *Writing I/O Driver*, 2-12
PCBDF$, *Crash Dump Analyzer*, C-57
PCL11
See also LRDRV
hardware, *I/O Drivers*, 11-1
receiver driver, *I/O Drivers*, 11-2
transmitter driver, *I/O Drivers*, 11-1
PCL11 receiver/transmitter
SYSGEN question, *System Generation*, 3-65
P command, *Debugging*, 2-9, 3-3, 3-4; *XDT*, 1-9, 2-14
ODT, *Program Development*, 5-7
PC-relative location, *Debugging*, 2-5, 4-5
PC-relative offset, *Debugging*, 2-9, 7-2; *XDT*, 2-14
PDR, *Task Builder*, 2-16; *Writing I/O Driver*, 1-2
/PD switch
RMSCNV utility, *RMS-11 Utilities*, 4-12
RMSIFL utility, *RMS-11 Utilities*, 3-6 to 3-7, 3-11
Percent sign (%)
See also Wildcard character
defines register symbols, *MACRO-11*, 2-8, 2-9
special character in MACRO–11, *MACRO-11*, 2-1
Percent sign operator (%)
See Operator
Performance
stall I/O (disk driver), *I/O Drivers*, 4-12
Period (.)
component of a term, *MACRO-11*, 2-13
current location counter symbol, *MACRO-11*, 2-7, 2-11, 2-13
assign new value to, *MACRO-11*, 2-11
makes expression relocatable, *MACRO-11*, 2-15
reserved for DIGITAL system symbols, *MACRO-11*, 2-1, 2-5
signified decimal number in RSX command string, *MACRO-11*, 7-5
special character in MACRO–11, *MACRO-11*, 2-2
Peripheral configuration
choosing at system generation, *Writing I/O Driver*, 5-10
Peripheral device
See Device
Peripheral Interchange Program
See PIP utility
Peripheral support routine
K-series, *I/O Drivers*, 13-1
Permanent symbol table, *MACRO-11*, C-1
P error
.ERROR, *MACRO-11*, 6-16
inconsistent program section attribute, *MACRO-11*, 2-12
multiple definition of local symbol, *MACRO-11*, 2-10
when defining local symbols, *MACRO-11*, 5-14
PFCS$ directive, *Executive*, 5-157
PFT
using, *Utilities*, C-7
PFT Command Line Format
See CFT
Physical/logical association, *I/O Drivers*, 1-2

Physical address, *Task Builder*, 2-12
Physical device
  assigning LUN, *Task Builder*, 12-8
Physical device name, *Crash Dump Analyzer*, 3-14
Physical I/O, *I/O Drivers*, 1-2
Physical memory switch
  See /DUMP
PIC, *MACRO-11*, G-1
p lefn parameter
  DISWP: subroutine (LADRV), *I/O Drivers*, 12-12
PIP/ENTER command (RMSBCK), *RMS-11 Utilities*, 6-3
PIP utility, *RMS-11 Utilities*, 5-2; *MCR*, 2-2; *Program Development*, 1-9; *Introduction*, 5-1
  account file
    copying, *System Management*, 2-3
    extending, *System Management*, 2-3
  asterisk (*), *Program Development*, 3-9
  changing access rights with, *MCR*, 2-4
  cleaning up a directory, *Program Development*, 3-9
  command functions, *Utilities*, 12-35
    concatenating, *Utilities*, 12-39
    copying Files-11 file, *Utilities*, 12-35
    file control, *Utilities*, 12-39
  command line, *Utilities*, 12-1, A-24
    ampersand (&), *Utilities*, 12-39
    switch placement, *Utilities*, 12-5
  copy command
    subswitches, *Utilities*, 12-37
  creating a concatenated object module, *Program Development*, 4-4
  deleting directory, *MCR*, 2-2
  deleting files, *MCR*, 2-2
  examining listing at terminal, *Program Development*, 3-6, 4-6, 7-4
  file
    control, *Utilities*, 12-3
    deleting, *Utilities*, 12-11
    listing, *Utilities*, 12-18
    merging, *Utilities*, 12-36
    protecting, *Utilities*, 12-22
    purging, *Utilities*, 12-24
    renaming, *Utilities*, 12-25
    spooling, *Utilities*, 12-30
  file specification, *Utilities*, 12-2
    default, *Utilities*, 12-2 to 12-3
    wildcard character, *Utilities*, 12-7
PIP utility (cont'd.)
  merge
    subswitches, *Utilities*, 12-37
  messages
    error, *Utilities*, 12-40
    error code, *Utilities*, 12-49
    format, *Utilities*, 12-40
  printing listing, *Program Development*, 3-8
  spooling listing, *Program Development*, 3-8
  subswitches
    copy command, *Utilities*, 12-37
    description, *Utilities*, 12-19
    file control, *Utilities*, 12-39
    merge, *Utilities*, 12-37
    placement in command line, *Utilities*, 12-5
  switches
    /AP, *Utilities*, 12-8
    /BS, *Utilities*, 12-9
    /CD, *Utilities*, 12-10
    /DD, *Utilities*, 12-10
    /DE, *Utilities*, 12-11
    /DF, *Utilities*, 12-12
    /EN, *Utilities*, 12-13
    /EOF, *Utilities*, 12-14
    /EX, *Utilities*, 12-15
    /FI, *Utilities*, 12-16
    /FR, *Utilities*, 12-17
    /ID, *Utilities*, 12-17
    /LI, *Program Development*, 3-9; *Utilities*, 12-18
    /ME, *Program Development*, 4-4; *Utilities*, 12-21, 12-36
    /NM, *Utilities*, 12-21
    /PR, *Utilities*, 12-22
    /PU, *Program Development*, 3-9; *Utilities*, 12-24
    /RE, *Utilities*, 12-25
    /RM, *Utilities*, 12-27
    /RW, *Utilities*, 12-28
    /SB, *Utilities*, 12-29
    /SP, *Program Development*, 3-8; *Utilities*, 12-30
    /SR, *Utilities*, 12-31
    /SS, *Utilities*, 12-29
    /TD, *Utilities*, 12-32
    /TR, *Utilities*, 12-32
    /UF, *Utilities*, 12-33
    /UN, *Utilities*, 12-34
    /UP, *Utilities*, 12-34

PIP utility (cont'd.)
/TR switch
overriding default extension block count, *System Management*, 1-8
UFD creation, *Utilities*, 12-33
wildcard character, *Utilities*, 12-7
p IS.PND status return
tape driver, *I/O Drivers*, 6-10
/PI switch, *Task Builder*, 10-34
$PKAVL, *Crash Dump Analyzer*, 3-36
p K-series supported hardware, *I/O Drivers*, 13-1
%PKT$IDENT
CFL packet information function, *Error Logging*, 5-22
%PKT$MODULE
CFL packet information function, *Error Logging*, 5-22
PKTDF$, *Crash Dump Analyzer*, C-62
Placement
RMSBCK utility, *RMS-11 Utilities*, 6-1
RMSDEF utility, *RMS-11 Utilities*, A-14
RMSRST utility, *RMS-11 Utilities*, 7-1
Placement control, *RMS-11 User's Guide*, 1-17, 1-19
calculating starting LBN, *RMS-11 User's Guide*, 6-14
cylinder, *RMS-11 User's Guide*, 6-13 to 6-14
indexed files, *RMS-11 User's Guide*, 6-13
sector, *RMS-11 User's Guide*, 6-14
track, *RMS-11 User's Guide*, 6-13 to 6-14
Placement control F11ACP, *I/O Operations*, H-11
Platter, *RMS-11 Intro*, 2-1
/PLCTL keyword
SET command, *MCR*, 3-178; *System Management*, 8-10
SET command (VMR), *System Management*, 5-61
Plus sign (+)
default switch value in RSX command string, *MACRO-11*, 7-5
special character in MACRO–11, *MACRO-11*, 2-2
Plus sign operator (+)
See also Operator
addition, *MACRO-11*, 2-4
unary plus, *MACRO-11*, 2-4
PMD
See also Postmortem Dump
specifying, *Task Builder*, 11-50
PMD file type, *Program Development*, 5-10
/PMD keyword
ABORT command, *MCR*, 3-3
INS command (VMR), *System Management*, 5-23
INSTALL command, *MCR*, 3-97
RUN command, *MCR*, 3-144
PMD task, *Program Development*, 1-8
enabling with TKB, *Program Development*, 5-9
/PM switch, *Task Builder*, 10-35
TKB, *Program Development*, 5-9
PMT
See also Pool Monitor Task
abortable tasks, *System Management*, 8-7
listing at console, *System Management*, 8-6
aborting, *System Management*, 8-13
aborting tasks running from console, *System Management*, 8-12
activation, *System Management*, 8-2
checkpointing stopped tasks, *System Management*, 8-12
conditions affecting response, *System Management*, 8-3
controlling actions, *System Management*, 8-12
controlling pool use, *System Management*, 8-12
extreme fragmentation, *System Management*, 8-6
example, *System Management*, 8-8
functions, *System Management*, 8-2
high pool state, *System Management*, 8-6
installation, *System Management*, 8-2
low pool state, *System Management*, 8-5
messages
extreme pool fragmentation, *System Management*, 8-6, 8-8
low pool state, *System Management*, 8-5
preventing, *System Management*, 8-12
operating cycle, *System Management*, 8-3, 8-11
dependencies, *System Management*, 8-11
lengthening, *System Management*, 8-12
pool monitoring support and, *System Management*, 8-2
removing from system, *System Management*, 8-11

PMT (cont'd.)
task-build options, *System Management*, 8-11
tasks eligible to abort, *System Management*, 8-7
timing, *System Management*, 8-11
PMTBLD.CMD file
modifying, *System Management*, 8-11
PNC argument
for .ENABL/.DSABL, *MACRO-11*, 5-15
Pn parameter
IO.RLB function, *I/O Drivers*, 1-30
IO.RVB function, *I/O Drivers*, 1-32
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-34
POINTER
CFL named variable, *Error Logging*, 5-9
Pointer
mapping
allocating, *System Management*, 1-9
default number for file window, *System Management*, 1-9
POINTER data type
CFL, *Error Logging*, 5-7
POINTER statement
CFL, *Error Logging*, 5-37
.POINT routine
file byte position, *I/O Operations*, 2-10
positioning file to byte, *I/O Operations*, 4-21
/POOL, *Crash Dump Analyzer*, 2-4, 2-7
Pool, *System Management*, 8-1
bit map, *Crash Dump Analyzer*, 3-12
buffer
private (TTDRV), *I/O Drivers*, 2-80
buffer descriptor block, *RMS-11 Macro*, 2-8
change in condition of
definition of temporary, *System Management*, 8-4
condition
description, *System Management*, 8-3
largest fragment and, *System Management*, 8-4
largest fragment too small, *System Management*, 8-4
declaring space, *RMS-11 Macro*, 2-4
definition, *System Generation*, 1-11; *System Management*, 8-1
depleting
explanation, *System Management*, 8-1
depletion
avoiding, *System Management*, 8-1
Pool
depletion (cont'd.)
detecting signs, *System Management*, 8-1
detecting pool events, *System Management*, 8-2
determining overall state, *System Management*, 8-3
displaying, *DCL*, 8-14 to 8-17
dump, *Crash Dump Analyzer*, 3-36
Executive code for monitoring, *System Management*, 8-2
extreme fragmentation of, *System Management*, 8-6
PMT messages, *System Management*, 8-6
fragmentation
responding to, *System Management*, 8-2
fragment size
increasing, *System Management*, 8-12
setting, *System Management*, 8-10
free, *Crash Dump Analyzer*, 3-12
free-space list, *RMS-11 Macro*, 2-21
high limit, *System Management*, 8-3
high pool event, *System Management*, 8-6
I/O buffer, *RMS-11 Macro*, 2-6
index descriptor block, *RMS-11 Macro*, 2-5
installing headers in, *MCR*, 3-100; *System Management*, 5-26
internal FAB, *RMS-11 Macro*, 2-5
internal RAB, *RMS-11 Macro*, 2-5
key buffer, *RMS-11 Macro*, 2-6
largest fragment, *Crash Dump Analyzer*, 3-12
limit
displaying, *MCR*, 3-179
low limit, *System Management*, 8-3
low pool event, *System Management*, 8-5
major events, *System Management*, 8-4
monitoring, *System Management*, 8-1
number of unallocated fragments, *Crash Dump Analyzer*, 3-12
primary
definition, *System Management*, 1-2
installing tasks, *MCR*, 3-24
requirements, *System Management*, 8-1
secondary
See also Secondary pool
definition, *System Management*, 1-2
displaying, *MCR*, 3-183; *System Management*, 8-14

Pool
secondary (cont'd.)
increasing availablility, *System Management*, 8-17
installing tasks, *MCR*, 3-24, 3-98
percent in use, *MCR*, 3-183; *System Management*, 8-14
saving, *MCR*, 3-147; *System Management*, 8-18
secondary pool dump, *Crash Dump Analyzer*, 3-36
setting limit, *MCR*, 3-178
size, *Crash Dump Analyzer*, 3-12
displaying, *MCR*, 3-179, 3-180
setting, *MCR*, 3-179
smallest possible block, *Crash Dump Analyzer*, 3-12
space
allocating, *MCR*, 3-157
total free bytes, *Crash Dump Analyzer*, 3-12
use
DECnet package
pregenerated kit, *System Generation*, 5-49
/POOL/LIMITS qualifier
SET SYSTEM command, *System Management*, 8-10
POOL$B macro, *RMS-11 Macro*, 2-4, C-2
POOL$E macro, *RMS-11 Macro*, 2-4
declaring, *RMS-11 Macro*, C-2
POOL_RESERVE parameter
Resource Accounting, *System Management*, 8-18
START/ACCOUNTING command, *System Management*, 10-5
Pool-declaration macro
declaring, *RMS-11 Macro*, C-2
Pool event, *System Management*, 8-4
detecting, *System Management*, 8-2
high pool, *System Management*, 8-6
low pool, *System Management*, 8-5
/POOL keyword
SET command, *MCR*, 3-179
SET command (VMR), *System Management*, 5-62
Pool limits, *System Management*, 8-10
setting high limit, *System Management*, 8-10
setting low limit, *System Management*, 8-10
Pool monitor code
Executive
function, *System Management*, 8-2
Pool monitoring support
description, *System Management*, 8-2
establishing, *System Management*, 8-2
overview, *System Management*, 1-13
Pool monitor interface
functions, *System Management*, 8-2
Pool Monitor Task, *MCR*, 3-178
See also PMT
Pool-resident, *Writing I/O Driver*, 6-7
header, *Writing I/O Driver*, 6-9
/POOLSIZE keyword
SET command (VMR), *System Management*, 5-62
Pool statistics dump, *Crash Dump Analyzer*, 3-1, 3-12
Populating indexed files, *RMS-11 User's Guide*, 6-26
primary key order, *RMS-11 User's Guide*, 6-27
random insertions, *RMS-11 User's Guide*, 6-28
bucket fill size, *RMS-11 User's Guide*, 6-29
mass insertion, *RMS-11 User's Guide*, 6-29
Port
See Communications port
Port parameter
UNIBUS switch driver
device-specific, *I/O Drivers*, 14-4
IO.DPT function, *I/O Drivers*, 14-6
Ports, *Writing I/O Driver*, 1-12
switching between, *Writing I/O Driver*, 1-12
POSITION
RMSDES utility, *RMS-11 Utilities*, 2-46
Position-independent code
See PIC
/POSITION qualifier
BRU utility, *Utilities*, 3-22
Position tape
DDDRV, *I/O Drivers*, 5-4
.POSIT routine
returning record position, *I/O Operations*, 4-23
/POS keyword
INITVOLUME command, *MCR*, 3-90
.POSRC routine
positioning file to record, *I/O Operations*, 4-22
Postmortem Dump, *Task Builder*, D-1 to D-6
See also PMD

Postmortem Dump (cont'd.)
See also PMD task
definition of, *MCR*, 3-2
example, *Task Builder*, D-3 to D-6
generating, *MCR*, 3-97
requesting, *MCR*, 3-144
specifying, *Task Builder*, 10-35
task, *MCR*, 3-144
/POSTMORTEM qualifier, *Task Builder*, 11-50
LINK command, *Program Development*, 5-9
Power failure
affecting disks, *I/O Drivers*, 1-42
affecting tape, *I/O Drivers*, 1-42
affecting the system, *I/O Drivers*, 14-7
entry point, *Writing I/O Driver*, 4-61
overview, *Writing I/O Driver*, 2-6
QIO$
valid (TM11), *I/O Drivers*, 6-14
recovery from
tape driver, *I/O Drivers*, 6-14
UNIBUS switch driver, *I/O Drivers*, 14-7
Power recovery event
DSP6P1 dispatcher module, *Error Logging*, 4-67
Power switch
CRDRV, *I/O Drivers*, 9-4
.PPASC routine
converting UIC to ASCII, *I/O Operations*, 4-8
PR11 reader
SYSGEN question, *System Generation*, 3-55
Pradd parameter
device-specific
VTDRV, *I/O Drivers*, 3-4
TTDRV, *I/O Drivers*, 2-12
IO.RPR function, *I/O Drivers*, 2-43
Predefined syntax elements, *System Management*, 18-50
basic data types, *System Management*, 18-50 to 18-51
common command elements, *System Management*, 18-51 to 18-54
program control elements, *System Management*, 18-57 to 18-58
special parser elements, *System Management*, 18-54 to 18-56
special translator elements, *System Management*, 18-56
Predriver initiation
processing during, *Writing I/O Driver*, 3-1, 3-2, 3-3, 3-4
Pregenerated kit
account file, *System Generation*, 5-36
BLDLAINIT.CMD file, *System Generation*, 5-49
changing crash device, *System Generation*, 5-49
configuration file statement, *System Generation*, 5-21 to 5-33
contents, *System Generation*, 5-1
copying, *System Generation*, 5-2
example, *System Generation*, 5-15 to 5-20
RL02 kit to DU-type disk, *System Generation*, 5-9 to 5-15
RL02 kit to RL02 disk, *System Generation*, 5-3 to 5-8
creating system management files, *System Generation*, 5-39
DECnet package, *System Generation*, 5-49
definition, *System Generation*, 1-2
DELETESYS.CMD file, *System Generation*, 5-8, 5-14
deleting unused system, *System Generation*, 5-5
detailed description, *System Generation*, 5-45
device configuration, *System Generation*, 5-47
Executive features, *System Generation*, 5-45
hardware support, *System Generation*, 5-46
installation, *System Generation*, 5-2
K-series devices, *System Generation*, 5-49
LOGIN.CMD file, *System Generation*, 5-38
LOGOUT.CMD file, *System Generation*, 5-39
LPA11-K laboratory subsystems, *System Generation*, 5-49
overview, *System Generation*, 5-1
recovering disk space, *System Generation*, 5-48
restrictions, *System Generation*, 5-47
RMS-11, *System Generation*, 5-43
setting crash device, *System Generation*, 5-49
setup information, *System Generation*, 5-20
startup procedure, *System Generation*, 5-20
error message, *System Generation*, 5-33
troubleshooting, *System Generation*, 5-33

Pregenerated kit (cont'd.)
SYSLOGIN.CMD file, *System Generation,* 5-37
functions, *System Generation,* 5-37
SYSLOGOUT.CMD file, *System Generation,* 5-39
system images
description, *System Generation,* 5-5
system management help files, *System Generation,* 5-40 to 5-43
tasks supplied, *System Generation,* 5-43
PREPGEN
definition, *System Generation,* 1-12
description, *System Generation,* 3-6
SYSGEN question, *System Generation,* 3-6, 3-18
Preset parameter
IO.CLK function (LADRV), *I/O Drivers,* 12-26
/PREVIOUS_DAYS qualifier
ANALYZE/ERROR_LOG command, *Error Logging,* 3-9
See also /DATE switch
PRI command
file switches, *Batch and Queue,* 2-3
format, *Batch and Queue,* 2-3
job switches, *Batch and Queue,* 2-3
/PRI keyword
ALT command (VMR), *System Management,* 5-8
ALTER command, *MCR,* 3-12
INS command (VMR), *System Management,* 5-23
INSTALL command, *MCR,* 3-97
RUN command, *MCR,* 3-144
Primary disk
shadowing, *System Management,* 1-15
Primary index
See Index
RMSCNV utility, *RMS-11 Utilities,* 4-1
RMSIFL utility, *RMS-11 Utilities,* 3-10 to 3-11
Primary key, *RMS-11 User's Guide,* 1-7, 1-11; *RMS-11 Intro,* 3-7
RMSCNV utility, *RMS-11 Utilities,* 4-1, 4-16
RMSDEF utility
definition, *RMS-11 Utilities,* A-10
RMSIFL utility, *RMS-11 Utilities,* 3-5 to 3-6
sorting, *RMS-11 Utilities,* 3-9
Primary RBN, *System Management,* 13-6
Primary UNIBUS run, *Writing I/O Driver,* 1-18
PRINT$ macro, *I/O Operations,* 8-1
error handling, *I/O Operations,* 8-2
$PRINT card
command qualifiers, *Batch and Queue,* 3-25
format, *Batch and Queue,* 3-25
PRINT command, *Batch and Queue,* 2-2; *I/O Operations,* 8-2; *Program Development,* 1-13, 3-8; *DCL,* 4-73 to 4-82, 9-28
command qualifiers, *Batch and Queue,* 2-3
examples, *Batch and Queue,* 2-7
file qualifiers, *Batch and Queue,* 2-3
format, *Batch and Queue,* 2-3
Print command
EDI editor, *Utilities,* 7-34
Print Despooler Transaction Block, *System Management,* 10-46
.PRINT directive, *MACRO-11,* 6-16
summary, *MACRO-11,* 6-2
Printer, *RMS-11 Macro,* 3-1, 5-20, 5-37, 5-77, 5-88, 5-103 to 5-104, 5-111, 5-117; *Program Development,* 1-13
form types
LA100, *System Management,* 3-22
LA50, *System Management,* 3-22
LA75, *System Management,* 3-22
LN01, *System Management,* 3-22
LN03, *System Management,* 3-22
spooling to, *System Management,* 3-1
stopping, *DCL,* 4-92
/PRINTER_PORT keyword
SET command, *MCR,* 3-178
SET command (VMR), *System Management,* 5-63
/PRINTER_QUEUE qualifier
INITIALIZE/PROCESSOR command, *System Management,* 3-20
Printer mode, *System Management,* 3-23
/PRINTER processor type, *System Management,* 3-19
/PRINTER qualifier, *Task Builder,* 11-51
Print formatting
CFL, *Error Logging,* 5-40 to 5-42
Print function
opening file on LP, *I/O Operations,* 8-2
Print job
queued by system tasks, *Batch and Queue,* 2-12
DCL COPY command, *Batch and Queue,* 2-12

Print job
queued by system tasks (cont'd.)
PIP, *Batch and Queue*, 2-12
PIP line printer, *Batch and Queue*, 2-12
queued by user tasks
opening file on LPn:, *Batch and Queue*, 2-14
.PRINT, *Batch and Queue*, 2-13
PRINT command, *Batch and Queue*, 2-13
stopping, *DCL*, 4-92
submission notification, *Batch and Queue*, 2-2
/PRINT log file qualifier
SUBMIT command, *Batch and Queue*, 3-15
Print processor, *Batch and Queue*, 1-3
See also LPP
description, *System Management*, 3-2
initializing, *System Management*, 3-7
installing, *System Management*, 3-6
/PRINT qualifier
SHOW QUEUE command, *Batch and Queue*, 2-14
Print queue, *System Management*, 3-17
assigning, *System Management*, 3-9
initializing
DCL command, *System Management*, 3-5
MCR command, *System Management*, 3-5
.PRINT routine
error handling, *I/O Operations*, 8-2
.PRINT subroutine, *I/O Operations*, 8-2
PRINTSUMMARY command
IOX, *System Management*, 12-42
/PRIO job switch
QUE /MOD command, *Batch and Queue*, 2-19
SUB command, *Batch and Queue*, 3-15
PRI option, *Task Builder*, 12-27
Priority, *MCR*, 2-19; *Introduction*, 6-4
of binary operators, *MACRO-11*, 2-4
setting base for nonprivileged tasks, *System Management*, 8-10
task, *DCL*, 7-70 to 7-71
/PRIORITY qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
SUBMIT command, *Batch and Queue*, 3-15
PRIORITY setup command, *System Management*, 7-11
/PRIO switch
PRI command, *Batch and Queue*, 2-3
Pri parameter
IO.ATT function, *I/O Drivers*, 1-27
IO.DET function, *I/O Drivers*, 1-28
IO.KIL function, *I/O Drivers*, 1-29
IO.RLB function, *I/O Drivers*, 1-30
IO.RVB function, *I/O Drivers*, 1-31
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
QIO$ basic syntax, *I/O Drivers*, 1-8
TTDRV, *I/O Drivers*, 2-13
IO.ATA function, *I/O Drivers*, 2-23
IO.CCO function, *I/O Drivers*, 2-26
IO.EIO function, *I/O Drivers*, 2-28
IO.GTS function, *I/O Drivers*, 2-35
IO.HNG function, *I/O Drivers*, 2-37
IO.RAL function, *I/O Drivers*, 2-38
IO.RNE function, *I/O Drivers*, 2-40
IO.RPR function, *I/O Drivers*, 2-42
IO.RST function, *I/O Drivers*, 2-45
IO.RTT function, *I/O Drivers*, 2-47
IO.SMC function, *I/O Drivers*, 2-62
IO.WAL function, *I/O Drivers*, 2-49
IO.WBT function, *I/O Drivers*, 2-51
SF.GMC function, *I/O Drivers*, 2-53
<PRIVIL> symbol, *Indirect*, 2-11
Privilege
privileged task, *Introduction*, 6-4
privileged user, *Introduction*, 6-4
/PRIVILEGED qualifier, *Task Builder*, 11-52
Privileged user input
rejection, *System Management*, 5-46
Privilege status, *MCR*, 2-3
/PRIV keyword
SET command, *MCR*, 3-180
SET command (VMR), *System Management*, 5-63
/PRIV subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
PRMS$ directive, *Executive*, 5-163
PRO/RMS-11
contrasted with RSTS/E RMS-11, *RMS-11 Macro*, D-1
contrasted with RSX-11 RMS-11, *RMS-11 Macro*, D-3
PRO attribute, *System Management*, 18-46
PRO block, *RMS-11 Intro*, 4-8
chaining to FAB, *RMS-11 Macro*, 2-13 to 2-14
declaring, *RMS-11 Macro*, 2-9

PRO block (cont'd.)
initializing, *RMS-11 Macro*, 2-10
summary, *RMS-11 Macro*, 6-108
PROCEDURE statement
CFL, *Error Logging*, 5-33
NOTES module, *Error Logging*, 4-34
user-written module, *Error Logging*, 4-29
PROCEED command
IOX, *System Management*, 12-43
effect on LOGFILE, *System Management*, 12-43
uses, *System Management*, 12-43
Proceed command
See P command
Proceed count, *Debugging*, 3-4
register, *Debugging*, 5-4
Processing
RMSBCK utility
data integrity checking, *RMS-11 Utilities*, 6-9
explicit/implicit file specification, *RMS-11 Utilities*, 6-9
extended diagnostic messages, *RMS-11 Utilities*, 6-10
summary listing, *RMS-11 Utilities*, 6-10
RMSCNV utility, *RMS-11 Utilities*, 4-14
input file organization, *RMS-11 Utilities*, 4-16
output file organization, *RMS-11 Utilities*, 4-15
RMSDEF utility, *RMS-11 Utilities*, A-1
RMSIFL utility, *RMS-11 Utilities*, 3-9
command string checking, *RMS-11 Utilities*, 3-9
loading output file, *RMS-11 Utilities*, 3-10
reading and sorting input, *RMS-11 Utilities*, 3-9
sorting alternate key files, *RMS-11 Utilities*, 3-11
summary, *RMS-11 Utilities*, 3-1
RMSRST utility, *RMS-11 Utilities*, 7-9
data integrity checking, *RMS-11 Utilities*, 7-11
explicit/implicit file specification, *RMS-11 Utilities*, 7-10
extended diagnostic messages, *RMS-11 Utilities*, 7-11
restoration account, *RMS-11 Utilities*, 7-10
summary listing, *RMS-11 Utilities*, 7-12
Processing blocks, *RMS-11 User's Guide*, 1-20; *RMS-11 Intro*, 4-1, 4-7
Processing files, *RMS-11 User's Guide*, 1-16; *RMS-11 Intro*, 4-1
indexed files, *RMS-11 User's Guide*, 7-10
relative files, *RMS-11 User's Guide*, 4-15
sequential files, *RMS-11 User's Guide*, 3-15
Processing records, *RMS-11 User's Guide*, 1-10, 1-15 ; *RMS-11 Intro*, 4-1
indexed files, *RMS-11 User's Guide*, 7-2
relative files, *RMS-11 User's Guide*, 4-7
sequential files, *RMS-11 User's Guide*, 3-7
Processor
activating with ONLINE command, *System Management*, 4-26
batch
initializing, *System Management*, 3-11
installing, *System Management*, 3-10
failure, *System Management*, 11-5
recovery from, *System Management*, 11-5
symptoms, *System Management*, 11-5
file control, *System Management*, 1-7
floating point
SYSGEN question, *System Generation*, 3-33
halt
tracing fault, *Writing I/O Driver*, 6-12
loop
tracing fault, *Writing I/O Driver*, 6-12
memory size
SYSGEN question, *System Generation*, 3-33
print
See also LPP
description, *System Management*, 3-2
initializing, *System Management*, 3-7
restrictions, *System Management*, 3-24
installing, *System Management*, 3-6
Processor clock, *XDT*, 1-11
turning off, *XDT*, 2-4
Processor differences
table of, *MACRO-11*, 4-2
/PROCESSOR processor type, *System Management*, 3-19
Processor-specific functions, *Writing I/O Driver*, 1-19
Processor states, *XDT*, 1-3
priority, *XDT*, 1-4

Processor Status Word, *Crash Dump Analyzer*, 3-2; *MCR*, 3-24, 3-49; *Writing I/O Driver*, 1-1
See also PSW
Processor support, *System Generation*, 3-23
Processor traps, *XDT*, 1-8
Professional 300 Series computer
using with MFT, *Utilities*, C-7
Professional Forms Interface
See PFT
Professional personal computer
file transfer using MFT, *Utilities*, C-1
Program, *Introduction*, 5-2
compiling, *DCL*, 6-1
developing, *Task Builder*, 1-1; *DCL*, 6-1 to 6-31
development
advanced, *Program Development*, 1-6
high-level language
overlaying, *Task Builder*, 3-44
sectioning, *Program Development*, 1-5, 1-6, 2-5, 2-8
user
breakpoints
setting, *Program Development*, 5-6
FORTRAN IV, *Program Development*, 7-3
library, *Program Development*, 6-1
macro symbol, *Program Development*, 6-4
definition placement, *Program Development*, 1-5
module
name, *Program Development*, 2-5
version, *Program Development*, 2-5
object library routines, *Program Development*, 6-6
overview of development, *Program Development*, 1-13
section definiton, *Program Development*, 2-8
Program counter, *Crash Dump Analyzer*, 3-2; *MCR*, 3-24
operation, *MACRO-11*, 4-1
value, *Program Development*, 4-8
Program development
optimizing, *RMS-11 User's Guide*, 8-9
Program example I/O, *I/O Operations*, J-1
Program interface subroutine
LADRV, *I/O Drivers*, 12-2
Programming hint
CRDRV, *I/O Drivers*, 9-8
disk driver, *I/O Drivers*, 4-11
LPDRV, *I/O Drivers*, 7-6
tape driver, *I/O Drivers*, 6-14
TTDRV, *I/O Drivers*, 2-83
XEDRV, *I/O Drivers*, 10-23
Programming sequence
XEDRV, *I/O Drivers*, 10-4
Program section, *Task Builder*, 2-4
allocating, *Task Builder*, 3-20
for multiuser task, *Task Builder*, 9-1
attribute
access-code, *Task Builder*, 2-5
allocation-code, *Task Builder*, 2-5
relocation-code, *Task Builder*, 2-5
save, *Task Builder*, 2-5, 2-7
scope-code, *Task Builder*, 2-5, 2-7
type-code, *Task Builder*, 2-5, 2-7
context information maintained by MACRO–11, *MACRO-11*, 5-36
creating, *Task Builder*, 2-4; *MACRO-11*, 5-37
default characteristics, *MACRO-11*, 5-40
default name, *MACRO-11*, 5-36
effect of ending with odd address, *MACRO-11*, 5-39
extending, *Task Builder*, 12-14
global, *Task Builder*, 3-20
local, *Task Builder*, 3-20
maximum number of, *MACRO-11*, 5-36
Memory allocation considerations, *MACRO-11*, 5-39
name
preserving, *Task Builder*, 5-9
reserved, *Task Builder*, E-3 to E-6
resolving, *Task Builder*, 5-45
named, *Task Builder*, 2-4
ordering sequentially, *Task Builder*, 10-40, 10-50, 11-59
segregating, *Task Builder*, 10-40, 11-56
separating code and data, *MACRO-11*, 5-39
sharing code or data, *MACRO-11*, 5-38
specifying, *Task Builder*, 3-31
TPARS, *I/O Operations*, 7-9
virtual
FORTRAN, *Task Builder*, 5-70
FORTRAN example, *Task Builder*, 5-73 to 5-75
specifying, *Task Builder*, 12-44
Program section directive, *MACRO-11*, 5-33

/PRO keyword
HOME command, *MCR*, 3-81
INITVOLUME command, *MCR*, 3-91
INS command (VMR), *System Management*, 5-23
INSTALL command, *MCR*, 3-97
MOUNT command, *MCR*, 3-115, 3-122
USER FILE DIRECTORY command, *MCR*, 3-209
Prologue, *RMS-11 User's Guide*, 1-19; *RMS-11 Intro*, 3-15
indexed files, *RMS-11 User's Guide*, 5-2
relative files, *RMS-11 User's Guide*, 4-1
Prompt, *DCL*, 1-8; *Introduction*, 1-4, 1-10
binary (TTDRV), *I/O Drivers*, 2-43
checkpointing (TTDRV), *I/O Drivers*, 2-16, 2-42
CLI string, *MCR*, 3-42
CTRL/O (TTDRV), *I/O Drivers*, 2-16
default, *MCR*, 2-13
explicit, *Introduction*, 1-5
explicit MCR, *MCR*, 2-13
ignoring (TTDRV), *I/O Drivers*, 2-16, 2-42
MCR, *MCR*, 2-16
invoking, *MCR*, 2-14
ODT, *Debugging*, 1-5
pass all (TTDRV), *I/O Drivers*, 2-29
read with (TTDRV), *I/O Drivers*, 2-20
redisplay (TTDRV), *I/O Drivers*, 2-30
RMSBCK utility, *RMS-11 Utilities*, 6-2
RMSDES utility, *RMS-11 Utilities*, 2-2
RMSDNV utility, *RMS-11 Utilities*, 4-3
RMSDSP utility, *RMS-11 Utilities*, 5-2
RMSIFL utility, *RMS-11 Utilities*, 3-2
RMSRST utility, *RMS-11 Utilities*, 7-2
send and read (TTDRV), *I/O Drivers*, 2-42
send pass all (TTDRV), *I/O Drivers*, 2-14
SHUTUP program, *System Management*, 6-2
example of input, *System Management*, 6-2
task, *MCR*, 2-14
Prompting
CLI, *System Management*, 17-3
RMSDES utility
conditional, *RMS-11 Utilities*, 2-1, 2-13, 2-15, 2-17, 2-29
Prompting output
VFC (LPDRV), *I/O Drivers*, 7-6
/PROMPT qualifier
initializing CLI with, *System Management*, 17-4
/PROMPT subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
PROTECTION
RMSDES utility, *RMS-11 Utilities*, 2-33
Protection, *RMS-11 User's Guide*, 1-18; *DCL*, 4-9 to 4-13, 4-107 to 4-113, 9-35
account, *MCR*, 2-22, 3-177
common region, *MCR*, 3-97
default UIC for task, *MCR*, 3-145
directory, *DCL*, 4-12 to 4-13, 4-17
file, *MCR*, 3-113, 3-115, 3-120, 3-122; *System Management*, 2-3; *DCL*, 4-9 to 4-12, 5-98, 9-35
default, *DCL*, 4-113
setting, *DCL*, 4-107 to 4-109, 4-110 to 4-112
specifying default, *MCR*, 3-87
specifying personal default, *MCR*, 3-164
magnetic tape, *MCR*, 3-121
RMSDEF utility, *RMS-11 Utilities*, A-18
RMSRST utility, *RMS-11 Utilities*, 7-7
volume, *MCR*, 3-113, 3-115, 3-120, 3-122; *DCL*, 4-13, 5-69
XAB
See PRO block
Protection code
file, *Utilities*, 12-19
setting with UIC, *MCR*, 2-4
Protection mask, *System Management*, 5-23
/PROTECTION qualifier
BRU utility, *Utilities*, 3-22
Protection UIC, *System Management*, 5-24
Protocol
Ethernet
LF$DEF, *I/O Drivers*, 10-3
LF$EXC, *I/O Drivers*, 10-3
type definition (XEDRV), *I/O Drivers*, 10-27
Prototype ODL file, *RMS-11 User's Guide*, 8-3
Prototype task
fixing, *System Management*, 5-19
installing, *System Management*, 5-25
PRS2AM control file module, *Error Logging*, 4-4, 4-11, A-7
PRS2BM control file module, *Error Logging*, 4-4, 4-11, A-7
.PRSDI routine
filling in directory information, *I/O Operations*, 4-15

.PRSDV routine
filling in device/unit information, *I/O Operations*, 4-15
.PRSFN routine
filling in file name, type, version, *I/O Operations*, 4-16
Prsize parameter
device-specific
VTDRV, *I/O Drivers*, 3-4
TTDRV, *I/O Drivers*, 2-13
IO.RPR function, *I/O Drivers*, 2-43
/PR switch, *Task Builder*, 10-36
PIP utility, *Utilities*, 12-22
Prv_Diag status flag, *System Management*, 4-13
PSECT
See Program section
P-sect
See Program section
.PSECT directive, *Program Development*, 2-8; *Task Builder*, 3-31; *MACRO-11*, 5-33
assigns attributes to current location counter, *MACRO-11*, 2-12
default characteristics, *MACRO-11*, 5-40
list of symbolic arguments, *MACRO-11*, 5-34
may confuse automatic local symbol generation in macro, *MACRO-11*, 6-10
summary, *MACRO-11*, 5-2
terminates local symbol block, *MACRO-11*, 2-10
Pseudo device, *MCR*, 2-10; *DCL*, 5-1, 5-6 to 5-8 ; *Introduction*, 3-11
See also Device
CL:, *DCL*, 5-6, 5-7
CO:, *DCL*, 5-6, 5-7
LB:, *DCL*, 5-6, 5-7
MK:, *DCL*, 5-6, 5-7
NL:, *DCL*, 5-7
RD:, *DCL*, 5-7
redirecting, *MCR*, 2-10
SP:, *DCL*, 5-7
SY:, *DCL*, 5-7
TI:, *DCL*, 3-1, 5-7, 5-8
VT:, *DCL*, 5-7, 5-8
WK:, *DCL*, 5-7, 5-8
Pseudo device names, *MCR*, 2-10
PSW, *Debugging*, B-1; *Executive*, 1-2; *Writing I/O Driver*, 1-1; *XDT*, A-1
format, *Debugging*, B-1; *XDT*, A-1
register, *Debugging*, 2-5, 5-3
$PTBYT routine, *Writing I/O Driver*, 7-28
$PTWRD routine, *Writing I/O Driver*, 7-28
/PUB keyword
MOUNT command, *MCR*, 3-115, 3-122
SET command, *MCR*, 3-180
SET command (VMR), *System Management*, 5-63
PURGE command, *Program Development*, 3-9; *DCL*, 4-42 to 4-44, 9-29; *Introduction*, 3-7
/PU switch
PIP utility, *Program Development*, 3-9; *Utilities*, 12-24
PUT$ macro, *I/O Operations*, 1-9, 3-1, 3-26
FD.RWM parameter
record I/O, *I/O Operations*, 2-10
FDB
file processing, *I/O Operations*, 3-25
file processing
locate mode, *I/O Operations*, 3-26
write logical record, *I/O Operations*, 3-24
file truncate, *I/O Operations*, 2-10
fixed-length record, *I/O Operations*, 3-26
block boundary, *I/O Operations*, 3-27
block buffer, *I/O Operations*, 3-27
locate mode, *I/O Operations*, 3-24, 3-27
move mode, *I/O Operations*, 3-24, 3-26
no truncate function, *I/O Operations*, 2-10
sequenced record, *I/O Operations*, 3-24
task record buffer, *I/O Operations*, 3-26
variable-length record, *I/O Operations*, 3-26
block boundary, *I/O Operations*, 3-27
PUT$R macro, *I/O Operations*, 3-1
example, *I/O Operations*, 3-29
file processing
write logical record random mode, *I/O Operations*, 3-28
random mode
locate mode execution, *I/O Operations*, 3-29
PUT$S macro, *I/O Operations*, 3-1
file processing
write logical record, sequential mode, *I/O Operations*, 3-29
PUT argument to ORG$ macro, *RMS-11 Macro*, 2-3
$PUT macro
key access, *RMS-11 Macro*, 5-95
sequential access, *RMS-11 Macro*, 5-91

PUT operation, *RMS-11 Macro*, 4-8, 5-88; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
access modes, *RMS-11 Intro*, 4-6
and key position, *RMS-11 User's Guide*, 6-7
and ODL files, *RMS-11 User's Guide*, 8-5
and shared access, *RMS-11 User's Guide*, 2-6
and stream records, *RMS-11 User's Guide*, 2-17
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 7-5, 7-9
key access, *RMS-11 User's Guide*, 5-10, 7-6
mass insertion, *RMS-11 User's Guide*, 7-9
initial allocation, *RMS-11 User's Guide*, 4-4
key access, *RMS-11 User's Guide*, 1-16
locate mode, *RMS-11 User's Guide*, 3-14
move mode
indexed files, *RMS-11 User's Guide*, 7-7
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-13
optimizing, *RMS-11 User's Guide*, 6-7
$PUT macro
key access, *RMS-11 Macro*, 5-95
relative files, *RMS-11 User's Guide*, 4-11
key access, *RMS-11 User's Guide*, 4-11
sequential access, *RMS-11 User's Guide*, 4-11
sequential access, *RMS-11 Macro*, 5-91; *RMS-11 User's Guide*, 1-16, 5-17, 7-6
sequential files, *RMS-11 User's Guide*, 3-10
key access, *RMS-11 User's Guide*, 3-10
sequential access, *RMS-11 User's Guide*, 3-10
PUT statement, *Error Logging*, 4-33
CFL, *Error Logging*, 5-38

Q

Q.xxx offsets
in I/O packet, *Writing I/O Driver*, 4-15, 4-16
$QERMV Executive routine, *Error Logging*, 4-27
Q error
.EVEN, *MACRO-11*, 5-31
in bad expression, *MACRO-11*, 2-14
invalid floating-point number, *MACRO-11*, 5-28
invalid syntax, *MACRO-11*, 2-3
.ODD, *MACRO-11*, 5-31
.TITLE, *MACRO-11*, 5-10
too many arguments in macro call, *MACRO-11*, 6-9
$QINSP routine, *Writing I/O Driver*, 7-29
QIO$
ACP interface, *I/O Operations*, H-1
parameter list (F11ACP), *I/O Operations*, H-6
QIO$C macro, *I/O Drivers*, 1-15
QIO$ directive, *Executive*, 5-168
BYE command, *MCR*, 3-36
SET /MAXPKT command, *MCR*, 3-172
soliciting input, *MCR*, 2-14
summary, *I/O Operations*, F-2
QIO$ function
ACP
closing a file, *I/O Operations*, H-3
creating a file, *I/O Operations*, H-2
deleting a file, *I/O Operations*, H-3
extending a file, *I/O Operations*, H-3
opening a file, *I/O Operations*, H-3
using, *I/O Operations*, H-2
device-specific
TTDRV, *I/O Drivers*, 2-19
UNIBUS switch driver, *I/O Drivers*, 14-4
directive error status list, *I/O Drivers*, B-6
directive success status list, *I/O Drivers*, B-7
standard (UNIBUS switch driver), *I/O Drivers*, 14-2
TTDRV, *I/O Drivers*, 2-21
QIO$ macro, *I/O Drivers*, 1-15
CRDRV, *I/O Drivers*, 9-2
DDDRV, *I/O Drivers*, 5-2
device-specific function
CRDRV, *I/O Drivers*, 9-3
DDDRV, *I/O Drivers*, 5-3
disk driver, *I/O Drivers*, 4-8
DUDRV, *I/O Drivers*, 4-9
LADRV, *I/O Drivers*, 12-25
receiving (LRDRV), *I/O Drivers*, 11-8
tape driver, *I/O Drivers*, 6-7
transmitting (LRDRV), *I/O Drivers*, 11-3

