

**RSTS/E**  
**Documentation Directory**

Order No. DEC-11-ORDAA-B-D

The information in this document is subject to change without notice and should not be construed as a commitment by Digital Equipment Corporation. Digital Equipment Corporation assumes no responsibility for any errors that may appear in this document.

The software described in this document is furnished under a license and may be used or copied only in accordance with the terms of such license.

Digital Equipment Corporation assumes no responsibility for the use or reliability of its software on equipment that is not supplied by DIGITAL.

Copyright © 1977 by Digital Equipment Corporation

The postage prepaid READER'S COMMENTS form on the last page of this document requests the user's critical evaluation to assist us in preparing future documentation.

The following are trademarks of Digital Equipment Corporation:

DIGITAL  
DEC  
PDP  
DECUS  
UNIBUS  
COMPUTER LABS  
COMTEX  
DDT  
DECCOMM

DECsystem-10  
DECtape  
DIBOL  
EDUSYSTEM  
FLIP CHIP  
FOCAL  
INDAC  
LAB-8  
DECsystem-20

MASSBUS  
OMNIBUS  
OS/8  
PHA  
RSTS  
RSX  
TYPESET-8  
TYPESET-10  
TYPESET-11

RSTS/E software consists of distribution media and documentation. The documentation describes the components and operation of the RSTS/E software. This directory describes the RSTS/E documentation.

## **1.0 ORGANIZATION OF THE DOCUMENT SET**

The RSTS/E document set is logically divided into 5 categories, as follows:

- system management and maintenance
- system procedures
- system reference
- languages
- optional software

Table 1 lists the manuals by category and indicates the intended audience of each manual.

## **2.0 DOCUMENT DESCRIPTION**

The following paragraphs summarize the information contained in each manual in the document set. The first three documents are listed in the recommended reading order for the system manager. The remaining documents can be read in any order that is suitable to one's interests.

- RSTS/E System Generation Manual
- RSTS/E Release Notes
- RSTS/E System Manager's Guide
- RSTS/E System User's Guide
- RSTS/E RUNOFF User's Guide
- RSTS/E Text Editor Manual
- PDP-11 ROLLIN Utility Program
- RSTS/E Pocket Guide
- RSTS/E Programming Manual
- BASIC-PLUS Language Manual
- PDP-11 COBOL Language Reference Manual
- PDP-11 COBOL User's Guide
- PDP-11 COBOL Reference Card
- PDP-11 FORTRAN Language Reference Manual
- RT-11/RSTS/E FORTRAN IV User's Guide
- RSTS/E FORTRAN IV Utilities Manual
- CTS-500/E RPG II Reference Manual
- CTS-500/E RPG II User's Guide
- PDP-11 SORT User's Guide
- DMS 500 User's Guide
- CTS-500/E System Generation Using Diskette

### **2.1 RSTS/E System Generation Manual (DEC-11-ORGNA-B-D)**

This manual describes the complete procedures to generate the V06B-02 RSTS/E system image, build the BASIC-PLUS run-time system, initialize system structures, and build the system library. Because RSTS/E supports a variety of hardware and offers many optional software features, the manual also contains reference information useful for planning and maintaining the system. Especially important are the system initialization options. They are used both to optimize system structures and to maintain and restructure the system.

Table 1 RSTS/E Documentation Set

Category	Document Title	Audience		
		System Manager	System Programmer	General User
System Management and Maintenance	System Generation Manual	X	X	
	RSTS/E Release Notes	X	X	
	RSTS/E System Manager's Guide	X	X	
System Procedures	RSTS/E System Manager's Guide	X	X	
	RSTS/E System User's Guide	X	X	X
	RSTS/E RUNOFF User's Guide			X
	RSTS/E Text Editor Manual		X	X
	PDP-11 ROLLIN Utility Program	X	X	
System Reference	RSTS/E Document Directory	X	X	X
	RSTS/E Pocket Guide	X	X	X
	RSTS/E Programming Manual		X	
	RSTS/E System Generation Manual	X	X	
Languages	BASIC-PLUS Language Manual		X	X
	PDP-11 COBOL Language Reference Manual		X	X
	PDP-11 COBOL User's Guide		X	X
	PDP-11 COBOL Language Reference Card		X	X
	PDP-11 FORTRAN Language Reference Manual		X	X
	RT-11/RSTS/E FORTRAN IV User's Guide		X	X
	RSTS/E FORTRAN IV Utilities Manual		X	X
	CTS-500/E RPG II Reference Manual		X	X
	CTS-500/E RPG II User's Guide		X	X
Optional Software	PDP-11 SORT User's Guide			X
	DMS 500 User's Guide		X	
	CTS-500/E System Generation Using Diskette	X		

## **2.2 RSTS/E Release Notes (DEC-11-ORINB-G-D)**

This document contains system code and library code patches and hardware and software installation guidelines related to the version of RSTS/E. The information is required for generating RSTS/E.