QIO$ macro
device-specific function (cont'd.)
TTDRV, *I/O Drivers*, 2-10, 2-19
list, *I/O Drivers*, 2-22
VTDRV, *I/O Drivers*, 3-2, 3-5
XEDRV, *I/O Drivers*, 10-4, 10-5
disk driver, *I/O Drivers*, 4-7
event flag, *I/O Drivers*, 1-4
Executive function, *I/O Drivers*, 1-4
format
basic, *I/O Drivers*, 1-5, 1-6
general (XEDRV), *I/O Drivers*, 10-3
introduction, *I/O Drivers*, 1-1
IO.ATT function, *I/O Drivers*, 1-27
IO.DET function, *I/O Drivers*, 1-28
IO.KIL function, *I/O Drivers*, 1-29
IO.RLB function, *I/O Drivers*, 1-30
IO.RVB function, *I/O Drivers*, 1-31
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
issuing hint (tape driver), *I/O Drivers*, 6-16
library (XEDRV), *I/O Drivers*, 10-3
LPDRV, *I/O Drivers*, 7-4
null argument, *I/O Drivers*, 1-5
omitting comma in syntax, *I/O Drivers*, 1-5
power failure, *I/O Drivers*, 1-42
standard function
CRDRV, *I/O Drivers*, 9-2
DDDRV, *I/O Drivers*, 5-3
disk driver, *I/O Drivers*, 4-7
LPDRV, *I/O Drivers*, 7-4
receiving (LRDRV), *I/O Drivers*, 11-8
tape driver, *I/O Drivers*, 6-6
transmitting (LRDRV), *I/O Drivers*, 11-3
TTDRV, *I/O Drivers*, 2-9, 2-10
VTDRV, *I/O Drivers*, 3-2, 3-4
XEDRV, *I/O Drivers*, 10-5
standard I/O format (TTDRV), *I/O Drivers*, 2-10
syntax element, *I/O Drivers*, 1-6
tape driver, *I/O Drivers*, 6-5
TTDRV, *I/O Drivers*, 2-9
UNIBUS switch, *I/O Drivers*, 14-2
valid power failure (TM11), *I/O Drivers*, 6-14
VTDRV, *I/O Drivers*, 3-2
XEDRV, *I/O Drivers*, 10-3, 10-5
QIO$S macro, *I/O Drivers*, 1-15
QIO$ syntax
P1,P2,...,P6 parameter, *I/O Drivers*, 1-9
QIO count
ELI, *Error Logging*, 2-9, 2-10
See also /RESET switch
QIO DEUNA driver
See XEDRV
QIO directive
building I/O packet, *Writing I/O Driver*, 4-10
creating DPB, *Writing I/O Driver*, 3-2
directive dispatching, *Writing I/O Driver*, 3-2
QIO Directive Parameter Block (QIO DPB), *Writing I/O Driver*, 4-12, 4-15 to 4-16
QIO execution routine, *I/O Operations*, 4-23
QIO request, *Writing I/O Driver*, 2-12
QIOW$ directive, *Executive*, 5-172
summary, *I/O Operations*, F-2
QIOW$ macro, *I/O Drivers*, 1-15, 1-16
format, *I/O Drivers*, 1-16
task synchronization, *I/O Drivers*, 1-5
QMG, *Program Development*, 1-13; *System Management*, 3-1; *DCL*, 1-23, 4-83 to 4-94
batch processing
support, *System Management*, 1-11
command descriptions, *System Management*, 3-15 to 3-43
commands
DCL format, *System Management*, 3-15
MCR format, *System Management*, 3-15
DCL commands
ASSIGN/QUEUE, *System Management*, 3-29
DEASSIGN/QUEUE, *System Management*, 3-30
DELETE/PROCESSOR, *System Management*, 3-27
DELETE/QUEUE, *System Management*, 3-26
INITIALIZE/PROCESSOR, *System Management*, 3-19
INITIALIZE/QUEUE, *System Management*, 3-17
START/PROCESSOR, *System Management*, 3-36
START/QUEUE, *System Management*, 3-40
START/QUEUE/MANAGER, *System Management*, 3-41
STOP/ABORT, *System Management*, 3-31

QMG
DCL commands (cont'd.)
STOP/PROCESSOR, *System Management*, 3-32
STOP/QUEUE, *System Management*, 3-34
STOP/QUEUE/MANAGER, *System Management*, 3-35
description, *System Management*, 1-11
entry number, *DCL*, 4-83
error messages, *System Management*, 3-43, 3-43 to 3-50
function, *System Management*, 3-2
installation, *System Management*, 3-2 to 3-10
interactive, *System Management*, 3-3
using STARTUP.CMD, *System Management*, 3-2
using SYSPARAM.DAT, *System Management*, 3-2
MCR commands
QUE /AS:, *System Management*, 3-29
QUE /CR, *System Management*, 3-17
QUE /DEA, *System Management*, 3-30
QUE /DEL:Q, *System Management*, 3-26
QUE /KIL, *System Management*, 3-31
QUE /SP, *System Management*, 3-19
QUE /STA, *System Management*, 3-36
QUE /STA:QMG, *System Management*, 3-41
QUE /STA:QUE, *System Management*, 3-40
QUE /STO, *System Management*, 3-32
QUE /STO:QMG, *System Management*, 3-35
QUE /STO:QUE, *System Management*, 3-34
QUE /UNSP, *System Management*, 3-27
number of processors supported, *System Management*, 1-11
number of queues supported, *System Management*, 1-11
starting, *System Management*, 3-4
DCL command, *System Management*, 3-4
MCR command, *System Management*, 3-4
QMGCLI task, *System Management*, 3-2
QMGSTART.CMD file, *System Management*, 3-2
QMGSTART.CMD file (cont'd.)
invoking, *System Management*, 3-3
Q register, *Debugging*, 2-6, 5-3, 7-2; *XDT*, 2-12
indicator, *Debugging*, 2-9, 7-3; *XDT*, 2-14
$QTRAN routine
calling, *System Management*, 10-19
description, *System Management*, 10-19
example of call to, *System Management*, 10-19
$QTRN1 routine
calling, *System Management*, 10-19
description, *System Management*, 10-19
example of call to, *System Management*, 10-20
$QTRN2 routine
calling, *System Management*, 10-20
description, *System Management*, 10-20
QUA attribute, *System Management*, 18-47
QUADWORD numeric data type
CFL, *Error Logging*, 5-5
QUADWORD value
equivalent string, *Error Logging*, 5-4
Qualifier, *DCL*, 1-9
See also individual qualifier entries
abbreviating, *DCL*, 1-12
command, *Crash Dump Analyzer*, 2-12 to 2-14
crash-input, *Crash Dump Analyzer*, 2-15 to 2-20
date-related, *DCL*, 4-8
DCL, *Introduction*, 3-1
LINK command, *Task Builder*, 11-1 to 11-71
summary, *Task Builder*, 11-3 to 11-9
Quantity register
See Q register
QUE /AS command, *System Management*, 3-29
assigning batch queues, *System Management*, 3-13
assigning print queues, *System Management*, 3-9
QUE /CR command, *System Management*, 3-17
functions, *System Management*, 3-19
initializing batch queues, *System Management*, 3-12
initializing print queues, *System Management*, 3-5

QUE /CR command (cont'd.)
queue types
BATCH, *System Management*, 3-17
PRINT, *System Management*, 3-17
switches, *System Management*, 3-19
QUE /DEA command, *System Management*, 3-30
QUE /DEL:Q command, *System Management*, 3-26
QUE /DEL command, *Batch and Queue*, 1-9
format, *Batch and Queue*, 2-10
QUE /HO command
format
entry number, *Batch and Queue*, 2-22
job name, *Batch and Queue*, 2-22
QUE /KIL command, *System Management*, 3-31
QUE /LI:DEV command
format, *Batch and Queue*, 2-18
QUE /LI command, *Batch and Queue*, 2-14
display, *Batch and Queue*, 2-14 to 2-17
format, *Batch and Queue*, 2-14
switches, *Batch and Queue*, 2-14
QUE /MOD command
example, *Batch and Queue*, 2-19
file format
switches, *Batch and Queue*, 2-19
job format
switches, *Batch and Queue*, 2-19
QUE /REL command
format
entry number, *Batch and Queue*, 2-22
job name, *Batch and Queue*, 2-22
QUE /SP command, *System Management*, 3-19
functions
/BA, *System Management*, 3-20
interactive use, *System Management*, 3-11
/INPUT, *System Management*, 3-20
/SP, *System Management*, 3-20
/SP/EX, *System Management*, 3-20
switches
/FL, *System Management*, 3-21
/FO, *System Management*, 3-21
/LOW, *System Management*, 3-23
/NM, *System Management*, 3-23
/NOLO, *System Management*, 3-24
/QUEUE, *System Management*, 3-20
/SHR, *System Management*, 3-8, 3-23
/TERM, *System Management*, 3-20
QUE /STA:QMG command, *System Management*, 3-41
starting QMG, *System Management*, 3-4
QUE /STA:QUE command, *System Management*, 3-40
QUE /STA command, *System Management*, 3-36
functions, *System Management*, 3-36
options, *System Management*, 3-36
/AL, *System Management*, 3-37
:BA, *System Management*, 3-37
/FL, *System Management*, 3-37
/FO, *System Management*, 3-37
:FW, *System Management*, 3-37
:NE, *System Management*, 3-37
overview, *System Management*, 3-37
:PA, *System Management*, 3-37, 3-38
:RES, *System Management*, 3-38
QUE /STO:QMG command, *System Management*, 3-35
QUE /STO:QUE command, *System Management*, 3-34
QUE /STO command, *System Management*, 3-32
functions, *System Management*, 3-32
options, *System Management*, 3-32
:AB, *System Management*, 3-33
:EOF, *System Management*, 3-33
:EOJ, *System Management*, 3-33
QUE /UNSP command, *System Management*, 3-27
functions, *System Management*, 3-27
$QUEBF routine, *Writing I/O Driver*, 1-16
QUERY.DIC file, *System Management*, 10-17
Query mode
RMSBCK utility, *RMS-11 Utilities*, 6-5 to 6-7, 6-10
RMSRST utility, *RMS-11 Utilities*, 7-6 to 7-8, 7-11
Question mark (?)
ODT, *Program Development*, 5-3
used to generate local symbols, *MACRO-11*, 6-10
user input error, *Debugging*, A-1; *XDT*, 3-1
Queue
batch, *System Management*, 3-17
assigning, *System Management*, 3-13
initializing, *System Management*, 3-12
displaying information, *Batch and Queue*, 2-1
general, *System Management*, 3-10

Queue (cont'd.)
I/O optimization, *System Management*, 14-1
job
holding, *Batch and Queue*, 2-1
releasing, *Batch and Queue*, 2-1
status
altering, *Batch and Queue*, 2-1
print, *System Management*, 3-17
assigning, *System Management*, 3-9
device-specific, *System Management*, 3-10
Queue I/O directive
BYE command, *MCR*, 3-36
SET /MAXPKT command, *MCR*, 3-172
soliciting input, *MCR*, 2-14
Queue I/O Request and Wait directive, *Executive*, 5-172
Queue I/O Request directive, *Executive*, 5-168
Queue management subsystem, *System Management*, 3-2
Queue Manager
See also QMG
SYSGEN question, *System Generation*, 3-28
Queue MCR Command Line function (GIN$), *Executive*, 5-117
Queuename: switch
PRI command, *Batch and Queue*, 2-3
Queuename job switch
SUB command, *Batch and Queue*, 3-15
Queuename parameter
DELETE command, *Batch and Queue*, 2-10
Queue optimization, *MCR*, 3-174; *Writing I/O Driver*, 1-17
algorithms, *MCR*, 3-174
entry point, *Writing I/O Driver*, 4-61
fairness-count, *MCR*, 3-174
/QUEUE qualifier
PRINT command, *Batch and Queue*, 2-3
SUBMIT command, *Batch and Queue*, 3-15
/QUEUE switch
QUE /SP command, *System Management*, 3-20
Quiet mode, *Indirect*, 2-55
/QUIET subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
QUIT command
EDT editor, *Introduction*, 2-10
RMSDES utility, *RMS-11 Utilities*, 2-2, 2-12, 2-18
Quotation mark ("), *DCL*, 1-14
Quotation mark operator (")
See Operator
Quoted string
remote file specification, *RMS-11 User's Guide*, B-2
$QUPKT Executive routine, *Error Logging*, 4-26

R

R.FIX parameter
fixed-length records, *I/O Operations*, 3-8
R.FIX file attribute, *I/O Operations*, 2-6
R.SEQ parameter
sequenced records, *I/O Operations*, 3-8
R.SEQ file attribute, *I/O Operations*, 2-6
R.VAR parameter
variable-length records, *I/O Operations*, 3-8
R.VAR file attribute, *I/O Operations*, 2-6
/R5 switch
DMP utility, *Utilities*, 5-7
R$-family macro, *RMS-11 Macro*, 2-10
declaring, *RMS-11 Macro*, C-2
RA60 disk, *I/O Drivers*, 4-4
RA80 disk, *I/O Drivers*, 4-4
RA81 disk, *I/O Drivers*, 4-4
RAB, *RMS-11 Intro*, 4-8
initializing, *RMS-11 Macro*, 2-10
summary, *RMS-11 Macro*, 6-115
RAB$B macro, *RMS-11 Macro*, C-2
RAB$E macro, *RMS-11 Macro*, 2-10
declaring, *RMS-11 Macro*, C-2
<RAD50> symbol, *Indirect*, 2-11
.RAD50 directive, *MACRO-11*, 5-22
character equivalents, *MACRO-11*, 5-23
formula, *MACRO-11*, 5-23
inserting special values with angle brackets, *MACRO-11*, 5-23
summary, *MACRO-11*, 5-2
valid characters, *MACRO-11*, 5-22
RAD50 print radix
CFL, *Error Logging*, 5-5
Radix–50
character set, *Debugging*, 7-4
displaying, *Debugging*, 4-7
evaluating, *Debugging*, 7-4
numeric equivalents, *Debugging*, 7-4
opening, *Debugging*, 4-7

Radix–50 (cont'd.)
operator
word mode, *Debugging*, 2-6, 4-7; *XDT*, 2-12
separator, *Debugging*, 7-4; *XDT*, 2-10
Radix–50 character set, *MACRO-11*, A-8
Radix–50 character terminates operator field, *MACRO-11*, 1-3
Radix-50 conversion
ASCII to Radix-50 ($CAT5), *System Library*, 4-8
ASCII with blanks to Radix-50 ($CAT5B), *System Library*, 4-9
Radix-50 to ASCII ($C5TA), *System Library*, 5-13
Radix–50 storage
See also .RAD50 directive
temporary with ^R, *MACRO-11*, 5-23
Radix control, *MACRO-11*, 5-25
changing default, *MACRO-11*, 2-13
list of temporary operators, *MACRO-11*, 5-26
temporary, *MACRO-11*, 2-13
when to use temporary, *MACRO-11*, 5-26
.RADIX directive, *MACRO-11*, 5-25
discussed, *MACRO-11*, 2-13
restriction if .RADIX 16, *MACRO-11*, 5-26
summary, *MACRO-11*, 5-2
Random access, *RMS-11 User's Guide*, 1-9; *RMS-11 Intro*, 2-4; *I/O Operations*, 2-10
by key, *RMS-11 User's Guide*, 1-12; *RMS-11 Intro*, 3-12
FIND, *RMS-11 User's Guide*, 1-16
GET, *RMS-11 User's Guide*, 1-16
match criterion, *RMS-11 Intro*, 3-12
PUT, *RMS-11 User's Guide*, 1-16
by RFA, *RMS-11 User's Guide*, 1-12; *RMS-11 Intro*, 3-11
FIND, *RMS-11 User's Guide*, 1-16
GET, *RMS-11 User's Guide*, 1-16
by VBN, *RMS-11 User's Guide*, 1-20; *RMS-11 Intro*, 3-12
match criteria, *RMS-11 User's Guide*, 5-13
to indexed files, *RMS-11 User's Guide*, 5-7, 5-9, 6-12
to relative files, *RMS-11 User's Guide*, 4-1
to sequential files, *RMS-11 User's Guide*, 3-2
Random access mode, *I/O Operations*, 3-20
record attribute, *I/O Operations*, 3-9
RANDOM command
IOX, *System Management*, 12-44
effect on INTERLEAVE command, *System Management*, 12-44
examples, *System Management*, 12-44
FILES-11, SELECT, and VERIFY command line, *System Management*, 12-44
Random I/O, *I/O Operations*, 2-19
Random mode
PUT$R macro
locating mode execution, *I/O Operations*, 3-29
writing logical record, *I/O Operations*, 3-28
Range
EDT editor, *Introduction*, 2-11 to 2-14
Trace program, *Debugging*, 8-3
RANGE command
IOX, *System Management*, 12-45
default range, *System Management*, 12-45
display command, *System Management*, 12-45
examples, *System Management*, 12-45
logical names, *System Management*, 12-45
parameter command, *System Management*, 12-45
/RA switch
RMSBCK utility, *RMS-11 Utilities*, 6-6 to 6-7, 6-9
RMSRST utility, *RMS-11 Utilities*, 7-8, 7-11
RATE setup command, *System Management*, 7-8, 7-14, 7-17, 7-21
RB$-family symbol
declaring, *RMS-11 Macro*, C-2
$RBCAL macro, *RMS-11 Macro*, C-3
RBN, *System Management*, 13-4
primary, *System Management*, 13-6
secondary, *System Management*, 13-6
RC25 disk, *I/O Drivers*, 4-5
dismounting, *I/O Drivers*, 4-13
RCLOKB: subroutine
read 16-bit clock (K-series), *I/O Drivers*, 13-23
RCML$ macro, *I/O Operations*, 6-11
Rcnt parameter
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-4
R command, *Debugging*, 2-9; *XDT*, 2-14

R command (cont'd.)
relocation register, *Program Development*, 5-3
ZAP utility, *Utilities*, 15-19
RCST$ directive, *Executive*, 5-174
summary, *I/O Operations*, F-3
UNSTOP command, *MCR*, 2-213
/RC switch
DMP utility, *Utilities*, 5-6
VFY utility, *Utilities*, 14-6
RCT task, *System Management*, 1-16, 13-1
activation, *System Management*, 13-3
bad block handling
steps, *System Management*, 13-3
bad block replacement
incomplete, *System Management*, 13-5
Error Logger and, *System Management*, 13-6
installing, *System Management*, 13-1
interaction with BAD, *System Management*, 13-1
MSCP configuration and, *System Management*, 13-3
recursion counter, *System Management*, 13-5
write-back cache corruption, *System Management*, 13-5
RCVD$ directive, *Executive*, 5-176
summary, *I/O Operations*, F-3
RCVX$ directive, *Executive*, 5-178
summary, *I/O Operations*, F-3
RD31 disk, *I/O Drivers*, 4-5
RD51 disk, *I/O Drivers*, 4-5
RD52 disk, *I/O Drivers*, 4-6
RD53 disk, *I/O Drivers*, 4-6
RD54 disk, *I/O Drivers*, 4-6
RD: driver, *System Management*, 1-12, 4-4
RDAF$ directive, *Executive*, 5-181; *I/O Drivers*, 1-7
RDB, *Executive*, 3-10
assigning values, *Executive*, 3-19
format, *Executive*, 3-10
generating, *Executive*, 3-12, 3-14
RDBBK$, *Executive*, 3-12
RDBDF$, *Executive*, 3-12
RDEF$ directive, *Executive*, 5-183
.RDFDR routine
reading $$FSR2 default directory string, *I/O Operations*, 4-3
.RDFPP routine
reading $$FSR2 default file protection word, *I/O Operations*, 4-5
.RDFUI routine
reading default UIC, *I/O Operations*, 4-4
$RDPAG (Read page), *System Library*, 8-36
/RD switch
RMSBCK utility, *RMS-11 Utilities*, 6-8 to 6-9
RDXF$ directive, *Executive*, 5-184; *I/O Drivers*, 1-7
REA command
See also REASSIGN command
VMR
definition, *System Management*, 5-36
examples, *System Management*, 5-36
format, *System Management*, 5-36
parameters, *System Management*, 5-36
Read/write
access declaration, *RMS-11 User's Guide*, 2-6
Read 16-bit clock
K-series, *I/O Drivers*, 13-21, 13-23
Read $$FSR2
default directory string, *I/O Operations*, 4-3
READ$ macro, *I/O Operations*, 1-8, 3-1
block access, *I/O Operations*, 2-11
end-of-file, *I/O Operations*, 3-33
example, *I/O Operations*, 3-32
FD.RWM parameter
block I/O, *I/O Operations*, 2-10
FDB
file operation, *I/O Operations*, 3-33
file processing
reading virtual block, *I/O Operations*, 3-30
format file processing, *I/O Operations*, 3-30
virtual block number, *I/O Operations*, 3-31
READ_AHEAD option, *System Management*, 15-6
default extent size for, *System Management*, 15-7
MOUNT /CACHE command, *MCR*, 3-112
SET /CACHE command, *MCR*, 3-160
Readable-block context, *RMS-11 Macro*, 4-12
Read access, *MCR*, 2-3
common region, *MCR*, 3-98; *System Management*, 5-24
file
initializing volumes with, *MCR*, 3-88
specifying default, *MCR*, 3-80
specifying default for mounted volume, *MCR*, 3-113

Read access
file (cont'd.)
specifying personal default, *MCR*, 3-164
UFD
establishing, *MCR*, 3-209
volume
initializing volumes with, *MCR*, 3-91
specifying default, *MCR*, 3-82
specifying default for mounted volume, *MCR*, 3-115
Read access function
F11ACP, *I/O Operations*, H-12
file open, *I/O Operations*, 2-14
shared, *I/O Operations*, 1-14
Read-ahead file processing, *I/O Operations*, 2-19
Read All Event Flags directive, *Executive*, 5-181
Read command
EDI editor, *Utilities*, 7-34
.READ directive, *Indirect*, 2-85
Read Event Flag directive, *Executive*, 5-183
Read Extended Event Flags directive, *Executive*, 5-184
Read function
after prompt
TTDRV, *I/O Drivers*, 2-16, 2-20, 2-30, 2-42
VTDRV, *I/O Drivers*, 3-7
all characters (TTDRV), *I/O Drivers*, 2-15, 2-29, 2-38, 2-41, 2-44, 2-46, 2-48
checking (CRDRV), *I/O Drivers*, 9-4
checkpointing (TTDRV), *I/O Drivers*, 2-16
converting lowercase (TTDRV), *I/O Drivers*, 2-15, 2-29
DDDRV, *I/O Drivers*, 5-4
default input (TTDRV), *I/O Drivers*, 2-15, 2-29
default UIC, *I/O Operations*, 4-4
destination address (XEDRV), *I/O Drivers*, 10-18
error (tape driver), *I/O Drivers*, 6-13
Ethernet address (XEDRV), *I/O Drivers*, 10-16
file protection word
default, *I/O Operations*, 4-5
logical block, *I/O Drivers*, 1-30
TTDRV, *I/O Drivers*, 2-15
special terminator, *I/O Drivers*, 2-45
Read function (cont'd.)
logical record file processing, *I/O Operations*, 3-18
logical record random mode file processing, *I/O Operations*, 3-22
logical record sequential mode, *I/O Operations*, 3-23
no echo (TTDRV), *I/O Drivers*, 2-16, 2-29, 2-31, 2-40, 2-44, 2-46, 2-48
TF.RNE, *I/O Drivers*, 2-39
no filter (TTDRV), *I/O Drivers*, 2-16, 2-29
pass through (TTDRV), *I/O Drivers*, 2-16, 2-30
process escape sequence (TTDRV), *I/O Drivers*, 2-15, 2-29
protocol type (XEDRV), *I/O Drivers*, 10-17
special terminator (TTDRV), *I/O Drivers*, 2-17, 2-30, 2-44
TF.RNE, *I/O Drivers*, 2-39
tape driver, *I/O Drivers*, 6-8
terminator (TTDRV)
CTRL/C, *I/O Drivers*, 2-70
no echo, *I/O Drivers*, 2-17
table, *I/O Drivers*, 2-17, 2-46
timeout
TF.TMO (TTDRV), *I/O Drivers*, 2-39
TTDRV, *I/O Drivers*, 2-17, 2-31, 2-44, 2-46, 2-48
virtual block, *I/O Drivers*, 1-31
file processing, *I/O Operations*, 3-30
$READ macro
sequential access, *RMS-11 Macro*, 5-98
VBN access, *RMS-11 Macro*, 5-100
Read-only
access declaration, *RMS-11 User's Guide*, 2-6
Read-Only switch
See /RO switch
READ operation, *RMS-11 Macro*, 4-13; *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
processing, *RMS-11 Intro*, 4-1
$READ macro
sequential access, *RMS-11 Macro*, 5-92, 5-98
VBN access, *RMS-11 Macro*, 5-100
Ready recovery
LPDRV, *I/O Drivers*, 7-5
Real-time system, *Introduction*, 6-2
REASSIGN command, *MCR*, 3-133
brief description, *MCR*, 1-6
device, *I/O Drivers*, 1-20

REASSIGN command (cont'd.)
examples, *MCR*, 3-133
format, *MCR*, 3-133
LUN assignment, *I/O Drivers*, 1-4
parameters, *MCR*, 3-133
VMR
See REA command
Rebuilding the Supplied System Tasks section, *System Generation*, 3-76 to 3-80
Receive By Reference directive, *Executive*, 5-198
Receive By Reference or Stop directive, *Executive*, 5-201
Receive-by-reference queue packet
dequeuing, *Executive*, 5-198, 5-201
inserting, *Executive*, 5-259
Receive Data directive, *Executive*, 5-176
Receive Data or Exit directive, *Executive*, 5-178
Receive Data or Stop directive, *Executive*, 5-174
UNSTOP command, *MCR*, 2-213
/RECEIVE qualifier, *Task Builder*, 11-53
Receiver disconnect
LRDRV, *I/O Drivers*, 11-10
/RECENT qualifier
SHOW ERROR_LOG command, *Error Logging*, 2-13
Reconfiguration
components, *System Management*, 4-4
CON interface, *System Management*, 4-4
HRC task, *System Management*, 4-4
RD: driver, *System Management*, 4-4
definition, *System Management*, 4-1
timing and, *System Management*, 11-4
use, *System Management*, 4-4
Reconfiguration driver
See RD: driver
Reconfiguration service
description, *System Management*, 1-12
initiating, *System Management*, 4-6
Record
See also Record format
access mode, *RMS-11 Intro*, 3-11
key, *RMS-11 Intro*, 3-12
RFA, *RMS-11 Intro*, 3-11
sequential, *RMS-11 Intro*, 3-11
data, *RMS-11 User's Guide*, 5-2; *RMS-11 Intro*, 3-7
deleting
See DELETE operation
Record (cont'd.)
fixed-length
R.FIX parameter, *I/O Operations*, 3-8
index, *RMS-11 User's Guide*, 5-2, 5-6; *RMS-11 Intro*, 3-7
locating
See FIND operation
moving, *DCL*, 4-53
processing, *RMS-11 User's Guide*, 1-15
reading, *Indirect*, 2-85
See GET operation
replacing
See UPDATE operation
sequenced
R.SEQ parameter, *I/O Operations*, 3-8
variable-length, *I/O Operations*, 1-6
R.VAR parameter, *I/O Operations*, 3-8
writing
See PUT operation
Record access, *RMS-11 User's Guide*, 1-12
See also Shared access
Record access initialization, *I/O Operations*, 2-9
Record access mode, *RMS-11 Macro*, 4-3
See also Access mode
Record attribute, *I/O Operations*, 2-6, 3-8
FD.BLK parameter
block boundary crossing, *I/O Operations*, 3-9
FD.CR parameter, *I/O Operations*, 2-6
line-feed character, *I/O Operations*, 3-9
FD.FTN parameter, *I/O Operations*, 2-6
FORTRAN carriage-control, *I/O Operations*, 3-9
FD.RAN parameter
random access mode, *I/O Operations*, 3-9
FD.RPN parameter
carriage-control word, *I/O Operations*, 3-9
locate mode, *I/O Operations*, 3-9
sequential mode, *I/O Operations*, 3-9
FD.RWM parameter
process with block I/O, *I/O Operations*, 3-9
Record buffer
declaring size, *Task Builder*, 12-24
Record buffer task
locate mode, *I/O Operations*, 3-26
Record context, *RMS-11 Macro*, 4-3

Record file address
See RFA
Record fixed-length PUT$ macro, *I/O Operations*, 3-26
Record format, *RMS-11 User's Guide*, 1-11, 1-18; *RMS-11 Intro*, 3-1
and file organizations, *RMS-11 User's Guide*, 1-20, 2-15
fixed-length, *RMS-11 User's Guide*, 1-11, 2-15; *RMS-11 Intro*, 3-2
indexed files, *RMS-11 User's Guide*, 6-1
relative files, *RMS-11 User's Guide*, 4-2
RMSCNV utility, *RMS-11 Utilities*, 4-14
RMSDEF utility, *RMS-11 Utilities*, A-8
sequential files, *RMS-11 User's Guide*, 3-3
stream, *RMS-11 User's Guide*, 1-11, 2-16; *RMS-11 Intro*, 3-4
tape, *I/O Operations*, 5-5
undefined, *RMS-11 User's Guide*, 1-11, 2-17; *RMS-11 Intro*, 3-4
variable-length, *RMS-11 User's Guide*, 1-11, 2-15; *RMS-11 Intro*, 3-2
and medium, *RMS-11 User's Guide*, 2-15
VFC, *RMS-11 User's Guide*, 1-11, 2-16; *RMS-11 Intro*, 3-2
Record I/O, *I/O Operations*, 2-9, 2-10
FSR, *I/O Operations*, 2-35, 2-36
FSRZ
multibuffering, *I/O Operations*, 2-36
locate mode
FD.PLC parameter, *I/O Operations*, 3-6
macro calls, *I/O Operations*, 2-9
mode, *I/O Operations*, 1-10
multibuffering, *I/O Operations*, 1-11
operation, *I/O Operations*, 1-8
random
FD.RAN parameter, *I/O Operations*, 3-6
synchronization, event flag, *I/O Operations*, 2-17
Record Management Services
See RMS–11
Record operation, *RMS-11 Macro*, 4-9; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
See also Operation
Record-operation macro
declaring, *RMS-11 Macro*, C-3
$DELETE, *RMS-11 Macro*, 5-25
Record-operation macro (cont'd.)
$FIND, *RMS-11 Macro*, 5-51, 5-54
$GET, *RMS-11 Macro*, 5-60, 5-63, 5-67
$PUT, *RMS-11 Macro*, 5-91, 5-95
$TRUNCATE, *RMS-11 Macro*, 5-122
$UPDATE, *RMS-11 Macro*, 5-124
Record-output handling, *RMS-11 User's Guide*, 1-19
Record processing, *RMS-11 Macro*, 4-3
Record reference vector
See RRV
RECORDS command
IOX, *System Management*, 12-46
examples, *System Management*, 12-46
initial default, *System Management*, 12-46
overriding default, *System Management*, 12-46
SELECT command line, *System Management*, 12-46
Record sequenced PUT$ macro, *I/O Operations*, 3-24
Record size, *RMS-11 User's Guide*, 1-18
FDB, *I/O Operations*, 3-9
fixed-length, *I/O Operations*, 2-7
indexed files, *RMS-11 User's Guide*, 6-1
largest, *I/O Operations*, 2-8
relative files, *RMS-11 User's Guide*, 4-2
sequential files, *RMS-11 User's Guide*, 3-2
UPDATE operation, *RMS-11 User's Guide*, 2-16
Record stream, *RMS-11 Macro*, 4-3
Record transfer mode, *RMS-11 Intro*, 4-6
indexed files, *RMS-11 User's Guide*, 7-6
locate mode, *RMS-11 Intro*, 4-6
move mode, *RMS-11 Intro*, 4-6
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-13
Record type
object module, *Task Builder*, A-1
Record variable-length PUT$ macro, *I/O Operations*, 3-26
Recoverable error, *System Management*, 11-3
/RECOVER qualifier
EDIT command, *DCL*, 4-21
Recovery check
CRDRV, *I/O Drivers*, 9-5
Recursive Translation of Logical Name directive, *Executive*, 5-186
RED command
See also REDIRECT command
format, *System Management*, 9-1

RED command (cont'd.)
parameters, *System Management*, 9-2
redirecting CO, *System Management*, 9-1
VMR
definition, *System Management*, 5-37
examples, *System Management*, 5-37
format, *System Management*, 5-37
parameters, *System Management*, 5-37
restrictions, *System Management*, 5-37
Redirect algorithm, *Writing I/O Driver*, 3-2
REDIRECT command, *MCR*, 3-134; *System Management*, 9-9
See also RED command
and pseudo devices, *MCR*, 2-10
brief description, *MCR*, 1-5
device, *I/O Drivers*, 1-20
examples, *MCR*, 3-134
format, *MCR*, 3-134
parameters, *MCR*, 3-134
VMR
See RED command
Reentry vector register
See X register
Reference
search, *Debugging*, 6-3
REG argument
for .ENABL/.DSABL, *MACRO-11*, 5-15
Region, *Executive*, 3-5; *Task Builder*, 2-18
absolute
symbol definition file, *Task Builder*, 5-11
address
accessing, *MCR*, 3-128
attaching, *Executive*, 3-6, 5-22
checkpointing, *System Management*, 1-3
/CO/LI/PI switch, *Task Builder*, 5-6
common, *MCR*, 3-63
accessing, *MCR*, 3-98
installed, *MCR*, 3-97
protecting, *MCR*, 3-97
status, *MCR*, 3-40
synchronizing, *MCR*, 3-99
tasks, *MCR*, 3-40
unfixing, *MCR*, 3-211
creating, *Task Builder*, 2-18
data caching, *MCR*, 3-111, 3-159
detaching, *Executive*, 5-72
disk data cache, *System Management*, 15-16
format, *System Management*, 15-16
dynamic, *Executive*, 3-5; *Task Builder*, 2-18, 2-20
Region
dynamic (cont'd.)
See also Dynamic region
creating, *Executive*, 5-53; *Task Builder*, 5-46
example, *Task Builder*, 5-46 to 5-49
dynamic storage, *System Management*, 5-62
fixing, *System Management*, 5-18
getting parameters, *Executive*, 5-136
memory, *System Management*, 1-1
protecting, *Executive*, 3-8
read/write access, *System Management*, 5-24
read-only, *System Management*, 5-24
removing, *MCR*, 3-135
shareable, *Executive*, 3-5
shared, *Executive*, 3-5; *Task Builder*, 5-1
See also Shared region
static common, *Executive*, 3-5
STB file, *Task Builder*, 5-6
task, *Executive*, 3-5; *Task Builder*, 2-20
unfixing, *System Management*, 5-80
Region Definition Block
See RDB
Region descriptor, *Task Builder*, B-25
Region ID, *Executive*, 3-5
determining, *Executive*, 5-22
REGION option
MOUNT /CACHE command, *MCR*, 3-111
SET /CACHE command, *MCR*, 3-159
REGION setup command, *System Management*, 7-21
ReGIS character set, *MCR*, 3-180
/REGIS keyword
SET command, *MCR*, 3-180
SET command (VMR), *System Management*, 5-63
Register, *Debugging*, 2-5, 5-1
A, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
address expression, *Debugging*, 5-1
B, *Debugging*, 2-6, 5-4; *XDT*, 2-12
clearing, *Debugging*, 3-2
breakpoint, *Program Development*, 5-6
address, *Debugging*, 5-4; *XDT*, 2-12
instruction, *Debugging*, 5-4; *XDT*, 2-12
proceed count, *Debugging*, 5-4; *XDT*, 2-12
C, *Debugging*, 2-6, 5-3; *XDT*, 2-12
indicator, *XDT*, 2-13
cache control, *Crash Dump Analyzer*, 3-2

Register (cont'd.)
conventions
at system state, *Writing I/O Driver*, 7-1
D, *Debugging*, 2-6, 5-4, 6-2
E, *Debugging*, 2-6, 5-4
error, *Crash Dump Analyzer*, 3-2
F, *Debugging*, 2-6, 4-1, 5-3; *XDT*, 2-12
G, *Debugging*, 2-6, 5-4; *XDT*, 2-12
general, *Crash Dump Analyzer*, 3-2; *Debugging*, 5-1; *XDT*, 2-11
contents, *Debugging*, 5-2
examining, *Debugging*, 5-1
setting, *Debugging*, 5-1
H, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
I, *Debugging*, 2-6, 5-4; *XDT*, 2-12
indicator, *Debugging*, 2-7, 2-9
internal, *Debugging*, 5-2
accessing, *Debugging*, 5-2
L, *Debugging*, 2-6, 5-3, 6-2; *XDT*, 2-11
M, *Debugging*, 2-6, 5-3, 6-2
memory management, *Crash Dump Analyzer*, 3-2
memory operations, *Debugging*, 6-1
memory system error, *Crash Dump Analyzer*, 3-2
page
address, *Crash Dump Analyzer*, 3-2
description, *Crash Dump Analyzer*, 3-2
Q, *Debugging*, 2-6, 5-3, 7-2; *XDT*, 2-12
indicator, *XDT*, 2-14
R, *Debugging*, 2-6, 5-4, 5-5; *XDT*, 2-12
clearing, *Debugging*, 5-6; *XDT*, 2-14
setting, *Debugging*, 2-9, 5-6; *XDT*, 2-14
relocation, *Program Development*, 5-2, 5-3
S, *Debugging*, 2-5, 5-3; *XDT*, 2-11
search limit, *Debugging*, 6-2
UNIBUS mapping, *Crash Dump Analyzer*, 3-2
V, *Debugging*, 2-6, 5-4
volatile, *Crash Dump Analyzer*, 3-1, 3-3
See also Volatile registers
W, *Debugging*, 2-5, 5-3
X, *Debugging*, 2-6, 5-3, 5-6
XDT internal, *XDT*, 2-11
Register declaration
user-written module, *Error Logging*, 4-30
Register format report
processing, *Error Logging*, 4-10
Register handling
of control swapping function, *System Library*, 2-1
Register handling (cont'd.)
save all Registers ($SAVAL), *System Library*, 2-2
save Registers 0–2 ($SAVVR), *System Library*, 2-5
save Registers 1–5 (.SAVR1), *System Library*, 2-6
save Registers 3–5 ($SAVRG), *System Library*, 2-4
Register indicator, *Debugging*, 2-3
C register, *Debugging*, 2-3, 7-3; *XDT*, 2-13
current location, *Debugging*, 2-3, 7-3; *XDT*, 2-10
Q register, *Debugging*, 2-3, 7-3; *XDT*, 2-14
Register report
RPT, *Error Logging*, 3-13, 3-19
Register set, *Debugging*, 5-3
/REGISTERS qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-13, 3-19
See also /FORMAT switch
Register symbol, *MACRO-11*, 2-8
default definitions, *MACRO-11*, 2-8
requirements, *MACRO-11*, 2-9
/REG keyword
FIX command (VMR), *System Management*, 5-19
FIX-IN-MEMORY command, *MCR*, 3-63
OPENREGISTER command, *MCR*, 3-128
REM command (VMR), *System Management*, 5-38
UNF command (VMR), *System Management*, 5-80
UNFIX command, *MCR*, 3-211
<REGSEG> symbol, *Indirect*, 2-19
<REGSIZ> symbol, *Indirect*, 2-19
REL argument
for .PSECT, *MACRO-11*, 5-35
to ORG$ macro, *RMS-11 Macro*, 2-3
Relational operator
CFL expression, *Error Logging*, 5-11 to 5-13, 5-16
Relative
branch location, *Debugging*, 4-5
Relative address, *Crash Dump Analyzer*, 3-1; *Debugging*, 2-2
format, *Debugging*, 2-2
Relative branch location, *Debugging*, 2-5; *XDT*, 2-11

Relative file organization, *RMS-11 Macro*, 2-3; *RMS-11 User's Guide*, 1-4, 1-12; *RMS-11 Intro*, 3-5
access declarations, *RMS-11 User's Guide*, 4-6
allocation
DEQ, *RMS-11 User's Guide*, 4-4
initial, *RMS-11 User's Guide*, 4-3
and remote access, *RMS-11 User's Guide*, B-3
asynchronous operations, *RMS-11 User's Guide*, 4-14
buckets, *RMS-11 User's Guide*, 4-1
cell, *RMS-11 User's Guide*, 4-1; *RMS-11 Intro*, 3-5
CONNECT operation, *RMS-11 User's Guide*, 4-7
contiguity, *RMS-11 User's Guide*, 4-4
deferred write, *RMS-11 User's Guide*, 4-14
DELETE operation, *RMS-11 User's Guide*, 4-7
design, *RMS-11 User's Guide*, 4-1
allocation, *RMS-11 User's Guide*, 4-3
bucket size, *RMS-11 User's Guide*, 4-2
MRN, *RMS-11 User's Guide*, 4-4
record format, *RMS-11 User's Guide*, 4-2
directory operations, *RMS-11 User's Guide*, 4-15
DISCONNECT operation, *RMS-11 User's Guide*, 4-8
file operations, *RMS-11 User's Guide*, 4-15
FIND operation, *RMS-11 User's Guide*, 4-8
FLUSH operation, *RMS-11 User's Guide*, 4-10
GET operation, *RMS-11 User's Guide*, 4-10, 4-12 to 4-13
I/O techniques, *RMS-11 User's Guide*, 4-14
MRN, *RMS-11 User's Guide*, 4-4
multiple access streams, *RMS-11 User's Guide*, 4-15
multiple buffers, *RMS-11 User's Guide*, 4-15
prologue, *RMS-11 User's Guide*, 4-1
PUT operation, *RMS-11 User's Guide*, 4-11 to 4-12
random access
by key, *RMS-11 User's Guide*, 4-1
by RFA, *RMS-11 User's Guide*, 4-1
record operations, *RMS-11 User's Guide*, 4-7
record size, *RMS-11 User's Guide*, 4-2
Relative file organization (cont'd.)
record transfer modes, *RMS-11 User's Guide*, 4-12
move mode, *RMS-11 User's Guide*, 4-12
REWIND operation, *RMS-11 User's Guide*, 4-12
RRN, *RMS-11 Intro*, 3-6
sequential access, *RMS-11 User's Guide*, 4-1
shared access, *RMS-11 User's Guide*, 4-6
block access, *RMS-11 User's Guide*, 4-6
record access, *RMS-11 User's Guide*, 4-6
sharing declarations, *RMS-11 User's Guide*, 4-6
stream operations, *RMS-11 User's Guide*, 4-7
structure, *RMS-11 User's Guide*, 4-1
conceptual, *RMS-11 User's Guide*, 4-1
physical, *RMS-11 User's Guide*, 4-1
UPDATE operation, *RMS-11 User's Guide*, 4-12 to 4-13
Relative record number
See RRN
RELEASE command
format
entry number, *Batch and Queue*, 2-22
job name, *Batch and Queue*, 2-22
RELEASE/ENTRY, *DCL*, 4-94, 9-30
RELEASE/JOB, *DCL*, 4-94, 9-30
Release data buffer
K-series, *I/O Drivers*, 13-23
Release notes, *MACRO-11*, J-1
Relocatable address, *Debugging*, 2-2, 5-5; *XDT*, 2-13
calculating, *Debugging*, 2-8, 7-1
Relocatable expression
complex, *MACRO-11*, 2-16
definition, *MACRO-11*, 2-15
Relocation
discussion, *MACRO-11*, 3-1
Relocation and linking, *MACRO-11*, 3-1
Relocation directory record type, *Task Builder*, A-14
Relocation register, *Program Development*, 5-2, 5-3
See also R register
R command, *Program Development*, 5-3
$RELOC routine, *Writing I/O Driver*, 7-30
$RELOP routine, *Writing I/O Driver*, 7-30
REM command
See also REMOVE command

REM command (cont'd.)
VMR
definition, *System Management*, 5-38
examples, *System Management*, 5-39
format, *System Management*, 5-38
notes, *System Management*, 5-38
parameters, *System Management*, 5-38
/REG keyword, *System Management*, 5-38
.REM directive, *MACRO-11*, 5-13
summary, *MACRO-11*, 5-2
/REM option
command
MFT, *Utilities*, C-8
MFT command, *Utilities*, C-7, C-8
/REMOTE keyword
SET command, *MCR*, 3-181
SET command (VMR), *System Management*, 5-63 to 5-64
Remote line
clearing characteristic (TTDRV), *I/O Drivers*, 2-84
/REMOTE option
command
COPY, *Utilities*, C-8
DELETE, *Utilities*, C-8
Remote terminal
IO.EIO (TTDRV), *I/O Drivers*, 2-27
setting baud rate, *System Management*, 5-63
Remove Affinity directive, *Executive*, 5-190
REMOVE command, *MCR*, 3-135, 3-140; *DCL*, 7-37 to 7-38, 9-30
brief description, *MCR*, 1-6
example, *MCR*, 3-135
format, *MCR*, 3-135
parameter, *MCR*, 3-135
VMR
See REM command
REMOVE operation, *RMS-11 User's Guide*, 1-17
remote access, *RMS-11 User's Guide*, B-1
wildcard operations, *RMS-11 User's Guide*, A-4
.REMOVE routine
deleting directory entry, *I/O Operations*, 4-19
RENAME command, *DCL*, 4-50 to 4-52, 9-30; *Introduction*, 3-8
$RENAME macro, *RMS-11 Macro*, 5-105
example, *RMS-11 Macro*, 7-15
RENAME operation, *RMS-11 Macro*, 3-6, 5-97, 5-105; *RMS-11 User's Guide*, 1-17
RENAME operation (cont'd.)
BDB requirement, *RMS-11 Macro*, 2-8
file versions, *RMS-11 User's Guide*, A-3
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
remote access, *RMS-11 User's Guide*, B-1
wildcard loop, *RMS-11 Macro*, 3-10
wildcard operations, *RMS-11 User's Guide*, A-4
.RENAME routine
renaming file, *I/O Operations*, 4-23
Rename Task function (GIN$), *Executive*, 5-115
Renew command
EDI editor, *Program Development*, 2-14; *Utilities*, 7-35
REPEAT key, *DCL*, 3-14
Replacement
bad block
RCT task, *System Management*, 1-16
Replacement block number
See RBN
/REPLACE qualifier
LIBRARY command, *Program Development*, 6-10
REPORTERRORS command
IOX, *System Management*, 12-47
Interactive mode, *System Management*, 12-47
restrictions, *System Management*, 12-47
Report generator
See DATATRIEVE-11 program
Report Generator Task
See RPT
/REPORT switch
RPT, *Error Logging*, 3-23, 3-26
See also /COMMAND qualifier
strings, *Error Logging*, 3-26
.REPT directive, *MACRO-11*, 6-20
restriction using label, *MACRO-11*, 6-18
summary, *MACRO-11*, 6-2
$REQU1 routine, *Writing I/O Driver*, 7-31
$REQUE routine, *Writing I/O Driver*, 7-31
Request and Pass Offspring Information directive, *Executive*, 5-191
See also RPOI$ directive
REQUEST command, *DCL*, 3-36 to 3-37, 9-31
Request Task directive, *Executive*, 5-195
effect on default TI, *MCR*, 2-10
running an installed task, *MCR*, 2-21

R error
invalid redefinition of default register symbol, *MACRO-11*, 2-9
invalid register symbol, *MACRO-11*, 2-9
Reschedule interval, *System Management*, 5-41
running task at, *MCR*, 3-140
RES command
See RESUME command
RESCOM option, *Task Builder*, 5-16, 12-28 to 12-29
RESEQUENCE command
EDT editor, *Introduction*, 2-14, 2-15
Reserved symbol, *Indirect*, 2-30
/RESET_COUNTS qualifier
SET ERROR_LOG command, *Error Logging*, 2-10
See also /RESET switch
Reset Accounting Transaction Block, *System Management*, 10-35
RESET function
EDT editor, *Introduction*, 2-9
/RESET switch
ELI, *Error Logging*, 2-9, 2-10
See also /RESET_COUNTS qualifier
Reset switch
CRDRV, *I/O Drivers*, 9-5
/RESIDENT_OVERLAYS qualifier, *Task Builder*, 11-54
Resident common, *Task Builder*, 2-20
linking task to, *Task Builder*, 12-9
MACRO–11 example, *Task Builder*, 5-20 to 5-29
Resident database
See Database
Resident driver
See Driver
Resident library, *RMS-11 User's Guide*, 8-1, 8-8; *Task Builder*, 5-1
FCS types, *Task Builder*, 5-62
linking, *Task Builder*, 5-65 to 5-67
to supervisor-mode library, *Task Builder*, 8-24
linking task to, *Task Builder*, 12-9
MACRO–11 example, *Task Builder*, 5-36 to 5-45
RMSRES, *RMS-11 User's Guide*, 8-6, 8-9
rounding address, *Task Builder*, 12-33
supervisor-mode library, *Task Builder*, 8-24
/RES job switch
QUE /MOD command, *Batch and Queue*, 2-19
/RES job switch (cont'd.)
SUB command, *Batch and Queue*, 3-15
RESLIB option, *Task Builder*, 5-16, 12-28 to 12-29, 12-30
:RES option
QUE /STA command, *System Management*, 3-38
Resource Accounting, *MCR*, 2-3; *DCL*, 3-8, 3-11, 9-40
See also Transaction file
account blocks, *System Management*, 10-23
commands
SET ACCOUNTING, *System Management*, 10-9
SHOW ACCOUNTING, *System Management*, 10-11
SHOW ACCOUNTING/DATATRIEVE, *System Management*, 10-17
SHOW ACCOUNTING/INFORMATION, *System Management*, 10-12
SHOW ACCOUNTING/TRANSACTION_FILE, *System Management*, 10-11, 10-13
START/ACCOUNTING, *System Management*, 10-5
STOP/ACCOUNTING, *System Management*, 10-10
description, *System Management*, 1-14, 10-1
device statistics
example, *System Management*, 10-7
messages, *System Management*, 10-53
POOL_RESERVE parameter, *System Management*, 8-18
privileged task interface, *System Management*, 10-21
scan rate, *System Management*, 10-6
secondary pool, *System Management*, 8-18, 10-5
statistics scan, *System Management*, 10-6
summary of control commands, *System Management*, 10-4
system resources, *System Management*, 10-52
system statistics, *System Management*, 10-6
task accounting, *System Management*, 10-6
transaction interface
$QTRAN routine, *System Management*, 10-19
$QTRN1 routine, *System Management*, 10-19
$QTRN2 routine, *System Management*, 10-20

Resource Accounting
transaction interface (cont'd.)
writing, *System Management*, 10-18
using DATATRIEVE-11, *System Management*, 10-17
Resource Monitoring Display
See RMD
RESSUP option, *Task Builder*, 8-4, 12-31 to 12-32
/RES switch
PRI command, *Batch and Queue*, 2-3
RESTART command
IOX, *System Management*, 12-48
functions, *System Management*, 12-48
Interactive mode
restriction, *System Management*, 12-10
/RESTART qualifier
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
START/PROCESSOR command, *System Management*, 3-38
SUBMIT command, *Batch and Queue*, 3-15
.RESTORE directive, *MACRO-11*, 5-40
assigns attributes to current location counter, *MACRO-11*, 2-12
summary, *MACRO-11*, 5-2
terminates local symbol block, *MACRO-11*, 2-10
/RESTRICT subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
RESUME command, *MCR*, 3-137
brief description, *MCR*, 1-6
example, *MCR*, 3-137
format, *MCR*, 3-137
keyword
/TERM, *MCR*, 3-137
parameter, *MCR*, 3-137
Resume Task directive, *Executive*, 5-204
/RE switch
PIP utility, *Utilities*, 12-25
VFY utility, *Utilities*, 14-6
Retadd parameter
device-specific function
receiving (LRDRV), *I/O Drivers*, 11-9
transmitting (LRDRV), *I/O Drivers*, 11-4
RETRIES command
IOX, *System Management*, 12-49
default, *System Management*, 12-49
RETRIES command
IOX (cont'd.)
SELECT command line, *System Management*, 12-49
VERIFY command line, *System Management*, 12-49
write-check, *System Management*, 12-62
Retries parameter
device-specific function
transmitting (LRDRV), *I/O Drivers*, 11-4
Retrieval pointer, *RMS-11 User's Guide*, 8-11
in memory, *RMS-11 User's Guide*, 8-11
on disk, *RMS-11 User's Guide*, 8-11
Retry count parameter
UNIBUS switch driver
IO.CON function, *I/O Drivers*, 14-5
Retry procedure
tape driver, *I/O Drivers*, 6-13
/RETRY switch
BAD utility, *System Management*, 13-1; *Utilities*, 2-5
RETURN character
TTDRV, *I/O Drivers*, 2-71
RETURN command, *Debugging*, 2-4, 4-2; *XDT*, 2-10
.RETURN directive, *Indirect*, 2-86
Return from completion handler, *RMS-11 Macro*, 2-20
RETURN key, *MCR*, 2-15; *DCL*, 3-12 to 3-13, 3-22 ; *Introduction*, 1-4
TTDRV, *I/O Drivers*, 2-72
using to terminate command, *MCR*, 1-3
RETURN key command
EDI editor, *Utilities*, 7-35
$RETURN macro, *RMS-11 Macro*, 2-20
Return operation, *RMS-11 Macro*, 2-15
RETURN statement, *Error Logging*, 4-34
CFL, *Error Logging*, 5-33
Retype command
EDI editor, *Utilities*, 7-36
Revector control table, *System Management*, 13-4
status codes, *System Management*, 13-4
/REVISED qualifier
BRU utility, *Utilities*, 3-23
REWIND_MAGTAPE
RMSDES utility, *RMS-11 Utilities*, 2-34
$REWIND macro, *RMS-11 Macro*, 5-114
REWIND operation, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
indexed files, *RMS-11 User's Guide*, 7-6

REWIND operation (cont'd.)
record stream, *RMS-11 Macro*, 4-9
relative files, *RMS-11 User's Guide*, 4-12
$REWIND macro, *RMS-11 Macro*, 5-114
sequential files, *RMS-11 User's Guide*, 3-11
/REWIND qualifier
BRU utility, *Utilities*, 3-24
RF11 disk controller, *I/O Drivers*, 4-2
RFA, *RMS-11 User's Guide*, 1-12; *RMS-11 Intro*, 3-11, 3-15
relative files, *RMS-11 User's Guide*, 4-1
sequential files, *RMS-11 User's Guide*, 3-2
RFA record access
to relative files, *RMS-11 User's Guide*, 4-1
to sequential files, *RMS-11 User's Guide*, 3-2
.RFOWN routine
reading $$FSR2 file owner word, *I/O Operations*, 4-7
Right angle bracket (>), *MACRO-11*, 2-14
argument delimiter, *MACRO-11*, 2-3
spaces may increase readability of arguments, *MACRO-11*, 6-6
special character in MACRO–11, *MACRO-11*, 2-2
Right angle bracket command (>), *Debugging*, 2-5, 4-5; *XDT*, 2-11
Right parenthesis
special character in MACRO–11, *MACRO-11*, 2-2
RK05 disk, *I/O Drivers*, 4-3
RK05F disk, *I/O Drivers*, 4-3
RK06 disk, *I/O Drivers*, 4-3
RK07 disk, *I/O Drivers*, 4-3
RK07 disk kit
contents, *System Generation*, 2-5
copying
on line, *System Generation*, 2-18 to 2-20
stand alone, *System Generation*, 2-12 to 2-14
under VAX–11 RSX, *System Generation*, 2-25 to 2-26
RK07 distribution kit, *System Generation*, 2-4
RK11 disk controller, *I/O Drivers*, 4-3
RK611 disk controller, *I/O Drivers*, 4-3
RL01 disk, *I/O Drivers*, 4-3
RL02 disk, *I/O Drivers*, 4-3
RL02 distribution kit, *System Generation*, 2-3
RL11 disk controller, *I/O Drivers*, 4-3
Rlast parameter
RCLOKB: subroutine (K-series), *I/O Drivers*, 13-23
$RLCB (Release core block), *System Library*, 7-4
$RLCB system routine, *RMS-11 Macro*, 2-22
RLOG$ directive, *Executive*, 5-186
RLON$ directive, *Executive*, 5-186
RLSBUF: subroutine
release data buffer
K-series, *I/O Drivers*, 13-23
LADRV, *I/O Drivers*, 12-19
RLSCT subroutine, *Task Builder*, 5-72
RM02/03 module
See ERM23 device-level module
See NRM23 notes module
RM02 disk, *I/O Drivers*, 4-3
RM03 disk, *I/O Drivers*, 4-3
RM05 device-level module, *Error Logging*, 4-8
RM05 disk, *I/O Drivers*, 4-3
RM80 disk, *I/O Drivers*, 4-3
RMAF$S directive, *Executive*, 5-190
RMD, *Error Logging*, 1-3, 2-9; *System Management*, 7-1; *Introduction*, 6-9
Active task display, *System Management*, 7-1
cached device
Detailed Statistics display, *System Management*, 7-1
cache region
General Statistics display, *System Management*, 7-1
description, *System Management*, 1-13, 7-1
displaying disk data cache statistics, *System Management*, 15-8, 15-10
display pages, *System Management*, 7-1
displays
Active Task, *System Management*, 7-10
Cache Region (detailed), *System Management*, 7-21
Cache Region (general), *System Management*, 7-19
Help, *System Management*, 7-4
I/O Counts, *System Management*, 7-15
Memory, *System Management*, 7-4
System Statistics, *System Management*, 7-18
Task Header, *System Management*, 7-13
error messages, *System Management*, 7-25
Help display, *System Management*, 7-1
help page
description, *System Management*, 1-13

RMD (cont'd.)
I/O count display, *System Management*, 7-1
installed copy
invoking, *System Management*, 7-2
installing, *System Management*, 7-2
INSTALL command, *System Management*, 7-2
invoking, *System Management*, 7-2
format, *System Management*, 7-2
parameters, *System Management*, 7-2
Memory display, *System Management*, 7-1
monitoring pool, *System Management*, 8-1
pages, *System Management*, 7-1
running
nonprivileged users, *System Management*, 7-2
on a slaved terminal, *System Management*, 7-2, 7-3
setup page, *System Management*, 7-2
description, *System Management*, 1-13
specifying setup commands, *System Management*, 7-2
System Statistics display, *System Management*, 7-1
task-build command file
modifying, *System Management*, 7-24
Task Header display, *System Management*, 7-1
type of displays available, *System Management*, 1-13
uninstalled copy
invoking, *System Management*, 7-3
RMD.TSK task image file
location, *System Management*, 7-3
RMDBLD.CMD file
modifying, *System Management*, 7-24
RMS–11
installing libraries and utilities, *System Generation*, 4-5
pregenerated kit, *System Generation*, 5-43
processing string, *Executive*, 5-163
RMS–11 object library, *Program Development*, 1-10
RMS-11 defaults, *RMS-11 User's Guide*, 2-2
RMS-11 File Back-Up Utility
See RMSBCK
RMS-11 File Conversion Utility
See RMSCNV
RMS-11 File Design Utility
See RMSDES
RMS-11 File Display Utility
See RMSDSP
RMS-11 File Restoration Utility
See RMSRST
RMS-11 Indexed File Load Utility
See RMSIFL
RMS-11 resident library
See RMSRES
RMSBCK, *RMS-11 User's Guide*, 1-12; *RMS-11 Utilities*, 1-1, 3-3, 4-5, 5-1, 6-1, 7-1, 7-9 to 7-10
backup file contents, *RMS-11 Utilities*, 6-1
backup medium, *RMS-11 Utilities*, 6-3
/CD switch, *RMS-11 Utilities*, 6-8 to 6-9
command string, *RMS-11 Utilities*, 6-2 to 6-3
container file, *RMS-11 Utilities*, 6-1
data integrity checking, *RMS-11 Utilities*, 6-6 to 6-7, 6-9
examples, *RMS-11 Utilities*, 6-10
HELP, *RMS-11 Utilities*, 6-4
indirect command file, *RMS-11 Utilities*, 6-2
input file switches, *RMS-11 Utilities*, 6-8
intersystem file transfer, *RMS-11 Utilities*, 1-2
invoking, *RMS-11 Utilities*, 6-2
magnetic tape, *RMS-11 Utilities*, 6-7
multivolume, *RMS-11 Utilities*, 6-9
messages, *RMS-11 Utilities*, C-1
/[NO]QU switch, *RMS-11 Utilities*, 6-5 to 6-7, 6-10
output file switches, *RMS-11 Utilities*, 6-6
processing, *RMS-11 Utilities*, 6-8
data integrity checking, *RMS-11 Utilities*, 6-9
explicit/implicit file specification, *RMS-11 Utilities*, 6-9
extended diagnostic messages, *RMS-11 Utilities*, 6-10
summary listing, *RMS-11 Utilities*, 6-10
prompt, *RMS-11 Utilities*, 6-2
query mode, *RMS-11 Utilities*, 6-5 to 6-7, 6-10
/RA switch, *RMS-11 Utilities*, 6-6 to 6-7, 6-9
/RC switch, *RMS-11 Utilities*, 6-7, 6-9
/RD switch, *RMS-11 Utilities*, 6-8 to 6-9
/RW switch, *RMS-11 Utilities*, 6-7
/SL switch, *RMS-11 Utilities*, 6-6, 6-10
/SU switch, *RMS-11 Utilities*, 6-7

RMSBCK (cont'd.)
terminating, *RMS-11 Utilities*, 6-2
RMSCNV, *RMS-11 User's Guide*, 1-12; *RMS-11 Utilities*, 1-1, 3-1, 4-1
/AP switch, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15
ASCII stream files, *RMS-11 Utilities*, 4-3, 4-8
block mode, *RMS-11 Utilities*, 4-1
/BL switch, *RMS-11 Utilities*, 4-8
/CA switch, *RMS-11 Utilities*, 4-8
command string, *RMS-11 Utilities*, 4-3 to 4-4
CTRL/Z
file terminator, *RMS-11 Utilities*, 4-8
/EO switch, *RMS-11 Utilities*, 4-8
examples, *RMS-11 Utilities*, 4-16
/FO switch, *RMS-11 Utilities*, 4-9, 4-15
HELP, *RMS-11 Utilities*, 4-5
/ID switch, *RMS-11 Utilities*, 4-5, 4-9
/IM switch, *RMS-11 Utilities*, 4-9
indirect command file, *RMS-11 Utilities*, 4-4
intersystem file transfer, *RMS-11 Utilities*, 1-2, 4-1
invoking, *RMS-11 Utilities*, 4-3
key name, *RMS-11 Utilities*, 4-10
key of reference, *RMS-11 Utilities*, 4-10
/KN switch, *RMS-11 Utilities*, 4-10, 4-16
/KR switch, *RMS-11 Utilities*, 4-10, 4-16
/LO switch, *RMS-11 Utilities*, 4-10
mass-insertion mode, *RMS-11 Utilities*, 4-10
/MA switch, *RMS-11 Utilities*, 4-10
messages, *RMS-11 Utilities*, C-1
/ML switch, *RMS-11 Utilities*, 4-11
network facilities, *RMS-11 Utilities*, 4-1
/PD switch, *RMS-11 Utilities*, 4-12
populating files, *RMS-11 User's Guide*, 6-26 to 6-27
processing, *RMS-11 Utilities*, 4-14
input file organization, *RMS-11 Utilities*, 4-16
output file organization, *RMS-11 Utilities*, 4-15
prompt, *RMS-11 Utilities*, 4-3
/SL switch, *RMS-11 Utilities*, 4-12
summary listing, *RMS-11 Utilities*, 4-12
supersession, *RMS-11 Utilities*, 4-13
/SU switch, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15
terminating, *RMS-11 Utilities*, 4-4

RMSCNV (cont'd.)
/TR switch, *RMS-11 Utilities*, 4-13
/WF switch, *RMS-11 Utilities*, 4-14
RMSDEF, *RMS-11 Utilities*, 1-1, A-1
alignment, *RMS-11 Utilities*, A-14
allocation
data, *RMS-11 Utilities*, A-16
file, *RMS-11 Utilities*, A-14
area definition, *RMS-11 Utilities*, A-13
area numbers, *RMS-11 Utilities*, A-16
block boundaries, *RMS-11 Utilities*, A-9
bucket size, *RMS-11 Utilities*, A-15
carriage control, *RMS-11 Utilities*, A-9
command file, *RMS-11 Utilities*, A-5
command string, *RMS-11 Utilities*, A-5
contiguity, *RMS-11 Utilities*, A-15
default extension quantity, *RMS-11 Utilities*, A-15
file creation, *RMS-11 Utilities*, A-19
file organization, *RMS-11 Utilities*, A-8
file specification, *RMS-11 Utilities*, A-7
fill numbers, *RMS-11 Utilities*, A-16
fixed control area, *RMS-11 Utilities*, A-8
HELP, *RMS-11 Utilities*, A-5
/ID switch, *RMS-11 Utilities*, A-5
invoking, *RMS-11 Utilities*, A-5
location, *RMS-11 Utilities*, A-14
magnetic tape, *RMS-11 Utilities*, A-8, A-10
maximum record number, *RMS-11 Utilities*, A-9
maximum record size, *RMS-11 Utilities*, A-9
messages, *RMS-11 Utilities*, A-20
placement control, *RMS-11 Utilities*, A-14
primary key definition, *RMS-11 Utilities*, A-10
processing, *RMS-11 Utilities*, A-1
protection, *RMS-11 Utilities*, A-18
record format, *RMS-11 Utilities*, A-8
terminating, *RMS-11 Utilities*, A-5
RMSDES, *RMS-11 User's Guide*, 1-12, 1-18
allocation areas, *RMS-11 Utilities*, 2-10, 2-25
areas
CREATE command, *RMS-11 Utilities*, 2-8
numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-43
SET ALL command, *RMS-11 Utilities*, 2-14
attributes, *RMS-11 Utilities*, 2-29

RMSDES
attributes (cont'd.)
ALLOCATION
area section, *RMS-11 Utilities*, 2-44
file section, *RMS-11 Utilities*, 2-31
BLOCK_SPAN, *RMS-11 Utilities*, 2-37
BUCKET_SIZE
area section, *RMS-11 Utilities*, 2-43, 2-45
file section, *RMS-11 Utilities*, 2-32
CARRIAGE_CONTROL, *RMS-11 Utilities*, 2-37
CHANGES, *RMS-11 Utilities*, 2-40
clearing, *RMS-11 Utilities*, 2-22, 2-25
individual values, *RMS-11 Utilities*, 2-26
sections, *RMS-11 Utilities*, 2-26
CLUSTER_SIZE, *RMS-11 Utilities*, 2-31
CONTIGUOUS
area section, *RMS-11 Utilities*, 2-46
file section, *RMS-11 Utilities*, 2-35
CONTROL_FIELD_SIZE, *RMS-11 Utilities*, 2-37
DATA_AREA, *RMS-11 Utilities*, 2-40
DATA_FILL, *RMS-11 Utilities*, 2-40
displaying, *RMS-11 Utilities*, 2-15, 2-26
individual values, *RMS-11 Utilities*, 2-26
displaying sections, *RMS-11 Utilities*, 2-27
DUPLICATES, *RMS-11 Utilities*, 2-40, 2-42, 2-44
EXACT_POSITIONING, *RMS-11 Utilities*, 2-47
EXTENSION
area section, *RMS-11 Utilities*, 2-45
file section, *RMS-11 Utilities*, 2-32
FILE PLACEMENT, *RMS-11 Utilities*, 2-30
FORMAT, *RMS-11 Utilities*, 2-36
INDEX_AREA, *RMS-11 Utilities*, 2-41
INDEX_FILL, *RMS-11 Utilities*, 2-41
informational, *RMS-11 Utilities*, 2-1, 2-17, 2-29
LEVEL1_INDEX_AREA, *RMS-11 Utilities*, 2-41
MAGTAPE_BLOCK_SIZE, *RMS-11 Utilities*, 2-34
MAX_RECORD_NUMBER, *RMS-11 Utilities*, 2-34

RMSDES
attributes (cont'd.)
NAME
file section, *RMS-11 Utilities*, 2-31
key section, *RMS-11 Utilities*, 2-38
NULL_KEY, *RMS-11 Utilities*, 2-39
NULL_VALUE, *RMS-11 Utilities*, 2-39
ORGANIZATION, *RMS-11 Utilities*, 2-31
OWNER, *RMS-11 Utilities*, 2-43
POSITION, *RMS-11 Utilities*, 2-46
PROTECTION, *RMS-11 Utilities*, 2-33
resetting, *RMS-11 Utilities*, 2-21
REWIND_MAGTAPE, *RMS-11 Utilities*, 2-34
RMS-11, *RMS-11 Utilities*, 2-1, 2-17, 2-29
SEG0_POSITION, *RMS-11 Utilities*, 2-42
SEGn_LENGTH, *RMS-11 Utilities*, 2-42
SEGn_POSITION, *RMS-11 Utilities*, 2-42
setting, *RMS-11 Utilities*, 2-13
from data file, *RMS-11 Utilities*, 2-25
from description file, *RMS-11 Utilities*, 2-24
individual values, *RMS-11 Utilities*, 2-21
sections, *RMS-11 Utilities*, 2-21
SIZE, *RMS-11 Utilities*, 2-36
SOURCE, *RMS-11 Utilities*, 2-30
SUPERSEDE, *RMS-11 Utilities*, 2-35
TARGET, *RMS-11 Utilities*, 2-30
TYPE, *RMS-11 Utilities*, 2-38
bucket fill size, *RMS-11 User's Guide*, 6-29
bucket size, *RMS-11 User's Guide*, 6-22
relative files, *RMS-11 User's Guide*, 4-3
CLEAR command, *RMS-11 Utilities*, 2-6, 2-18, 2-25 to 2-26
defining areas by default, *RMS-11 Utilities*, 2-44
in indirect command file, *RMS-11 Utilities*, 2-4
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with CREATE, *RMS-11 Utilities*, 2-8, 2-28
with SAVE, *RMS-11 Utilities*, 2-27
clearing attributes, *RMS-11 Utilities*, 2-6
commands, *RMS-11 Utilities*, 2-4

RMSDES (cont'd.)
CREATE command, *RMS-11 Utilities*, 2-7, 2-18, 2-28, 2-31
defining areas by default, *RMS-11 Utilities*, 2-44
defining areas explicitly, *RMS-11 Utilities*, 2-43
INDEX_AREA attribute, *RMS-11 Utilities*, 2-42
key numbering, *RMS-11 Utilities*, 2-38
LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
setting attributes, *RMS-11 Utilities*, 2-21
with GET, *RMS-11 Utilities*, 2-10, 2-25
creating data files, *RMS-11 Utilities*, 2-28
CTRL/Z command, *RMS-11 Utilities*, 2-2, 2-9, 2-18
data file, *RMS-11 Utilities*, 2-3, 2-17, 2-24
creating, *RMS-11 Utilities*, 2-3, 2-7, 2-28
GET command, *RMS-11 Utilities*, 2-10
defaults, *RMS-11 Utilities*, 2-21
defining areas, *RMS-11 Utilities*, 2-1, 2-42, B-1
and BUCKET_SIZE attribute, *RMS-11 Utilities*, 2-32
and DATA_AREA attribute, *RMS-11 Utilities*, 2-40
and LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
and SIZE attribute, *RMS-11 Utilities*, 2-36
defining areas by default, *RMS-11 Utilities*, 2-17, 2-38, 2-43
CREATE command, *RMS-11 Utilities*, 2-28
defining areas explicitly, *RMS-11 Utilities*, 2-17, 2-43
DEQ, *RMS-11 User's Guide*, 3-5, 4-4, 6-26
description file, *RMS-11 Utilities*, 2-3, 2-17, 2-24
EXIT command, *RMS-11 Utilities*, 2-10
GET command, *RMS-11 Utilities*, 2-10
SAVE command, *RMS-11 Utilities*, 2-27
design buffer, *RMS-11 Utilities*, 2-1
using, *RMS-11 Utilities*, 2-16
design session, *RMS-11 Utilities*, 2-1
resuming, *RMS-11 Utilities*, 2-22
ESC command, *RMS-11 Utilities*, 2-9, 2-21
examples, *RMS-11 Utilities*, 2-47

RMSDES (cont'd.)
EXIT command, *RMS-11 Utilities*, 2-3, 2-9, 2-17, 2-18
GET command, *RMS-11 Utilities*, 2-10, 2-17, 2-24
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with SAVE, *RMS-11 Utilities*, 2-28
HELP command, *RMS-11 Utilities*, 2-11
indirect command file, *RMS-11 Utilities*, 2-3
comments, *RMS-11 Utilities*, 2-4
initial allocation, *RMS-11 User's Guide*, 3-4, 4-4, 6-26
invoking, *RMS-11 Utilities*, 2-2
keys
numbering, *RMS-11 Utilities*, 2-8, 2-28, 2-38
key segments, *RMS-11 User's Guide*, 6-7
magnetic tape, *RMS-11 Utilities*, 2-34
messages, *RMS-11 Utilities*, 2-52
MRN, *RMS-11 User's Guide*, 4-5
multiple areas, *RMS-11 Utilities*, 2-7, 2-43
multiple keys, *RMS-11 Utilities*, 2-7, 2-38
placement control, *RMS-11 User's Guide*, 6-14
prompt, *RMS-11 Utilities*, 2-2
conditional, *RMS-11 Utilities*, 2-14 to 2-15, 2-21
prompting
conditional, *RMS-11 Utilities*, 2-1, 2-13, 2-15, 2-17, 2-29
QUIT command, *RMS-11 Utilities*, 2-2, 2-12, 2-18
SAVE command, *RMS-11 Utilities*, 2-13, 2-18, 2-27
setting attributes, *RMS-11 Utilities*, 2-21
saving the design, *RMS-11 Utilities*, 2-13, 2-22, 2-27
sections
area section, *RMS-11 Utilities*, 2-29, 2-42
design buffer, *RMS-11 Utilities*, 2-1, 2-16, 2-29
file section, *RMS-11 Utilities*, 2-29, 2-31
key section, *RMS-11 Utilities*, 2-29, 2-38
key segments, *RMS-11 Utilities*, 2-41
record section, *RMS-11 Utilities*, 2-29, 2-36

RMSDES
sections (cont'd.)
system section, *RMS-11 Utilities*, 2-29 to 2-30
SET command, *RMS-11 Utilities*, 2-13, 2-17, 2-20, 2-33
allocation, *RMS-11 Utilities*, 2-10
defining areas by default, *RMS-11 Utilities*, 2-17, 2-43
defining areas explicitly, *RMS-11 Utilities*, 2-43
INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with GET, *RMS-11 Utilities*, 2-25
SHOW ALL command, *RMS-11 Utilities*, 2-4
defining areas by default, *RMS-11 Utilities*, 2-17
defining areas explicitly, *RMS-11 Utilities*, 2-43
setting attributes, *RMS-11 Utilities*, 2-21
SHOW command, *RMS-11 Utilities*, 2-15, 2-18, 2-26
allocation, *RMS-11 Utilities*, 2-10
PROTECTION attribute, *RMS-11 Utilities*, 2-33
with GET, *RMS-11 Utilities*, 2-25
SHOW ID command, *RMS-11 Utilities*, 2-16
terminating, *RMS-11 Utilities*, 2-2, 2-9, 2-12
version, *RMS-11 Utilities*, 2-16
RMSDSP, *RMS-11 User's Guide*, 1-12, 1-19; *RMS-11 Utilities*, 1-1, 5-1, 6-3, 7-10
ANSI-standard tape, *RMS-11 Utilities*, 5-3
/BP switch, *RMS-11 Utilities*, 5-3 to 5-4
command string, *RMS-11 Utilities*, 5-2 to 5-3
container file, *RMS-11 Utilities*, 5-1, 5-3 to 5-4
detailed display, *RMS-11 Utilities*, 5-4
display, *RMS-11 Utilities*, 5-5
information, *RMS-11 Utilities*, 5-1
/FU switch, *RMS-11 Utilities*, 5-2, 5-5
HELP, *RMS-11 Utilities*, 5-3
/ID switch, *RMS-11 Utilities*, 5-3, 5-5
RMSDSP (cont'd.)
indirect command file, *RMS-11 Utilities*, 5-2
intersystem file transfer, *RMS-11 Utilities*, 1-2
invoking, *RMS-11 Utilities*, 5-2
magtape allocation information, *RMS-11 Utilities*, 5-2
messages, *RMS-11 Utilities*, C-1
mounting tapes, *RMS-11 Utilities*, 5-3
prompt, *RMS-11 Utilities*, 5-2
switches, *RMS-11 Utilities*, 5-3 to 5-4
terminating, *RMS-11 Utilities*, 5-2
RMSIFL, *RMS-11 User's Guide*, 1-12; *RMS-11 Utilities*, 1-1, 3-1, 4-1 to 4-2
building alternate indexes, *RMS-11 Utilities*, 3-12
calculating file work space, *RMS-11 Utilities*, 3-12
command string, *RMS-11 Utilities*, 3-2 to 3-3
/DE switch, *RMS-11 Utilities*, 3-7, 3-10, 3-14
/ER switch, *RMS-11 Utilities*, 3-5 to 3-6
examples, *RMS-11 Utilities*, 3-14
global switch, *RMS-11 Utilities*, 3-5
HELP, *RMS-11 Utilities*, 3-3
/ID switch, *RMS-11 Utilities*, 3-3, 3-5
indirect command file, *RMS-11 Utilities*, 3-2
input file switches, *RMS-11 Utilities*, 3-7
invoking, *RMS-11 Utilities*, 3-2
/KR switch, *RMS-11 Utilities*, 3-8 to 3-9
/LO switch, *RMS-11 Utilities*, 3-6
messages, *RMS-11 Utilities*, C-1
/NOER switch, *RMS-11 Utilities*, 3-6
/NOSO switch, *RMS-11 Utilities*, 3-8 to 3-10
output file switches, *RMS-11 Utilities*, 3-5
/PD switch, *RMS-11 Utilities*, 3-6 to 3-7, 3-11
populating files, *RMS-11 User's Guide*, 6-26 to 6-27
processing, *RMS-11 Utilities*, 3-9
command string checking, *RMS-11 Utilities*, 3-9
loading output file, *RMS-11 Utilities*, 3-10
reading and sorting input, *RMS-11 Utilities*, 3-9
sorting alternate key files, *RMS-11 Utilities*, 3-11

RMSIFL
processing (cont'd.)
summary, *RMS-11 Utilities*, 3-1
prompt, *RMS-11 Utilities*, 3-2
sort error codes, *RMS-11 Utilities*, D-1
sort work files, *RMS-11 Utilities*, 3-1, 3-7, 3-12 to 3-13
switches, *RMS-11 Utilities*, 3-3, 3-5
terminating, *RMS-11 Utilities*, 3-2
terminating processing, *RMS-11 Utilities*, 3-12
/TR switch, *RMS-11 Utilities*, 3-7, 3-11
RMSLIB.OLB (Record Management Services library), *Program Development*, 1-11
RMSMAC.MLB, *RMS-11 Macro*, 2-22
RMSMAC.MLB (PDP–11 Record Management Services Library), *Program Development*, 1-10
RMSRES
and I/O paging operations, *RMS-11 User's Guide*, 8-10
clustered, *RMS-11 User's Guide*, 8-7
overlays, *RMS-11 User's Guide*, 8-6, 8-9
supervisor mode, *RMS-11 User's Guide*, 8-7
task building, *RMS-11 User's Guide*, 8-6
RMSRST, *RMS-11 User's Guide*, 1-12; *RMS-11 Utilities*, 1-1, 4-2, 5-4, 6-1, 6-3, 6-8, 7-1
/BD switch, *RMS-11 Utilities*, 7-8, 7-10
command string, *RMS-11 Utilities*, 7-2 to 7-3
data integrity checking, *RMS-11 Utilities*, 7-6, 7-8, 7-11
examples, *RMS-11 Utilities*, 7-12
/FR switch, *RMS-11 Utilities*, 7-7
HELP, *RMS-11 Utilities*, 7-3
/ID switch, *RMS-11 Utilities*, 7-3
indirect command file, *RMS-11 Utilities*, 7-2
input file switches, *RMS-11 Utilities*, 7-8
interstate file transfer, *RMS-11 Utilities*, 1-2, 7-1, 7-10
invoking, *RMS-11 Utilities*, 7-2
messages, *RMS-11 Utilities*, C-1
/[NO]CV switch, *RMS-11 Utilities*, 7-10
/[NO]QU switch, *RMS-11 Utilities*, 7-6 to 7-8, 7-12
/OA switch, *RMS-11 Utilities*, 7-9 to 7-10
output file switches, *RMS-11 Utilities*, 7-7
processing
data integrity checking, *RMS-11 Utilities*, 7-11
RMSRST
processing (cont'd.)
explicit/implicit file specification, *RMS-11 Utilities*, 7-10
extended diagnostic messages, *RMS-11 Utilities*, 7-11
restoration account, *RMS-11 Utilities*, 7-10
summary listing, *RMS-11 Utilities*, 7-12
prompt, *RMS-11 Utilities*, 7-2
query mode, *RMS-11 Utilities*, 7-6 to 7-8, 7-11
/RA switch, *RMS-11 Utilities*, 7-7, 7-11
/RC switch, *RMS-11 Utilities*, 7-8, 7-11
/SE switch, *RMS-11 Utilities*, 7-3, 7-9
/SL switch, *RMS-11 Utilities*, 7-6, 7-12
summary listing, *RMS-11 Utilities*, 7-12
/SU switch, *RMS-11 Utilities*, 7-8
terminating, *RMS-11 Utilities*, 7-2
$RMSTAT macro, *RMS-11 Macro*, C-3
/RM switch
PIP utility, *Utilities*, 12-27
RMVBUF: subroutine
removing buffer from device queue
K-series, *I/O Drivers*, 13-24
LADRV, *I/O Drivers*, 12-19
/RNDC keyword
SET command, *MCR*, 3-182
SET command (VMR), *System Management*, 5-64
/RNDH keyword
SET command, *MCR*, 3-182
SET command (VMR), *System Management*, 5-65
/RNDL keyword
SET command, *MCR*, 3-182
SET command (VMR), *System Management*, 5-65
RNDSEG option, *Task Builder*, 5-16, 12-33
RO argument
for .PSECT, *MACRO-11*, 5-34
/RON keyword
FIX command (VMR), *System Management*, 5-19
FIX-IN-MEMORY command, *MCR*, 3-63
INS command (VMR), *System Management*, 5-24
INSTALL command, *MCR*, 3-98
UNF command (VMR), *System Management*, 5-80
UNFIX command, *MCR*, 3-211

$RONLY macro
state table, *I/O Operations*, 7-2
Root, *RMS-11 User's Guide*, 1-7
co-tree, *Task Builder*, 3-33
indexed files, *RMS-11 User's Guide*, 5-5
null, *Task Builder*, 3-33
.ROOT directive, *Task Builder*, 3-26
arguments, *Task Builder*, 3-28
creating statement, *Task Builder*, 3-40
Root module
error logging, *Error Logging*, 4-4
/ROPAR keyword
INS command (VMR), *System Management*, 5-24
INSTALL command, *MCR*, 3-98
RUN command, *MCR*, 3-144
ROPAR option, *Task Builder*, 12-34
^R operator, *MACRO-11*, 5-23
/RO switch, *Task Builder*, 10-37
ZAP utility, *Utilities*, 15-2, 15-5
Round-robin scheduler, *System Management*, 1-6
function, *System Management*, 1-6
setting priority range, *System Management*, 1-6
time interval, *System Management*, 1-6
Routine
completion, *Task Builder*, 8-2
specifying, *Task Builder*, 12-11
user-written, *Task Builder*, 8-25
overlay run-time, *Task Builder*, 3-21, 4-15
comparing, *Task Builder*, 4-17
RP02 disk, *I/O Drivers*, 4-3
RP03 disk, *I/O Drivers*, 4-3
RP04 disk, *I/O Drivers*, 4-3
RP05 disk, *I/O Drivers*, 4-3
RP06 disk, *I/O Drivers*, 4-3
RP11/RP02 or RP03 disk packs, *I/O Drivers*, 4-3
RP11 disk controller, *I/O Drivers*, 4-3
/RPA keyword
SET command, *MCR*, 3-182
SET command (VMR), *System Management*, 5-65
RPOI$ directive, *Executive*, 5-192
comparison to SPWN$ directive, *System Management*, 18-6
/RPRI keyword
ALTER command, *MCR*, 3-12
/RP switch
LBR utility, *Program Development*, 6-9, 6-10; *Utilities*, 10-24
RPT, *Error Logging*, 1-3, 1-4, 2-3
See also ANALYZE/ERROR_LOG command
command line
DCL, *Error Logging*, 3-2, 3-3
defaults, *Error Logging*, 3-2
information required, *Error Logging*, 3-2
input file, *Error Logging*, 3-3
MCR, *Error Logging*, 3-1, 3-2
MCR and DCL equivalents, *Error Logging*, 3-1
parsing module, *Error Logging*, 4-4
report file, *Error Logging*, 3-3
universal library, *Error Logging*, 3-2
using multiple arguments, *Error Logging*, 3-5, 3-9, 3-10, 3-11, 3-12, 3-21
context information, *Error Logging*, 1-5
control file modules, *Error Logging*, 1-3
data types, *Error Logging*, 5-26
default file specification, *Error Logging*, 3-2, 3-4
device-supplied information, *Error Logging*, 1-5
error log packet, *Error Logging*, 3-1
error messages, *Error Logging*, 3-27 to 3-49
format selection, *Error Logging*, 3-2, 3-4, 3-13
installing, *Error Logging*, 2-1, 3-2
interpreter, *Error Logging*, 5-1
packet selection, *Error Logging*, 3-2, 3-4
report formats, *Error Logging*, 1-4
report types, *Error Logging*, 1-4
summary selection, *Error Logging*, 3-2, 3-4
switches
defined report, *Error Logging*, 3-23
packet selection, *Error Logging*, 3-8, 3-11
report format, *Error Logging*, 3-13
summary report, *Error Logging*, 3-21, 3-23
table of, *Error Logging*, 3-6 to 3-8
width, *Error Logging*, 3-27
%RPT$COMMAND
CFL report control function, *Error Logging*, 5-22
%RPT$IDENT
CFL report control function, *Error Logging*, 5-22

%RPT$LINE_REMAINING
CFL report control function, *Error Logging*, 5-22
%RPT$LINE_SKIP
CFL report control function, *Error Logging*, 5-22
%RPT$PAGE_CURRENT
CFL report control function, *Error Logging*, 5-22
%RPT$PAGE_DEFAULT
CFL report control function, *Error Logging*, 5-22
%RPT$PAGE_REMAINING
CFL report control function, *Error Logging*, 5-22
%RPT$PAGE_SIZE
CFL report control function, *Error Logging*, 5-22
%RPT$STATUS
CFL report control function, *Error Logging*, 5-23
RPTBLD.BLD file, *Error Logging*, 3-3
RPT report format
See also /FORMAT switch
brief, *Error Logging*, 1-4, 3-13 to 3-16
processing, *Error Logging*, 4-10, 4-17
full, *Error Logging*, 3-13, 3-16 to 3-19
processing, *Error Logging*, 4-10, 4-17
no report, *Error Logging*, 3-19
register, *Error Logging*, 3-13, 3-19
RPT summary report
ERROR, *Error Logging*, 3-21, 4-6
GEOMETRY, *Error Logging*, 3-23, 4-7
HISTORY, *Error Logging*, 3-23, 4-7
processing, *Error Logging*, 4-6, 4-10, 4-17
$RQCB (Request core blocks), *System Library*, 7-3
$RQCB system routine, *RMS-11 Macro*, 2-22
$RQCNC, *Writing I/O Driver*, 4-38
$RQCND, *Writing I/O Driver*, 4-38
RQST$ directive, *Executive*, 5-195
effect on default TI, *MCR*, 2-10
running an installed task, *MCR*, 2-21
$RQVCB (Request virtual core block), *System Library*, 8-29
RREF$ directive, *Executive*, 5-198
R register, *Debugging*, 2-6, 5-4, 5-5; *XDT*, 2-12
clearing, *Debugging*, 5-6; *XDT*, 2-14
setting, *Debugging*, 2-9, 5-6; *XDT*, 2-14
RRN, *RMS-11 Intro*, 3-12, 3-12 to 3-15
relative files, *RMS-11 User's Guide*, 4-1
RRN (cont'd.)
sequential files, *RMS-11 User's Guide*, 3-2
RRST$ directive, *Executive*, 5-201
RRV, *RMS-11 User's Guide*, 5-12, 5-16
RS03 disk, *I/O Drivers*, 4-3
RS04 fixed-head disk, *I/O Drivers*, 4-3
RS11 disk, *I/O Drivers*, 4-2
RSEF$ directive, *I/O Drivers*, 1-7
/RSI keyword
RUN command, *MCR*, 3-140
RUN command (VMR), *System Management*, 5-41
/RS keyword
MOUNT command, *MCR*, 3-122
/RS switch
FLX utility, *Utilities*, 8-4
SLP utility, *Utilities*, 13-16
RSTS/E RMS-11
contrasted with PRO/RMS-11, *RMS-11 Macro*, D-1
contrasted with RSX-11 RMS-11, *RMS-11 Macro*, D-3
remote access, *RMS-11 User's Guide*, B-3
RSTS operating procedure, *MACRO-11*, 8-1
RSUM$ directive, *Executive*, 5-204
RSX11.SYS file
See Account file
<RSX11D> symbol, *Indirect*, 2-11
RSX–11M
default file specifications, *MACRO-11*, 7-3
file specification, *MACRO-11*, 7-16
file specification switches, *MACRO-11*, 7-6
operating procedures, *MACRO-11*, 7-1
system error messages, *MACRO-11*, 7-16
under RSTS, *MACRO-11*, 8-1
RSX11M.SYS file
See System image file
RSX-11M/M-PLUS RMS-11
contrasted with PRO/RMS-11, *RMS-11 Macro*, D-3
contrasted with RSTS/E RMS-11, *RMS-11 Macro*, D-3
remote access, *RMS-11 User's Guide*, B-3
RSX–11M–PLUS and VMS, *DCL*, 1-24
RSX_TIME data type
CFL, *Error Logging*, 5-8
RSXASM.CMD file, *Writing I/O Driver*, 5-4
RSXMAC.SML, *Executive*, 1-4; *Program Development*, 1-10, 2-6
RT02 Alphanumeric Display Terminal, *I/O Drivers*, 2-7

RT–11
CSI command line format, *MACRO-11*, 8-2
CSI command line options, *MACRO-11*, 8-4
DCL command line format, *MACRO-11*, 8-5
default file specifications, *MACRO-11*, 8-2
device support, *Utilities*, 8-2
file transferring, *Utilities*, 8-4
operating procedures, *MACRO-11*, 8-2
system error messages, *MACRO-11*, 8-8
under RSTS, *MACRO-11*, 8-1
volume
deleting, *Utilities*, 8-11
directory listing, *Utilities*, 8-11
initializing, *Utilities*, 8-12
RT–11 format
accessing volume, *MCR*, 2-1
/RT switch
FLX utility, *Utilities*, 8-4
Rubout character
cannot follow single or double quotation mark, *MACRO-11*, 5-19
LPDRV, *I/O Drivers*, 7-6
TTDRV
CRT, *I/O Drivers*, 2-21
RUBOUT key
TTDRV, *I/O Drivers*, 2-73
RUN$ directive, *Executive*, 5-207
See also Run Task directive
CANCEL command, *MCR*, 3-38
CLOCK QUEUE command, *MCR*, 3-46
effect on task protection UIC, *System Management*, 5-25
running an installed task, *MCR*, 2-21
task activation, *MCR*, 2-10
RUN command, *MCR*, 3-138; *Program Development*, 4-7, 5-2, 7-6; *DCL*, 7-6 to 7-16, 9-31 to 9-32; *Introduction*, 3-10, 5-8, 5-12
brief description, *MCR*, 1-6
examples, *MCR*, 3-145
formats, *MCR*, 3-138
installed task, *DCL*, 7-12 to 7-15
installing task, *MCR*, 2-21
keywords
/CKP, *MCR*, 3-143
/CMD, *MCR*, 3-143
/EST, *MCR*, 3-139, 3-143
/INC, *MCR*, 3-143
/IOP, *MCR*, 3-143
/PAR, *MCR*, 3-144
RUN command
keywords (cont'd.)
/PMD, *MCR*, 3-144
/PRI, *MCR*, 3-144
/ROPAR, *MCR*, 3-144
/RSI, *MCR*, 3-140
/SLV, *MCR*, 3-144
/TASK, *MCR*, 3-144
/TIME, *MCR*, 3-145
/UIC, *MCR*, 3-139, 3-140, 3-145
options
absolute time, *MCR*, 3-138
immediate, *MCR*, 3-138
install-run-remove, *MCR*, 2-19, 3-107, 3-138
synchronized, *MCR*, 3-138
time increment, *MCR*, 3-138
prototype task, *MCR*, 3-138
redirecting TI (terminal input/output device), *MCR*, 2-10
setting ticks, *MCR*, 3-140
/TASK_NAME qualifier, *Introduction*, 5-13
uninstalled task, *DCL*, 7-8 to 7-12
VMR, *System Management*, 5-40
definition, *System Management*, 5-40
formats, *System Management*, 5-40 to 5-43
keywords
/RSI, *System Management*, 5-41
/UIC, *System Management*, 5-42
parameters, *System Management*, 5-40
restriction, *System Management*, 5-40
time options, *System Management*, 5-40
Run Task directive, *Executive*, 5-206
See also RUN$ directive
CANCEL command, *MCR*, 3-38
CLOCK QUEUE command, *MCR*, 3-46
COMMAND LINE INTERPRETER command, *MCR*, 3-44
effect on task protection UIC, *MCR*, 3-99
running an installed task, *MCR*, 2-21
task activation, *MCR*, 2-10
RUNTIME command
IOX, *System Management*, 12-50
Command mode, *System Management*, 12-50
initial default, *System Management*, 12-50
Interactive mode
restriction, *System Management*, 12-10

Run-time initialization
FSR FINIT$ macro, *I/O Operations*, 2-37
RUX50 UNIBUS interface, *I/O Drivers*, 4-5
RW argument
for .PSECT, *MACRO-11*, 5-34
/RW switch
DMP utility, *Utilities*, 5-7
DSC utility, *Utilities*, 6-15
FLX utility, *Utilities*, 8-8
PIP utility, *Utilities*, 12-28
RMSBCK utility, *RMS-11 Utilities*, 6-7
RX01 disk, *I/O Drivers*, 4-4
RX02 device-level module, *Error Logging*, 4-8
RX02 disk, *I/O Drivers*, 4-4
RX11 disk controller, *I/O Drivers*, 4-4
RX180 disk drive, *I/O Drivers*, 4-5
RX211 disk controller, *I/O Drivers*, 4-4
RX33 disk, *I/O Drivers*, 4-5
RX50 disk, *I/O Drivers*, 4-5

S

S.HDHD offset
header area size, *I/O Operations*, C-2
S.IDHD offset
identification area size, *I/O Operations*, C-2
S.MPHD offset
map area size, *I/O Operations*, C-3
S.ST3, *Writing I/O Driver*, 4-37
S.STS, *Writing I/O Driver*, 4-37
SAB, *System Management*, 10-32
description, *System Management*, 10-23
Resource Accounting, *System Management*, 10-23
$SAHDB, *Writing I/O Driver*, 6-9, 6-10
contains an unknown value, *Writing I/O Driver*, 6-7
$SAHPT, *Writing I/O Driver*, 6-9
pointer to first word of task header, *Writing I/O Driver*, 6-7
Sample configuration
increasing system throughput, *System Management*, 4-23
Saturation
definition, *System Management*, 16-12
$SAVAL (Save all Registers), *System Library*, 2-2
SAV argument
for .PSECT, *MACRO-11*, 5-36
SAV command
See also SAVE command
SAV command
VMR
definition, *System Management*, 5-44
example, *System Management*, 5-45
format, *System Management*, 5-44
keywords
/BOOT, *System Management*, 5-45
/DENS, *System Management*, 5-45
notes, *System Management*, 5-45
parameters, *System Management*, 5-44
SAVE command, *MCR*, 3-147; *System Management*, 8-18
brief description, *MCR*, 1-7
examples, *MCR*, 3-150
format, *MCR*, 3-149
keywords
/CSR, *MCR*, 3-149
/MOU, *MCR*, 3-149
/SFILE, *MCR*, 3-149
/WB, *MCR*, 3-149
/MOU keyword, *System Management*, 1-9
RMSDES utility, *RMS-11 Utilities*, 2-1, 2-29
area section, *RMS-11 Utilities*, 2-29, 2-42
file section, *RMS-11 Utilities*, 2-29, 2-31
key section, *RMS-11 Utilities*, 2-29, 2-38
key segments, *RMS-11 Utilities*, 2-41
record section, *RMS-11 Utilities*, 2-29, 2-36
system section, *RMS-11 Utilities*, 2-29 to 2-30
VMR
See SAV command
Save command
EDI editor, *Utilities*, 7-36
Saved answer file
comment line, *System Generation*, 3-5
content, *System Generation*, 3-5
default names, *System Generation*, 3-5
definition, *System Generation*, 1-12
description, *System Generation*, 3-5
incomplete, *System Generation*, 3-6
SYSGEN question, *System Generation*, 3-17
.SAVE directive, *MACRO-11*, 5-40
maximum number, *MACRO-11*, 5-40
summary, *MACRO-11*, 5-3
Saved system
backing up, *System Generation*, 4-4
definition, *System Generation*, 1-12

/SAVE qualifier, *Task Builder*, 11-55
.SAVR1 (Save Registers 1–5), *System Library*, 2-6
$SAVRG (Save Registers 3–5), *System Library*, 2-4
$SAVSP, *Writing I/O Driver*, 6-9
  pointer to first word of task header, *Writing I/O Driver*, 6-7
$SAVVR (Save Registers 0–2), *System Library*, 2-5
/SB switch, *Task Builder*, 10-38
  DMP utility, *Utilities*, 5-7
  PIP utility, *Utilities*, 12-29
.SBTTL directive, *Program Development*, 2-6; *MACRO-11*, 5-10
  generates table of contents, *MACRO-11*, 5-10
  summary, *MACRO-11*, 5-3
  text appears in listing heading, *MACRO-11*, 5-3
SC.MDL offset
  bad data block
    user-controlled file characteristic, *I/O Operations*, C-4
  file marked for deletion
    user-controlled file characteristic, *I/O Operations*, C-4
SCAA$ directive, *Executive*, 5-211
SCAL$S directive, *Executive*, 5-213
SCAL library
  converting to CSM library, *Task Builder*, 8-23
Scan
  definition, *System Management*, 10-15
SCAN_RATE parameter
  SET ACCOUNTING command, *System Management*, 10-9
  START/ACCOUNTING command, *System Management*, 10-5
Scan rate
  Resource Accounting, *System Management*, 10-6
/SCB, *Crash Dump Analyzer*, 2-4, 2-6
SCB, *Writing I/O Driver*, 1-14, 2-3
  adding KRB, *Writing I/O Driver*, A-2
  address for KRB, *Writing I/O Driver*, 2-3
  changes for converting a driver, *Writing I/O Driver*, A-2
  combined with KRB, *Writing I/O Driver*, 4-48
    layout, *Writing I/O Driver*, 4-48
SCB (cont'd.)
  composite arrangement, *Writing I/O Driver*, 2-15
  contiguous with KRB, *Writing I/O Driver*, 2-7, 4-3
  details, *Writing I/O Driver*, 4-34, 4-36, 4-40
  format, *Writing I/O Driver*, 4-36, 4-40
  KRB addresses for, *Writing I/O Driver*, 4-41
  layout, *Writing I/O Driver*, 4-36
  linking to fork blocks, *Writing I/O Driver*, 2-3
  overview, *Writing I/O Driver*, 2-3
  parallel operations, *Writing I/O Driver*, 2-3
  pointer
    to currently assigned KRB, *Writing I/O Driver*, 4-40
    to head of queue for I/O requests, *Writing I/O Driver*, 2-3
  validation during LOAD, *Writing I/O Driver*, 5-13
SCBDF$, *Crash Dump Analyzer*, C-69
Scheduler
  round-robin
    function, *System Management*, 1-6
    setting priority range, *System Management*, 1-6
    time interval, *System Management*, 1-6
SCLI$ directive, *Executive*, 5-215
  COMMAND LINE INTERPRETER
    command, *MCR*, 3-44
S command, *Debugging*, 2-9, 3-4; *XDT*, 2-2, 2-14
SCOPE: subroutine
  control scope (K-series), *I/O Drivers*, 13-24
Scratch disk
  formatting, *DCL*, 5-11
SDAT$ directive, *Executive*, 5-217
  summary, *I/O Operations*, F-3
/SDI keyword
  INITVOLUME command, *MCR*, 3-91
SDIR$ directive, *Executive*, 5-219
SDRC$ directive, *Executive*, 5-222
  summary, *I/O Operations*, F-4
SDRP$ directive, *Executive*, 5-226
  summary, *I/O Operations*, F-4
/SD switch
  PIP utility, *Utilities*, 12-29
SE.BIN error return
  TTDRV, *I/O Drivers*, 2-69

SE.FIX error return
TTDRV, *I/O Drivers*, 2-69
SE.IAA error return
TTDRV, *I/O Drivers*, 2-69
SE.NAT error return
TTDRV, *I/O Drivers*, 2-69
SE.NIH error return
TTDRV, *I/O Drivers*, 2-69
VTDRV, *I/O Drivers*, 3-9
SE.NSC error return
TTDRV, *I/O Drivers*, 2-69
SE.SPD error return
TTDRV, *I/O Drivers*, 2-69
SE.UPN error return
TTDRV, *I/O Drivers*, 2-69
SE.VAL error return
TTDRV, *I/O Drivers*, 2-69
Search
argument register, *Debugging*, 2-6, 5-3, 6-2
byte, *Debugging*, 6-3
command, *Debugging*, 6-2
E, *Debugging*, 6-3
N, *Debugging*, 6-3
W, *Debugging*, 6-3
limit register, *Debugging*, 6-2
mask register, *Debugging*, 2-6, 5-3, 6-2
memory
command, *Debugging*, 2-7, 2-8
reference, *Debugging*, 6-3
word, *Debugging*, 6-3
Search & Change command
EDI editor, *Utilities*, 7-37
$SEARCH macro, *RMS-11 Macro*, 5-116
example, *RMS-11 Macro*, 7-7, 7-15
SEARCH operation, *RMS-11 User's Guide*, 1-17; *RMS-11 Intro*, 4-1
BDB requirement, *RMS-11 Macro*, 2-8
explicit, *RMS-11 Macro*, 3-12
I/O buffer requirement, *RMS-11 Macro*, 2-7
IFAB requirement, *RMS-11 Macro*, 2-5
remote access, *RMS-11 User's Guide*, B-1
$SEARCH macro, *RMS-11 Macro*, 5-116
wildcard loop, *RMS-11 Macro*, 3-8, 3-10
Search order of symbol tables, *MACRO-11*, 2-6
SEARCH statement
CFL, *Error Logging*, 5-39
Search time
indexed files, *RMS-11 User's Guide*, 5-8
/SEC keyword
INS command (VMR), *System Management*, 5-24
INSTALL command, *MCR*, 3-98
Secondary file
closing, *Indirect*, 2-48
opening, *Indirect*, 2-76
for appending, *Indirect*, 2-78
outputting data to, *Indirect*, 2-49
Secondary index data record
See SIDR
Secondary pool, *System Management*, 8-13
description, *System Management*, 8-13
displaying, *System Management*, 8-14
dump, *Crash Dump Analyzer*, 3-36
increasing availability, *System Management*, 8-17
increasing size, *System Management*, 8-16
Resource Accounting, *System Management*, 8-18, 10-5
saving, *System Management*, 8-18
switch
See /SECPOL
Secondary RBN, *System Management*, 13-6
Secondary UNIBUS run, *Writing I/O Driver*, 1-18
/SECPOL, *Crash Dump Analyzer*, 2-4, 2-7
/SECPOL keyword
SET command, *MCR*, 3-183; *System Management*, 8-14
SET command (VMR), *System Management*, 5-65
SECPOL partition
description, *System Management*, 7-7
SECT function
EDT editor, *Introduction*, 2-7
Section design buffer (RMSDES), *RSX-11 Utilities*, 2-16
Sector, *RMS-11 Intro*, 2-1
See also Placement control
Security information DELET$ macro, *I/O Operations*, 3-38
Seek-time
definition, *System Management*, 14-2
SEG0_POSITION
RMSDES utility, *RMS-11 Utilities*, 2-42
Segment, *Task Builder*, 3-1
descriptor, *Task Builder*, 3-22, B-21 to B-24
loading
automatically, *Task Builder*, 4-7
manually, *Task Builder*, 4-8

/SERIAL keyword (cont'd.)
SET command (VMR), *System Management*, 5-66
Serial nondisk device (RMSIFL), *RMS-11 Utilities*, 3-1, 3-12
Serial number
RPT, *Error Logging*, 3-5, 3-7, 3-11
significant digits, *Error Logging*, B-1
/SERIAL switch
RPT, *Error Logging*, 3-5, 3-11
See also /SERIAL_NUMBER qualifier
arguments, *Error Logging*, 3-5, 3-11
processing, *Error Logging*, 4-4
Service routine, *Writing I/O Driver*, 1-2
See also Executive services
summaries of Executive, *Writing I/O Driver*, 3-4, 7-34
/SE switch, *Task Builder*, 10-39
RMSRST utility, *RMS-11 Utilities*, 7-3, 7-9
SET /COLOG command
options
/COTERM, *System Management*, 9-6
/LOGFILE, *System Management*, 9-6
/NOCOTERM, *System Management*, 9-6
/NOLOGFILE, *System Management*, 9-8
OFF, *System Management*, 9-5
ON, *System Management*, 9-5
SET /NOOPT command
displaying optimization status, *System Management*, 14-3
SET /OPT command, *System Management*, 14-2
displaying optimization status, *System Management*, 14-3
format, *System Management*, 14-2
SET /PASSWORD command, *System Management*, 2-2
SET /PLCTL command, *System Management*, 8-10
SET ACCOUNTING command, *System Management*, 10-9
format, *System Management*, 10-9
options, *System Management*, 10-9
parameters
EXTEND_SIZE, *System Management*, 10-9
FILE, *System Management*, 10-9
SCAN_RATE, *System Management*, 10-9
SET ACCOUNTING command
parameters (cont'd.)
STATISTICS_SCAN, *System Management*, 10-9
TASK, *System Management*, 10-9
SETADC: subroutine
set channel information
K-series, *I/O Drivers*, 13-25
LADRV, *I/O Drivers*, 12-20
Set Affinity directive, *Executive*, 5-265
SET and SHOW commands, *DCL*, 1-3
Set-backup-file operation
subpacket information, *Error Logging*, 4-65
SET command, *MCR*, 3-151; *DCL*, 2-1; *Introduction*, 1-17
allocation, *RMS-11 Utilities*, 2-10
brief description, *MCR*, 1-5
/BUFFERSIZE keyword
messages to CO, *System Management*, 9-4
/COLOG keyword, *System Management*, 9-5
CON, *System Management*, 4-29
examples, *System Management*, 4-30
format, *System Management*, 4-29
options, *System Management*, 4-29
ALARM, *System Management*, 4-29
CSR, *System Management*, 4-29
TIMER, *System Management*, 4-29
VEC, *System Management*, 4-29
requirement, *System Management*, 4-30
values, *System Management*, 4-29
defining areas by default, *RMS-11 Utilities*, 2-17, 2-43
defining areas explicitly, *RMS-11 Utilities*, 2-43
disk data caching, *System Management*, 15-12
format, *Batch and Queue*, 3-11; *MCR*, 3-152
INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
keywords
/BUF, *MCR*, 3-159
/CHAR_LENGTH, *MCR*, 3-161
/CLI, *MCR*, 3-96, 3-161
/COLOG, *MCR*, 3-161
/CRASHDEV, *MCR*, 3-161
/DCL, *MCR*, 3-162
/DEF, *MCR*, 3-162
/HFILL, *MCR*, 3-167
/HOST, *MCR*, 3-168

SET command
keywords (cont'd.)
/INQUIRE, *MCR*, 3-169
/LIBUIC, *MCR*, 3-105, 3-170
/LINES, *MCR*, 3-170
list, *MCR*, 3-152 to 3-157
/MAXEXT, *MCR*, 3-172
/MAXPKT, *MCR*, 3-172
/MCR, *MCR*, 3-172
/NETUIC, *MCR*, 3-173
/[NO]ABAUD, *MCR*, 3-157
/[NO]ANSI, *MCR*, 3-158
/[NO]AVO, *MCR*, 3-158
/[NO]BLKMOD, *MCR*, 3-158
/[NO]BRO, *MCR*, 3-159
/[NO]CACHE, *MCR*, 3-159
/[NO]CRT, *MCR*, 3-161
/[NO]DEC, *MCR*, 3-162
/[NO]DPRO, *MCR*, 2-4, 3-163
/[NO]EBC, *MCR*, 3-164
/[NO]ECHO, *MCR*, 3-165
/[NO]EDIT, *MCR*, 3-165
/[NO]ESCSEQ, *MCR*, 3-166
/[NO]FDX, *MCR*, 3-166
/[NO]FORMFEED, *MCR*, 3-166
/[NO]HHT, *MCR*, 3-167
/[NO]HOLD, *MCR*, 2-16, 3-168
/[NO]HSYNC, *MCR*, 3-169
/[NO]LOGON, *MCR*, 3-171
/[NO]LOWER, *MCR*, 3-171
/[NO]MAIN, *MCR*, 3-171
/[NO]NAMED, *MCR*, 3-173
/[NO]OPT, *MCR*, 3-174
/[NO]OVLP, *MCR*, 3-174
/[NO]PAR, *MCR*, 3-175
/[NO]PARITY, *MCR*, 3-176
/[NO]PASTHRU, *MCR*, 3-177
/[NO]PRINTER_PORT, *MCR*, 3-178
/[NO]PRIV, *MCR*, 2-18, 3-180
/[NO]PUB, *MCR*, 2-12, 3-180
/[NO]REGIS, *MCR*, 3-180
/[NO]REMOTE, *MCR*, 3-181
/[NO]RPA, *MCR*, 3-182
/[NO]SERIAL, *MCR*, 3-183
/[NO]SLAVE, *MCR*, 2-18, 3-183
/[NO]SOFT, *MCR*, 3-184
/[NO]TTSYNC, *MCR*, 3-187
/[NO]TYPEAHEAD, *MCR*, 3-187
/[NO]VFILL, *MCR*, 3-189
/[NO]VTLOGON, *MCR*, 3-189
/[NO]WCHK, *MCR*, 3-189
/[NO]WRAP, *MCR*, 3-190
SET command
keywords (cont'd.)
/NOCEX, *MCR*, 3-174
/PASSWORD, *MCR*, 3-177
/PLCTL, *MCR*, 3-178
/POOL, *MCR*, 3-179
/RNDC, *MCR*, 3-182
/RNDH, *MCR*, 3-182
/RNDL, *MCR*, 3-182
/SECPOL, *MCR*, 3-183; *System Management*, 8-14
/SPEED, *MCR*, 3-184
/SWPC, *MCR*, 3-185
/SWPR, *MCR*, 3-185
/SYSUIC, *MCR*, 3-105, 3-185
/TERM, *MCR*, 3-185
/TOP, *MCR*, 3-186; *System Management*, 4-25
/UIC, *MCR*, 3-188
LEVEL1_INDEX_AREA attribute, *RMS-11 Utilities*, 2-41
nonprivileged options, *MCR*, 3-151
privileged options, *MCR*, 3-151
PROTECTION attribute, *RMS-11 Utilities*, 2-33
RMSDES utility, *RMS-11 Utilities*, 2-13, 2-17, 2-20, 2-33
SET [NO]PARTITION, *DCL*, 7-46 to 7-49
SET [DAY]TIME, *DCL*, 2-2, 8-2
SET DEBUG, *DCL*, 1-20, 9-32
SET DEFAULT, *DCL*, 2-6, 4-96 to 4-99, 9-32
SET DEVICE, *DCL*, 5-134 to 5-137, 9-33
SET FILE, *DCL*, 4-101 to 4-103, 9-33
SET GROUPFLAGS, *DCL*, 7-75 to 7-76, 9-34
SET HOST, *DCL*, 1-17, 9-34
SET LIBRARY/DIRECTORY, *DCL*, 8-10, 9-34
SET PARTITION, *DCL*, 9-34
SET PASSWORD, *DCL*, 3-10 to 3-11, 9-35
SET PRIORITY, *DCL*, 7-70 to 7-71, 9-35
SET PROTECTION, *DCL*, 4-107 to 4-109, 9-35
SET PROTECTION/DEFAULT, *DCL*, 4-110 to 4-112, 9-35
SET QUEUE, *DCL*, 4-89 to 4-91
SET QUEUE/ENTRY, *DCL*, 9-36
SET QUEUE/JOB, *DCL*, 9-36
SET SYSTEM, *DCL*, 8-5 to 8-7, 9-37
SET TERMINAL, *DCL*, 9-37 to 9-39
SET UIC, *DCL*, 4-104 to 4-105, 9-39

SET command (cont'd.)
/TOP qualifier
using added memory, *System Management*, 4-28
/UIC keyword
changing default UIC, *MCR*, 2-3
VMR, *System Management*, 5-46
definition, *System Management*, 5-46
examples, *System Management*, 5-71 to 5-75
format, *System Management*, 5-46
keywords
/AFF, *System Management*, 5-51
/BOT, *System Management*, 5-52 to 5-53
/BUF, *System Management*, 5-53
/CHAR_LENGTH, *System Management*, 5-53
/HFILL, *System Management*, 5-55
/LIBUIC, *System Management*, 5-56
/LINES, *System Management*, 5-56
/MAXEXT, *System Management*, 5-57
/NETUIC, *System Management*, 5-57
/[NO]ABAUD, *System Management*, 5-50
/[NO]ANSI, *System Management*, 5-51
/[NO]AVO, *System Management*, 5-51
/[NO]BLKMOD, *System Management*, 5-52
/[NO]BRO, *System Management*, 5-53
/[NO]CRT, *System Management*, 5-53
/[NO]DEC, *System Management*, 5-54
/[NO]EBC, *System Management*, 5-54
/[NO]ECHO, *System Management*, 5-54
/[NO]EDIT, *System Management*, 5-54
/[NO]ESCSEQ, *System Management*, 5-55
/[NO]FDX, *System Management*, 5-55
/[NO]FORMFEED, *System Management*, 5-55

SET command
VMR
keywords (cont'd.)
/[NO]HHT, *System Management*, 5-55
/[NO]HSYNC, *System Management*, 5-56
/[NO]LOGON, *System Management*, 5-56
/[NO]LOWER, *System Management*, 5-57
/[NO]OPT, *System Management*, 5-57
/[NO]PAR, *System Management*, 5-58 to 5-60
/[NO]PARITY, *System Management*, 5-60
/[NO]PASTHRU, *System Management*, 5-61
/[NO]PRINTER_PORT, *System Management*, 5-63
/[NO]PRIV, *System Management*, 5-63
/[NO]PUB, *System Management*, 5-63
/[NO]REGIS, *System Management*, 5-63
/[NO]REMOTE, *System Management*, 5-63 to 5-64
/[NO]RPA, *System Management*, 5-65
/[NO]SERIAL, *System Management*, 5-66
/[NO]SLAVE, *System Management*, 5-66
/[NO]SOFT, *System Management*, 5-66
/[NO]TTSYNC, *System Management*, 5-69
/[NO]TYPEAHEAD, *System Management*, 5-69 to 5-70
/[NO]VFILL, *System Management*, 5-70
/[NO]WCHK, *System Management*, 5-70
/[NO]WRAP, *System Management*, 5-70
/PLCTL, *System Management*, 5-61
/POOL, *System Management*, 5-62
/POOLSIZE, *System Management*, 5-62
/RNDC, *System Management*, 5-64

SET command
VMR
keywords (cont'd.)
/RNDH, *System Management*, 5-65
/RNDL, *System Management*, 5-65
/SECPOL, *System Management*, 5-65
/SPEED, *System Management*, 5-66
/SWPC, *System Management*, 5-67
/SWPR, *System Management*, 5-67
/SYSUIC, *System Management*, 5-67
/TERM, *System Management*, 5-67
/TOP, *System Management*, 5-68 to 5-69
/UIC, *System Management*, 5-70
keyword table, *System Management*, 5-46 to 5-50
saving secondary pool, *System Management*, 8-18
uses, *System Management*, 5-46
with GET, *RMS-11 Utilities*, 2-25
Set Command Line Interpreter directive, *Executive*, 5-215
.SETD directive, *Indirect*, 2-89
SET DEFAULT command, *Introduction*, 3-10
Set Default Directory directive, *Executive*, 5-219
SET DEVICE command
/CHECKPOINT_FILE qualifier, *System Management*, 1-5
SET ERROR_LOG command, *Error Logging*, 2-4
qualifiers, *Error Logging*, 2-4, 2-9 to 2-10, 2-11 to 2-13
Set Event Flag directive, *Executive*, 5-228
SETF$ directive, *Executive*, 5-228
.SETF directive, *Indirect*, 2-87
$SETGSA macro, *RMS-11 Macro*, 2-20
SET HOST/DTE command, *Utilities*, C-4
example, *Utilities*, C-6
format, *Utilities*, C-4
option
/DIAL, *Utilities*, C-5
/MUTE, *Utilities*, C-5
/VERSION, *Utilities*, C-5
parameters, *Utilities*, C-4
SETIBF: subroutine
setting array for buffered sweep
K-series, *I/O Drivers*, 13-26
LADRV, *I/O Drivers*, 12-21
/SET keyword
SWITCH REGISTER command, *MCR*, 3-201
.SETL directive, *Indirect*, 2-87
$SET macro, *RMS-11 Macro*, 2-11
.SETN directive, *Indirect*, 2-88
.SETO directive, *Indirect*, 2-89
Set operational characteristic
LRDRV, *I/O Drivers*, 11-6
SET PARTITION command
/TOP qualifier, *System Management*, 4-25
using added memory, *System Management*, 4-28
SET PASSWORD command, *System Management*, 2-2; *Introduction*, 3-10
SET QUEUE command, *Introduction*, 3-14
example, *Batch and Queue*, 2-19
file format
qualifiers, *Batch and Queue*, 2-19
job format
qualifiers, *Batch and Queue*, 2-19
.SETS directive, *Indirect*, 2-90
SET statement
CFL, *Error Logging*, 5-30
SET SYSTEM command
/POOL/LIMITS qualifier, *System Management*, 8-10
Set System Time directive, *Executive*, 5-268
Set Task Default UIC function (GIN$), *Executive*, 5-114
Set Task Privilege function (GIN$), *Executive*, 5-114
.SETT directive, *Indirect*, 2-87
SET TERMINAL command, *Utilities*, C-3; *DCL*, 3-19, 3-38 to 3-50; *Introduction*, 1-17
option
/NOECHO, *Utilities*, C-3
/SLAVE, *Utilities*, C-3
qualifiers
/INQUIRE, *DCL*, 3-41
/[NO]CONTROL, *DCL*, 3-40
/[NO]SERIAL, *DCL*, 3-48
Setup command
Active task display, *System Management*, 7-11
OWNER, *System Management*, 7-11
PRIORITY, *System Management*, 7-11
TASK, *System Management*, 7-11
Cache region display
RATE, *System Management*, 7-21
REGION, *System Management*, 7-21

Setup command (cont'd.)
I/O Counts display, *System Management*, 7-16
DEVICE, *System Management*, 7-17
RATE, *System Management*, 7-17
Memory display, *System Management*, 7-8
FREE, *System Management*, 7-8
RATE, *System Management*, 7-8
RMD, *System Management*, 7-2
System Statistics display, *System Management*, 7-19
Task Header display
RATE, *System Management*, 7-14
TASK, *System Management*, 7-14
truncating, *System Management*, 7-11
SF.GMC function
TTDRV, *I/O Drivers*, 2-20, 2-53
VTDRV, *I/O Drivers*, 3-6
SF.SMC function
TTDRV, *I/O Drivers*, 2-20, 2-61
VTDRV, *I/O Drivers*, 3-7
/SFILE keyword
SAVE command, *MCR*, 3-149
SFPA$ directive, *Executive*, 5-229
/SF switch
DMP utility, *Utilities*, 5-7
/SG switch, *Task Builder*, 10-40
Shadowed pair
definition, *System Management*, 1-15, 16-1
primary disk, *System Management*, 16-1
secondary disk, *System Management*, 16-1
selecting devices for, *System Management*, 16-2
Shadow Recording, *System Management*, 16-1
See also Shadowed pair
bad blocks and, *System Management*, 16-10
catchup
definition, *System Management*, 16-5
commands
ABORT, *System Management*, 16-7
CONTINUE, *System Management*, 16-8
DISPLAY, *System Management*, 16-9
START, *System Management*, 16-5
STOP, *System Management*, 16-6
control commands, *System Management*, 16-4
controlling, *System Management*, 16-4
description, *System Management*, 1-15, 16-1
error handling, *System Management*, 16-10
error messages, *System Management*, 16-11
Shadow Recording (cont'd.)
errors
primary disk, *System Management*, 16-10
secondary disk, *System Management*, 16-10
simultaneous (both disks), *System Management*, 16-11
invoking, *System Management*, 16-4
media requirements, *System Management*, 16-2
preparation for, *System Management*, 16-2
shadowed pair
creating equivalent bad block data for, *System Management*, 16-2
SYSGEN question, *System Generation*, 3-27
uses, *System Management*, 16-1
write-checking, *System Management*, 16-10
/SHAREABLE:COMMON qualifier, *Task Builder*, 11-60
/SHAREABLE:LIBRARY qualifier, *Task Builder*, 11-61
/SHAREABLE[:TASK] qualifier, *Task Builder*, 11-62
Shareable device
definition, *System Management*, 3-8
/SHAREABLE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-23
MOUNT command, *DCL*, 5-13
Shareable region, *Executive*, 3-5
Shared access, *RMS-11 User's Guide*, 1-17; *RMS-11 Intro*, 2-4
See also Access sharing
access declarations, *RMS-11 User's Guide*, 2-6
read/write, *RMS-11 User's Guide*, 2-6
read-only, *RMS-11 User's Guide*, 2-6
application design
consideration, *RMS-11 User's Guide*, 2-5
bucket locking, *RMS-11 User's Guide*, 2-8
deferred write
to relative files, *RMS-11 User's Guide*, 4-14
file open, *I/O Operations*, 2-14, 3-11
multiple access streams, *RMS-11 User's Guide*, 2-9 to 2-10
programming considerations, *RMS-11 User's Guide*, 2-10

Shared access (cont'd.)
sharing declarations
user-provided interlocks, *RMS-11 User's Guide*, 2-7
system protection codes, *RMS-11 User's Guide*, 2-5
to indexed files, *RMS-11 User's Guide*, 7-1
block access, *RMS-11 User's Guide*, 7-1
record access, *RMS-11 User's Guide*, 7-1
to relative files, *RMS-11 User's Guide*, 4-6
block access, *RMS-11 User's Guide*, 4-6
record access, *RMS-11 User's Guide*, 4-6
to sequential files, *RMS-11 User's Guide*, 3-5
record structured, *RMS-11 User's Guide*, 3-6
with undefined records, *RMS-11 User's Guide*, 3-6
Shared access file, *I/O Operations*, 1-13
Shared common
building, *Task Builder*, 10-10, 11-60
specifying, *Task Builder*, 5-4
Shared library
building, *Task Builder*, 11-61
specifying, *Task Builder*, 5-4
Shared region, *Executive*, 3-5; *Task Builder*, 5-1
absolute, *Task Builder*, 5-9
mapping example, *Task Builder*, 5-9 to 5-10
specifying, *Task Builder*, 5-11
accessing, *Task Builder*, 12-12, 12-28
building, *Task Builder*, 5-3, 10-10, 10-28
/CO/LI/PI switch, *Task Builder*, 5-6
common, *Task Builder*, 2-20
installing, *Task Builder*, 5-3
library, *Task Builder*, 2-20
linking, *Task Builder*, 5-16 to 5-19, 5-29
error conditions, *Task Builder*, 5-19
options, *Task Builder*, 5-16
memory-resident overlay, *Task Builder*, 5-15
number, *Task Builder*, 5-20
overlaid, *Task Builder*, 5-11
autoload vector, *Task Builder*, 5-14
building, *Task Builder*, 5-11
example, *Task Builder*, 5-12
options, *Task Builder*, 5-13
symbol definition file, *Task Builder*, 5-14
Shared region (cont'd.)
position-independent, *Task Builder*, 5-7, 10-34, 11-20, 11-21
mapping example, *Task Builder*, 5-7
specifying, *Task Builder*, 5-7
relocatable, *Task Builder*, 5-4
linking, *Task Builder*, 5-19
size, *Task Builder*, 5-20
specifying, *Task Builder*, 5-4
/SHARE keyword
MOUNT command, *MCR*, 3-115, 3-122
Sharing
See Shared access
Sharing code or data, *MACRO-11*, 5-38
Sharing declaration
indexed files, *RMS-11 User's Guide*, 7-1
relative files, *RMS-11 User's Guide*, 4-6
sequential files, *RMS-11 User's Guide*, 3-6
user-provided interlocks, *RMS-11 User's Guide*, 2-7
SHDDF$, *Crash Dump Analyzer*, C-72
SHF
algorithms, *System Management*, 8-20
first pass, *System Management*, 8-20
second pass, *System Management*, 8-21
conventions, *System Management*, 8-19
description, *System Management*, 1-4
installation, *System Management*, 8-19
monitoring with RMD, *System Management*, 8-19
overhead, *System Management*, 8-19
performance, *System Management*, 8-19
removal, *System Management*, 8-20
shuffling
common regions, *System Management*, 8-20
fixed tasks, *System Management*, 8-20
partition sections, *System Management*, 8-20
size, *System Management*, 8-19
$SHFCT word
changing contents, *System Management*, 8-19
$SHFTM word, *System Management*, 8-19
SHIFT key, *DCL*, 3-14
SHOW ACCOUNTING/DATATRIEVE command
format, *System Management*, 10-17
parameters, *System Management*, 10-17
SHOW ACCOUNTING/INFORMATION command, *System Management*, 10-12
format, *System Management*, 10-12

SHOW ACCOUNTING/INFORMATION command (cont'd.)
parameters
CO, *System Management*, 10-12
SYS, *System Management*, 10-12
TASK, *System Management*, 10-12
SHOW ACCOUNTING/TRANSACTION_FILE command, *System Management*, 10-13
example, *System Management*, 10-13
format, *System Management*, 10-13
Resource Accounting, *System Management*, 10-11
SHOW ACCOUNTING commands, *System Management*, 10-11
summary, *System Management*, 10-11
SHOW ALL command
RMSDES utility
defining areas by default, *RMS-11 Utilities*, 2-17
defining areas explicitly, *RMS-11 Utilities*, 2-43
SHOW ASSIGNMENTS command
/ALL qualifier, *System Management*, 8-18
SHOW CACHE command
disk data caching, *System Management*, 15-8
SHOW command, *DCL*, 2-1; *Introduction*, 1-10
allocation, *RMS-11 Utilities*, 2-10
PROTECTION attribute, *RMS-11 Utilities*, 2-33
RMSDES utility, *RMS-11 Utilities*, 2-15, 2-18, 2-26
SHOW [DAY]TIME, *DCL*, 2-2, 8-4, 9-41
SHOW ACCOUNTING, *DCL*, 9-40
SHOW ALL, *RMS-11 Utilities*, 2-4
setting attributes, *RMS-11 Utilities*, 2-21
SHOW ASSIGNMENTS, *DCL*, 2-5, 5-15, 5-130 to 5-133, 9-40
SHOW CACHE, *DCL*, 5-142, 9-40
SHOW CLOCK_QUEUE, *DCL*, 7-72, 9-40
SHOW COMMON, *DCL*, 7-73 to 7-74, 9-41
SHOW DEFAULT, *DCL*, 4-100, 9-41
SHOW DEVICES, *DCL*, 5-5, 5-138 to 5-141, 9-41
SHOW GROUPFLAGS, *DCL*, 7-77
SHOW HOST, *DCL*, 1-19, 9-42
SHOW LIBRARY, *DCL*, 8-11, 9-42
SHOW command (cont'd.)
SHOW LOGICALS, *DCL*, 2-5, 5-15, 5-130 to 5-133, 9-42
SHOW MEMORY, *DCL*, 2-2, 8-14 to 8-17, 9-43
SHOW PARTITIONS, *DCL*, 7-50 to 7-52, 9-43
SHOW PROCESSOR, *DCL*, 2-5, 4-88, 9-43
SHOW PROTECTION, *DCL*, 4-113, 9-43
SHOW QUEUE, *DCL*, 2-4, 4-85 to 4-87, 9-44
SHOW SYSTEM, *DCL*, 8-8 to 8-9, 9-44
SHOW TASKS, *DCL*, 7-53 to 7-69, 9-45
SHOW TASKS/ACTIVE, *DCL*, 7-54 to 7-59
SHOW TASKS/INSTALLED, *DCL*, 7-60 to 7-61
SHOW TASKS/INSTALLED/DEVICE, *DCL*, 7-62
SHOW TASKS/LOGICAL_UNITS, *DCL*, 7-68 to 7-69
SHOW TERMINAL, *DCL*, 3-51 to 3-59, 9-46 to 9-47
display, *DCL*, 2-3
SHOW UIC, *DCL*, 4-106, 9-48
SHOW USERS, *DCL*, 8-12 to 8-13, 9-48
with GET, *RMS-11 Utilities*, 2-25
SHOW DEFAULT command, *Introduction*, 1-15, 3-11
SHOW DEVICE command
disk data caching, *System Management*, 15-7
SHOW DEVICES command, *Introduction*, 3-11
status of CO, *System Management*, 9-8
SHOW ERROR_LOG command, *Error Logging*, 2-2, 2-12
See also /SHOW switch
nonprivileged command, *Error Logging*, 2-2
qualifiers, *Error Logging*, 2-13
SHOW ID command
RMSDES utility, *RMS-11 Utilities*, 2-16
/SHOW keyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
SHOW LOGICALS command
/ALL qualifier, *System Management*, 8-18
SHOW MEMORY command, *Introduction*, 6-9
SHOW PARTITIONS command, *System Management*, 8-15
format, *System Management*, 8-15

SHOW PROCESSOR command
format, *Batch and Queue*, 2-17
SHOW QUEUE (QUE /LI)
display, *Batch and Queue*, 1-8
format, *Batch and Queue*, 1-7
SHOW QUEUE command, *Batch and Queue*, 2-14; *Introduction*, 3-14
display, *Batch and Queue*, 2-14 to 2-17
format, *Batch and Queue*, 2-14
qualifiers, *Batch and Queue*, 2-14
/SHOW switch
ELI, *Error Logging*, 2-2, 2-12
See also SHOW ERROR_LOG command
example, *Error Logging*, 2-13 to 2-14
nonprivileged command, *Error Logging*, 2-2
subswitches, *Error Logging*, 2-13
SHOW TASKS/ACTIVE command
secondary pool usage, *System Management*, 8-17
SHOW TASKS/INSTALLED command
secondary pool usage, *System Management*, 8-17
SHOW TASKS command, *Introduction*, 1-18, 5-5
SHOW TASKS/ACTIVE/DYNAMIC, *DCL*, 7-63 to 7-65, 9-45
SHOW TASKS:taskname/DYNAMIC, *DCL*, 7-66 to 7-67, 9-45
SHOW TERMINAL command, *Introduction*, 1-17
SHOW TIME command, *Introduction*, 1-10, 3-12
SHOW USERS command, *Introduction*, 1-18, 3-12
/SHR switch
QUE /SP command, *System Management*, 3-8, 3-23
/SH switch, *Task Builder*, 10-41
TKB, *Program Development*, 4-7
SHUBLD.CMD file, *System Management*, 6-3
Shuffler
See SHF
Shutdown code
transaction file (Resource Accounting), *System Management*, 10-16
Shutdown procedure, *System Management*, 6-4
See also SHUTUP program
customizing, *System Management*, 6-3
example, *System Management*, 6-5
Shutdown procedure (cont'd.)
execution time, *System Management*, 6-3
SHUTUP.CMD file, *System Management*, 6-3
example, *System Management*, 6-4
installing tasks with, *System Management*, 6-3
modifying timeout interval, *System Management*, 6-3
using to shut down DECnet, *System Management*, 6-3
SHUTUP program
description, *System Management*, 1-12, 6-1
function performed by, *System Management*, 6-4
input prompts, *System Management*, 6-2
invoking, *System Management*, 6-1
prerequisites to running, *System Management*, 6-1
warning messages, *System Management*, 6-2
SIDR, *RMS-11 User's Guide*, 5-5, 7-9
changeable keys, *RMS-11 User's Guide*, 6-10
duplicate keys, *RMS-11 User's Guide*, 6-8 to 6-9
SIGNAL_STOP statement
CFL, *Error Logging*, 5-40
Signalling
CFL, *Error Logging*, 5-39
SIGNAL statement
CFL, *Error Logging*, 5-40
Significant event, *Executive*, 2-1; *I/O Drivers*, 1-9; *Introduction*, 6-6
declaring, *Executive*, 5-64, 5-148, 5-217; *I/O Drivers*, 1-13
list, *Executive*, 2-1
/SINCE qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-9
See also /DATE switch
Single file operation, *I/O Operations*, 5-7
Single-precision routine
See Integer routine
Single quotation mark (')
component of a term, *MACRO-11*, 2-14
example of concatenation, *MACRO-11*, 6-8
flag in assembly listing, *MACRO-11*, 3-1
for ASCII character storage, *MACRO-11*, 5-18
special character in MACRO–11, *MACRO-11*, 2-2

Single quotation mark (') (cont'd.)
use to concatenate macro arguments, *MACRO-11*, 6-12
SIZE
RMSDES utility, *RMS-11 Utilities*, 2-36
Size command
EDI editor, *Utilities*, 7-38
/SIZE keyword
LOA command (VMR), *System Management*, 5-30
LOAD command, *MCR*, 3-104; *System Management*, 8-16
Size parameter
device-specific
CRDRV, *I/O Drivers*, 9-3
DDDRV, *I/O Drivers*, 5-4
disk driver, *I/O Drivers*, 4-8
receiving (LRDRV), *I/O Drivers*, 11-9
tape driver, *I/O Drivers*, 6-7
transmitting (LRDRV), *I/O Drivers*, 11-4
VTDRV, *I/O Drivers*, 3-3
F11ACP, *I/O Operations*, H-9
general (TTDRV), *I/O Drivers*, 2-13
IO.CCO function (TTDRV), *I/O Drivers*, 2-26
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.RAL function (TTDRV), *I/O Drivers*, 2-39
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-43
IO.RST function (TTDRV), *I/O Drivers*, 2-46
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-63
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
IO.WBT function (TTDRV), *I/O Drivers*, 2-52
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB function, *I/O Drivers*, 1-33
SF.GMC function (TTDRV), *I/O Drivers*, 2-54
Size parameter (cont'd.)
standard function
CRDRV, *I/O Drivers*, 9-2
DDDRV, *I/O Drivers*, 5-3
disk driver, *I/O Drivers*, 4-7
LPDRV, *I/O Drivers*, 7-4
tape driver, *I/O Drivers*, 6-6
Slash (/)
EDI editor, *Program Development*, 2-15
ODT, *Program Development*, 5-4
Slash (/), *Task Builder*, 1-7
division operator, *MACRO-11*, 2-4
special character in MACRO–11, *MACRO-11*, 2-2
/C[R] option
relationship to .CROSS/.NOCROSS, *MACRO-11*, 5-16
/CROSS option
relationship to .CROSS/.NOCROSS, *MACRO-11*, 5-16
/LIBRARY option
relationship to .MCALL, *MACRO-11*, 6-21
/ML option
relationship to .MCALL, *MACRO-11*, 6-21
Slash operator (/)
See also Operator
/SLAVE keyword
SET command, *MCR*, 3-183
SET command (VMR), *System Management*, 5-66
/SLAVE option
SET TERMINAL command, *Utilities*, C-3
/SLAVE qualifier, *Task Builder*, 11-63
Slow mode
specifying, *Task Builder*, 10-38, 11-64
/SLOW qualifier, *Task Builder*, 11-64
Slow TKB
using to improve performance, *Task Builder*, F-11
SLP utility, *DCL*, 4-24
audit trail, *Utilities*, 13-16
changing value, *Utilities*, 13-18
deleting, *Utilities*, 13-20
setting
length, *Utilities*, 13-17
position, *Utilities*, 13-17
suppressing, *Utilities*, 13-19
calculating checksum, *Utilities*, 13-2
command line, *Utilities*, A-32
edit commands, *Utilities*, 13-5
file
input, *Utilities*, 13-2

SLP utility
file (cont'd.)
listing, *Utilities*, 13-3
output, *Utilities*, 13-3
processing, *Utilities*, 13-3
source
creating, *Utilities*, 13-14
updating, *Utilities*, 13-9
indirect command file, *Utilities*, 13-8
initiating (invoking), *Utilities*, 13-1
messages, *Utilities*, 13-20
diagnostic error, *Utilities*, 13-21
fatal error, *Utilities*, 13-23
informational, *Utilities*, 13-21
operator, *Utilities*, 13-9
switches
/AU, *Utilities*, 13-15
/BF, *Utilities*, 13-15
/CM, *Utilities*, 13-15
/CS, *Utilities*, 13-15
/DB, *Utilities*, 13-15
/NS, *Utilities*, 13-15
/RS, *Utilities*, 13-16
/SP, *Utilities*, 13-16
/SQ, *Utilities*, 13-16
/TR, *Utilities*, 13-16
/SL switch, *Task Builder*, 10-48
CMP utility, *Utilities*, 4-3
ELI, *Error Logging*, 2-3, 2-10
See also /SOFT_LIMIT qualifier
with /HL switch, *Error Logging*, 2-10
RMSBCK utility, *RMS-11 Utilities*, 6-6, 6-10
RMSCNV utility, *RMS-11 Utilities*, 4-12
RMSRST utility, *RMS-11 Utilities*, 7-6
TKB, *System Management*, 5-25
/SLV keyword
INS command
VMR
and /SL switch (TKB), *System Management*, 5-25
and prototype tasks, *System Management*, 5-25
INS command (VMR), *System Management*, 5-25
INSTALL command, *MCR*, 3-98
RUN command, *MCR*, 3-144
$S macro form, *Executive*, 1-6
processing errors, *Executive*, 1-7
SMRYEP control file module, *Error Logging*, 4-6, 4-11, A-7
SMRYGP control file module, *Error Logging*, 4-7, 4-11, A-7
SMRYHP control file module, *Error Logging*, 4-7, 4-11, A-7
SMSG$ directive, *Error Logging*, 1-4; *Executive*, 5-231
summary, *I/O Operations*, F-5
$SNAP, *Program Development*, 1-8, 5-9
subset of Postmortem Dump Task, *Program Development*, 5-9
SNAP$ macro, *Task Builder*, D-6
Snapshot dump, *Task Builder*, D-6 to D-15
See $SNAP
example, *Task Builder*, D-10 to D-15
/SNGL keyword
initializing CLI with, *System Management*, 17-4
/SNGL subkeyword
COMMAND LINE INTERPRETER
command, *MCR*, 3-44
SNPBK$ macro, *Task Builder*, D-6
SNXC$ directive, *Executive*, 5-234
/SOFT_LIMIT qualifier
SET ERROR_LOG command, *Error Logging*, 2-10
See also /SL switch
Soft error, *Error Logging*, 1-3; *System Management*, 10-7, 11-3
defined, *Error Logging*, 2-10
/SOFT keyword
SET command, *MCR*, 3-184
SET command (VMR), *System Management*, 5-66
Software bootstrap
definition, *System Generation*, 1-12
Software Performance Report
See SPR
Sorting
RMSIFL utility
alternate key, *RMS-11 Utilities*, 3-11 to 3-13
files, *RMS-11 Utilities*, 3-7
input file organization, *RMS-11 Utilities*, 3-9
primary key, *RMS-11 Utilities*, 3-9
bypassing, *RMS-11 Utilities*, 3-8 to 3-9
work files, *RMS-11 Utilities*, 3-7, 3-13
SORT option
ACNT, *System Management*, 2-13

Sort routine error code
RMSIFL utility, *RMS-11 Utilities*, 3-1, 3-10, 3-12
allocating space
primary key sort, *RMS-11 Utilities*, 3-13
device allocation, *RMS-11 Utilities*, 3-7
SOURCE
RMSDES utility, *RMS-11 Utilities*, 2-30
Source file, *Introduction*, 5-3, 5-4, 5-6
See also SLP utility
FORTRAN IV
adding debugging statements, *Program Development*, 7-6
blank line, *Program Development*, 7-3
comment line, *Program Development*, 7-3
creating, *Program Development*, 7-2, 7-3
editing, *Program Development*, 7-4, 7-6, 7-8
MACRO-11
assembling, *Program Development*, 3-1, 3-2
creating from a skeleton, *Program Development*, 2-11
editing, *Program Development*, 2-12 to 2-17
error, *Program Development*, 3-2, 3-3, 3-4
format, *Program Development*, 2-1 to 2-3
inserting lines, *Program Development*, 2-17
introduction, *Program Development*, 2-1
listing, *Program Development*, 3-4, 3-5
macro library call, *Program Development*, 6-3, 6-4
Source language, *Introduction*, 5-3
Source Language Input Program
See also SLP utility
See SLP utility
/-SP, *Crash Dump Analyzer*, 2-8, 2-9
/SP/EX function
QUE /SP command, *System Management*, 3-20
Space
data storage, *RMS-11 User's Guide*, 2-5
delimiter in expressions, *MACRO-11*, 2-15
I/O buffer size, *RMS-11 User's Guide*, 2-5
Space (cont'd.)
in direct assignment statements, *MACRO-11*, 2-8
in macro argument, *MACRO-11*, 6-7
separating character, *MACRO-11*, 2-3
special character in MACRO–11, *MACRO-11*, 2-2
task size, *RMS-11 User's Guide*, 2-5
terminates operator field, *MACRO-11*, 1-3
used in operand field, *MACRO-11*, 1-4
valid in angle bracket arguments, *MACRO-11*, 6-6
<SPACE> symbol, *Indirect*, 2-19
SPACE operation, *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
Space operator
See Operator
Spanning blocks, *RMS-11 User's Guide*, 1-16, 1-19, 3-1
variable-length records, *RMS-11 User's Guide*, 2-16
Spawn directive, *Executive*, 5-241
effect on default TI, *MCR*, 2-10
running an installed task, *MCR*, 2-21
Spawning, *Executive*, 4-4
SP device, *MCR*, 2-10
SPEA$ directive, *Executive*, 5-236
Special character
ampersand (&), *MACRO-11*, 2-2
asterisk (*), *MACRO-11*, 2-2
at sign (@), *MACRO-11*, 2-2, 4-3, 4-4, 4-5, 4-6, 4-8
backslash (\), *MACRO-11*, 2-2
carriage return, *MACRO-11*, 5-19
circumflex (^), *MACRO-11*, 2-2, 6-6
colon (:), *MACRO-11*, 2-1, 5-11, 5-20, 5-21, 5-22
label terminator, *MACRO-11*, 1-2
comma (,), *MACRO-11*, 2-2
used in operand field, *MACRO-11*, 1-4
dollar sign ($)
reserved for DIGITAL system symbols, *MACRO-11*, 1-3, 2-1, 2-5
double colon (::), *MACRO-11*, 2-1, 2-6
label terminator, *MACRO-11*, 1-2
double equal sign (==), *MACRO-11*, 2-1, 2-6
double equal sign colon (==:), *MACRO-11*, 2-1, 2-6
double quotation mark ("), *MACRO-11*, 2-2, 2-14, 5-18
equal sign (=), *MACRO-11*, 2-1, 5-20

Special character (cont'd.)
equal sign colon (=:), *MACRO-11*, 2-1
exclamation point (!), *MACRO-11*, 2-2
form feed, *MACRO-11*, 5-12, 5-19
in macro arguments, *MACRO-11*, 6-7
left angle bracket (<), *MACRO-11*, 2-2, 5-11, 5-20, 5-21, 5-22, 5-23
left parenthesis, *MACRO-11*, 2-2
line feed, *MACRO-11*, 5-19
minus sign (-), *MACRO-11*, 2-2
null, *MACRO-11*, 5-19
number sign (#), *MACRO-11*, 2-2, 4-5, 4-6
percent sign (%), *MACRO-11*, 2-1
defines register symbols, *MACRO-11*, 2-8, 2-9
period (.), *MACRO-11*, 2-2, 2-15
assign new value to current location counter, *MACRO-11*, 2-11
current location counter, *MACRO-11*, 2-13
current location counter symbol, *MACRO-11*, 2-7
reserved for DIGITAL system symbols, *MACRO-11*, 1-3, 2-1, 2-5
symbol for current location counter, *MACRO-11*, 2-11
plus sign (+), *MACRO-11*, 2-2
right angle bracket (>), *MACRO-11*, 2-2, 2-3, 5-23
right parenthesis, *MACRO-11*, 2-2
rubout, *MACRO-11*, 5-19
semicolon (;), *MACRO-11*, 2-2, 5-20
begins comment field, *MACRO-11*, 1-4
single quotation mark ('), *MACRO-11*, 2-2, 2-14, 3-1, 5-18
slash (/), *MACRO-11*, 2-2
space, *MACRO-11*, 2-2, 2-15
in direct assignment statements, *MACRO-11*, 2-8
terminates operator field, *MACRO-11*, 1-3
used in operand field, *MACRO-11*, 1-4
tab, *MACRO-11*, 2-1
terminates operator field, *MACRO-11*, 1-3
used in operand field, *MACRO-11*, 1-4
table, *MACRO-11*, B-1
table of, *MACRO-11*, 2-1
Special character key
See Character
Special characters
use in command line, *MCR*, 1-4
Special character state table, *I/O Operations*, 7-8
Special key table
TTDRV, *I/O Drivers*, 2-72, 2-73
Special symbol, *Indirect*, 1-5, 2-9
format, *Indirect*, 2-9
logical, *Indirect*, 2-10
numeric, *Indirect*, 2-12
string, *Indirect*, 2-22
type, *Indirect*, 2-9
Special symbols
ICP, *Introduction*, 4-3
Specify Command Arrival AST directive, *Executive*, 5-211
Specify Floating Point Processor Exception AST directive, *Executive*, 5-229
Specify Parity Error AST directive, *Executive*, 5-236
Specify Power Recovery AST directive, *Executive*, 5-239
Specify Receive-By-Reference AST directive, *Executive*, 5-263
Specify Receive Data AST directive, *Executive*, 5-253
Specify Requested Exit AST directive, *Executive*, 5-255
BYE command, *MCR*, 3-36
effect on blocked task, *MCR*, 3-29
Specify Requested Exit AST directive (SREX$), *MCR*, 3-2
Specify SST Vector Table for Debugging Aid directive, *Executive*, 5-277
DEBUG command, *MCR*, 3-49
Specify SST Vector Table for Task directive, *Executive*, 5-279
Speed
application design consideration, *RMS-11 User's Guide*, 2-3
/SPEED keyword
SET command, *MCR*, 3-184
SET command (VMR), *System Management*, 5-66
/SP function
QUE /SP command, *System Management*, 3-20
SPND$S directive, *Executive*, 5-238
Spool
file, *Utilities*, 12-30
library file, *Utilities*, 10-29
Spooled device, *Batch and Queue*, 2-1
Spooling, *I/O Operations*, 8-1

Spooling (cont'd.)
defined, *Batch and Queue*, 2-1; *System Management*, 3-19
line printer
multistream, *System Management*, 3-1
.PRINT subroutine, *I/O Operations*, 8-2
transparent, *System Management*, 3-1
Spooling device
See SP device
SPR, *Writing I/O Driver*, 1-25
SPRA$ directive, *Executive*, 5-239
/SP switch, *Task Builder*, 10-49
CMP utility, *Utilities*, 4-3
CRF utility, *Utilities*, B-3
DMP utility, *Utilities*, 5-7
FLX utility, *Utilities*, 8-8
LBR utility, *Program Development*, 6-11; *Utilities*, 10-29
MAC command, *Program Development*, 3-5, 3-7, 6-4
PIP utility, *Program Development*, 3-8; *Utilities*, 12-30
SLP utility, *Utilities*, 13-16
SPWN$ directive, *Executive*, 5-241
effect on default TI, *MCR*, 2-10
relationship to EXECUTE command
IOX, *System Management*, 12-27
running an installed task, *MCR*, 2-21
SPY command
IOX, *System Management*, 12-54
examples, *System Management*, 12-54
logical names, *System Management*, 12-54
/SQ switch, *Task Builder*, 10-50
SLP utility, *Utilities*, 13-16
SRC argument
for .LIST/.NLIST, *MACRO-11*, 5-8
SRDA$ directive, *Executive*, 5-253
SREA$ directive, *Executive*, 5-255
See Specify Requested Exit AST directive
BYE command, *MCR*, 3-36
SREF$ directive, *Executive*, 5-260
S register, *Debugging*, 2-5, 5-3; *XDT*, 2-11
SREX$ directive, *Executive*, 5-255; *MCR*, 3-2
See Specify Requested Exit AST directive
SRRA$ directive, *Executive*, 5-263
/SR switch
PIP utility, *Utilities*, 12-31
SS.MAS state setting
transmitter (LRDRV), *I/O Drivers*, 11-5
SS.NEU state setting
transmitter (LRDRV), *I/O Drivers*, 11-5
SSM command, *Error Logging*, 1-3
See also SYSTEM SERVICE MESSAGE command
/SS switch, *Task Builder*, 10-51 to 10-52
LBR utility, *Utilities*, 10-29
SST, *Executive*, 2-5; *XDT*, 1-5
ODT, *Program Development*, 5-8
relation to Postmortem Dump, *Program Development*, 1-8
role in task termination, *Program Development*, 4-8, 4-9
service routine, *Executive*, 2-6
interrupt, *I/O Drivers*, 1-10
specifying, *Executive*, 5-277, 5-279
stack contents register, *Debugging*, 2-6, 5-4
vector
handling, *Debugging*, 2-9
register, *Debugging*, 2-6, 5-4
SST vector
declaring address, *Task Builder*, 12-38
ODT, *Task Builder*, 12-25
Stack
declaring size, *Task Builder*, 12-35
structure, *Writing I/O Driver*, 6-12
internal SST fault, *Writing I/O Driver*, 6-10, 6-11
Stack and register dump
Executive, *Writing I/O Driver*, 6-11
Stack check
card reader (CRDRV), *I/O Drivers*, 9-5
Stack Depth Indicator
See $STKDP
STACK option, *Task Builder*, 12-35
Stack pointer
kernel, *Crash Dump Analyzer*, 3-2
Stack pointer
kernel, *Crash Dump Analyzer*, 3-4
user, *Crash Dump Analyzer*, 3-2
Stadd parameter
device-specific
CRDRV, *I/O Drivers*, 9-3
DDDRV, *I/O Drivers*, 5-4
disk driver, *I/O Drivers*, 4-8
receiving (LRDRV), *I/O Drivers*, 11-9
tape driver, *I/O Drivers*, 6-7
transmitting (LRDRV), *I/O Drivers*, 11-4
VTDRV, *I/O Drivers*, 3-3
general (TTDRV), *I/O Drivers*, 2-13

Stadd parameter (cont'd.)
IO.CCO function (TTDRV), *I/O Drivers*, 2-26
IO.EIO function (TTDRV), *I/O Drivers*, 2-28
IO.GTS function (TTDRV), *I/O Drivers*, 2-35
IO.RAL function (TTDRV), *I/O Drivers*, 2-39
IO.RLB function, *I/O Drivers*, 1-30
IO.RNE function (TTDRV), *I/O Drivers*, 2-40
IO.RPR function (TTDRV), *I/O Drivers*, 2-43
IO.RST function (TTDRV), *I/O Drivers*, 2-45
IO.RTT function (TTDRV), *I/O Drivers*, 2-47
IO.RVB function, *I/O Drivers*, 1-31
IO.SMC function (TTDRV), *I/O Drivers*, 2-62
IO.WAL function (TTDRV), *I/O Drivers*, 2-49
IO.WBT function (TTDRV), *I/O Drivers*, 2-52
IO.WLB function, *I/O Drivers*, 1-32
IO.WVB, *I/O Drivers*, 1-33
SF.GMC function (TTDRV), *I/O Drivers*, 2-53
standard function
CRDRV, *I/O Drivers*, 9-2
DDDRV, *I/O Drivers*, 5-3
disk driver, *I/O Drivers*, 4-7
LPDRV, *I/O Drivers*, 7-4
tape driver, *I/O Drivers*, 6-6
STAF$ directive, *Executive*, 5-266
Stall I/O
F11ACP performance (disk driver), *I/O Drivers*, 4-12
RC25, *I/O Drivers*, 4-12
system performance (disk driver), *I/O Drivers*, 4-12
Standalone BRU
See BRU utility
Standalone Configuration and Disk Sizing Program
See CNF
Standalone maintenance, *System Management*, 11-6
Standalone system
definition, *System Generation*, 1-12
Standard
for coding programs, *MACRO-11*, E-1
Standard function list
TTDRV, *I/O Drivers*, 2-21
Standard ODL file, *RMS-11 User's Guide*, 8-3, 8-5
and file organization, *RMS-11 User's Guide*, 8-5
DAP11X, *RMS-11 User's Guide*, 8-6
RMS11S, *RMS-11 User's Guide*, 8-5
RMS11X, *RMS-11 User's Guide*, 8-5
RMS12X, *RMS-11 User's Guide*, 8-6
START/ACCOUNTING command
parameters
CRASH_REASON, *System Management*, 10-5
EXTEND_SIZE, *System Management*, 10-5
FILE, *System Management*, 10-5
POOL_RESERVE, *System Management*, 10-5
SCAN_RATE, *System Management*, 10-5
STATISTICS_SCAN, *System Management*, 10-5
SYSTEM_STATISTICS, *System Management*, 10-6
TASK, *System Management*, 10-6
Resource Accounting, *System Management*, 10-5
START/ERROR_LOG command, *Error Logging*, 2-3, 2-5, 2-10
See also /LOG switch
qualifiers, *Error Logging*, 2-5
START/PROCESSOR command, *System Management*, 3-36
processor types, *System Management*, 3-36
qualifiers, *System Management*, 3-36
/ALIGN, *System Management*, 3-37
/BACKSPACE, *System Management*, 3-37
/CONTINUE, *System Management*, 3-37
/FLAG, *System Management*, 3-37
/FORMS, *System Management*, 3-37
/FORWARDSPACE, *System Management*, 3-37
/NEXT_JOB, *System Management*, 3-37
overview, *System Management*, 3-37
/PAGE, *System Management*, 3-37
/RESTART, *System Management*, 3-38

START/PROCESSOR command
qualifiers (cont'd.)
/TOP_OF_FILE, *System Management*, 3-38
START/QUEUE/MANAGER command, *System Management*, 3-41
starting QMG, *System Management*, 3-4
START/QUEUE command, *System Management*, 3-40
START command, *DCL*, 7-26, 9-48
IOX, *System Management*, 12-55
functions, *System Management*, 12-55
Interactive mode
restriction, *System Management*, 12-10
Shadow Recording, *System Management*, 16-5
START/PROCESSOR, *DCL*, 9-48
START/QUEUE, *DCL*, 9-49
START/QUEUE/MANAGER, *DCL*, 9-49
START/UNBLOCK, *DCL*, 7-27, 9-49
Starting address of program
specify with .END directive, *MACRO-11*, 5-33
STARTUP.CMD file, *System Generation*, 4-5
Autoconfigure, *System Generation*, 5-33; *System Management*, 4-1
function, *System Management*, 1-10
Startup command file, *Introduction*, 2-2
Startup procedure
Autoconfigure, *System Generation*, 5-33; *System Management*, 4-1
content, *System Generation*, 4-4
description, *System Generation*, 4-4
pregenerated kit, *System Generation*, 5-20
STARTUP.CMD file, *System Generation*, 4-5
system, *System Generation*, 4-4
STATE$ macro, *I/O Operations*, 7-1, 7-2
Statement
format, *MACRO-11*, 1-1
MACRO-11, *Program Development*, 1-4
format, *Program Development*, 2-3
State parameter
device-specific function
transmitting (LRDRV), *I/O Drivers*, 11-5
IO.STC function
transmitter (LRDRV), *I/O Drivers*, 11-6
$STATE program section, *I/O Operations*, 7-2
State setting
transmitter (LRDRV), *I/O Drivers*, 11-5
State table, *I/O Operations*, 7-1
arrangement of syntax types, *I/O Operations*, 7-7
initializing, *I/O Operations*, 7-2
rejecting transitions, *I/O Operations*, 7-18
special character, *I/O Operations*, 7-8
using subexpressions, *I/O Operations*, 7-18
Static common region, *Executive*, 3-5
Static structure, *Writing I/O Driver*, 2-1
Statistics
device
Resource Accounting, *System Management*, 10-7
STATISTICS_SCAN parameter
SET ACCOUNTING command, *System Management*, 10-9
START/ACCOUNTING command, *System Management*, 10-5
Statistics block, *I/O Operations*, D-1
address, *I/O Operations*, 3-11
/STATISTICS qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-5, 3-21
See also /SUMMARY switch
arguments, *Error Logging*, 3-21, 3-23
Statistics scan
Resource Accounting, *System Management*, 10-6
Stat parameter
device-specific function (VTDRV), *I/O Drivers*, 3-3
Status
completion (VTDRV), *I/O Drivers*, 3-6
end-of-volume
unlabeled tape (tape driver), *I/O Drivers*, 6-15
I/O, *I/O Drivers*, 1-36
completion (VTDRV), *I/O Drivers*, 3-5
condition, *I/O Drivers*, 1-38
CRDRV, *I/O Drivers*, 9-6
directive, *I/O Drivers*, 1-37
IO.XOP function (XEDRV), *I/O Drivers*, 10-6
resetting transport (tape driver), *I/O Drivers*, 6-16
returning (TTDRV), *I/O Drivers*, 2-66
/STATUS:TASK qualifier, *Batch and Queue*, 3-8
Status bit
for CLI, *MCR*, 3-45

Status block
I/O, *I/O Drivers*, 1-5, 1-8, 1-11, 1-26, 1-29, 1-36 to 1-39, 1-39
CRDRV, *I/O Drivers*, 9-3, 9-6
DDDRV, *I/O Drivers*, 5-5
disk driver, *I/O Drivers*, 4-9
first word content, *I/O Drivers*, 13-29
LADRV, *I/O Drivers*, 12-28
K-series, *I/O Drivers*, 13-6, 13-29
LADRV, *I/O Drivers*, 12-2, 12-27
LPDRV, *I/O Drivers*, 7-4
LRDRV, *I/O Drivers*, 11-4, 11-5, 11-7, 11-11
tape driver, *I/O Drivers*, 6-10, 6-11
TTDRV, *I/O Drivers*, 2-12, 2-45, 2-53, 2-62, 2-66, 2-76, 2-78, 2-81
UNIBUS switch driver, *I/O Drivers*, 14-7, 14-8
VTDRV, *I/O Drivers*, 3-8, 3-9
4-word (LADRV), *I/O Drivers*, 12-27
XEDRV, *I/O Drivers*, 10-6, 10-7, 10-12, 10-15, 10-19 to 10-21
Status code, *Batch and Queue*, 3-11
binary value, *I/O Drivers*, 1-37
ERROR, *Batch and Queue*, 3-10
SEVERERROR, *Batch and Queue*, 3-10
SUCCESS, *Batch and Queue*, 3-10
WARNING, *Batch and Queue*, 3-10
Status Control Block
See SCB
Status flags
common, *DCL*, 7-73 to 7-74
task, *DCL*, 7-56 to 7-58
Status information
error logging, *Error Logging*, 2-1
Status line
transaction file, *System Management*, 10-16
Status parameter
XEDRV
IO.XCL function, *I/O Drivers*, 10-19
IO.XIN function, *I/O Drivers*, 10-20
IO.XRC function, *I/O Drivers*, 10-15
IO.XSC function, *I/O Drivers*, 10-7
IO.XTL function, *I/O Drivers*, 10-21
IO.XTM function, *I/O Drivers*, 10-12
Status return
CRDRV, *I/O Drivers*, 9-3, 9-6 to 9-7
DDDRV, *I/O Drivers*, 5-4
disk driver, *I/O Drivers*, 4-9
IO.XCL function (XEDRV), *I/O Drivers*, 10-20
Status return (cont'd.)
IO.XIN function (XEDRV), *I/O Drivers*, 10-20
IO.XRC function (XEDRV), *I/O Drivers*, 10-18
IO.XTL function (XEDRV), *I/O Drivers*, 10-22
IO.XTM function (XEDRV), *I/O Drivers*, 10-15
LPDRV, *I/O Drivers*, 7-4
receiver (LRDRV), *I/O Drivers*, 11-11 to 11-12
tape driver, *I/O Drivers*, 6-10
transmitter (LRDRV), *I/O Drivers*, 11-7
UNIBUS switch driver, *I/O Drivers*, 14-7
VTDRV, *I/O Drivers*, 3-8
XEDRV, *I/O Drivers*, 10-5
Status word
F11ACP
FNB, *I/O Operations*, H-11
/STB, *Crash Dump Analyzer*, 2-2, 2-8, 2-10
STB
See Symbol table file
STB file
See Symbol definition file
/STD, *Crash Dump Analyzer*, 2-4, 2-7
STD, *System Management*, 5-20, 5-26; *DCL*, 7-1 to 7-5
See also System Task Directory
dump, *Crash Dump Analyzer*, 3-36
switch
See /STD
Step command
See S command
STIM$ directive, *Executive*, 5-268
$STKDP, *Writing I/O Driver*, 6-12; *XDT*, 1-4, 1-8, 2-2
stack depth indicator, *Crash Dump Analyzer*, 4-2; *Writing I/O Driver*, 6-7
STLO$ directive, *Executive*, 5-271
$STMAP routine, *Writing I/O Driver*, 7-32
calling from the driver, *Writing I/O Driver*, 7-3
$STMP1 routine, *Writing I/O Driver*, 7-33
calling from the driver, *Writing I/O Driver*, 7-3
STOP/ABORT command, *System Management*, 3-31; *Introduction*, 3-15
STOP/ACCOUNTING command, *System Management*, 10-10
format, *System Management*, 10-10

STOP/ACCOUNTING command (cont'd.)
shutdown reasons
CLEAN_UP, *System Management,* 10-10
MAINTENANCE, *System Management,* 10-10
OTHER, *System Management,* 10-10
REBOOT, *System Management,* 10-10
SCHEDULED_SHUTDOWN, *System Management,* 10-10
SHUTUP, *System Management,* 10-10
STOP/ERROR_LOG command, *Error Logging,* 2-7, 2-9
See also /NOLOG switch
STOP/PROCESSOR command, *System Management,* 3-32
processor types, *System Management,* 3-32
qualifiers, *System Management,* 3-32
/ABORT, *System Management,* 3-33
/FILE_END, *System Management,* 3-33
/JOB_END, *System Management,* 3-33
/PAUSE, *System Management,* 3-33
STOP/QUEUE/MANAGER command, *System Management,* 3-35
/ABORT qualifier, *System Management,* 3-35
STOP/QUEUE command, *System Management,* 3-34
STOP$ directive
UNSTOP command, *MCR,* 2-213
STOP$S directive, *Executive,* 5-274
Stop-bit synchronization, *Executive,* 2-13
directives, *Executive,* 2-14
STOP command
See also ON and IF commands
format, *Batch and Queue,* 3-8
Shadow Recording, *System Management,* 16-6
STOP/ABORT, *DCL,* 4-92, 9-49
STOP/BLOCK, *DCL,* 7-24 to 7-25, 9-50
STOP/PROCESSOR, *DCL,* 9-50
STOP/QUEUE, *DCL,* 9-50
STOP/QUEUE/MANAGER, *DCL,* 9-51
.STOP directive, *Indirect,* 2-91
Stop directive, *Executive,* 5-274
UNSTOP command, *MCR,* 2-213
Stop for Logical OR of Event Flags directive, *Executive,* 5-271
Stop for Single Event Flag directive, *Executive,* 5-275
Stop switch
card reader (CRDRV), *I/O Drivers,* 9-5
Storage
data, *RMS-11 Intro,* 2-1
Storage area
declaring size, *Task Builder,* 12-16
$STORE macro, *RMS-11 Macro,* 2-11
example, *RMS-11 Macro,* 7-3, 7-7, 7-11, 7-15
STPSWP: subroutine
stop sweep
K-series, *I/O Drivers,* 13-26
LADRV, *I/O Drivers,* 12-22
%STR$CHAR
CFL string-handling function, *Error Logging,* 5-24
%STR$FILE
CFL string-handling function, *Error Logging,* 5-24
%STR$LENGTH
CFL string-handling function, *Error Logging,* 5-23
%STR$MATCH
CFL string-handling function, *Error Logging,* 5-24
%STR$PAD
CFL string-handling function, *Error Logging,* 5-24
%STR$PARSE
CFL string-handling function, *Error Logging,* 5-23
%STR$QUOTE
CFL string-handling function, *Error Logging,* 5-23
%STR$REMAINING
CFL string-handling function, *Error Logging,* 5-24
%STR$SEARCH
CFL string-handling function, *Error Logging,* 5-24
%STR$TRAIL
CFL string-handling function, *Error Logging,* 5-23
%STR$UPCASE
CFL string-handling function, *Error Logging,* 5-24
Stream, *RMS-11 Macro,* 4-2
See also Access stream
connecting
See CONNECT operation
disconnecting
See DISCONNECT operation
record stream, *RMS-11 Macro,* 4-7

Stream (cont'd.)
unlocking bucket
See FREE operation
writing buffers
See FLUSH operation
Stream operation, *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
See also Operation
Stream-operation macro
$CONNECT, *RMS-11 Macro*, 5-6
declaring, *RMS-11 Macro*, C-3
$DISCONNECT, *RMS-11 Macro*, 5-27
$FLUSH, *RMS-11 Macro*, 5-56
$FREE, *RMS-11 Macro*, 5-58
$REWIND, *RMS-11 Macro*, 5-100
Stream record format, *RMS-11 User's Guide*, 1-11, 2-16 ; *RMS-11 Intro*, 3-4
terminators, *RMS-11 User's Guide*, 2-16; *RMS-11 Intro*, 3-4
String concatenation binary operator
CFL expression, *Error Logging*, 5-10
String constant, *Indirect*, 2-28
String conversion
CFL, *Error Logging*, 5-4
STRING data type
CFL, *Error Logging*, 5-4
numeric values
equivalent, *Error Logging*, 5-4
String declaration
CFL, *Error Logging*, 5-4
String expression, *Indirect*, 2-29
String key, *RMS-11 User's Guide*, 6-3
segmented, *RMS-11 User's Guide*, 6-7
String-matching binary operator
CFL expression, *Error Logging*, 5-13
String operator
CFL expression, *Error Logging*, 5-10
String symbol, *Indirect*, 2-9, 2-28
comparing, *Indirect*, 2-66
defining, *Indirect*, 2-44
setting, *Indirect*, 2-90
testing, *Indirect*, 2-68
<STRLEN> symbol, *Indirect*, 2-19
Structure
indexed files
conceptual, *RMS-11 User's Guide*, 5-4
physical, *RMS-11 User's Guide*, 5-2
relative files, *RMS-11 User's Guide*, 4-1
conceptual, *RMS-11 User's Guide*, 4-1
sequential files, *RMS-11 User's Guide*, 3-1
conceptual, *RMS-11 User's Guide*, 3-2
Structure
sequential files (cont'd.)
physical, *RMS-11 User's Guide*, 3-1
STSE$ directive, *Executive*, 5-275; *I/O Drivers*, 1-10
SU$-family symbol
declaring, *RMS-11 Macro*, C-3
value, *RMS-11 Macro*, A-1
SUB command
example, *Batch and Queue*, 3-18
file switches, *Batch and Queue*, 3-15
log file switches, *Batch and Queue*, 3-15
MCR job switches, *Batch and Queue*, 3-15
Subcontroller device, *Writing I/O Driver*, 1-14
block, *Writing I/O Driver*, 1-14
Subexpression
parsing complex command lines, *I/O Operations*, 7-19
Subfunction
TTDRV
allowing, *I/O Drivers*, 2-21
list
device-specific, *I/O Drivers*, 2-22
standard, *I/O Drivers*, 2-21
modifier
extended I/O, *I/O Drivers*, 2-28
Subfunction bit
TTDRV, *I/O Drivers*, 2-14
$SUBMIT card
command qualifiers, *Batch and Queue*, 3-24
See SUBMIT command
format, *Batch and Queue*, 3-24
SUBMIT command, *DCL*, 9-51; *Introduction*, 4-6
DCL command qualifiers, *Batch and Queue*, 3-15
example, *Batch and Queue*, 3-18
file qualifiers, *Batch and Queue*, 3-15
format, *Batch and Queue*, 3-1, 3-15
log file qualifiers, *Batch and Queue*, 3-15
/NOPRINT qualifier, *Batch and Queue*, 3-1
Subpacket
DATA, *Error Logging*, 4-3, 4-4, 4-65 to 4-68
declaration, *Error Logging*, 4-10, 4-61
definition, *Error Logging*, 4-2
DEVICE_ID, *Error Logging*, 4-3, 4-62
DEVICE_OP, *Error Logging*, 4-3, 4-63
error log, *Error Logging*, 5-2
HEADER, *Error Logging*, 4-3
required, *Error Logging*, 4-10, 4-61
information in, *Error Logging*, 4-61 to 4-68

Subpacket (cont'd.)
IO_ACTIVITY, *Error Logging*, 4-3, 4-64
TASK, *Error Logging*, 4-3, 4-62
SUBPACKET declaration
user-written module, *Error Logging*, 4-29
SUBPACKET statement
CFL, *Error Logging*, 5-28
Subpartition
See Partition
Subroutine, *Introduction*, 5-9
calling, *Indirect*, 2-64
high-level language, *Executive*, 1-9
error conditions, *Executive*, 1-18
optional arguments, *Executive*, 1-11
specifying task names, *Executive*, 1-11
returning from, *Indirect*, 2-86
Subroutine linkage
K-series, *I/O Drivers*, 13-28
standard MACRO-11 (LADRV), *I/O Drivers*, 12-23
SUBSTITUTE command
EDT editor, *Introduction*, 2-18
Substitution format control string, *Indirect*, 2-31
Substitution mode, *Indirect*, 1-3, 2-54
ICP, *Introduction*, 4-3
Substring
searching, *Indirect*, 2-92
Substring extraction unary suffix operator
CFL expression, *Error Logging*, 5-10
Subtraction binary operator
CFL expression, *Error Logging*, 5-14
Subtraction operator
summary, *MACRO-11*, 2-4
Success
handler, *RMS-11 Macro*, 2-18
SUM block, *RMS-11 Intro*, 4-8
chaining to FAB, *RMS-11 Macro*, 2-13
declaring, *RMS-11 Macro*, 2-9
initializing, *RMS-11 Macro*, 2-10
summary, *RMS-11 Macro*, 6-145
Summary listing
RMSBCK utility, *RMS-11 Utilities*, 6-10
RMSCNV utility, *RMS-11 Utilities*, 4-12
RMSRST utility, *RMS-11 Utilities*, 7-12
Summary report
generated by PRINTSUMMARY, *System Management*, 12-42
RPT, *Error Logging*, 3-21 to 3-23
See also /SUMMARY switch
/SUMMARY switch
RPT, *Error Logging*, 3-5, 3-21
See also /STATISTICS qualifier
arguments, *Error Logging*, 3-5, 3-21, 3-23
processing, *Error Logging*, 4-4
SUMMARYTIME command
IOX, *System Management*, 12-56
initial default, *System Management*, 12-56
suppressing interval reports, *System Management*, 12-56
Summary XAB
See SUM block
SUPERSEDE
RMSDES utility, *RMS-11 Utilities*, 2-35
/SUPERSEDE qualifier
BRU utility, *Utilities*, 3-24
Supersession
RMSBCK utility, *RMS-11 Utilities*, 6-7
RMSCNV utility, *RMS-11 Utilities*, 4-7, 4-13
RMSDEF utility, *RMS-11 Utilities*, A-7
RMSRST utility, *RMS-11 Utilities*, 7-8
Supervisor Call directive, *Executive*, 5-213
Supervisor mode, *Debugging*, 1-4, 3-2; *Task Builder*, 2-24
library routine, *Executive*, 3-1
calling, *Executive*, 5-213
mapping in, *Task Builder*, 2-25
switching, *Task Builder*, 8-7
switching vector, *Task Builder*, 8-1
user-written, *Task Builder*, 8-25
Supervisor-mode library, *Debugging*, 1-4; *Task Builder*, 2-24, 8-1
See also CSM library
accessing, *Task Builder*, 12-31, 12-36
building, *Task Builder*, 8-4, 8-7
command, *Debugging*, 2-10
contents, *Task Builder*, 8-2
data, *Task Builder*, 8-4
debugging, *Debugging*, 1-4
I- and D-space, *Task Builder*, 8-4
installing READ/WRITE access, *Debugging*, 1-4
linking, *Task Builder*, 8-4, 8-24
multiple, *Task Builder*, 8-24
overlaid, *Task Builder*, 8-25
resident library, *Task Builder*, 8-24
setting, *Debugging*, 2-10
switching vector, *Task Builder*, 8-1

Supervisor-mode library
switching vector (cont'd.)
user-written, *Task Builder*, 8-25
SYSGEN question, *System Generation*, 3-25
SUPLIB option, *Task Builder*, 12-36
Supplied system tasks
rebuilding, *System Generation*, 4-11
SYSGEN question, *System Generation*, 3-78
types, *System Generation*, 3-76
Support routine
feature list (K-series), *I/O Drivers*, 13-3
generation (K-series), *I/O Drivers*, 13-4 to 13-5
interface (K-series), *I/O Drivers*, 13-6
invoking (K-series), *I/O Drivers*, 13-28
MACRO-11 (LADRV), *I/O Drivers*, 12-23
program use (K-series), *I/O Drivers*, 13-5 to 13-6
use (K-series), *I/O Drivers*, 13-4
Suspend directive, *Executive*, 5-238
/SU subswitch
PIP utility, *Utilities*, 12-37
/SU switch
RMSBCK utility, *RMS-11 Utilities*, 6-7
RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7, 4-13, 4-15
RMSRST utility, *RMS-11 Utilities*, 7-8
SVBD$ directive
DEBUG command, *MCR*, 3-49
SVDB$ directive, *Executive*, 5-277
SVTK$ directive, *Executive*, 5-279
Sw1 parameter
device-specific function (VTDRV), *I/O Drivers*, 3-4
IO.STC function (VTDRV), *I/O Drivers*, 3-6
Sw2 parameter
device-specific function (VTDRV), *I/O Drivers*, 3-3
IO.STC function (VTDRV), *I/O Drivers*, 3-6
Swapping
definition, *System Management*, 1-4
Sweep
initiating A/D synchronous (K-series), *I/O Drivers*, 13-8
stopping (K-series), *I/O Drivers*, 13-26
Switch
analysis, *Crash Dump Analyzer*, 2-3 to 2-7
RMSBCK utility, *RMS-11 Utilities*, 6-4 to 6-5
RMSCNV utility, *RMS-11 Utilities*, 4-5, 4-7
Switch (cont'd.)
RMSDSP utility, *RMS-11 Utilities*, 5-3 to 5-4
RMSIFL utility, *RMS-11 Utilities*, 3-3, 3-5
RMSRST utility, *RMS-11 Utilities*, 7-3
TKB, *Task Builder*, 10-1 to 10-56
See also individual switch entries
summary, *Task Builder*, 10-2 to 10-5
syntax, *Task Builder*, 10-1
SWITCH command, *System Management*, 4-31
example, *System Management*, 4-31
format, *System Management*, 4-31
Switches, *Indirect*, 2-33 to 2-35
function, *Crash Dump Analyzer*, 2-7 to 2-10
Switching access modes, *RMS-11 Intro*, 3-13
Switch-logging-file operation
subpacket information, *Error Logging*, 4-65
SWITCH REGISTER command, *MCR*, 3-201
brief description, *MCR*, 1-7
examples, *MCR*, 3-201
formats, *MCR*, 3-201
keywords
/CLE, *MCR*, 3-201
/DIS, *MCR*, 3-201
/SET, *MCR*, 3-201
parameters, *MCR*, 3-201
Switch State directive, *Executive*, 5-281
Switch string
user-defined, *Error Logging*, 3-26
/SWITCH switch
ELI, *Error Logging*, 2-11
See also /NEW_LOG_FILE qualifier
New Version subswitch, *Error Logging*, 2-11
/SWPC keyword
SET command, *MCR*, 3-185
SET command (VMR), *System Management*, 5-67
/SWPR keyword
SET command, *MCR*, 3-185
SET command (VMR), *System Management*, 5-67
SWR command
See SWITCH REGISTER command
SWST$ directive, *Executive*, 5-281
SY device
as default device name, *MCR*, 2-5
assigning logical name to, *MCR*, 3-67
default logical device, *MCR*, 3-67
logical name default, *MCR*, 3-163

SY device (cont'd.)
pseudo device, *MCR*, 2-10
system default for file specification, *MCR*, 2-6
user device logical, *MCR*, 3-14
<SYDISK> symbol, *Indirect*, 2-25
SYM argument
for .LIST/.NLIST, *MACRO-11*, 5-8
Symbol, *RMS-11 Intro*, 4-7; *Indirect*, 1-3
assumed value of undefined, *MACRO-11*, 2-14
code and mask, *RMS-11 Intro*, 4-7
component of a term, *MACRO-11*, 2-13
cross-reference, *Program Development*, 3-7
defining, *Indirect*, 2-4
deleting definition, *Indirect*, 2-59
displaying, *Indirect*, 2-104
field-offset, *RMS-11 Intro*, 4-7
global, *Program Development*, 1-5; *Introduction*, 5-6, 5-10
See also Global symbol
entry point, *Program Development*, 1-5
resolution, *Program Development*, 1-5, 4-2
resolving, *Task Builder*, 3-18
TKB, *Program Development*, 1-5
local, *Program Development*, 1-4, 1-5, 2-7; *Introduction*, 5-6
defining (TTDRV), *I/O Drivers*, 2-36
definition, *Program Development*, 2-7
obtaining, *I/O Drivers*, 1-7
macro
definition, *Program Development*, 1-4, 1-10, 2-6, 6-4
rules, *MACRO-11*, 2-5
MACRO-11 evaluation, *Program Development*, 1-5, 3-1, 3-2
Memory display (RMD), *System Management*, 7-7
order of symbol table searches, *MACRO-11*, 2-6
permanent, *MACRO-11*, 2-5
overriding with .MCALL, *MACRO-11*, 6-21
resolving, *Task Builder*, 3-28
substituting, *Indirect*, 2-31, 2-54
TKB, *DCL*, 6-7
types of, *MACRO-11*, 2-4
undefined
assumed value, *MACRO-11*, 2-14
resolving, *Task Builder*, 10-22, 11-33
user-defined, *MACRO-11*, 2-5
Symbol
user-defined (cont'd.)
rules, *MACRO-11*, 2-5
using, *Indirect*, 2-9
/SYMBOL_TABLE qualifier, *Task Builder*, 11-65
Symbol control directive, *MACRO-11*, 5-42
Symbol definition file, *Task Builder*, 5-6 to 5-7
absolute shared region, *Task Builder*, 5-11
contents, *Task Builder*, 5-6, 5-15
excluding global symbol, *Task Builder*, 12-21
I- and D-space task, *Task Builder*, 7-10
overlaid shared region, *Task Builder*, 5-14
relationship to system image file, *System Management*, 5-2
specifying, *System Management*, 5-2; *Task Builder*, 11-65
use of /CO/LI/PI switch, *Task Builder*, 5-6
VMR requirements, *System Management*, 5-2
Symbolic offset, *Executive*, 1-8
establishing, *Task Builder*, 5-19
usage, *Writing I/O Driver*, 4-2
Symbol name, *Indirect*, 2-9
Symbol table, *Indirect*, 2-4, 2-31
excluding global symbol, *Task Builder*, 11-34
including global symbol, *Task Builder*, 10-51, 11-57
permanent symbols, *MACRO-11*, C-1
storing, *Task Builder*, F-2 to F-5
Symbol table file, *MCR*, 3-105
for device driver
location of, *MCR*, 3-105
Symbol type, *Indirect*, 2-9
defining, *Indirect*, 2-9
logical, *Indirect*, 2-9
numeric, *Indirect*, 2-9
string, *Indirect*, 2-9
#symbol variable, *XDT*, 2-10
list, *XDT*, B-1
<SYMTYP> symbol, *Indirect*, 2-19
Synchronous operation, *RMS-11 User's Guide*, 8-2
Synchronous system trap
See SST
Synchronous trap, *I/O Drivers*, 1-10
/SYNC keyword
INS command (VMR), *System Management*, 5-25

/SYNC keyword (cont'd.)
INSTALL command, *MCR*, 3-99
Syntax, *Introduction*, 1-14
VMR, *System Management*, 5-4
abbreviating commands, *System Management*, 5-4
command line format, *System Management*, 5-4
command names, *System Management*, 5-4
Syntax element
attributes, *System Management*, 18-27
defining, *I/O Operations*, 7-2
Syntax state table, *I/O Operations*, 7-7
/-SYS, *Crash Dump Analyzer*, 2-4, 2-7
SYS$LOGIN
user directory logical, *MCR*, 3-14
<SYSDEV> symbol, *Indirect*, 2-25
SYSGEN
See also Pregenerated kit
abnormal exit, *System Generation*, 3-6
Autoconfigure, *System Generation*, 3-6
baseline system, *System Generation*, 3-12
changing system, *System Generation*, 4-9
compared to system generation, *System Generation*, 1-1
definition, *System Generation*, 1-4
error message, *System Generation*, 3-3
error recovery, *System Generation*, 3-3
features, *System Generation*, 1-4
help paragraph, *System Generation*, 3-3
invoking, *System Generation*, 3-14
making changes, *System Generation*, 3-4
media requirement, *System Generation*, 2-2
preparation, *System Generation*, 2-1
processor support, *System Generation*, 3-23
question
example, *System Generation*, 3-2
format, *System Generation*, 3-1
number format, *System Generation*, 3-1
prompt format, *System Generation*, 3-2
sections, *System Generation*, 3-15
restarting, *System Generation*, 3-20
saved answer file, *System Generation*, 3-5
sections, *System Generation*, 1-5 to 1-7
Adding a Device, *System Generation*, 4-10
Assembling the Executive and Drivers, *System Generation*, 3-70 to 3-71
Building the Executive and Drivers, *System Generation*, 3-72 to 3-73
SYSGEN
sections (cont'd.)
Building the Privileged Task, *System Generation*, 3-74 to 3-75
Choosing Executive Options, *System Generation*, 3-22 to 3-34
Choosing Peripheral Configuration, *System Generation*, 3-35 to 3-69
Choosing SYSGEN Options, *System Generation*, 3-16 to 3-21
Creating System Image File, *System Generation*, 3-81 to 3-83
Rebuilding the Supplied System Tasks, *System Generation*, 3-76 to 3-80
system
setting up, *System Generation*, 4-4 to 4-7
terms defined, *System Generation*, 1-7 to 1-13
SYSGEN question
accounting, *System Generation*, 3-28
alternate CLI, *System Generation*, 3-28
assembling listings Executive, *System Generation*, 3-71
Autoconfigure, *System Generation*, 3-6, 3-19
overriding, *System Generation*, 3-9, 3-19
batch processor, *System Generation*, 3-28
character translation, *System Generation*, 3-30
CLI alternate, *System Generation*, 3-28
CM/CR11 card reader, *System Generation*, 3-47
communications device, *System Generation*, 3-65
communications support, *System Generation*, 3-27
console driver, *System Generation*, 3-28
controllers
DECtape II, *System Generation*, 3-51
DEUNA, *System Generation*, 3-68
MSCP-type controller, *System Generation*, 3-45
RH-type, *System Generation*, 3-36
RK11, *System Generation*, 3-41
RK611/711, *System Generation*, 3-42
RL11/RLV11, *System Generation*, 3-43
RP11, *System Generation*, 3-44
RX11, *System Generation*, 3-50
RX211/RXV21, *System Generation*, 3-50

SYSGEN question
controllers (cont'd.)
TC11 DECtape, *System Generation*, 3-49
TM/TMA/TMB11, *System Generation*, 3-54
TMSCP-type, *System Generation*, 3-47
TU58, *System Generation*, 3-51
crash dump device, *System Generation*, 3-32
CTRL/C abort support, *System Generation*, 3-29
DCL, *System Generation*, 3-28
decimal version numbers, *System Generation*, 3-29
default buffer, *System Generation*, 3-30
default response, *System Generation*, 3-2
device
LA-type, *System Generation*, 3-56
MU-type, *System Generation*, 3-47
dial-up line, *System Generation*, 3-58
baud rate, *System Generation*, 3-58, 3-64
modem support, *System Generation*, 3-63
disks
DB-type, *System Generation*, 3-37
DK-type, *System Generation*, 3-41
DL-type, *System Generation*, 3-43
DM-type, *System Generation*, 3-42
DP-type, *System Generation*, 3-44
DR-type, *System Generation*, 3-38
DS-type, *System Generation*, 3-38
DU-type, *System Generation*, 3-45
DY-type, *System Generation*, 3-51
EM-type, *System Generation*, 3-39
ML11, *System Generation*, 3-39
MSCP, *System Generation*, 3-45
RA60/80/81, *System Generation*, 3-45
RC25, *System Generation*, 3-45
RD51/52/53, *System Generation*, 3-45
RK05, *System Generation*, 3-41
RK05F, *System Generation*, 3-41
RK06/07, *System Generation*, 3-42
RL01/RL02, *System Generation*, 3-43
RM02/03/05/80, *System Generation*, 3-38
RP02/RPR02/RP03, *System Generation*, 3-44
RP04/05/06, *System Generation*, 3-37
RP07, *System Generation*, 3-38
RS03/04, *System Generation*, 3-38

SYSGEN question
disks (cont'd.)
RX02, *System Generation*, 3-51
RX50, *System Generation*, 3-45
driver
user-supplied, *System Generation*, 3-68
Executive data space, *System Generation*, 3-24
F11ACP, *System Generation*, 3-29
fast-mapping facility, *System Generation*, 3-26
FCSRES library, *System Generation*, 3-26
file window in secondary pool, *System Generation*, 3-29
Full-functionality Executive, *System Generation*, 3-23
help paragraph, *System Generation*, 3-3
ICB
pool size, *System Generation*, 3-26
interrupt vector
highest address, *System Generation*, 3-69
IP11 industrial I/O subsystem, *System Generation*, 3-31
IP11 powerfail support, *System Generation*, 3-31
line frequency, *System Generation*, 3-34
line interface
DL11/DLV11, *System Generation*, 3-56
DM11-BB, *System Generation*, 3-59
DMC11, *System Generation*, 3-66
DMR11, *System Generation*, 3-66
DUP11, *System Generation*, 3-67
TT-type, *System Generation*, 3-57
line printer
LA180 controller, *System Generation*, 3-52
LP11 controller, *System Generation*, 3-52
LP-type, *System Generation*, 3-52
LS11 controller, *System Generation*, 3-52
LV11 controller, *System Generation*, 3-52
loadable driver, *System Generation*, 3-26
logical name support, *System Generation*, 3-25
LPA11-K laboratory subsystem, *System Generation*, 3-56
LP-type line printer, *System Generation*, 3-52

SYSGEN question (cont'd.)
magnetic tape
DD-type, *System Generation*, 3-51
MM-type, *System Generation*, 3-39
MS-type, *System Generation*, 3-49
MT-type, *System Generation*, 3-54
TA11 cassette, *System Generation*, 3-48
TE16, *System Generation*, 3-39
TK25, *System Generation*, 3-49
TK50, *System Generation*, 3-47
TS11, *System Generation*, 3-49
TSV05, *System Generation*, 3-49
TU16/45/77, *System Generation*, 3-39
TU80, *System Generation*, 3-49
TU81, *System Generation*, 3-47
magnetic tape formatter
TM02/03, *System Generation*, 3-39
mixed MASSBUS, *System Generation*, 3-36
moving old system, *System Generation*, 3-73
multiplexer
CXA16/CXB16/CXY08, *System Generation*, 3-60
DH11, *System Generation*, 3-58
DHU11/DHV11/DHQ11, *System Generation*, 3-60
DJ11, *System Generation*, 3-62
DZ11/DZQ11/DZV11, *System Generation*, 3-63
paper tape
PR11 reader, *System Generation*, 3-55
PC11 paper tape reader/punch, *System Generation*, 3-54
PCL11 receiver/transmitter, *System Generation*, 3-65
PREPGEN, *System Generation*, 3-6, 3-18
print explanation, *System Generation*, 3-17
processor
floating point, *System Generation*, 3-33
memory size, *System Generation*, 3-33
Queue Manager, *System Generation*, 3-28
saved answer file, *System Generation*, 3-17, 3-18
Shadow Recording, *System Generation*, 3-27
supervisor-mode library, *System Generation*, 3-25
system clock, *System Generation*, 3-33
system name, *System Generation*, 3-27
target processor type, *System Generation*, 3-23
target system disk, *System Generation*, 3-18
SYSGEN question (cont'd.)
task
supplied system, *System Generation*, 3-78
task header
out-of-pool, *System Generation*, 3-25
terminals
YH-type, *System Generation*, 3-59
YJ-type, *System Generation*, 3-63
YV-type, *System Generation*, 3-61
YZ-type, *System Generation*, 3-64
terminal support, *System Generation*, 3-57
UMR, *System Generation*, 3-56
unsolicited input timeout, *System Generation*, 3-31
user data space, *System Generation*, 3-25
virtual terminal, *System Generation*, 3-30
XDT, *System Generation*, 3-31
<SYSID> symbol, *Indirect*, 2-25
SYSLIB
See System library
SYSLIB.OLB (System Macro Library), *Program Development*, 1-11
SYSLOGIN.CMD file
function, *System Management*, 1-10
pregenerated kit, *System Generation*, 5-37
SYSLOGOUT.CMD file
function, *System Management*, 1-10
pregenerated kit, *System Generation*, 5-39
SYSLOG task
interaction with $QTRAN, *System Management*, 10-19
interaction with $QTRN1, *System Management*, 10-20
interaction with $QTRN2, *System Management*, 10-21
SYSPARAM.DAT configuration data file
definition, *System Management*, 1-10
setting up QMG, *System Management*, 3-2
SYSPAR partition
description, *System Management*, 7-7
SYSTB.MAC file, *Writing I/O Driver*, 1-23
System
bootstrapping, *MCR*, 3-30
restrictions, *MCR*, 3-31
unsaved system, *MCR*, 3-31
valid device, *MCR*, 3-30
bootstrapping with XDT
unsaved system, *MCR*, 3-31
checkpoint file, *MCR*, 3-6
device
switches, *Crash Dump Analyzer*, 2-6

System (cont'd.)
directive, *Program Development*, 1-10
directory
as default for INSTALL command, *MCR*, 3-95
as default for RUN command, *MCR*, 3-142
displaying parameters, *DCL*, 8-8 to 8-9
failure
causes, *System Management*, 1-16
determining cause, *System Management*, 1-17, 11-4
recovery from, *System Management*, 1-16, 11-4
files for management, *System Management*, 1-10
halt, *System Management*, 11-6
I/O database
main thread through, *Writing I/O Driver*, 2-1, 2-3
identification, *MCR*, 3-67
image file, *System Management*, 8-18
location, *MCR*, 3-147
saving, *MCR*, 3-147; *System Management*, 8-18
devices, *MCR*, 3-147
size, *MCR*, 3-147; *System Management*, 8-18
transporting, *MCR*, 3-30, 3-150
information, *Crash Dump Analyzer*, 3-1
switch
See /-SYS
installing, *System Management*, 1-9
library
contributions (in map), *Program Development*, 4-7
macro call, *Writing I/O Driver*, 4-5
mapped
See Mapped system
memory management, *Task Builder*, 11-47
specifying, *Task Builder*, 10-30
object library, *I/O Drivers*, 1-37
object module library, *I/O Drivers*, 1-8
overhead (TTDRV), *I/O Drivers*, 2-16, 2-30, 2-42
performance
stall I/O (disk driver), *I/O Drivers*, 4-12
pool
dump, *Crash Dump Analyzer*, 3-36
switch
See /POOL
System (cont'd.)
power failure
recovery from (UNIBUS switch driver), *I/O Drivers*, 14-7
putting more than one on same volume, *System Generation*, 4-12
reconfiguration, *System Management*, 4-1
recovery methods, *System Management*, 11-4
saved
installing task, *MCR*, 3-94; *System Management*, 5-26
saving, *MCR*, 3-147
setting parameters, *DCL*, 8-5 to 8-7
setting up, *System Management*, 1-9
shutdown
See also SHUTUP program
using the SHUTUP program, *System Management*, 1-12
shutting down, *System Management*, 6-4
stack, *Writing I/O Driver*, 6-11
statistics
Resource Accounting, *System Management*, 10-6
task, *Program Development*, 1-1
UFD defaults, *System Management*, A-2
UIC, *MCR*, 2-3
setting default, *MCR*, 3-185
unsaved
installing task, *MCR*, 3-94; *System Management*, 5-20
<SYSTEM> symbol, *Indirect*, 2-19
/SYSTEM_LIBRARY_DISPLAY qualifier, *Task Builder*, 11-66
LINK command, *Program Development*, 4-7
SYSTEM_STATISTICS parameter
START/ACCOUNTING command, *System Management*, 10-6
System Account Block
See SAB
System characteristic
subpacket information, *Error Logging*, 4-61
System clock
SYSGEN question, *System Generation*, 3-33
System common, *Crash Dump Analyzer*, 3-5
active task, *Crash Dump Analyzer*, 3-6
alphabetized dump, *Crash Dump Analyzer*, 3-1, 3-10
boot device, *Crash Dump Analyzer*, 3-6
dump
See System common dump

System common (cont'd.)
labels, *Crash Dump Analyzer,* 3-10 to 3-11
network UIC, *Crash Dump Analyzer,* 3-6
partition address, *Crash Dump Analyzer,* 3-6
stack depth, *Crash Dump Analyzer,* 3-6
stack depth indicator, *Crash Dump Analyzer,* 4-2
system size, *Crash Dump Analyzer,* 3-6
TCB address, *Crash Dump Analyzer,* 3-6
UIC, *Crash Dump Analyzer,* 3-6
System common dump, *Crash Dump Analyzer,* 3-1, 3-10 to 3-11
System control information code
event-level dispatching, *Error Logging,* 4-16
System-crash event
subpacket information, *Error Logging,* 4-67
System device
See SY device
System directory, *DCL,* 7-28 to 7-31, 8-10
System disk
RMSBCK utility, *RMS-11 Utilities,* 6-1
RMSRST utility, *RMS-11 Utilities,* 7-1
System failure, *DCL,* 9-2 to 9-3
System fault
definition, *System Management,* 11-1
recovery from, *System Management,* 11-4
System file names
conventions, *System Management,* A-3
System generation
definition, *System Generation,* 1-1
flow, *System Generation,* 1-2 to 1-4
glossary, *System Generation,* 1-7 to 1-13
incorporating a driver, *Writing I/O Driver,* 5-1
option (TTDRV), *I/O Drivers,* 2-20
System image
description, *System Generation,* 5-5
System image file, *MCR,* 3-147; *System Generation,* 3-81
assigning SY and LB, *System Management,* 5-2
bootstrap, *System Management,* 5-1
relationship to symbol definition file, *System Management,* 5-2
/SYSTEM keyword
ASN command (VMR), *System Management,* 5-9, 5-10
ASSIGN command, *MCR,* 3-19, 3-21
DEFINE LOGICALS command, *MCR,* 3-56, 3-57
System library, *Task Builder,* 2-8
System library (cont'd.)
macro (RSXMAC.SML), *Program Development,* 1-10
searching
macro, *Program Development,* 2-6
macro (RSXMAC.SML), *Program Development,* 1-10
object (SYSLIB.OLB), *Program Development,* 4-2
System library device
See LB device
System logical assignment, *MCR,* 3-14
System login command file
See SYSLOGIN.CMD file
System logout command file
See SYSLOGOUT.CMD file
System Macro Library, *Executive,* 1-4; *I/O Drivers,* 1-4
System maintenance commands, *MCR,* 1-7
System-message event
subpacket information, *Error Logging,* 4-68
System name
SYSGEN question, *System Generation,* 3-27
System option
feature symbols, *Executive,* 5-93
testing, *Executive,* 5-93
System parameter
changing after SYSGEN, *System Generation,* 4-9
System-required files, *System Generation,* 4-4
System Service Message
See SSM command
SYSTEM SERVICE MESSAGE command, *MCR,* 3-200
brief description, *MCR,* 1-7
example, *MCR,* 3-200
format, *MCR,* 3-200
System setup
after SYSGEN, *System Generation,* 4-4 to 4-7
System startup command file
See STARTUP.CMD file
System-state
register convention, *Writing I/O Driver,* 7-1
System Statistics display
RMD
altering from MCR command line, *System Management,* 7-19
altering from setup page, *System Management,* 7-19

System Statistics display
RMD (cont'd.)
contents, *System Management*, 7-18
description, *System Management*, 7-18
example, *System Management*, 7-18
System status
displaying, *DCL*, 8-14 to 8-17
System task
spawning, *Executive*, 4-4
System Task Directory, *MCR*, 1-4, 3-94, 3-148
See also STD
installing task, *MCR*, 2-21
installing task in, *MCR*, 3-139
removing task, *MCR*, 3-135
System time
setting, *Executive*, 5-268
System Time Change Transaction Block, *System Management*, 10-45
System Trap, *Executive*, 2-5; *XDT*, 1-5
<SYSUIC> symbol, *Indirect*, 2-25
/SYSUIC keyword
SET command, *MCR*, 3-185
SET command (VMR), *System Management*, 5-67
SYSVMR.CMD file
definition, *System Generation*, 3-82
function, *System Management*, 1-10
<SYTYP> symbol, *Indirect*, 2-25
<SYUNIT> symbol, *Indirect*, 2-19
/SZ switch
LBR utility, *Utilities*, 10-30

T

TAB
description, *System Management*, 10-23
Resource Accounting, *System Management*, 10-23
Tab, *DCL*, 3-22
ignoring in command line, *I/O Operations*, 7-8
in macro argument, *MACRO-11*, 6-7
special character in MACRO–11, *MACRO-11*, 2-1
terminates operator field, *MACRO-11*, 1-3
used in operand field, *MACRO-11*, 1-4
vertical, *DCL*, 3-22
Tab character
TTDRV, *I/O Drivers*, 2-70
vertical, *I/O Drivers*, 2-70
TAB key, *Introduction*, 5-9
Table
CFL, *Error Logging*, 5-36, 5-37, 5-38
RPT, *Error Logging*, 5-36
See also TABLE statement
storing, *Task Builder*, F-2 to F-6
Table Driven Parser
See TPARS
Table of contents
generated by .SBTTL, *MACRO-11*, 5-10
Table parameter
TTDRV
general, *I/O Drivers*, 2-13
IO.RTT function, *I/O Drivers*, 2-48
TABLE statement
CFL, *Error Logging*, 5-36
Tab On/Off command
EDI editor, *Utilities*, 7-38
/TAL, *Crash Dump Analyzer*, 2-4, 2-7
TAL command
See also TASKLIST-ATL command
secondary pool usage, *System Management*, 8-17
Tape
See also Magnetic tape or DECtape
ANSI file structure, *I/O Operations*, 5-1
backing up, *Utilities*, 3-1
comparing, *Utilities*, 6-13
control task, *I/O Operations*, G-9
conventional backup, *Utilities*, 3-3
copying, *Utilities*, 3-1
data format, *I/O Operations*, 1-8
density, *I/O Drivers*, 6-9
end-of-file label, *I/O Operations*, G-8
end-of-volume label, *I/O Operations*, G-8
exercising with IOX, *System Management*, 12-2
file header block, *I/O Operations*, G-9
file processing, *I/O Operations*, 5-5
file structure, *I/O Operations*, G-8
fixed-length records, *I/O Operations*, 1-8
formatting, *Utilities*, 8-4
full backup, *Utilities*, 3-4
handling end-of-tape, *I/O Operations*, G-9
mounting, *Utilities*, 3-2; *RMS-11 Utilities*, 5-3
nolabel
block size (tape driver), *I/O Drivers*, 6-17
owner ID field, *I/O Operations*, G-2
position (DDDRV), *I/O Drivers*, 5-4
positioning, *I/O Operations*, G-16

Tape (cont'd.)
position to next file, *I/O Operations*, 5-6
power failure affecting, *I/O Drivers*, 1-42
processing example, *I/O Operations*, 5-8
record format, *I/O Operations*, 5-5
restoring, *Utilities*, 3-1
selective backup, *Utilities*, 3-4
setting block size, *Utilities*, 12-9
transferring data, *Utilities*, 6-19
translation, *I/O Operations*, G-17
unlabeled, *I/O Operations*, G-15
block size, *I/O Operations*, G-15
user file label, *I/O Operations*, G-8
user volume label, *I/O Operations*, G-3
variable-length record, *I/O Operations*, 1-8
verifying, *Utilities*, 14-1
volume access, *I/O Operations*, 5-5
volume label, *I/O Operations*, G-1
/TAPE_LABEL qualifier
BRU utility, *Utilities*, 3-24
Tape density switch
See /DENS
Tape drive
MM-type
SYSGEN question, *System Generation*, 3-39
TE16
SYSGEN question, *System Generation*, 3-39
TU16/45/77
SYSGEN question, *System Generation*, 3-39
Tape driver, *I/O Drivers*, 6-1
consecutive tape mark, *I/O Drivers*, 6-16
data security
erase, *I/O Drivers*, 6-8
device characteristic, *I/O Drivers*, 6-1
programming hint, *I/O Drivers*, 6-14
resetting transport status, *I/O Drivers*, 6-16
rewinding, *I/O Drivers*, 6-8
unloading, *I/O Drivers*, 6-8
Tape file
attributes
specifying, *I/O Operations*, G-16
header label, *I/O Operations*, G-4
HDR1, *I/O Operations*, G-4
HDR2, *I/O Operations*, G-5
HDR3, *I/O Operations*, G-5
identifier processing, *I/O Operations*, G-7
label, *I/O Operations*, G-1
Tape Mass Storage Control Protocol
See TMSCP
Tape position
file open, *I/O Operations*, 2-15
Tape read function
indirect command file, *I/O Operations*, G-19
Tape standard
ANSI, *I/O Operations*, G-1
TARGET
RMSDES utility, *RMS-11 Utilities*, 2-30
Target system, *Task Builder*, C-1
definition, *System Generation*, 1-12
disk
definition, *System Generation*, 2-2
SYSGEN question, *System Generation*, 3-18
types, *System Generation*, 2-2
/TAS, *Crash Dump Analyzer*, 2-4, 2-7
TAS command
See also TASKLIST command
VMR
definition, *System Management*, 5-76
display contents, *System Management*, 5-76
examples, *System Management*, 5-76 to 5-77
format, *System Management*, 5-76
parameter, *System Management*, 5-76
/TASK, *Crash Dump Analyzer*, 2-4, 2-7
Task, *DCL*, 7-1; *Introduction*, 5-1, 5-2
abort, *Program Development*, 4-8
abortable
requirements, *System Management*, 8-7
selecting, *System Management*, 8-7
aborted, *MCR*, 3-210
aborting, *Executive*, 5-10, 5-255; *MCR*, 3-2; *DCL*, 7-17 to 7-20
CRDRV, *I/O Drivers*, 9-9
LPDRV, *I/O Drivers*, 7-7
tape driver, *I/O Drivers*, 6-15
access rights, *MCR*, 2-18
access to commons, *System Management*, 5-24
activating, *Executive*, 5-195
active, *MCR*, 2-21; *DCL*, 7-1 to 7-2; *Introduction*, 6-5
displaying, *MCR*, 3-8, 3-24, 3-203; *DCL*, 7-53 to 7-59
dynamic display, *DCL*, 7-63 to 7-67
address, *Task Builder*, 2-12
space
allocating, *MCR*, 3-143
addressing, *Executive*, 3-1

Task (cont'd.)
address windows
declaring number of, *Task Builder*, 12-45
after exit, *System Management*, 5-80
allocating checkpoint space, *System Management*, 1-5
altering running priority, *MCR*, 3-2
attached, *MCR*, 2-14, 2-18
Autoconfigure, *System Generation*, 5-33; *System Management*, 4-1
base priority
setting, *System Management*, 8-10
blocked, *I/O Drivers*, 1-10; *MCR*, 2-19
effective priority, *MCR*, 3-29
unblocking, *MCR*, 3-210
blocking, *Executive*, 5-309, 5-311; *DCL*, 7-24 to 7-25
breakpoints
setting, *Program Development*, 5-6
building, *Program Development*, 4-1, 7-5
See also TKB
compatibility mode, *Task Builder*, 10-9, 11-22
default partition, *MCR*, 3-97
determining default for /XHR keyword, *MCR*, 3-100
using external headers, *MCR*, 3-101
canceling, *MCR*, 3-38
canceling time-synchronized requests, *Executive*, 5-62
chaining, *Executive*, 4-2, 5-225
changing
priority, *Executive*, 5-15
size, *Executive*, 5-91
state, *Executive*, 1-20, 1-22
checkpoint (VTDRV), *I/O Drivers*, 3-5
checkpointability
disabling, *Executive*, 5-70
enabling, *Executive*, 5-84
checkpointable, *System Management*, 5-19
effect of fixing in memory, *MCR*, 3-63
installing, *MCR*, 3-95
running, *MCR*, 3-143
specifying, *Task Builder*, 10-6, 10-11, 11-12, 11-13
status bit for, *MCR*, 3-24
checkpoint area, *Task Builder*, B-12
checkpointing, *MCR*, 3-26, 3-96; *System Management*, 1-3, 5-21; *Writing I/O Driver*, 1-16
definition of, *MCR*, 2-19

Task (cont'd.)
CLI
removing, *MCR*, 3-135
common
installing, *MCR*, 3-98, 3-144
common region
mapping count, *MCR*, 3-40
synchronizing, *MCR*, 3-99
completion routine, *Task Builder*, 12-11
connecting, *Executive*, 4-1, 5-222, 5-304
continuing, *DCL*, 7-21 to 7-22
correcting, *Program Development*, 4-8
CPU affinity
removing, *Executive*, 5-190
creating, *MCR*, 2-19
creating image, *Program Development*, 1-6
cross-referencing, *Task Builder*, 4-13
data space, *Task Builder*, 7-1
debugging, *Executive*, 5-277; *MCR*, 3-49; *Program Development*, 4-8, 7-6, 7-7, 7-8
debugging aid
including, *Task Builder*, 10-15, 11-27
decrementing I/O count, *Writing I/O Driver*, 1-16
default conditions, *Program Development*, 4-5, 4-7
default UIC
overriding, *MCR*, 3-188
definition, *MCR*, 2-18
delaying, *Executive*, 5-148
detaching from region, *Executive*, 5-72
device driver
building, *MCR*, 3-105
device independence, *MCR*, 2-11
disable offspring (VTDRV), *I/O Drivers*, 3-5
disk image file, *Task Builder*, 2-9
dormant, *MCR*, 2-21, 3-94; *System Management*, 5-20 ; *DCL*, 7-1; *Introduction*, 6-5
dynamic memory, *MCR*, 3-143
enabling fast-mapping for, *MCR*, 3-96
event driven, *I/O Drivers*, 1-11
event flags
group global, *MCR*, 3-65
executable, *RMS-11 User's Guide*, 8-1
executing, *MCR*, 3-94; *System Management*, 5-20 ; *DCL*, 7-6 to 7-16
affinity, *MCR*, 3-95
specifying resources for, *MCR*, 3-95

Task (cont'd.)
executing in parallel, *Indirect*, 2-102
execution
beginning, *XDT*, 2-13
execution priority
specifying, *Task Builder*, 12-27
exiting, *MCR*, 1-4
CTRL/Z (TTDRV), *I/O Drivers*, 2-72
exiting with status, *Executive*, 5-89
extending, *MCR*, 3-96; *System Management*, 1-5
default size, *MCR*, 3-96
extension size, *System Management*, 5-22
fixed, *Debugging*, 5-6; *System Management*, 5-18 ; *XDT*, 2-2
accessing address relative to, *MCR*, 3-128
running, *MCR*, 3-63
unloading, *MCR*, 3-63
fixing, *DCL*, 7-39 to 7-40
fixing in memory, *MCR*, 3-63
restrictions, *MCR*, 3-63
frequency of accessing data areas, *Writing I/O Driver*, 1-18
getting parameters, *Executive*, 5-142
header
Executive copy, *System Management*, 5-26
Executive copy of, *MCR*, 3-100
external, *MCR*, 3-100; *System Management*, 5-26
installing
options, *MCR*, 3-100
installing in pool, *MCR*, 3-100; *System Management*, 5-26
in task image, *MCR*, 3-100; *System Management*, 5-26
I- and D-space, *Task Builder*, 2-28
allocating memory, *Task Builder*, 7-10 to 7-19
identifying, *Task Builder*, 7-2
loading manually, *Task Builder*, 4-9, 4-11
mapping, *Task Builder*, 7-2, 7-4
overlaid, *Task Builder*, 7-5 to 7-9
overlay structure, *Task Builder*, 3-23
specifying, *Task Builder*, 10-24, 11-15
window, *Task Builder*, 7-5
identifying, *Task Builder*, 12-22
image, *Program Development*, 7-5
creating, *Program Development*, 4-1, 4-2, 7-5

Task (cont'd.)
image file, *MCR*, 3-135; *System Management*, 8-18
creating, *MCR*, 2-19
for bootable system, *MCR*, 3-30
installing, *MCR*, 2-19
initiated with IOX
terminating, *System Management*, 12-15
initiation
EXECUTE command (IOX), *System Management*, 12-27
installed, *MCR*, 1-4; *DCL*, 7-1 to 7-2, 7-3, 7-12 to 7-16
blocking, *MCR*, 3-29
displaying, *MCR*, 3-204; *DCL*, 7-60 to 7-61
effect of /SWPR keyword on priority, *MCR*, 3-185
removing, *Executive*, 1-23
installing, *MCR*, 2-20, 3-94; *System Management*, 5-20; *DCL*, 7-28 to 7-36
default task name, *MCR*, 3-99; *System Management*, 5-25
setting time limit, *MCR*, 3-99
installing and using, *System Generation*, 4-7
pregenerated kit, *System Generation*, 5-43
installing in unsaved system, *MCR*, 3-94; *System Management*, 5-20
installing permanently, *System Management*, 19-8
installing TCB in primary pool, *MCR*, 3-98
installing TCB in secondary pool, *MCR*, 3-98
label block group, *Task Builder*, 2-9
linking
to resident common, *Task Builder*, 12-9
to resident library, *Task Builder*, 12-9
to shared region, *Task Builder*, 5-16 to 5-19
options, *Task Builder*, 5-16
linking to supervisor-mode library, *System Generation*, 3-76
logical assignment, *MCR*, 3-14
low-memory context, *Task Builder*, B-15
macro calls, *Program Development*, 6-3, 6-4
map, *Program Development*, 4-5
full, *Program Development*, 4-7
standard, *Program Development*, 4-5, 4-6

Task (cont'd.)
mapping, *MCR*, 3-97, 3-144; *System Management*, 5-23; *Task Builder*, 2-16, 2-21, 2-25, 2-26
memory management
use of, *Task Builder*, 2-16
memory management support, *System Management*, 5-19
multisegment
See Overlay
multiuser, *Task Builder*, 2-28, 9-1
allocating program section, *Task Builder*, 9-1
building example, *Task Builder*, 9-4 to 9-10
disk image, *Task Builder*, 9-4
fixing common in memory, *MCR*, 3-63
I- and D-space, *Task Builder*, 9-4
overlaid, *Task Builder*, 9-4
specifying, *Task Builder*, 10-32, 11-62
specifying partition, *Task Builder*, 12-34
unfixing common, *MCR*, 3-211
window block, *Task Builder*, 9-2
name, *Introduction*, 5-12
CLI, *System Management*, 17-3
naming, *MCR*, 2-14, 2-20, 3-99, 3-144; *System Management*, 5-25
naming convention, *MCR*, 1-4
nonprivileged, *MCR*, 2-18; *Task Builder*, 6-1
breakthrough write (TTDRV), *I/O Drivers*, 2-18
directive restrictions, *Executive*, 1-23
object file, *MCR*, 2-19
object library routines, *Program Development*, 6-6
offspring, *Executive*, 4-1
offspring (VTDRV), *I/O Drivers*, 3-1
overlaid, *Task Builder*, 2-10
disk-resident, *Task Builder*, 2-11
memory-resident, *Task Builder*, 2-12, 10-37, 11-54
using, *Task Builder*, 10-37, 11-54
structure, *Task Builder*, 3-21, 3-22, 3-23
overlay
restriction on extending, *MCR*, 3-96
overlaying, *Executive*, 3-1
parent, *Executive*, 4-1
parent (VTDRV), *I/O Drivers*, 3-1
partition
allocating space in, *MCR*, 3-96

Task
partition (cont'd.)
installing, *MCR*, 3-144, 3-190
specifying, *Task Builder*, 12-26
specifying size, *MCR*, 3-96, 3-143
patching, *Task Builder*, 12-6, 12-13, 12-19
patching image file, *Utilities*, 15-1
priority, *MCR*, 2-19
altering, *MCR*, 3-12
base value, *MCR*, 3-179
running, *MCR*, 3-12
setting, *DCL*, 7-70 to 7-71
specifying, *MCR*, 3-97, 3-144; *System Management*, 5-23
static, *MCR*, 3-12
privilege 0, *Task Builder*, 6-5
privilege 4, *Task Builder*, 6-5
privilege 5, *Task Builder*, 6-6
privileged
breakthrough write (TTDRV), *I/O Drivers*, 2-20
privileged, *MCR*, 2-18, 3-144; *Task Builder*, 2-25, 6-1; *XDT*, 2-2
breakthrough write (TTDRV), *I/O Drivers*, 2-18
building example, *Task Builder*, 6-6 to 6-11
debugging with ZAP, *XDT*, 1-11
hazards, *Task Builder*, 6-1
I- and D-space system, *Task Builder*, 6-13
mapping, *Executive*, 3-19, 5-281; *Task Builder*, 6-2 to 6-5, 6-13
specifying, *Task Builder*, 2-25, 6-2, 10-36, 11-52
prompt, *MCR*, 2-14
proper state to initiate buffered I/O, *Writing I/O Driver*, 1-16
protecting, *MCR*, 3-145
protection
specifying UIC, *MCR*, 3-99; *System Management*, 5-25
prototype
effect of fixing in memory, *MCR*, 3-63
installing TCB in secondary pool, *MCR*, 3-98
slave status, *MCR*, 3-99
reassigning LUN, *MCR*, 3-133
receiving next CLI command, *Executive*, 5-234
reexecuting, *System Management*, 5-18
region, *Task Builder*, 2-20

Task (cont'd.)
relocating, *Task Builder*, 2-2
removing, *System Management*, 5-18; *DCL*, 7-37 to 7-38
removing from system, *MCR*, 3-135
requesting, *Executive*, 5-195, 5-222, 5-225, 5-241, 5-304
resident, *MCR*, 3-63; *Introduction*, 6-5
restrictions for fixing, *System Management*, 5-19
resuming, *Executive*, 5-204
returning status, *Executive*, 4-2, 4-3, 5-80
root, *Task Builder*, 2-11
running, *Executive*, 5-206; *MCR*, 1-4, 2-19, 3-138 to 3-146; *Program Development*, 4-7, 7-6; *Introduction*, 5-2
default UIC, *MCR*, 3-139
options
immediate, *MCR*, 3-145
install-run-remove, *MCR*, 3-146
protection UIC, *MCR*, 3-139
setting reschedule interval, *MCR*, 3-140
UIC, *MCR*, 3-145
uninstalled, *MCR*, 3-139
running from console
aborting with PMT, *System Management*, 8-12
segment, *Task Builder*, 2-11
setting slave status, *MCR*, 3-144
setting slave status for, *MCR*, 3-98
size, *RMS-11 User's Guide*, 2-5; *System Management*, 5-57
slaved
specifying, *Task Builder*, 10-48, 11-63
spawning, *Executive*, 4-1, 4-4; *MCR*, 2-21
spooling print job, *I/O Operations*, 8-1
SST, *Program Development*, 4-8
starting, *DCL*, 7-26
status flags
displaying, *MCR*, 3-24
list of, *MCR*, 3-24 to 3-26
stopped
forcing to checkpoint, *System Management*, 8-12
stopping, *Executive*, 5-271, 5-274, 5-275
storage area
declaring size, *Task Builder*, 12-16
structure, *RMS-11 User's Guide*, 1-13; *Task Builder*, 2-9
Task (cont'd.)
supplied system list, *System Generation*, 3-78
suspended
resuming execution of, *MCR*, 3-137
suspending, *Executive*, 5-238, 5-307, 5-309, 5-311
system, *Program Development*, 1-1
library contributions, *Program Development*, 4-7
setting default UIC for, *MCR*, 3-185
terminal
slave, *MCR*, 2-18
terminating, *Executive*, 5-85, 5-87
termination, *Program Development*, 4-8
testing, *Indirect*, 2-67, 2-69
time limit
specifying, *MCR*, 3-145
traceable
specifying, *Task Builder*, 10-53, 11-69
transfer (starting) address
default, *Program Development*, 4-3, 4-7
defining, *Program Development*, 2-8
transferring command line, *Executive*, 5-129
transferring to target system, *Task Builder*, C-1
example, *Task Builder*, C-2 to C-5
UIC
declaring, *Task Builder*, 12-39
specifying, *MCR*, 3-99
unblocked, *MCR*, 3-210
unblocking, *DCL*, 7-27
unfixing, *MCR*, 3-211
unfixing from memory, *System Management*, 5-80
unstopping, *Executive*, 5-294
XEDRV connection, *I/O Drivers*, 10-25
Task/File Patch Program
See ZAP utility
Task Account Block, *System Management*, 10-27
See TAB
Task accounting
Resource Accounting, *System Management*, 10-6
Task buffer descriptor, *I/O Operations*, 3-10
Task build
aborting, *Task Builder*, 12-5
Task Builder, *MCR*, 2-19; *Introduction*, 5-6 to 5-8
See also TKB

Task Builder (cont'd.)
/CP switch
overriding with INSTALL command, *MCR*, 3-96
/IP switch
complement to INSTALL keyword, *MCR*, 3-97, 3-144
/PM switch
using ABORT command instead of, *MCR*, 3-2
/SL switch
overriding with INSTALL keyword, *MCR*, 3-98
task
object file, *MCR*, 2-19
priority, *MCR*, 2-19
/XH option
correlation with INSTALL keyword /XHR, *MCR*, 3-100
/XH switch
modifying default for installed task, *MCR*, 3-101
Task-build file
IOX, *System Management*, 12-2
Task Control Block, *MCR*, 3-24, 3-29
See also TCB
creating, *MCR*, 3-94
installing in primary pool, *MCR*, 3-98
installing in secondary pool, *MCR*, 3-98
removing, *MCR*, 3-94
saving, *MCR*, 3-148
Task Control Block switch
See /ACT, /ATL
Task control commands, *MCR*, 1-6
Task data space
switch
See /TDS
Task directive common, *Writing I/O Driver*, 1-20
/TASKD keyword
OPENREGISTER command, *MCR*, 3-128
Task dump, *Crash Dump Analyzer*, 3-39
window blocks, *Crash Dump Analyzer*, 3-39
Task entry points, *Writing I/O Driver*, 1-20
Task execution
aborting, *Debugging*, 1-6
beginning, *Debugging*, 2-8, 3-3
continuing, *Debugging*, 2-9, 3-3
resuming, *Debugging*, 1-6, 3-4
Task Executive code, *Writing I/O Driver*, 1-20
Task Exit directive, *Executive*, 5-87
Task header, *Task Builder*, B-12 to B-15; *Writing I/O Driver*, 6-9
composite arrangement, *Writing I/O Driver*, 2-12
LUT entry, *Task Builder*, B-17
out-of-pool, *System Generation*, 3-25
pointers, *Writing I/O Driver*, 6-7
switch
See /HDR
Task Header display
RMD
altering from MCR command line, *System Management*, 7-15
altering from setup page, *System Management*, 7-14
contents, *System Management*, 7-13
description, *System Management*, 7-13
example, *System Management*, 7-14
RATE command, *System Management*, 7-14
TASK command, *System Management*, 7-14
Task header dump, *Crash Dump Analyzer*, 3-21
Directive Status Word, *Crash Dump Analyzer*, 3-22
File Control Block, *Crash Dump Analyzer*, 3-22
Logical Unit Table, *Crash Dump Analyzer*, 3-22
Page Description Register, *Crash Dump Analyzer*, 3-23
swapping priority, *Crash Dump Analyzer*, 3-22
window blocks, *Crash Dump Analyzer*, 3-22
Task I/O, *Writing I/O Driver*, 1-16
/TASKI keyword
OPENREGISTER command, *MCR*, 3-128
Task image, *Task Builder*, B-17 to B-26; *Introduction*, 5-3
file, *Introduction*, 5-7
header
specifying, *Task Builder*, 10-23, 11-35
Task image file, *MCR*, 3-147; *DCL*, 7-8 to 7-12
for checkpointable task
restriction on extending, *MCR*, 3-96
installing task in unsaved system, *MCR*, 3-94; *System Management*, 5-20
recording on disk, *Task Builder*, B-1 to B-5
specifying UIC for, *MCR*, 3-139
structure, *Task Builder*, B-1 to B-26

Task image file (cont'd.)
System Task Directory entry, *MCR*, 1-4
Task instruction space
switch
See /TIS
/TASK keyword
INS command (VMR), *System Management*, 5-25
INSTALL command, *MCR*, 3-99
OPENREGISTER command, *MCR*, 3-128
RUN command, *MCR*, 3-144
TASKLIST-ATL command, *MCR*, 3-203
brief description, *MCR*, 1-6
format, *MCR*, 3-203
parameters, *MCR*, 3-203
TASKLIST command, *MCR*, 3-204
brief description, *MCR*, 1-6
/DEV keyword, *MCR*, 3-204
examples, *MCR*, 3-204
format, *MCR*, 3-204
parameters, *MCR*, 3-204
VMR
See TAS command
Task map, *Debugging*, 1-2, 1-3, 5-5
Task name, *DCL*, 7-2 to 7-5
changing, *Task Builder*, 12-37
specifying, *Task Builder*, 11-30, 11-67
TASK option, *Task Builder*, 12-37
Task option
list, *Executive*, 5-283
testing, *Executive*, 5-283
Task output
spooling, *Batch and Queue*, 2-12
TASK parameter
SET ACCOUNTING command, *System Management*, 10-9
START/ACCOUNTING command, *System Management*, 10-6
/TASK qualifier, *Task Builder*, 11-67
INSTALL command, *System Management*, 3-11
installing batch processors, *System Management*, 3-11
LINK command, *Program Development*, 6-6, 6-7, 6-8
Task record buffer, *I/O Operations*, 3-20
Task region, *Executive*, 3-5
TASK setup command, *System Management*, 7-11, 7-14
/TASKS keyword
COMMON BLOCK DIRECTORY command, *MCR*, 3-40
/TASK subkeyword
COMMAND LINE INTERPRETER command, *MCR*, 3-44
TASK subpacket, *Error Logging*, 4-3
listing, *Error Logging*, 4-62
Task Termination Notification program
See TKTN
Task vectoring, *Writing I/O Driver*, 1-20
Task virtual address space switch, *Crash Dump Analyzer*, 2-7
Task window, *Task Builder*, 2-20, 2-22
creating, *Task Builder*, 2-24
identifying, *Task Builder*, 2-24
setting up, *Task Builder*, 2-22
/TB subswitch
PIP utility, *Utilities*, 12-19
/TB switch
CMP utility, *Utilities*, 4-4
TC.8BC characteristic
TTDRV, *I/O Drivers*, 2-58
TC.ABD characteristic
TTDRV, *I/O Drivers*, 2-54
TC.ACD characteristic
TTDRV, *I/O Drivers*, 2-54
TC.ACR characteristic
TTDRV, *I/O Drivers*, 2-54
TC.ANI characteristic
TTDRV, *I/O Drivers*, 2-54
TC.ASP characteristic
TTDRV, *I/O Drivers*, 2-54, 2-60
baud rate
modem support, *I/O Drivers*, 2-84
TC.AVO characteristic
TTDRV, *I/O Drivers*, 2-54
TC.BIN characteristic
TTDRV, *I/O Drivers*, 2-54
TC.BLK characteristic
TTDRV, *I/O Drivers*, 2-54
TC.CLN characteristic
TTDRV, *I/O Drivers*, 2-54
TC.CTS characteristic
TTDRV, *I/O Drivers*, 2-54, 2-61
TC.DEC characteristic
TTDRV, *I/O Drivers*, 2-54
TC.DLU characteristic
TTDRV, *I/O Drivers*, 2-55
modem support, *I/O Drivers*, 2-84
TC.EDT characteristic
TTDRV, *I/O Drivers*, 2-55
TC.EPA characteristic
TTDRV, *I/O Drivers*, 2-55

TC.ESQ characteristic
TTDRV, *I/O Drivers*, 2-55
TC.FDX characteristic
TTDRV, *I/O Drivers*, 2-55
VTDRV, *I/O Drivers*, 3-7, 3-8
TC.HFF characteristic
TTDRV, *I/O Drivers*, 2-55
TC.HFL characteristic
TTDRV, *I/O Drivers*, 2-55
TC.HHT characteristic
TTDRV, *I/O Drivers*, 2-55
TC.HLD characteristic
TTDRV, *I/O Drivers*, 2-55, 2-60
side effect, *I/O Drivers*, 2-65
TC.HSY characteristic
TTDRV, *I/O Drivers*, 2-55
TC.ICS characteristic
TTDRV, *I/O Drivers*, 2-55
TC.ISL characteristic
TTDRV, *I/O Drivers*, 2-56
TC.LPP characteristic
TTDRV, *I/O Drivers*, 2-56
TC.MAP characteristic
TTDRV, *I/O Drivers*, 2-56
processing, *I/O Drivers*, 2-63
TC.MHU characteristic
TTDRV, *I/O Drivers*, 2-56
buffer, *I/O Drivers*, 2-63
processing, *I/O Drivers*, 2-63
TC.NBR characteristic
TTDRV, *I/O Drivers*, 2-56
TC.NEC characteristic
TTDRV, *I/O Drivers*, 2-56
TC.OOB characteristic
TTDRV, *I/O Drivers*, 2-56
buffer, *I/O Drivers*, 2-64
processing, *I/O Drivers*, 2-63, 2-64
TC.PAR characteristic
TTDRV, *I/O Drivers*, 2-56
TC.PPT characteristic
TTDRV, *I/O Drivers*, 2-56
TC.PRI characteristic
TTDRV, *I/O Drivers*, 2-56
TC.PTH characteristic
TTDRV, *I/O Drivers*, 2-56
TC.QDP characteristic
TTDRV, *I/O Drivers*, 2-56
TC.RAT characteristic
TTDRV, *I/O Drivers*, 2-56
TC.RGS characteristic
TTDRV, *I/O Drivers*, 2-56
TC.RSP characteristic
TTDRV, *I/O Drivers*, 2-57, 2-60
TC.SCP characteristic
TTDRV, *I/O Drivers*, 2-57
VTDRV, *I/O Drivers*, 3-8
TC.SFC characteristic
TTDRV, *I/O Drivers*, 2-57
TC.SLV characteristic
TTDRV, *I/O Drivers*, 2-57
TC.SMR characteristic
TTDRV, *I/O Drivers*, 2-57
side effect, *I/O Drivers*, 2-65
VTDRV, *I/O Drivers*, 3-8
TC.SSC characteristic
TTDRV, *I/O Drivers*, 2-57
buffer, *I/O Drivers*, 2-64
processing, *I/O Drivers*, 2-63
side effect, *I/O Drivers*, 2-66
TC.SXL characteristic
TTDRV, *I/O Drivers*, 2-57
TC.TBF characteristic
TTDRV, *I/O Drivers*, 2-57, 2-61
TC.TBM characteristic
TTDRV, *I/O Drivers*, 2-57
TC.TBS characteristic
TTDRV, *I/O Drivers*, 2-57
TC.TLC characteristic
TTDRV, *I/O Drivers*, 2-57
TC.TMM characteristic
TTDRV, *I/O Drivers*, 2-57
TC.TPP characteristic
TTDRV
terminal type value, *I/O Drivers*, 2-58
TC.TSY characteristic
TTDRV, *I/O Drivers*, 2-58
TC.TTP characteristic
TTDRV, *I/O Drivers*, 2-58, 2-61
VTDRV, *I/O Drivers*, 3-8
TC.VFL characteristic
TTDRV, *I/O Drivers*, 2-58
TC.WID characteristic
TTDRV, *I/O Drivers*, 2-58
TC.XSP characteristic
TTDRV, *I/O Drivers*, 2-58, 2-60
/TCB, *Crash Dump Analyzer*, 2-4, 2-7
TCB, *System Management*, 5-26; *Writing I/O Driver*, 1-16
See also Task Control Block
address of, *Crash Dump Analyzer*, 3-16, 3-18
composite arrangement, *Writing I/O Driver*, 2-12

TCB (cont'd.)
creating, *System Management*, 5-26
pointer to current, *Crash Dump Analyzer*, 3-5
removing, *System Management*, 5-20
TCBDF$, *Crash Dump Analyzer*, C-74
/TDS, *Crash Dump Analyzer*, 2-4, 2-7
/TD switch
PIP utility, *Utilities*, 12-32
TDX, *Indirect*, 2-2; *System Management*, 19-1
See also Catchall task
command summary, *System Management*, 19-1
corresponding MCR commands, *System Management*, 19-1
definition, *System Management*, 19-1
description, *System Management*, 1-19
flying Indirect behavior, *System Management*, 19-4
flying install behavior, *System Management*, 19-4
logical assignments for pseudo device ZZ, *System Management*, 19-3
modifying, *System Management*, 19-7
running uninstalled tasks, *MCR*, 3-139
sample command file, *System Management*, 19-5
selecting MCR options, *System Management*, 19-7
use, *System Management*, 1-19, 19-1
TE10 magnetic tape unit, *I/O Drivers*, 6-3, 6-4
TE16 magnetic tape unit, *I/O Drivers*, 6-4
Tef parameter
device-specific function
receive (LRDRV), *I/O Drivers*, 11-9
Telephone
dial command string, *Utilities*, C-5
Teletypewriter, *I/O Drivers*, 2-4
ASR-33, *I/O Drivers*, 2-4
ASR-35, *I/O Drivers*, 2-4
TEMPORARYFILE command
IOX, *System Management*, 12-57
initial default, *System Management*, 12-57
Term
component of expressions, *MACRO-11*, 2-13
definition and possible elements, *MACRO-11*, 2-13
Terminal, *RMS-11 Macro*, 3-1, 5-20, 5-37, 5-42, 5-77, 5-80, 5-88, 5-104, 5-111, 5-117; *DCL*, 3-1 to 3-11; *Introduction*, 1-1, 1-6
attached, *MCR*, 2-18; *DCL*, 3-2
attached by task, *MCR*, 2-14
attaching (VTDRV), *I/O Drivers*, 3-4
attaching with task, *MCR*, 2-18
baud rate, *Indirect*, 2-20
setting, *MCR*, 3-184
baud rate for RSX systems, *Utilities*, C-2
buffer, *MCR*, 3-187
characteristics
get multiple
TTDRV, *I/O Drivers*, 2-53
VTDRV, *I/O Drivers*, 3-6
implicit (TTDRV), *I/O Drivers*, 2-61
setting
TTDRV, *I/O Drivers*, 2-61
VTDRV, *I/O Drivers*, 3-7
table
TTDRV, *I/O Drivers*, 2-54
VTDRV, *I/O Drivers*, 3-8
characteristics
displaying, *DCL*, 3-51
setting, *MCR*, 3-151, 3-157 to 3-199; *DCL*, 3-38, 9-37
showing, *DCL*, 9-46
CLI
default, *MCR*, 3-67
console
displaying current assignment, *System Management*, 9-5
cursor control (TTDRV), *I/O Drivers*, 2-81
default directory for, *MCR*, 2-7
definition of, *MCR*, 2-13
detaching (VTDRV), *I/O Drivers*, 3-4
disconnect (TTDRV), *I/O Drivers*, 2-37
displaying, *MCR*, 3-50
driver
virtual, *I/O Drivers*, 3-1
driver
full-duplex, *MCR*, 3-166
establishing ports for data transfer, *Utilities*, C-1
examining a listing, *Program Development*, 3-6
exercising with IOX, *System Management*, 12-2
full-duplex operation (TTDRV), *I/O Drivers*, 2-80
function code list, *I/O Drivers*, B-9

Terminal (cont'd.)
get support
TTDRV, *I/O Drivers*, 2-20, 2-35
return, *I/O Drivers*, 2-36
hardcopy, *Introduction*, 1-1
input
checkpointing TTDRV, *I/O Drivers*, 2-83
interface (TTDRV), *I/O Drivers*, 2-82
lock out during file transfer, *Utilities*, C-7
nonprivileged, *MCR*, 2-18
nonslave, *MCR*, 3-184
nonslaved, *System Management*, 5-46
output
controlling, *Program Development*, 3-6
privilege status, *MCR*, 2-18, 3-68
programming hint (TTDRV), *I/O Drivers*, 2-83
READ operation, *RMS-11 Macro*, 5-103
read-pass-all, *MCR*, 3-182
remote, *MCR*, 3-157
setting baud rate, *System Management*, 5-63
running a task from, *MCR*, 2-13
session
accounting, *MCR*, 3-67
setting characteristics for, *Utilities*, C-1
setting to MCR, *MCR*, 1-1
shareable
definition, *System Management*, 3-8
slave, *MCR*, 2-18, 3-68
displaying, *MCR*, 3-184
setting, *MCR*, 3-183
slaved, *System Management*, 5-46; *DCL*, 3-2
running RMD on, *System Management*, 7-2
speed
setting, *MCR*, 3-184
status return (TTDRV), *I/O Drivers*, 2-66
support
TTDRV, *I/O Drivers*, 2-2
VTDRV, *I/O Drivers*, 3-7
suppressing output (TTDRV), *I/O Drivers*, 2-71
synchronization
disabling, *MCR*, 3-187
setting, *MCR*, 3-187
task
displaying, *MCR*, 3-50
name, *MCR*, 2-20
Terminal (cont'd.)
testing with IOX, *System Management*, 12-35
type, *Indirect*, 2-21; *Program Development*, 1-12
setting, *MCR*, 3-185, 3-186
type-ahead buffer, *Utilities*, C-7
type value (TTDRV), *I/O Drivers*, 2-58
unattached, *MCR*, 2-18
video, *Introduction*, 1-1
virtual, *I/O Drivers*, 3-1
creating, *Executive*, 5-56
deallocating, *Executive*, 5-78
function code list, *I/O Drivers*, B-11
VT100, *Introduction*, 1-1, 1-3
VT100-series, *DCL*, 3-17
special keys, *DCL*, 3-18
VT200-series, *DCL*, 3-17
special keys, *DCL*, 3-18
VT220, *Introduction*, 1-1, 1-4
VT52, *DCL*, 3-17
special keys, *DCL*, 3-18
Terminal driver
full-duplex
See TTDRV
Terminal emulation, *System Management*, 1-19
establishing, *Utilities*, C-3
using DCL, *Utilities*, C-4
terminating, *Utilities*, C-5
Terminal input/outut device
See TI device
Terminal interface
See also Line interface
support, *I/O Drivers*, 2-3
Terminal line
asynchronous, *Utilities*, C-1
parallel processing, *MCR*, 3-183
remote
displaying, *MCR*, 3-181
setting, *MCR*, 3-181
serial processing, *MCR*, 3-183
variations in transmission speed, *Utilities*, C-2
Terminal monitoring
TTDRV, *I/O Drivers*, 2-15
Terminal multiplexer
See Multiplexer
Terminator
stream records, *RMS-11 User's Guide*, 2-16; *RMS-11 Intro*, 3-4

/TERM keyword
ABORT command, *MCR*, 3-3
ACTIVE command, *MCR*, 3-8
ALLOCATE command, *MCR*, 3-10
ALTER command, *MCR*, 3-12
ASSIGN command, *MCR*, 3-19, 3-20, 3-21
BLOCK command, *MCR*, 3-29
DEFINE LOGICALS command, *MCR*, 3-56, 3-57
DISMOUNT command, *MCR*, 3-61
RESUME command, *MCR*, 3-137
SET command, *MCR*, 3-185
SET command (VMR), *System Management*, 5-67
UNBLOCK command, *MCR*, 3-210
UNSTOP command, *MCR*, 2-213
/TERM switch
QUE /SP command, *System Management*, 3-20
T error
number more than 16 bits long, *MACRO-11*, 2-13
$TESTBITS macro, *RMS-11 Macro*, 2-17
Test configuration
setting up for IOX, *System Management*, 12-4
.TESTDEVICE directive, *Indirect*, 2-94
.TEST directive, *Indirect*, 2-92
.TESTFILE directive, *Indirect*, 2-96
Test for Specified System Feature directive, *Executive*, 5-93
Test for Specified Task Feature directive, *Executive*, 5-283
.TESTPARTITION directive, *Indirect*, 2-98
TE trap, *Debugging*, 1-6
Text
buffer, *Program Development*, 1-4
displaying on terminal, *Indirect*, 2-39, 2-41, 2-44
editor, *Program Development*, 1-4
See also EDI editor, EDT editor
Text information record type, *Task Builder*, A-13
TF.AST subfunction
TTDRV, *I/O Drivers*, 2-14
TF.BIN subfunction
TTDRV, *I/O Drivers*, 2-14
IO.EIO function, *I/O Drivers*, 2-29
IO.RPR function, *I/O Drivers*, 2-43
TF.CCO subfunction
Cancel CTRL/O, *I/O Drivers*, 2-14
TF.CCO subfunction (cont'd.)
TTDRV, *I/O Drivers*, 2-14
IO.EIO function, *I/O Drivers*, 2-29
IO.WAL function, *I/O Drivers*, 2-50
IO.WBT function, *I/O Drivers*, 2-52
TF.ESQ subfunction
TTDRV, *I/O Drivers*, 2-14
IO.ATA function, *I/O Drivers*, 2-24
TF.NOT subfunction
TTDRV, *I/O Drivers*, 2-15
IO.ATA function, *I/O Drivers*, 2-23, 2-25
TF.RAL subfunction
TTDRV, *I/O Drivers*, 2-15
IO.EIO function, *I/O Drivers*, 2-29
IO.RNE function, *I/O Drivers*, 2-41
IO.RPR function, *I/O Drivers*, 2-44
IO.RST function, *I/O Drivers*, 2-46
IO.RTT function, *I/O Drivers*, 2-48
TF.RCU subfunction
TTDRV, *I/O Drivers*, 2-15
IO.EIO function, *I/O Drivers*, 2-29
IO.RTT function, *I/O Drivers*, 2-48
IO.WAL function, *I/O Drivers*, 2-50
IO.WBT function, *I/O Drivers*, 2-52
TF.RDI subfunction
TTDRV, *I/O Drivers*, 2-15
IO.EIO function, *I/O Drivers*, 2-29
TF.RES subfunction
TTDRV, *I/O Drivers*, 2-15
IO.EIO function, *I/O Drivers*, 2-29
TF.RLB subfunction
TTDRV, *I/O Drivers*, 2-15
TF.RLU subfunction
TTDRV, *I/O Drivers*, 2-15
IO.EIO function, *I/O Drivers*, 2-29
TF.RNE subfunction
TTDRV, *I/O Drivers*, 2-16
IO.EIO function, *I/O Drivers*, 2-29
IO.RAL function, *I/O Drivers*, 2-39
IO.RPR function, *I/O Drivers*, 2-44
IO.RST function, *I/O Drivers*, 2-46
IO.RTT function, *I/O Drivers*, 2-48
TF.RNF subfunction
TTDRV, *I/O Drivers*, 2-16
IO.EIO function, *I/O Drivers*, 2-29
TF.RPR subfunction
TTDRV, *I/O Drivers*, 2-16
ignoring prompt, *I/O Drivers*, 2-30
IO.EIO function, *I/O Drivers*, 2-30
TF.RPT subfunction
TTDRV, *I/O Drivers*, 2-16

TF.RPT subfunction
TTDRV (cont'd.)
IO.EIO function, *I/O Drivers*, 2-30
TF.RST subfunction
TTDRV, *I/O Drivers*, 2-17
IO.EIO function, *I/O Drivers*, 2-30
IO.RAL function, *I/O Drivers*, 2-39
IO.RNE function, *I/O Drivers*, 2-41
IO.RPR function, *I/O Drivers*, 2-44
TF.RTT subfunction
TTDRV, *I/O Drivers*, 2-17
IO.EIO function, *I/O Drivers*, 2-30
TF.RAL subfunction, *I/O Drivers*, 2-17
TF.RNF subfunction, *I/O Drivers*, 2-17
TF.TNE subfunction, *I/O Drivers*, 2-17
TF.TMO subfunction
TTDRV, *I/O Drivers*, 2-17
IO.EIO function, *I/O Drivers*, 2-31
IO.RAL function, *I/O Drivers*, 2-39
IO.RNE function, *I/O Drivers*, 2-39, 2-41
IO.RPR function, *I/O Drivers*, 2-44
IO.RST function, *I/O Drivers*, 2-46
IO.RTT function, *I/O Drivers*, 2-48
TF.TNE subfunction
TTDRV, *I/O Drivers*, 2-17
IO.EIO function, *I/O Drivers*, 2-31
TF.WAL subfunction
TTDRV, *I/O Drivers*, 2-18
IO.CCO function, *I/O Drivers*, 2-26
IO.EIO function, *I/O Drivers*, 2-31
IO.WBT function, *I/O Drivers*, 2-52
TF.WBT subfunction
TTDRV, *I/O Drivers*, 2-18
breakthrough write, *I/O Drivers*, 2-20, 2-27
IO.CCO function, *I/O Drivers*, 2-27
IO.EIO function, *I/O Drivers*, 2-31
IO.WAL function, *I/O Drivers*, 2-50
TF.WIR subfunction
TTDRV, *I/O Drivers*, 2-18
IO.EIO function, *I/O Drivers*, 2-32
TF.WLB subfunction
TTDRV, *I/O Drivers*, 2-18
TF.XCC subfunction
TTDRV, *I/O Drivers*, 2-19, 2-23
IO.ATA function, *I/O Drivers*, 2-25
TF.XOF subfunction
TTDRV, *I/O Drivers*, 2-19
IO.EIO function, *I/O Drivers*, 2-32
IO.RNE function, *I/O Drivers*, 2-41
IO.RPR function, *I/O Drivers*, 2-44
TF.XOF subfunction
TTDRV (cont'd.)
IO.RST function, *I/O Drivers*, 2-46
TFEA$ directive, *Executive*, 5-283
Throughput
definition, *System Management*, 14-4
file system
increasing, *System Management*, 1-7
improving, *System Management*, 14-4
increasing, *System Management*, 4-22
Tick
definition, *MCR*, 3-140; *System Management*, 1-6
rate, *MCR*, 3-140
zero, *System Management*, 10-16
<TICLPP> symbol, *Indirect*, 2-19
<TICWID> symbol, *Indirect*, 2-19
TI device, *MCR*, 2-10
redirecting, *MCR*, 2-10
$TIM (Time conversion), *System Library*, 6-6
%TIM$RSX_CURRENT
CFL time-handling function, *Error Logging*, 5-24
%TIM$RSX_DATE
CFL time-handling function, *Error Logging*, 5-24
%TIM$RSX_NULL
CFL time-handling function, *Error Logging*, 5-24
%TIM$RSX_VMS
CFL time-handling function, *Error Logging*, 5-24
%TIM$VMS_CURRENT
CFL time-handling function, *Error Logging*, 5-25
%TIM$VMS_DATE
CFL time-handling function, *Error Logging*, 5-25
%TIM$VMS_MINUS
CFL time-handling function, *Error Logging*, 5-25
%TIM$VMS_NULL
CFL time-handling function, *Error Logging*, 5-25
%TIM$VMS_PLUS
CFL time-handling function, *Error Logging*, 5-25
%TIM$VMS_RSX
CFL time-handling function, *Error Logging*, 5-25
TIM command
See also TIME command

TIM command (cont'd.)
VMR, *System Management*, 5-78
definition, *System Management*, 5-78
examples, *System Management*, 5-79
formats, *System Management*, 5-78
notes, *System Management*, 5-78
parameters, *System Management*, 5-78
Time
displaying, *System Management*, 5-78; *DCL*, 8-4
getting parameters, *Executive*, 5-140
setting, *Executive*, 5-268; *System Management*, 5-78; *DCL*, 8-2
<TIME> symbol, *Indirect*, 2-25
TIME command, *MCR*, 3-206
brief description, *MCR*, 1-5
examples, *MCR*, 3-207
format, *MCR*, 3-206
parameters, *MCR*, 3-206
VMR
See TIM command
Time conversion
time ($TIM), *System Library*, 6-6
Time data
K-series
gathering interevent, *I/O Drivers*, 13-19
/TIME keyword
INSTALL command, *MCR*, 3-99
RUN command, *MCR*, 3-145
Timeout
count, *Writing I/O Driver*, 4-37
entry point, *Writing I/O Driver*, 2-5
LADRV, *I/O Drivers*, 12-31
reading (TTDRV), *I/O Drivers*, 2-31
unsolicited input (TTDRV), *I/O Drivers*, 2-21
Timeout count
TTDRV, *I/O Drivers*, 2-17
Timeout interval
system shutdown (SHUTUP.CMD), *System Management*, 6-3
Timeout mode, *Indirect*, 2-55
Timeout parameter
UNIBUS switch driver
IO.DPT function, *I/O Drivers*, 14-7
Time parameter
RCLOKB: subroutine (K-series), *I/O Drivers*, 13-23
/TIME qualifier
JOB command, *Batch and Queue*, 3-4
Timesharing, *Introduction*, 6-3
Time-stamp
format, *System Management*, 9-2
<TIMOUT> symbol, *Indirect*, 2-11
/TIS, *Crash Dump Analyzer*, 2-5, 2-7
<TISPED> symbol, *Indirect*, 2-20
.TITLE directive, *Program Development*, 2-4, 6-6; *MACRO-11*, 5-9
defaults to .MAIN., *MACRO-11*, 5-10
result if more than one, *MACRO-11*, 5-10
summary, *MACRO-11*, 5-3
text appears in listing heading, *MACRO-11*, 5-3
<TITYPE> symbol, *Indirect*, 2-21
TK25 magnetic tape unit, *I/O Drivers*, 6-4
TK50 kit
contents, *System Generation*, 2-5
TK50 magnetic tape unit, *I/O Drivers*, 6-4
TKB, *RMS-11 User's Guide*, 1-13; *Program Development*, 1-6, 4-1; *DCL*, 6-1, 6-6 to 6-7
See also LINK command
See also Task Builder
and optimizations, *RMS-11 User's Guide*, 8-10
and overlay structure, *RMS-11 User's Guide*, 8-10
and remote access code, *RMS-11 User's Guide*, B-1
and RMS-11 routines, *RMS-11 User's Guide*, 8-1
and RMSRES, *RMS-11 User's Guide*, 8-6
command line, *Task Builder*, 1-2
creating task, *Program Development*, 1-6
cross-reference listing, *Program Development*, 4-6
/DA switch, *Debugging*, 8-1
data formats, *Task Builder*, A-1 to A-36
defaults
modifying, *Task Builder*, F-6 to F-11
error, *Program Development*, 4-2, 4-8
error messages, *Program Development*, 4-2; *Task Builder*, H-1 to H-12
functions, *Task Builder*, 2-1
GBLPAT option, *Debugging*, 8-3
generating
cross-reference listing, *Program Development*, 4-5, 4-6
map
full, *Program Development*, 4-7
standard, *Program Development*, 4-6

TKB (cont'd.)
improving performance, *Task Builder*, F-1 to F-12
improving throughput, *Task Builder*, F-1 to F-6
including ODT in task, *Program Development*, 5-2
input, *Program Development*, 1-6
input file, *DCL*, 6-3 to 6-6
/IP switch
complement to INSTALL keyword, *System Management*, 5-23
linking
ODT, *Debugging*, 1-2
ODTID, *Debugging*, 1-3
supervisor-mode libraries, *Debugging*, 1-4
object library
designation, *Program Development*, 6-4
use, *Program Development*, 6-8
options, *Task Builder*, 12-1 to 12-45
categories, *Task Builder*, 12-1
prompting for, *Task Builder*, 11-48
summary, *Task Builder*, 12-1 to 12-4
output, *Program Development*, 1-6
PAT utility, *Utilities*, 11-5
qualifiers, *Task Builder*, 11-1 to 11-71
summary, *Task Builder*, 11-3 to 11-9
search of system library
default, *Program Development*, 1-11
slow
using to improve performance, *Task Builder*, F-11
specifying a debugger, *Debugging*, 8-1
switches, *Task Builder*, 10-1 to 10-56
/CR, *Program Development*, 1-9, 4-6
/DA, *Program Development*, 5-2
/LB, *Program Development*, 6-7, 6-8, 7-7
/MA, *Program Development*, 4-7
/PM, *Program Development*, 5-9
/SH, *Program Development*, 4-7
summary, *Task Builder*, 10-2 to 10-5
syntax, *Task Builder*, 10-1
symbol, *DCL*, 6-7
undefined, *Program Development*, 4-2
syntax rules, *Task Builder*, 1-17 to 1-19
transfer (starting) address
default, *Program Development*, 4-3
/XH option
correlation with INSTALL keyword /XHR, *System Management*, 5-26
/TKB qualifier, *Task Builder*, 11-68
$TKTCB
pointer to current TCB, *Writing I/O Driver*, 6-7
TKTN
abort message, *Program Development*, 4-8
format of messages, *MCR*, A-1
messages, *DCL*, 10-17 to 10-18
nonrecoverable hardware error, *System Management*, 11-4
request during I/O rundown, *MCR*, 3-2
using with PMD task, *Program Development*, 1-8
TLOG$ directive, *Executive*, 5-286
TLON$ directive, *Executive*, 5-286
TM02 formatter, *I/O Drivers*, 6-4
TM03 formatter, *I/O Drivers*, 6-4
TMCLI.FTN file, *System Management*, 17-9
TMCLI.MAC file, *System Management*, 17-9
Tmo parameter
device-specific function
VTDRV, *I/O Drivers*, 3-4
TTDRV, *I/O Drivers*, 2-13
IO.RAL function, *I/O Drivers*, 2-39
IO.RNE function, *I/O Drivers*, 2-40
IO.RPR function, *I/O Drivers*, 2-43
IO.RST function, *I/O Drivers*, 2-46
IO.RTT function, *I/O Drivers*, 2-48
VTDRV, *I/O Drivers*, 3-5
TMSCP
controller
SYSGEN question, *System Generation*, 3-47
TMSCPE device-level module, *Error Logging*, 4-9, A-7
TOC argument
for .LIST/.NLIST, *MACRO-11*, 5-8
/TODAY qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-9
See also /DATE switch
/TOP_OF_FILE qualifier
START/PROCESSOR command, *System Management*, 3-38
Top command
EDI editor, *Utilities*, 7-39
TOP function
EDT editor, *Introduction*, 2-7
/TOP keyword
SET command, *MCR*, 3-186
SET command (VMR), *System Management*, 5-68 to 5-69

Top of File command
EDI editor, *Utilities*, 7-39
Total system statistics
Resource Accounting, *System Management*, 10-16
Tout parameter
device-specific (UNIBUS switch driver), *I/O Drivers*, 14-5
TPARS
built-in variable, *I/O Operations*, 7-5
coding, *I/O Operations*, 7-1, 7-7
command line parsing, *I/O Operations*, 7-1
creating parser program, *I/O Operations*, 7-12
invoking, *I/O Operations*, 7-11
macro, *I/O Operations*, 7-1
options word, *I/O Operations*, 7-12
programming examples, *I/O Operations*, 7-14
program section, *I/O Operations*, 7-9
register usage, *I/O Operations*, 7-11
state table, *I/O Operations*, 7-1
subexpression, *I/O Operations*, 7-6
transition, *I/O Operations*, 7-1
Trace mode, *Indirect*, 2-55
Trace program, *Debugging*, 8-2
listing, *Debugging*, 8-2
format, *Debugging*, 8-2
/TRACE qualifier, *Task Builder*, 11-69
Tracing fault, *Writing I/O Driver*, 6-12, 6-13
Track, *RMS-11 Intro*, 2-1
See also Placement control
bad sector (disk driver), *I/O Drivers*, 4-11
TRAN$ macro, *I/O Operations*, 7-1, 7-3
Transaction file
accessing information in, *System Management*, 10-11
account blocks, *System Management*, 10-23
SAB, *System Management*, 10-23
TAB, *System Management*, 10-23
UAB, *System Management*, 10-23
accumulation fields, *System Management*, 10-25
block diagrams, *System Management*, 10-26
card reader job data, *System Management*, 10-3
card reader spooling block, *System Management*, 10-44
crash recovery block, *System Management*, 10-37
DATATRIEVE-11, *System Management*, 10-17
Transaction file (cont'd.)
deallocation data, *System Management*, 10-3
device allocation data, *System Management*, 10-3
device mount data, *System Management*, 10-3
device statistics block, *System Management*, 10-50
device usage data, *System Management*, 10-3
disk accounting block, *System Management*, 10-43
dismount data, *System Management*, 10-3
example, *System Management*, 10-13
header area, *System Management*, 10-24
invalid login block, *System Management*, 10-39
login data, *System Management*, 10-3
offset definitions, *System Management*, 10-24
print despooler block, *System Management*, 10-44
print job data, *System Management*, 10-3
reset accounting block, *System Management*, 10-36
scan, *System Management*, 10-15
shutdown codes, *System Management*, 10-16
size, *System Management*, 10-5
status line, *System Management*, 10-16
summary of contents, *System Management*, 10-2
system account block (SAB), *System Management*, 10-33
system data, *System Management*, 10-2
system time change, *System Management*, 10-3
system time change block, *System Management*, 10-44
task data, *System Management*, 10-2
terms
cylinder crossed count, *System Management*, 10-8
fairness count, *System Management*, 10-8
hard error, *System Management*, 10-7
I/O count, *System Management*, 10-7
soft error, *System Management*, 10-7
words transferred count, *System Management*, 10-7

Transaction file (cont'd.)
user account block, *System Management*, 10-25
user data, *System Management*, 10-2
zero CPU intervals, *System Management*, 10-16
Transfer (starting) address
defining, *Program Development*, 2-8
system treatment of default, *Program Development*, 4-3, 4-7
/TRANSFER file qualifier
PRINT command, *Batch and Queue*, 2-9
SUBMIT command, *Batch and Queue*, 3-15
Transient failure, *System Management*, 11-2
Transition table
recognition of keyword, *I/O Operations*, 7-9
.TRANSLATE directive, *Indirect*, 2-99
Translate Logical Name String directive, *Executive*, 5-286
Translator processing, *System Management*, 18-14
Transmit speed
TTDRV, *I/O Drivers*, 2-60
Transparent spooling, *Batch and Queue*, 2-1; *System Management*, 3-1
EDT WRITE command, *Batch and Queue*, 2-2
Trap, *Debugging*, 5-5, A-2; *XDT*, 3-2
See also SST
entry codes, *XDT*, 1-6
handling, *Debugging*, 2-9, 5-4
instructions
BPT, *XDT*, 1-8
EMT, *XDT*, 1-8, 2-5
IOT, *XDT*, 1-8
TRAP, *XDT*, 1-8
SST vector register, *Debugging*, 5-4
system, *I/O Drivers*, 1-10
asynchronous, *I/O Drivers*, 1-10, 1-11
synchronous, *I/O Drivers*, 1-10
TE, *Debugging*, 1-6
unexpected, *Error Logging*, 1-6
TRAP instruction, *MACRO-11*, 4-8
TRAP trap instruction, *XDT*, 1-8
Tree, *Task Builder*, 3-33
overlay, *Task Builder*, 3-17
multiple, *Task Builder*, 3-32
defining, *Task Builder*, 3-33
Tree structure
indexed file organization, *RMS-11 Intro*, 3-7
/TR file switch
PRI command, *Batch and Queue*, 2-9
SUB command, *Batch and Queue*, 3-15
/TR keyword
MOUNT command, *MCR*, 3-122
.TRNCL routine
truncating file, *I/O Operations*, 4-25
/TR switch, *Indirect*, 2-33; *Task Builder*, 10-53
PIP utility, *Utilities*, 12-32
RMSCNV utility, *RMS-11 Utilities*, 4-13
RMSIFL utility, *RMS-11 Utilities*, 3-7, 3-11
SLP utility, *Utilities*, 13-16
/TR switch (Indirect), *Indirect*, 2-33
<TRUE> symbol, *Indirect*, 2-11
$TRUNCATE macro, *RMS-11 Macro*, 5-122
Truncate mode, *Indirect*, 2-55
TRUNCATE operation, *RMS-11 Macro*, 4-10; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and shared access, *RMS-11 User's Guide*, 2-6
sequential files, *RMS-11 User's Guide*, 3-12
$TRUNCATE macro, *RMS-11 Macro*, 5-122
Truncation
print line (LPDRV), *I/O Drivers*, 7-7
RMSCNV utility, *RMS-11 Utilities*, 4-13
RMSIFL utility, *RMS-11 Utilities*, 3-7
TS03 magnetic tape unit, *I/O Drivers*, 6-3
TS11 magnetic tape unit, *I/O Drivers*, 6-4
/TSK, *Crash Dump Analyzer*, 2-4, 2-7
TSK file type, *Program Development*, 4-1
TSKV option, *Task Builder*, 12-38
$TSPAR routine, *Writing I/O Driver*, 7-33
TST attribute, *System Management*, 18-49
$TSTBF routine, *Writing I/O Driver*, 1-16, 7-34
TSV05 magnetic tape unit, *I/O Drivers*, 6-4
TTDRV, *I/O Drivers*, 2-1
features, *I/O Drivers*, 2-1
input line length, *I/O Drivers*, 2-4
interface support, *I/O Drivers*, 2-3
programming hint, *I/O Drivers*, 2-83
subfunction bit, *I/O Drivers*, 2-14
terminal support, *I/O Drivers*, 2-2
TTM argument
for .LIST/.NLIST, *MACRO-11*, 5-8
TTSYM system module
TTDRV, *I/O Drivers*, 2-36
TTSYNC
TTDRV, *I/O Drivers*, 2-71

/TTSYNC keyword
SET command, *MCR*, 3-187
SET command (VMR), *System Management*, 5-69
TU10 magnetic tape unit, *I/O Drivers*, 6-3, 6-4
TU16 magnetic tape unit, *I/O Drivers*, 6-4
TU45 magnetic tape unit, *I/O Drivers*, 6-4
TU58 DECtape II, *I/O Drivers*, 5-1
TU77 magnetic tape unit, *I/O Drivers*, 6-4
TU80 magnetic tape unit, *I/O Drivers*, 6-4
TU81 magnetic tape unit, *I/O Drivers*, 6-4
TUNE.CMD, *Error Logging*, 2-7, A-1
Two-byte signed integer key, *RMS-11 User's Guide*, 6-4
Two-byte unsigned binary key, *RMS-11 User's Guide*, 6-5
TYPE
RMSDES utility, *RMS-11 Utilities*, 2-38
Type-ahead buffer, *Utilities*, C-7
TTDRV, *I/O Drivers*, 2-79
/TYPEAHEAD keyword
SET command, *MCR*, 3-187
SET command (VMR), *System Management*, 5-69 to 5-70
TYPE command, *Program Development*, 3-6, 4-6, 7-4; *DCL*, 4-60 to 4-62, 9-51; *Introduction*, 1-14, 3-8
Type command
EDI editor, *Program Development*, 2-12, 2-13; *Utilities*, 7-40
type command
EDI editor, *Program Development*, 2-16
/TYPE keyword
ALLOCATE command, *MCR*, 3-10
/TYPE switch
RPT, *Error Logging*, 3-5, 3-11
See also /INCLUDE qualifier
arguments, *Error Logging*, 3-5, 3-11, 3-12
processing, *Error Logging*, 4-4

U

U.ST2, *Writing I/O Driver*, 4-31
U.STS, *Writing I/O Driver*, 4-30
U$$NCT parameter
XEDRV, *I/O Drivers*, 10-2
U$$NPC parameter
XEDRV, *I/O Drivers*, 10-2
U$$NRS parameter
XEDRV, *I/O Drivers*, 10-2
U$$NTS parameter
XEDRV, *I/O Drivers*, 10-2
UAB, *System Management*, 10-30
description, *System Management*, 10-23
Resource Accounting, *System Management*, 10-23
UC.CON
contiguous file
user-controlled file characteristic, *I/O Operations*, C-4
UC.DLK
file improperly closed
user-controlled file characteristic, *I/O Operations*, C-4
/UCB, *Crash Dump Analyzer*, 2-4, 2-6
UCB, *MCR*, 3-94; *System Management*, 5-26; *Writing I/O Driver*, 1-14, 2-4
association with SCB, *Writing I/O Driver*, 2-7
composite arrangement, *Writing I/O Driver*, 2-13
details, *Writing I/O Driver*, 4-25 to 4-34
device-dependent values, *Writing I/O Driver*, 4-28
device-specific characteristics, *Writing I/O Driver*, 4-31 to 4-32
disk geometry calculations, *Writing I/O Driver*, A-2
enabling driver to access data structures, *Writing I/O Driver*, 2-3
fields, *Writing I/O Driver*, 4-25
format, *Writing I/O Driver*, 4-25 to 4-34
layout, *Writing I/O Driver*, 4-26
length, *Writing I/O Driver*, 4-3
stored in DCB, *Writing I/O Driver*, 2-3
ordering, *Writing I/O Driver*, 4-3
overview, *Writing I/O Driver*, 2-3
pointer
to associated DCB, *Writing I/O Driver*, 4-28
to I/O structures, *Writing I/O Driver*, 2-3
to start of this UCB, *Writing I/O Driver*, 4-27
table
composite arrangement, *Writing I/O Driver*, 2-16
validation during LOAD, *Writing I/O Driver*, 5-12
UCBDF$, *Crash Dump Analyzer*, C-78
UCBSV
use in macro calls, *Writing I/O Driver*, 4-8

U command, *Debugging*, 2-9
UDA50 disk controller, *I/O Drivers*, 4-4
U error
  invalid forward reference, *MACRO-11*, 2-8
  .MCALL, *MACRO-11*, 6-22
  relationship to .ENABL/.DSABL GBL, *MACRO-11*, 5-14
  relationship to .ENABL/.DSABL MCL or GBL, *MACRO-11*, 5-14
  undefined symbol, *MACRO-11*, 2-6, 2-14
UFD, *MCR*, 2-2
  See also Directory
  See Directory
  and UIC, *MCR*, 2-2
  contents, *MCR*, 2-2
  creating, *MCR*, 2-2; *Utilities*, 12-33
  default, *MCR*, 2-2
  deleting, *MCR*, 2-2
  format, *MCR*, 2-2
  group number, *MCR*, 2-2; *System Management*, A-1
    Catchall utility task, *System Management*, A-2
    DCL files, *System Management*, A-2
    error logging control files, *System Management*, A-2
    Executive files, *System Management*, A-1
    Executive utility tasks, *System Management*, A-1
    FCP files, *System Management*, A-1
    FCS files, *System Management*, A-2
    file system utility tasks, *System Management*, A-1
    Indirect Command Processor files, *System Management*, A-2
    K-series files, *System Management*, A-2
    line printer despooler, *System Management*, A-2
    MCR files, *System Management*, A-1
    multiuser utility tasks, *System Management*, A-1
    online configuration, *System Management*, A-2
    Queue Manager files, *System Management*, A-2
    RCT files, *System Management*, A-2
    Resource Accounting tasks, *System Management*, A-2
    RMD files, *System Management*, A-1
UFD
  group number (cont'd.)
    Shadow Recording, *System Management*, A-2
    SYSGEN indirect command files, *System Management*, A-2
  member number, *MCR*, 2-2; *System Management*, A-2
    object modules, *System Management*, A-2
    SLP correction files, *System Management*, A-2
    source modules, *System Management*, A-2
  protection access codes, *MCR*, 3-209
  See also Directory, *System Management*, A-1
UFD command
  See USER FILE DIRECTORY command
/UFD qualifier
  BRU utility, *Utilities*, 3-24
/UF switch
  PIP utility, *Utilities*, 12-33
UIC, *Batch and Queue*, 3-1; *I/O Operations*, 5-2 ; *MCR*, 2-2, 3-69; *System Management*, 5-24; *DCL*, 4-1, 4-104 to 4-106; *Introduction*, 3-11
  and UFD, *MCR*, 2-2, 3-163, 3-208
  ASCII-binary conversion, *I/O Operations*, 4-7, 4-8
  authorized, *System Management*, 2-1
  changing default, *MCR*, 2-3
  contained in account entry, *System Management*, 2-1, 2-6, 2-11
  default, *MCR*, 2-2
  default for system task, *MCR*, 3-185
  displaying, *System Management*, 2-8, 2-10
  distinction by password, *System Management*, 2-1
  event flags, *MCR*, 3-65
  group
    access count, *MCR*, 3-65
  login, *MCR*, 2-3
  password, *MCR*, 3-67
  privilege status, *MCR*, 2-3
  protection, *MCR*, 2-2
  read/write defaults, *I/O Operations*, 4-4
  running tasks, *MCR*, 3-139
  setting, *MCR*, 2-2
  slash format, *Batch and Queue*, 3-4
  task
    declaring, *Task Builder*, 12-39

UIC
task (cont'd.)
specifying, *MCR*, 3-99
terminal
setting, *MCR*, 3-188
user categories
group, *MCR*, 2-3
owner, *MCR*, 2-3
system, *MCR*, 2-3
world, *MCR*, 2-3
volume
specifying, *MCR*, 3-116, 3-123
<UIC> symbol, *Indirect*, 2-26
[uic] switch
QUE /LI command, *Batch and Queue*, 2-14
/UIC keyword
HOME command, *MCR*, 3-82
INITVOLUME command, *MCR*, 3-91
INS command (VMR), *System Management*, 5-25
INSTALL command, *MCR*, 3-99
MOUNT command, *MCR*, 3-116, 3-123
RUN command, *MCR*, 3-139, 3-140, 3-145
RUN command (VMR), *System Management*, 5-42
SET command, *MCR*, 3-188
SET command (VMR), *System Management*, 5-70
UIC option, *Task Builder*, 12-39
/UI switch
FLX utility, *Utilities*, 8-8
$ULA (Universal library), *System Library*, A-1
ULGF$S directive, *Executive*, 5-290
UMAP$ directive, *Executive*, 5-292
UMDIO$ diagnostic function, *I/O Drivers*, 1-34
UMR
programming procedures, *Writing I/O Driver*, 7-2, 7-3
SYSGEN question, *System Generation*, 3-56
Unary operator
^B, *MACRO-11*, 5-26
^C, *MACRO-11*, 5-29
circumflex (^), *MACRO-11*, 2-4
components of a term, *MACRO-11*, 2-14
^D, *MACRO-11*, 5-26
double quotation mark ("), *MACRO-11*, 5-18
^F, *MACRO-11*, 5-30
minus sign (-), *MACRO-11*, 2-4
^O, *MACRO-11*, 5-26
plus sign (+), *MACRO-11*, 2-4
Unary operator (cont'd.)
single quotation mark ('), *MACRO-11*, 5-18
table of, *MACRO-11*, 2-4
treatment of multiple, *MACRO-11*, 2-14
use, *MACRO-11*, 2-3, 2-4
^X, *MACRO-11*, 5-26
UNB command
See UNBLOCK command
UNBLOCK command, *MCR*, 3-210
brief description, *MCR*, 1-6
examples, *MCR*, 3-210
format, *MCR*, 3-210
parameters, *MCR*, 3-210
/TERM keyword, *MCR*, 3-210
UND C function
EDT editor, *Introduction*, 2-9
Undefined record format, *RMS-11 User's Guide*, 1-10, 1-11, 2-17; *RMS-11 Intro*, 3-4
Underline (_) prompt
ODT, *Program Development*, 5-2
Underscore character (_), *DCL*, 1-14
Underscore command (_), *Debugging*, 2-5, 4-5; *XDT*, 2-11
UND L function
EDT editor, *Introduction*, 2-9
UND W function
EDT editor, *Introduction*, 2-9
UNF command
See also UNFIX command
VMR
definition, *System Management*, 5-80
example, *System Management*, 5-80
format, *System Management*, 5-80
keywords
/REG, *System Management*, 5-80
/RON, *System Management*, 5-80
parameters, *System Management*, 5-80
UNFIX command, *MCR*, 3-211; *DCL*, 7-41, 9-52
brief description, *MCR*, 1-6
examples, *MCR*, 3-211
formats, *MCR*, 3-211
keywords
/REG, *MCR*, 3-211
/RON, *MCR*, 3-211
parameters, *MCR*, 3-211
VMR
See UNF command
UNIBUS
run specifications, *MCR*, 3-95

UNIBUS (cont'd.)
switched bus, *Writing I/O Driver*, 1-18
UNIBUS mapping register
See UMR
UNIBUS Run Mask
See URM
UNIBUS switch driver, *I/O Drivers*, 14-1
AST
CPU disconnect, *I/O Drivers*, 14-3, 14-5
failed CPU response, *I/O Drivers*, 14-3
other CPU connect, *I/O Drivers*, 14-3
power failure, *I/O Drivers*, 14-3
switched to other CPU, *I/O Drivers*, 14-3
attaching task, *I/O Drivers*, 14-2
error return, *I/O Drivers*, 14-8
FORTRAN usage, *I/O Drivers*, 14-9
function code list, *I/O Drivers*, B-14
recovery from system power failure, *I/O Drivers*, 14-6
standard functions, *I/O Drivers*, 14-2
status return, *I/O Drivers*, 14-7
UNIBUS recovery from power failure, *I/O Drivers*, 14-7
use, *I/O Drivers*, 14-2
Unit
making accessible, *Writing I/O Driver*, 5-6
placing on line, *Writing I/O Driver*, 5-7
Unit Control Block
See UCB
Unit information
.PRSDV routine, *I/O Operations*, 4-15
Unit number field, *I/O Operations*, 2-32
Unit-record device, *RMS-11 Macro*, 3-2, 5-20, 5-37, 5-43, 5-77, 5-88, 5-104, 5-111, 5-117; *RMS-11 User's Guide*, A-1; *RMS-11 Intro*, 3-5
RMSCNV utility, *RMS-11 Utilities*, 4-5
UNITS option, *Task Builder*, 12-40
Unit status
change
entry point, *Writing I/O Driver*, 4-63, 4-64
overview, *Writing I/O Driver*, 2-6
extension 2, *Writing I/O Driver*, 4-31
Universal library, *Error Logging*, A-1, A-5
command procedure, *Indirect*, 2-33
creating, *System Library*, A-1
ERRLOG.ULB, *Error Logging*, 2-7, 3-3, 3-29
Universal library file
module
inserting, *Utilities*, 10-21
replacing, *Utilities*, 10-27
Unknown interrupt event
subpacket information, *Error Logging*, 4-67
Unknown status flag, *System Management*, 4-13
Unlabeled tape, *I/O Operations*, G-15
block size, *I/O Operations*, G-15
end-of-volume (tape driver), *I/O Drivers*, 6-15
UNL command
See also UNLOAD command
VMR
definition, *System Management*, 5-81
example, *System Management*, 5-81
format, *System Management*, 5-81
parameter, *System Management*, 5-81
restrictions, *System Management*, 5-81
/VEC keyword, *System Management*, 5-81
UNLINK command, *System Management*, 4-32
example, *System Management*, 4-32
format, *System Management*, 4-32
/UNL keyword
MOUNT command, *MCR*, 3-116
UNLOAD command, *MCR*, 3-212
brief description, *MCR*, 1-6
example, *MCR*, 3-212
format, *MCR*, 3-212
keywords
/EXP, *MCR*, 3-212
/VEC, *MCR*, 3-212
parameter, *MCR*, 3-212
VMR
See UNL command
UNLOCK command, *DCL*, 4-71 to 4-72, 9-52
Unlock Group Global Event Flags directive, *Executive*, 5-290
$UNLPG (Unlock page), *System Library*, 8-44
Unmap Address Window directive, *Executive*, 5-292
/UNOVR keyword
COMMAND LINE INTERPRETER
command, *MCR*, 3-45
Unsave command
EDI editor, *Utilities*, 7-40
Unsaved system
bootstrapping and saving, *System Generation*, 4-2 to 4-3

Unsaved system (cont'd.)
copying, *System Generation*, 4-1
definition, *System Generation*, 1-12
saving with /WB switch, *System Generation*, 4-3
UNS command
See UNSTOP command
Unsolicited input timeout
SYSGEN question, *System Generation*, 3-31
UNSTOP command, *MCR*, 2-213
brief description, *MCR*, 1-7
examples, *MCR*, 2-213
format, *MCR*, 2-213
parameter, *MCR*, 2-213
/TERM keyword, *MCR*, 2-213
Unstop Task directive, *Executive*, 5-294
/UN switch
PIP utility, *Utilities*, 12-34
UNTIL statement
CFL, *Error Logging*, 5-34
Unt parameter
ALUN$ macro, *I/O Drivers*, 1-18
UPD argument to ORG$ macro, *RMS-11 Macro*, 2-3
$UPDATE macro, *RMS-11 Macro*, 5-124
UPDATE operation, *RMS-11 Macro*, 4-11; *RMS-11 User's Guide*, 1-15; *RMS-11 Intro*, 4-4
and ODL files, *RMS-11 User's Guide*, 8-5
and record size, *RMS-11 User's Guide*, 2-16
and shared access, *RMS-11 User's Guide*, 2-6, 2-10
and stream records, *RMS-11 User's Guide*, 2-17
changeable keys, *RMS-11 User's Guide*, 6-1
declaring with ORG$ macro, *RMS-11 Macro*, 2-3
deferred write, *RMS-11 User's Guide*, 7-9
duplicate keys, *RMS-11 User's Guide*, 6-9
indexed files, *RMS-11 User's Guide*, 5-14, 7-6, 7-9
move mode, *RMS-11 User's Guide*, 3-1
indexed files, *RMS-11 User's Guide*, 7-7 to 7-8
relative files, *RMS-11 User's Guide*, 4-12 to 4-13
sequential files, *RMS-11 User's Guide*, 3-13
relative files, *RMS-11 User's Guide*, 4-12
sequential files, *RMS-11 User's Guide*, 3-12
$UPDATE macro, *RMS-11 Macro*, 5-124
/UPDATE qualifier
START/ERROR_LOG command, *Error Logging*, 2-6
Update UICs and Default Directory function (GIN$), *Executive*, 5-124
/UPD switch
BAD utility, *Utilities*, 2-5
Uppercase On/Off command
EDI editor, *Utilities*, 7-40
/UPPERCASE qualifier
INITIALIZE/PROCESSOR command, *System Management*, 3-24
PRINT command, *Batch and Queue*, 2-3
SET QUEUE command, *Batch and Queue*, 2-19
/UP switch
PIP utility, *Utilities*, 12-34
VFY utility, *Utilities*, 14-7
URM, *Writing I/O Driver*, 1-18, 4-36
User Account Block
See UAB
User buffer, *RMS-11 User's Guide*, 1-14
USERCM, *Error Logging*, 3-3
User data space
SYSGEN question, *System Generation*, 3-25
User file attributes
header area
file characteristics, *I/O Operations*, C-4
User File Directory
See UFD
USER FILE DIRECTORY command, *MCR*, 3-208
brief description, *MCR*, 1-5
creating UFD, *MCR*, 2-4
example, *MCR*, 3-209
format, *MCR*, 3-208
keywords
/ALLOC, *MCR*, 3-208
/DEL, *MCR*, 3-208
/OWNER, *MCR*, 3-209
/PRO, *MCR*, 3-209
parameters, *MCR*, 3-208
User file label
tape, *I/O Operations*, G-8
User Identification Code
See UIC
Userid parameter
IO.STP function (LADRV), *I/O Drivers*, 12-27
/USER keyword
DISMOUNT command, *MCR*, 3-61

User login command file
See LOGIN.CMD file
User logout command file
See LOGOUT.CMD file
User mode, *Debugging*, 3-2; *Task Builder*, 2-15
command, *Debugging*, 2-9
I- and D-space, *Task Builder*, 7-1
setting, *Debugging*, 2-9
User-provided interlocks, *RMS-11 User's Guide*, 3-6
sharing declaration, *RMS-11 User's Guide*, 2-7
/USER qualifier
$PRINT card, *Batch and Queue*, 3-25
$SUBMIT card, *Batch and Queue*, 3-24
Users
displaying list of, *DCL*, 8-12 to 8-13
User-supplied driver
definition, *System Generation*, 1-13
SYSGEN question, *System Generation*, 3-68
User-tailored Executive
definition, *System Generation*, 1-13
User volume label tape, *I/O Operations*, G-3
User-written module
bit-to-text translation, *Error Logging*, 4-27, 4-33
coroutine statement, *Error Logging*, 4-32
determining error type, *Error Logging*, 4-32
exiting, *Error Logging*, 4-34
intermodule variables, *Error Logging*, 4-32
local work variables, *Error Logging*, 4-31
naming requirements, *Error Logging*, 4-28
notes requirement, *Error Logging*, 4-33
procedures, *Error Logging*, 4-28 to 4-34
register declaration, *Error Logging*, 4-30
SUBPACKET declaration, *Error Logging*, 4-29
%USR$STRING
CFL user I/O function, *Error Logging*, 5-25
$USRTB global label, *Writing I/O Driver*, 4-3
USTP$ directive, *Executive*, 5-294
Utility, *RMS-11 User's Guide*, 1-12, 2-11; *Introduction*, 5-1
See also RMSBCK, RMSCNV, RMSDEF, RMSDES, RMSDSP, RMSIFL, RMSRST
command line general format, *Utilities*, 1-3
DEQ, *RMS-11 User's Guide*, 3-5, 4-4, 6-26
editing, *Utilities*, 1-2
file manipulation, *Utilities*, 1-3
Utility (cont'd.)
file specification
default, *Utilities*, 1-4
format, *Utilities*, 1-4
indirect command file, *Utilities*, 1-9
initial allocation, *RMS-11 User's Guide*, 3-4, 4-4, 6-26
invoking, *Utilities*, 1-6
DCL, *Utilities*, 1-6
installed, *Utilities*, 1-7, 1-8
MCR, *Utilities*, 1-6
key segments, *RMS-11 User's Guide*, 6-7
listed, *Utilities*, 1-1
MRN, *RMS-11 User's Guide*, 4-4
placement control, *RMS-11 User's Guide*, 6-14
program maintenance, *Utilities*, 1-2, 1-3, 15-1
programming, *Utilities*, 1-2, 1-3
RMSBCK, *RMS-11 User's Guide*, 1-12
RMSCNV, *RMS-11 User's Guide*, 1-12
populating files, *RMS-11 User's Guide*, 6-26 to 6-27
RMSDES, *RMS-11 User's Guide*, 1-12, 1-18
bucket fill size, *RMS-11 User's Guide*, 6-29
bucket size, *RMS-11 User's Guide*, 4-3
RMSDSP, *RMS-11 User's Guide*, 1-12, 1-19
RMSIFL, *RMS-11 User's Guide*, 1-12
RMSRST, *RMS-11 User's Guide*, 1-12
spawning, *Executive*, 4-5
volume maintenance, *Utilities*, 1-2, 1-3
Utility programs, *Program Development*, 1-8, 1-9

V

Val parameter
CVADF: subroutine
K-series, *I/O Drivers*, 13-12
LADRV, *I/O Drivers*, 12-8
FLT16: subroutine
K-series, *I/O Drivers*, 13-19
LADRV, *I/O Drivers*, 12-15
VALUE numeric data type
CFL, *Error Logging*, 5-5
Value parameter
IO.SMC function (TTDRV), *I/O Drivers*, 2-63
Variable, *Debugging*, 2-1; *XDT*, 2-10
#symbol
list, *XDT*, B-1

Variable (cont'd.)
testing, *Indirect*, 2-92
Variable, named
CFL, *Error Logging*, 5-8
Variable-length record block boundary PUT$ macro, *I/O Operations*, 3-27
Variable-length record format, *RMS-11 User's Guide*, 1-11, 2-15; *RMS-11 Intro*, 3-2
and medium, *RMS-11 User's Guide*, 2-15
Variable Receive Data directive, *Executive*, 5-296
Variable Receive Data or Exit directive, *Executive*, 5-300
Variable Receive Data or Stop directive, *Executive*, 5-298
Variable Send, Request, and Connect directive, *Executive*, 5-304
Variable Send Data directive, *Executive*, 5-302
Variable with fixed control
See VFC
VARRAY option, *Task Builder*, 12-41
VAX/VMS
remote access, *RMS-11 User's Guide*, B-1, B-3
VAX–11 host
referring to device names, *System Generation*, 2-21
VAX–11 RSX
file transfer using MFT, *Utilities*, C-1
VBN, *RMS-11 User's Guide*, 8-11; *RMS-11 Intro*, 2-4
access, *RMS-11 User's Guide*, 1-20; *RMS-11 Intro*, 3-12, 4-7
areas, *RMS-11 User's Guide*, 6-10
/VB switch
CMP utility, *Utilities*, 4-4
VCB
composite arrangement, *Writing I/O Driver*, 2-17
V command, *Debugging*, 2-9
ZAP utility, *Utilities*, 15-19
/VEC keyword
LOA command (VMR), *System Management*, 5-30
LOAD command, *MCR*, 3-104
UNL command (VMR), *System Management*, 5-81
UNLOAD command, *MCR*, 3-212
Vector, *Writing I/O Driver*, 1-1
address
BRUSYS default, *System Generation*, 2-7
Vector (cont'd.)
addresses
definition of in Driver Dispatch Table, *Writing I/O Driver*, 2-6
assignment
error, *Writing I/O Driver*, 5-8
setting, *Writing I/O Driver*, 5-7
autoload, *Task Builder*, 3-22, 3-25, 4-4, B-20 to B-21
I- and D-space task, *Task Builder*, 7-10
definition, *System Generation*, 1-13
determining, *System Generation*, 2-1
floating assignment algorithm, *System Generation*, D-1
interrupt, *Writing I/O Driver*, 1-1, 1-13
changing value, *System Management*, 4-29
mode-switching, *Task Builder*, 8-1
user-written, *Task Builder*, 8-25
reentry register, *Debugging*, 5-3, 5-6
SST register, *Debugging*, 2-9
Vectored Executive, *Writing I/O Driver*, 1-20 to 1-22
Vectoring, *Writing I/O Driver*, 1-20 to 1-22
drivers, *Writing I/O Driver*, 1-21
Verification
device, *Utilities*, 2-7
of file structure, *Utilities*, 14-1
task image file content
See ZAP utility
VERIFY command
IOX, *System Management*, 12-58
Command mode, *System Management*, 12-58
examples, *System Management*, 12-58, 12-68
function, *System Management*, 12-5
Interactive mode, *System Management*, 12-58
logical names, *System Management*, 12-58
parameter commands for, *System Management*, 12-58
specifying block range, *System Management*, 12-45
Verify On/Off command
EDI editor, *Utilities*, 7-42
/VERIFY qualifier
BRU utility, *Utilities*, 3-25
/VERIFY switch
DSC utility, *Utilities*, 6-17

Version
file, *RMS-11 User's Guide*, A-3, A-5
RMSDES utility, *RMS-11 Utilities*, 2-16
Version number
decimal, *MCR*, 2-5
file, *DCL*, 4-3
default, *DCL*, 4-4
octal, *MCR*, 2-5
RMSBCK utility, *RMS-11 Utilities*, 6-5
RMSCNV utility, *RMS-11 Utilities*, 4-9
RMSDEF utility, *RMS-11 Utilities*, A-5
RMSDSP utility, *RMS-11 Utilities*, 5-5
RMSIFL utility, *RMS-11 Utilities*, 3-5
specifying for file, *MCR*, 2-5
/VERSION option
command
SET HOST/DTE, *Utilities*, C-5
<VERSN> symbol, *Indirect*, 2-26
Vertical format control
See Vfc parameter
/VE switch
FLX utility, *Utilities*, 8-8
FMT utility, *Utilities*, 9-5
VFC
LPDRV, *I/O Drivers*, 7-6
character, *I/O Drivers*, 7-6
double space, *I/O Drivers*, 7-6
format
internal vertical, *I/O Drivers*, 7-6
internal, *I/O Drivers*, 7-6
overprint, *I/O Drivers*, 7-6
page eject, *I/O Drivers*, 7-6
prompting output, *I/O Drivers*, 7-6
single space, *I/O Drivers*, 7-6
TTDRV, *I/O Drivers*, 2-77
character table, *I/O Drivers*, 2-77
double space, *I/O Drivers*, 2-77
internal vertical format, *I/O Drivers*, 2-77
overprint, *I/O Drivers*, 2-77
page eject, *I/O Drivers*, 2-77
prompting output, *I/O Drivers*, 2-77
single space, *I/O Drivers*, 2-77
Vfc parameter
QIO$ macro (VTDRV), *I/O Drivers*, 3-4
standard function (LPDRV), *I/O Drivers*, 7-4
TTDRV
IO.RPR function, *I/O Drivers*, 2-43
TTDRV
general, *I/O Drivers*, 2-13
IO.CCO function, *I/O Drivers*, 2-26
Vfc parameter
TTDRV (cont'd.)
IO.WAL function, *I/O Drivers*, 2-49
IO.WBT function, *I/O Drivers*, 2-52
VFC record format, *RMS-11 User's Guide*, 1-11, 2-16 ; *RMS-11 Intro*, 3-2
/VFILL keyword
SET command, *MCR*, 3-189
SET command (VMR), *System Management*, 5-70
VFY utility
command line, *Utilities*, 14-2, A-33
messages, *Utilities*, 14-9
error, *Utilities*, 14-11
format, *Utilities*, 14-9
operation mode, *Utilities*, 14-7
switches
/DE, *Utilities*, 14-3
/DV, *Utilities*, 14-3
/FR, *Utilities*, 14-4
/HD, *Utilities*, 14-4
/AL subswitch, *Utilities*, 14-4
/ID, *Utilities*, 14-5
/LI, *Utilities*, 14-5
/LO, *Utilities*, 14-5
/RC, *Utilities*, 14-6
/RE, *Utilities*, 14-6
/UP, *Utilities*, 14-7
validity check, *Utilities*, 14-7
/VI keyword
HOME command, *MCR*, 3-82
INITVOLUME command, *MCR*, 3-91
MOUNT command, *MCR*, 3-116, 3-123
Virtual address, *Task Builder*, 2-12
Virtual address space, *Task Builder*, 2-15
reducing use, *Task Builder*, 3-1
Virtual array
example, *Task Builder*, 12-42 to 12-43
specifying, *Task Builder*, 12-41
Virtual block, *RMS-11 Intro*, 2-3
file device, *I/O Operations*, 1-7
file extension, *I/O Operations*, 2-9
Virtual block number
See also VBN
READ$ macro, *I/O Operations*, 3-31
WRITE$ macro, *I/O Operations*, 3-34
Virtual I/O, *I/O Drivers*, 1-2
definition, *System Management*, 15-6
Virtual memory
allocating, *MACRO-11*, F-1
Virtual memory management, *System Library*, 8-1

Virtual memory management (cont'd.)
See also Memory management
address conversion ($CVRL), *System Library*, 8-34
allocate ($ALVRT), *System Library*, 8-23
allocate small virtual block ($ALSVB), *System Library*, 8-26
core blocks request ($RQVCB), *System Library*, 8-29
$CVRL routine, *System Library*, 8-34
error-handling, *System Library*, 8-2
find page ($FNDPG), *System Library*, 8-38
initialize ($INIVM), *System Library*, 8-5
lock page ($LCKPG), *System Library*, 8-42
memory storage
allocate block ($ALBLK), *System Library*, 8-10
extend task ($EXTSK), *System Library*, 8-18
get core ($GTCOR), *System Library*, 8-12, 8-15
page lock ($CVLOK), *System Library*, 8-31
read page ($RDPAG), *System Library*, 8-36
task-building requirements, *System Library*, 8-4
unlock page ($UNLPG), *System Library*, 8-44
write-marked page ($WRMPG), *System Library*, 8-40
write page ($WRPAG), *System Library*, 8-20
Virtual Monitor Console Routine
See VMR
VIRTUAL option, *System Management*, 15-6
default extent size for, *System Management*, 15-6
MOUNT /CACHE command, *MCR*, 3-112
SET /CACHE command, *MCR*, 3-160
Virtual terminal
creating, *Executive*, 5-56
deallocating, *Executive*, 5-78
default buffer
SYSGEN question, *System Generation*, 3-30
SYSGEN question, *System Generation*, 3-30
Virtual terminal driver
See VTDRV
Virtual-to-logical block
mapping optimizations, *RMS-11 User's Guide*, 8-11
VMLIB.OLB (Virtual memory management library), *Program Development*, 1-11
VMR
See also Command format
changing system parameters, *System Generation*, 4-9
command
abbreviations, *System Management*, 5-4
categories, *System Management*, 5-1
description format, *System Management*, 5-7
descriptions, *System Management*, 5-7 to 5-81
keywords
overview, *System Management*, 5-4
names, *System Management*, 5-4
parameters, *System Management*, 5-4
specifying, *System Management*, 5-4
syntax, *System Management*, 5-4
command file
See SYSVMR.CMD file
defaults
device, *System Management*, 5-5
directory, *System Management*, 5-6
file types, *System Management*, 5-6
version number, *System Management*, 5-6
definition, *System Management*, 5-1
description, *System Management*, 1-12
diagnostic messages, *System Generation*, 3-82
error messages, *System Management*, 5-82 to 5-105
extending command lines, *System Management*, 5-5
file specifications
components, *System Management*, 5-5
device name, *System Management*, 5-5
directory, *System Management*, 5-6
file names, *System Management*, 5-6
file type, *System Management*, 5-6
format, *System Management*, 5-5
/IM switch, *System Management*, 5-6
specifying, *System Management*, 5-5
version number, *System Management*, 5-6
range, *System Management*, 5-6
including comments, *System Management*, 5-5
introduction, *System Management*, 5-1
invoking, *System Management*, 5-3
prompt, *System Management*, 5-3
relationship to MCR, *System Management*, 5-1

VMR (cont'd.)
running, *System Management*, 5-2, 5-3 to 5-4
with indirect command file, *System Management*, 5-3
system image file
assigning SY and LB, *System Management*, 5-2
bootstrap, *System Management*, 5-1
relationship to symbol definition file, *System Management*, 5-2
VMR commands
ALTER, *System Management*, 5-8
ASSIGN, *System Management*, 5-9
CANCEL, *System Management*, 5-11
CONFIGURATION, *System Management*, 5-12
DEVICES, *System Management*, 5-16
FIX, *System Management*, 5-18
INSTALL, *System Management*, 5-20
LOAD, *System Management*, 5-29
LUNS, *System Management*, 5-32
PARTITION DEFINITIONS, *System Management*, 5-33
REASSIGN, *System Management*, 5-36
REDIRECT, *System Management*, 5-37
REMOVE, *System Management*, 5-38
RUN, *System Management*, 5-40
SAVE, *System Management*, 5-44
SET, *System Management*, 5-46
TASKLIST, *System Management*, 5-76
TIME, *System Management*, 5-78
UNFIX, *System Management*, 5-80
UNLOAD, *System Management*, 5-81
VMS_TIME data type
CFL, *Error Logging*, 5-8
VMS DCL, *DCL*, 1-24
Volatile registers, *Crash Dump Analyzer*, 3-1
dump, *Crash Dump Analyzer*, 3-2 to 3-3
/VOL keyword
MOUNT command, *MCR*, 3-123
Volume, *DCL*, 4-1, 5-1 to 5-10
accessing
dismounted, *MCR*, 3-108
allocating, *MCR*, 3-116, 3-122
backing up, *Utilities*, 3-1; *DCL*, 5-91
See also BRU utility
See also DSC utility
bit density, *MCR*, 3-87, 3-112
compressing, *Utilities*, 6-4
Volume (cont'd.)
DECtape
initializing, *MCR*, 3-83
definition of, *MCR*, 2-1
directory listing, *Utilities*, 8-7
dismounting, *MCR*, 3-60
displaying free space
PIP utility, *Utilities*, 12-17
VFY utility, *Utilities*, 14-4
displaying information, *MCR*, 3-116, 3-123
DOS–11 format
accessing, *MCR*, 2-1
examining data, *Utilities*, 5-1
file
deleting, *Utilities*, 8-7
recovering lost, *Utilities*, 14-5
transferring, *Utilities*, 8-5
Files–11, *MCR*, 3-30; *DCL*, 5-4
home block, *MCR*, 3-79
initializing, *MCR*, 3-83 to 3-93; *DCL*, 5-67
Files–11 structure, *MCR*, 2-1
foreign, *MCR*, 2-1
accessing, *MCR*, 2-2
displaying information, *MCR*, 3-116, 3-123
mounting, *MCR*, 2-1, 3-114, 3-121
translating to Files–11, *MCR*, 2-1
formatting
FLX utility, *Utilities*, 8-4
FMT utility, *Utilities*, 9-1
home block, *MCR*, 3-113
identifier, *MCR*, 3-109, 3-118, 3-124
index file
unlocking, *MCR*, 3-116
initializing, *MCR*, 2-1
BRU utility, *Utilities*, 3-18
FLX utility, *Utilities*, 8-2
IOX exercise
selecting, *System Management*, 12-5
label, *MCR*, 3-61, 3-84, 3-114, 3-121; *DCL*, 1-15
listing File ID, *Utilities*, 14-5
locating bad block
BAD utility, *Utilities*, 2-1
FMT utility, *Utilities*, 9-1
VFY utility, *Utilities*, 14-6
locking, *MCR*, 3-113, 3-120
magnetic tape
labelling, *MCR*, 3-120
protecting, *MCR*, 3-121
record, *MCR*, 3-122

Volume (cont'd.)
mounted, *DCL*, 5-10
mounting, *MCR*, 2-4, 3-109; *DCL*, 5-46 to 5-62
Files–11, *MCR*, 3-110
magnetic tape, *MCR*, 3-109
nonprivileged, *MCR*, 3-108
shared, *MCR*, 3-115, 3-122
mounting from batch job, *Batch and Queue*, 3-13
mounting with ACP, *MCR*, 3-113, 3-114, 3-119, 3-121
nonshared, *MCR*, 3-108
preparing for use with Files–11, *MCR*, 2-1
private, *DCL*, 5-10, 5-41 to 5-45, 5-50
mounting, *MCR*, 3-113
protecting, *MCR*, 3-87, 3-115, 3-122
public, *MCR*, 3-108, 3-115, 3-122; *DCL*, 5-10, 5-50
dismounting, *MCR*, 3-61
mounting, *MCR*, 3-116, 3-122
setting, *MCR*, 3-116, 3-122
record type, *MCR*, 3-120
recovering
lost block, *Utilities*, 14-6
lost file, *Utilities*, 14-5
space, *Utilities*, 6-4
restoring, *Utilities*, 3-1; *DCL*, 5-91
RT–11 format
accessing, *MCR*, 2-1
shareable, *DCL*, 5-10, 5-50
shared, *MCR*, 3-108
UIC
specifying, *MCR*, 3-116, 3-123
unloading, *MCR*, 3-114, 3-121
verifying, *Utilities*, 14-1
block, *Utilities*, 14-6
virtual, *MCR*, 3-114, 3-121
/VOLUME_LABEL qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-12
See also /VOLUME switch
Volume access
protection codes
specifying default, *MCR*, 3-82
types of
initializing volumes with, *MCR*, 3-91
specifying default for mounted volume, *MCR*, 3-115
VOLUMECHECK command
IOX, *System Management*, 12-60
VOLUMECHECK command
IOX (cont'd.)
initial default, *System Management*, 12-60
verifying file structure, *System Management*, 12-6
Volume Control Block
See VCB
Volume default extend size, *I/O Operations*, 2-9
Volume label
tape, *I/O Operations*, G-1
tape user, *I/O Operations*, G-3
Volume protection
access codes
specifying default, *MCR*, 3-82
Volume sets
rewinding, *I/O Operations*, 5-6
/VOLUME switch
RPT, *Error Logging*, 3-12
See also /VOLUME_LABEL qualifier
processing, *Error Logging*, 4-4
Volume valid processing, *Writing I/O Driver*, 4-65
VRCD$ directive, *Executive*, 5-296
summary, *I/O Operations*, F-5
VRCS$ directive, *Executive*, 5-298
summary, *I/O Operations*, F-5
VRCX$ directive, *Executive*, 5-300
summary, *I/O Operations*, F-6
V register, *Debugging*, 2-6, 5-4
VSDA$ directive, *Executive*, 5-302
summary, *I/O Operations*, F-6
VSECT option, *Task Builder*, 5-67, 12-44
VSRC$ directive, *Executive*, 5-304
summary, *I/O Operations*, F-7
VT05B terminal, *I/O Drivers*, 2-7
VT100-series terminal, *DCL*, 3-17
special keys, *DCL*, 3-18
VT100 terminal, *I/O Drivers*, 2-8; *Introduction*, 1-1, 1-3
VT101 terminal, *I/O Drivers*, 2-8
VT102 terminal, *I/O Drivers*, 2-8
VT105 terminal, *I/O Drivers*, 2-8
VT131 terminal, *I/O Drivers*, 2-8
VT200-series terminal, *DCL*, 3-1, 3-17
special keys, *DCL*, 3-18
VT220 terminal, *I/O Drivers*, 2-8; *Introduction*, 1-1, 1-4
VT240 terminal, *I/O Drivers*, 2-8
VT241 terminal, *I/O Drivers*, 2-8
VT50H terminal, *I/O Drivers*, 2-7

VT50 terminal, *I/O Drivers*, 2-7
VT52 terminal, *I/O Drivers*, 2-7; *DCL*, 3-17
VT55 terminal, *I/O Drivers*, 2-7
VT61 terminal, *I/O Drivers*, 2-7
VTDRV, *I/O Drivers*, 3-1
/VTLOGON keyword
  SET command, *MCR*, 3-189

W

WAIT$ macro
  file processing, *I/O Operations*, 3-2
    block I/O completion, *I/O Operations*, 3-36
  format file operations, *I/O Operations*, 3-36
  with READ$ and WRITE$, *I/O Operations*, 3-36
  with READ$ or WRITE$, *I/O Operations*, 3-30
WAIT command
  IOX, *System Management*, 12-61
    EXECUTE command
      effect on, *System Management*, 12-61
    initial default, *System Management*, 12-61
    system resources
      effect on, *System Management*, 12-61
.WAIT directive, *Indirect*, 2-101
Wait-for buffer
  K-series, *I/O Drivers*, 13-22
Wait for Logical OR of Event Flags directive, *Executive*, 5-309
Wait for Significant Event directive, *Executive*, 5-307
Wait for Single Event Flag directive, *Executive*, 5-311
/WAIT keyword
  MOUNT command, *MCR*, 3-117, 3-124
WAIT operation, *RMS-11 User's Guide*, 1-14, 1-15
/WAIT qualifier
  MOUNT command, *Batch and Queue*, 3-14
/WARNINGS qualifier, *Task Builder*, 11-70
/WB keyword
  INS command (VMR), *System Management*, 5-26
  INSTALL command, *MCR*, 3-96, 3-99
  SAVE command, *MCR*, 3-149
/WCHK keyword
  SET command, *MCR*, 3-189
  SET command (VMR), *System Management*, 5-70
W command, *Debugging*, 2-9, 6-2, 6-3
WDB, *Executive*, 3-10, 5-131; *Task Builder*, 2-22
  assigning values, *Executive*, 3-19
  format, *Executive*, 3-15
  generating, *Executive*, 3-16, 3-18
WDBBK$, *Executive*, 3-16
WDBDF$, *Executive*, 3-16
.WDFPP routine
  writing $$FSR2 default file protection word, *I/O Operations*, 4-6
.WDFR routine
  writing $$FSR2 default directory string, *I/O Operations*, 4-3
.WDFUI routine
  writing default UIC, *I/O Operations*, 4-4
/WD switch
  DMP utility, *Utilities*, 5-7
.WEAK directive, *MACRO-11*, 5-43
  summary, *MACRO-11*, 5-3
  supported only in RT-11, *MACRO-11*, 5-44
.WFOWN routine, write $$FSR2 file owner word, *I/O Operations*, 4-7
/WF switch
  RMSCNV utility, *RMS-11 Utilities*, 4-14
WHILE statement
  CFL, *Error Logging*, 5-34
/WIDE qualifier, *Task Builder*, 11-71
  ANALYZE/ERROR_LOG command, *Error Logging*, 3-27
    See also /WIDTH switch
    arguments, *Error Logging*, 3-27
WIDTH print field width option
  CFL, *Error Logging*, 5-5
/WIDTH switch
  RPT, *Error Logging*, 3-27
    See also /WIDE qualifier
    arguments, *Error Logging*, 3-27
    processing, *Error Logging*, 4-4
Wildcard, *Introduction*, 3-1 to 3-3
Wildcard character, *RMS-11 Intro*, 4-1; *MCR*, 2-6 ; *Utilities*, 3-7, 3-9, 12-7
  context (F11ACP)
    FNB, *I/O Operations*, H-11
  example of use in command line, *MCR*, 2-6

Wildcard character (cont'd.)
file name, *I/O Operations*, 4-18
file specification, *RMS-11 User's Guide*, A-2 to A-3 ; *DCL*, 4-6 to 4-8
BRU utility, *Utilities*, 3-7, 3-9
FLX utility, *Utilities*, 8-3
PIP utility, *Utilities*, 12-7
file type, *I/O Operations*, 4-18
loops, *RMS-11 User's Guide*, A-4
percent sign (%), *Utilities*, 12-7
Wildcard loop, *RMS-11 Macro*, 3-9
Window, *RMS-11 User's Guide*, 8-11
address
See also Address window
declaring number of, *Task Builder*, 12-45
block
composite arrangement, *Writing I/O Driver*, 2-15
descriptor, *Task Builder*, 3-22, B-24
I- and D-space task, *Task Builder*, 7-5
task
See Task window
turning, *RMS-11 User's Guide*, 8-11
optimizations, *RMS-11 User's Guide*, 8-12
Window block, *Task Builder*, 2-20
defining, *Task Builder*, 2-22
multiuser task, *Task Builder*, 9-2
overlay, *Task Builder*, 3-54
Window Definition Block
See WDB
Window file
mapping pointers, *System Management*, 1-9
Window pointer number, *I/O Operations*, 2-15, 2-16
/WINDOW qualifier, *System Management*, 1-9
MOUNT command, *System Management*, 1-9
Windows, *RMS-11 User's Guide*, 8-11
turning, *RMS-11 User's Guide*, 8-11
areas, *RMS-11 User's Guide*, 8-13
contiguity, *RMS-11 User's Guide*, 8-12
F11ACP size, *RMS-11 User's Guide*, 8-13
size, *RMS-11 User's Guide*, 8-12
Window size parameter
F11ACP, *I/O Operations*, H-10
/WINDOWS qualifier
BRU utility, *Utilities*, 3-25
/WIN keyword
HOME command, *MCR*, 3-82
/WIN keyword (cont'd.)
INITVOLUME command, *MCR*, 3-92
MOU command, *System Management*, 1-9
MOUNT command, *MCR*, 3-117
/WI switch, *Task Builder*, 10-54
/WLT switch
FMT utility, *Utilities*, 9-5
WNDWS option, *Task Builder*, 12-45
.WORD directive, *MACRO-11*, 5-18
compared with .FLT2, .FLT4, *MACRO-11*, 5-30
implicit, *MACRO-11*, 1-1, 1-4
implicit if blank operator field, *MACRO-11*, 5-18
operation described, *MACRO-11*, 2-11
summary, *MACRO-11*, 5-3
WORD function
EDT editor, *Introduction*, 2-7
Word location
displaying, *Debugging*, 4-2, 4-4
opening, *Debugging*, 4-2, 4-4
underscore command (_), *Debugging*, 4-5
Word mode
changing to byte mode, *Debugging*, 4-3
operator
ASCII, *Debugging*, 2-6; *XDT*, 2-12
octal, *Debugging*, 2-6, 4-2; *XDT*, 2-12
Radix-50, *Debugging*, 2-6; *XDT*, 2-12
WORD numeric data type
CFL, *Error Logging*, 5-5
Words transferred count, *System Management*, 10-7
WORD value
equivalent string, *Error Logging*, 5-4
Work file, *Task Builder*, F-2 to F-5
Wraparound
automatic
remote line (TTDRV), *I/O Drivers*, 2-84
/WRAP keyword
SET command, *MCR*, 3-190
SET command (VMR), *System Management*, 5-70
W register, *Debugging*, 2-5, 5-3
Write $$FSR2 macro
default directory string, *I/O Operations*, 4-3
WRITE$ macro, *I/O Operations*, 1-8, 3-2
block access, *I/O Operations*, 2-11
example, *I/O Operations*, 3-35
extending file, *I/O Operations*, 3-35

WRITE$ macro (cont'd.)
FD.RWM parameter
block I/O, *I/O Operations*, 2-10
FDB, *I/O Operations*, 3-36
file processing, *I/O Operations*, 3-33
writing virtual block, *I/O Operations*, 3-33
format, *I/O Operations*, 3-33
virtual block number, *I/O Operations*, 3-34
WRITE_GROUP statement, *Error Logging*, 4-33
CFL, *Error Logging*, 5-26, 5-31, 5-41
Writeable-block context, *RMS-11 Macro*, 4-12
Write access, *MCR*, 2-3
common region, *MCR*, 3-98; *System Management*, 5-24
F11ACP, *I/O Operations*, H-12
file
initializing volumes with, *MCR*, 3-88
specifying default, *MCR*, 3-80
specifying default for mounted volume, *MCR*, 3-113
specifying personal default, *MCR*, 3-164
file open, *I/O Operations*, 2-14
shared, *I/O Operations*, 1-13
UFD
establishing, *MCR*, 3-209
volume
initializing volumes with, *MCR*, 3-91
specifying default, *MCR*, 3-82
specifying default for mounted volume, *MCR*, 3-115
Write-back cache
RCT handling of corruption, *System Management*, 13-5
Write-back cache data
preventing loss, *System Management*, 13-6
Write-behind file processing, *I/O Operations*, 2-19
Write-behind operation
FD.WBH parameter, *I/O Operations*, 3-11
Write-check
enabling in IOX, *System Management*, 12-62
WRITECHECK command
IOX, *System Management*, 12-62
SELECT command line, *System Management*, 12-62
using with RETRIES command, *System Management*, 12-62
Write-checking
enabling for Shadow Recording, *System Management*, 16-10
WRITE command
EDT editor, *Introduction*, 2-19
Write command
EDI editor, *Utilities*, 7-43
Write default UIC function, *I/O Operations*, 4-4
Write file protection word function
default, *I/O Operations*, 4-6
Write function
all character
TTDRV, *I/O Drivers*, 2-18, 2-26, 2-31, 2-52
breakthrough write
TF.WBT (TTDRV), *I/O Drivers*, 2-27, 2-31
TTDRV, *I/O Drivers*, 2-18, 2-20, 2-27, 2-50, 2-51
nonprivileged, *I/O Drivers*, 2-18
privileged, *I/O Drivers*, 2-18
DDDRV, *I/O Drivers*, 5-4
error (tape driver), *I/O Drivers*, 6-14
file owner word, *I/O Operations*, 4-7
logical block, *I/O Drivers*, 1-32, 1-33
TTDRV, *I/O Drivers*, 2-18, 2-48
NRZI (tape driver), *I/O Drivers*, 6-15
pass all (TTDRV), *I/O Drivers*, 2-31, 2-48
redisplay input (TTDRV), *I/O Drivers*, 2-18, 2-32
Write image
clock control register (LADRV), *I/O Drivers*, 12-25
/WRITE keyword
MOUNT command, *MCR*, 3-117, 3-124
Write logical record function
file processing, *I/O Operations*, 3-24
random mode, *I/O Operations*, 3-28
sequential mode, *I/O Operations*, 3-29
$WRITE macro
sequential access, *RMS-11 Macro*, 5-129
VBN access, *RMS-11 Macro*, 5-129
WRITE operation, *RMS-11 Macro*, 4-14; *RMS-11 Intro*, 4-7
access modes, *RMS-11 Intro*, 4-7
and shared access, *RMS-11 User's Guide*, 2-6
$WRITE macro
sequential access, *RMS-11 Macro*, 5-129

WRITE operation (cont'd.)
$WRITE macro
VBN access, *RMS-11 Macro*, 5-129
WRITE statement, *Error Logging*, 4-33
CFL, *Error Logging*, 5-30, 5-41
Write virtual block file processing, *I/O Operations*, 3-33
$WRMPG (Write-marked page), *System Library*, 8-40
$WRPAG (Write page), *System Library*, 8-20
WSIG$S directive, *Executive*, 5-307
WTLO$ directive, *Executive*, 5-309
WTSE$ directive, *Executive*, 5-311; *I/O Drivers*, 1-4, 1-10
WTSE$ macro, *I/O Drivers*, 1-15, 1-16, 1-24
example, *I/O Drivers*, 1-24

X

X$-family macro, *RMS-11 Macro*, 2-10
chaining to FAB, *RMS-11 Macro*, 2-11
declaring
ALL block, *RMS-11 Macro*, C-3
DAT block, *RMS-11 Macro*, C-3
KEY block, *RMS-11 Macro*, C-3
PRO block, *RMS-11 Macro*, C-3
SUM block, *RMS-11 Macro*, C-3
XAB
See ALL block
See DAT block
See KEY block
See PRO block
See SUM block
XAB$B macro, *RMS-11 Macro*, 2-8 to 2-9, C-3
XAB$BT macro, *RMS-11 Macro*, C-4
declaring, *RMS-11 Macro*, C-3
XAB$E macro, *RMS-11 Macro*, 2-10
XABOF$ macro, *RMS-11 Macro*, C-4
XB$-family symbol
declaring
ALL block, *RMS-11 Macro*, C-3 to C-4
DAT block, *RMS-11 Macro*, C-3 to C-4
KEY block, *RMS-11 Macro*, C-3 to C-4
PRO block, *RMS-11 Macro*, C-3 to C-4
SUM block, *RMS-11 Macro*, C-3 to C-4
XAB, *RMS-11 Macro*, C-4
XBAOF$ macro, *RMS-11 Macro*, C-4
XBDOF$ macro, *RMS-11 Macro*, C-4
XBKOF$ macro, *RMS-11 Macro*, C-4
XBPOF$ macro, *RMS-11 Macro*, C-4
XBSOF$ macro, *RMS-11 Macro*, C-4
X command, *Debugging*, 1-5, 2-10; *XDT*, 2-1, 2-14
ODT, *Program Development*, 5-8
ZAP utility, *Utilities*, 15-16
XDT, *Crash Dump Analyzer*, 1-4, 1-5, 1-6; *MCR*, 3-31; *System Management*, 1-16; *Writing I/O Driver*, 6-2, 6-3, 6-5
commands, *Writing I/O Driver*, 6-2
debugging
driver, *Writing I/O Driver*, 6-2, 6-4, 6-5
general operation, *Writing I/O Driver*, 6-4
invoking, *MCR*, 3-32
loading, *System Management*, 1-17
restrictions, *Writing I/O Driver*, 6-3, 6-4
startup, *Writing I/O Driver*, 6-3
SYSGEN question, *System Generation*, 3-31
XEDRV
address pairs
Ethernet, *I/O Drivers*, 10-2
asynchronous I/O, *I/O Drivers*, 10-24
auxiliary buffer
transmitting, *I/O Drivers*, 10-12
buffer
diagnostic, *I/O Drivers*, 10-22
protocol/address pair, *I/O Drivers*, 10-9
reading
destination address, *I/O Drivers*, 10-18
Ethernet address, *I/O Drivers*, 10-16
protocol type, *I/O Drivers*, 10-17
set characteristics, *I/O Drivers*, 10-8
setting
destination address, *I/O Drivers*, 10-12
multicast address, *I/O Drivers*, 10-10
protocol type, *I/O Drivers*, 10-14
change mode, *I/O Drivers*, 10-24
closing line, *I/O Drivers*, 10-19
connecting to task, *I/O Drivers*, 10-25
default mode bit, *I/O Drivers*, 10-25
definition, *I/O Drivers*, 10-1
macro
DLXDF$, *I/O Drivers*, 10-3
EPMDF$, *I/O Drivers*, 10-3
diagnostic
buffer, *I/O Drivers*, 10-22
no data transfer, *I/O Drivers*, 10-24
DLX incompatibility, *I/O Drivers*, 10-24

XEDRV (cont'd.)
driver installation, *I/O Drivers*, 10-4
error return
IO.XIN function, *I/O Drivers*, 10-20
IO.XRC function, *I/O Drivers*, 10-18
IO.XTM function, *I/O Drivers*, 10-15
Ethernet
address pairs, *I/O Drivers*, 10-2
device consideration, *I/O Drivers*, 10-2
LF$DEF protocol, *I/O Drivers*, 10-3
LF$EXC protocol, *I/O Drivers*, 10-3
message, *I/O Drivers*, 10-2
padding, *I/O Drivers*, 10-3
protocol, *I/O Drivers*, 10-2
receiving, *I/O Drivers*, 10-3
set characteristics, *I/O Drivers*, 10-7
transmitting, *I/O Drivers*, 10-3
function code, *I/O Drivers*, 10-4
glossary, *I/O Drivers*, 10-26 to 10-27
IO.XCL function, *I/O Drivers*, 10-4
IO.XIN function, *I/O Drivers*, 10-4
IO.XOP function, *I/O Drivers*, 10-4, 10-5
IO.XRC function, *I/O Drivers*, 10-4, 10-15
IO.XSC function, *I/O Drivers*, 10-4
IO.XTL function, *I/O Drivers*, 10-21
microcode, *I/O Drivers*, 10-4
IO.XTM function, *I/O Drivers*, 10-4
line message
transmitting, *I/O Drivers*, 10-11
load, *I/O Drivers*, 10-4
macro library
DEUNA.MLB, *I/O Drivers*, 10-3
microcode loader
UML..., *I/O Drivers*, 10-4
multicast address mode, *I/O Drivers*, 10-2
opening line, *I/O Drivers*, 10-5
pad enable bit
transmitting, *I/O Drivers*, 10-24
physical adddress mode, *I/O Drivers*, 10-2
programming
hint, *I/O Drivers*, 10-23
sequence, *I/O Drivers*, 10-4
protocol
Ethernet, *I/O Drivers*, 10-2
QIO$ macro, *I/O Drivers*, 10-3
general, *I/O Drivers*, 10-3
QIO$ macro libary
EXEMC.MLB, *I/O Drivers*, 10-3
reading
destination address
buffer, *I/O Drivers*, 10-18
Ethernet address
XEDRV
reading
Ethernet address (cont'd.)
buffer, *I/O Drivers*, 10-16
protocol type
buffer, *I/O Drivers*, 10-17
receiving message, *I/O Drivers*, 10-15
set characteristics
Ethernet, *I/O Drivers*, 10-7
setting
characteristics
buffer, *I/O Drivers*, 10-8
destination address
buffer, *I/O Drivers*, 10-12
multicast address
buffer, *I/O Drivers*, 10-10
protocol type
buffer, *I/O Drivers*, 10-14
size
maximum, *I/O Drivers*, 10-24
minimum, *I/O Drivers*, 10-24
status return, *I/O Drivers*, 10-5
IO.XIN function, *I/O Drivers*, 10-20
IO.XRC function, *I/O Drivers*, 10-18
IO.XTM function, *I/O Drivers*, 10-15
task requirement, *I/O Drivers*, 10-2
transmitting message, *I/O Drivers*, 10-11
U$$NCT parameter, *I/O Drivers*, 10-2
U$$NPC parameter, *I/O Drivers*, 10-2
U$$NRS parameter, *I/O Drivers*, 10-2
U$$NTS parameter, *I/O Drivers*, 10-2
use, *I/O Drivers*, 10-1
/XHR keyword
INS command (VMR), *System Management*, 5-26
INSTALL command, *MCR*, 3-100
/XH switch, *Task Builder*, 10-55
XOFF bit
TTDRV, *I/O Drivers*, 2-71
XOFF send
TTDRV, *I/O Drivers*, 2-19, 2-32, 2-39, 2-44
XON/XOFF protocol, *Utilities*, C-2
XON bit
TTDRV, *I/O Drivers*, 2-71
^X operator
for temporary hexadecimal radix, *MACRO-11*, 5-26
restriction, *MACRO-11*, 5-27
.XQIO routine
executing QIO, *I/O Operations*, 4-23
.XQT directive, *Indirect*, 2-102

XRATE: subroutine
computing clock rate and preset
K-series, *I/O Drivers*, 13-27
LADRV, *I/O Drivers*, 12-22
X register, *Debugging*, 2-6, 5-3, 5-6
/XT switch, *Task Builder*, 10-56
x variable, *Debugging*, 2-1; *XDT*, 2-10
xxCTB label, *Writing I/O Driver*, 4-3
$xxDCB
global label, *Writing I/O Driver*, 4-3
xxDRV.MAC file, *Writing I/O Driver*, 5-2
xxDRVASM.CMD file, *Writing I/O Driver*, 5-4
$xxLOA label, *Writing I/O Driver*, 4-9, 4-57
xxTAB.MAC file, *Writing I/O Driver*, 1-23, 5-2
$xxTBE label, *Writing I/O Driver*, 4-55
$xxTBL label, *Writing I/O Driver*, 4-18
$xxUNL label, *Writing I/O Driver*, 4-9, 4-57

Y

/YESTERDAY qualifier
ANALYZE/ERROR_LOG command, *Error Logging*, 3-9
See also /DATE switch
/@Y switch
FMT utility, *Utilities*, 9-4

Z

ZAP utility
address boundary
displaying, *Utilities*, 15-4
addressing locations, *Utilities*, 15-7
addressing mode, *Utilities*, 15-6
arithmetic operators
asterisk (*), *Utilities*, 15-9
minus sign (-), *Utilities*, 15-9
plus sign (+), *Utilities*, 15-9
command
carriage return, *Utilities*, 15-7
general-purpose, *Utilities*, 15-7, 15-16
open/close location, *Utilities*, 15-7, 15-12
command line, *Utilities*, 15-7, A-34
debugging privileged task, *XDT*, 1-11
displaying overlay segment boundaries, *Utilities*, 15-2
element separators
colon (:), *Utilities*, 15-10
comma (,), *Utilities*, 15-10
semicolon (;), *Utilities*, 15-10
ZAP utility (cont'd.)
error messages, *Utilities*, 15-26
example, *Utilities*, 15-20
indirect command file, *Utilities*, 15-4
initiating (invoking), *Utilities*, 15-2
inserting breakpoint, *XDT*, 1-11
location
addressing, *Utilities*, 15-5
closing, *Utilities*, 15-13
contents
changing, *Utilities*, 15-13
displaying, *Utilities*, 15-13
verifying, *Utilities*, 15-19
opening, *Utilities*, 15-13
specifying, *Utilities*, 15-10
modifying system image, *XDT*, 1-11
ODT online debugger, *Utilities*, 15-1
open and close commands
apostrophe ('), *Utilities*, 15-12
at sign (@), *Utilities*, 15-12
backslash (\), *Utilities*, 15-12
circumflex (^), *Utilities*, 15-12
left angle bracket (<), *Utilities*, 15-12
percent sign (%), *Utilities*, 15-12
quotation mark ("), *Utilities*, 15-12
RETURN key, *Utilities*, 15-12
right angle bracket (>), *Utilities*, 15-12
slash (/), *Utilities*, 15-12
underscore (_), *Utilities*, 15-12
operating mode, *Utilities*, 15-5
register
constant, *Utilities*, 15-8
format, *Utilities*, 15-8
quantity, *Utilities*, 15-8
relocation, *Utilities*, 15-8
setting value, *Utilities*, 15-19
relocation biases, *Utilities*, 15-5
switches
/AB, *Utilities*, 15-2, 15-5
/LI, *Utilities*, 15-2
/RO, *Utilities*, 15-2, 15-5
task image file, *Utilities*, 15-3
instruction and data space, *Utilities*, 15-4
multiuser, *Utilities*, 15-3
resident library, *Utilities*, 15-4
terminating, *Utilities*, 15-2
Z command, *Debugging*, 2-10
Zero CPU intervals
transaction file, *System Management*, 10-16

/ZERO qualifier
  START/ERROR_LOG command, *Error Logging*, 2-7
Zero ticks
  transaction file (Resource Accounting), *System Management*, 10-16
Z error
  flags inconsistent instructions, *MACRO-11*, 4-1
  table of applicable instructions, *MACRO-11*, 4-2
/ZE switch
  FLX utility, *Utilities*, 8-9
ZZ pseudo device
  logical assignments, *System Management*, 19-3

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