## **2.3 RSTS/E System Manager's Guide (DEC-11-ORSMD-B-D)**

This guide is directed to the individual who administrates and controls the local installation. It contains information on use of hardware and software resources. The material is more detailed than that presented in the *RSTS/E System User's Guide* and is directed more at the privileged user than at the nonprivileged user. Also included are the operational procedures necessary to daily functioning of the system. Included are guidelines for controlling system start up, shut down, and job execution; procedures for creating accounts and producing account statistics; procedures for operator services and spooling, for system error detection and correction; for system utility operations such as disk management, run-time system control, system statistics, terminal characteristics, adding CCL commands, adding system files, defining system logical names, and optimizing disk directories; and for system back up and restoration.

## **2.4 RSTS/E System User's Guide (DEC-11-ORSUB-A-D)**

This guide is directed to the time sharing user. Information on system commands, reference material, and system programs is provided. Most functions described are nonprivileged and the material is general in nature. Also included are device operating procedures.

## **2.5 RSTS/E RUNOFF User's Guide (DEC-11-URUNA-B-D)**

This guide presents operating and preparation information for the RSTS/E text formatting system program RUNOFF. The manual describes RUNOFF commands and their effect in the output text and shows how to produce a formatted output file.

## **2.6 RSTS/E Text Editor Manual (DEC-11-UTEMA-A-D)**

This manual describes ASCII file creation, editing, and manipulating procedures for the EDIT program. The commands and operating procedures are defined in this manual and summarized in the *RSTS/E System User's Guide* for EDIT.

## **2.7 PDP-11 ROLLIN Utility Program (DEC-11-OROAA-B-D)**

This manual describes the commands and operating procedures for making image mode copies of disks or for transferring images to and from tape using the stand alone program ROLLIN.

## **2.8 RSTS/E Pocket Guide (DEC-11-ORFCA-A-D)**

This pocket-size booklet contains summaries of the most useful RSTS/E features. The guide gives a brief summary of system standards and resource commands to include file specification information, extend and no extend formats, and utility commands. A section on the concise command language lists the commands and options to gain directory listings, edit and create files, manipulate files, specify queued requests, and back up and restore files. The BASIC-PLUS commands, functions, and statements are listed. There is also a summary of device dependent MODE and RECORD values.

## **2.9 RSTS/E Programming Manual (DEC-11-ORPMA-B-D)**

This manual presents device dependent features and more complex system function descriptions for the advanced programmer who uses RSTS/E. The manual describes both file structured and nonfile structured operations for disk, magnetic tape, paper tape, terminals, and line printers. The manual defines system function calls to monitor and explains programming conventions.

## **2.10 BASIC-PLUS Language Manual (DEC-11-ORBPB-B-D)**

This manual introduces the beginning user to the more elementary parts of the BASIC-PLUS language and explains for the experienced user the more advanced features of BASIC-PLUS as implemented in Version V6B of RSTS/E. Procedures are explained to help a user debug a program and to write more advanced code. The more commonly used system functions are described along with the three forms of input/output available: formatted ASCII, virtual core, and Record I/O. The manual is a complement of the *RSTS/E Programming Manual*.

**2.11 PDP-11 COBOL Language Reference Manual<sup>1</sup> (DEC-11-LCOBA-C-D)**

This manual describes the COBOL Language elements as implemented on the PDP-11. It is based on the document American National Standard COBOL, X3.23 – 1974, both for organization and content. Descriptions of PDP-11 extensions to the standard language are shaded.

**2.12 PDP-11 COBOL User's Guide<sup>1</sup> (DEC-11-LCUGA-B-D)**

This guide is a companion document to the *PDP-11 COBOL Language Reference Manual*. The guide describes COBOL file structures, data formats, I/O devices available, some hints on good programming practices, some modern techniques for debugging source programs, and the utility programs COBRG and REFORMAT. It contains additional information on the compiler and the run-time system and a complete list of COBOL error messages.

**2.13 PDP-11 COBOL Reference Card<sup>1</sup> (DEC-11-LCRCA-B-D)**

The card is a handy booklet containing the COBOL statement formats, a list of the compiler-reserved words, conditions, constants, picture symbols, picture symbol functions, an ASCII code chart, special registers, and computational fields.

**2.14 PDP-11 FORTRAN Language Reference Manual<sup>1</sup> (DEC-11-LFLRA-B-D)**

This document is a reference manual describing the basic elements of the FORTRAN language, the FORTRAN statements. Although it may well be used by an inexperienced FORTRAN programmer, it is not designed to function as a tutorial manual. The manual describes both FORTRAN IV and FORTRAN IV-PLUS for several of the operating systems which run on the PDP-11 Family of computers but makes no reference to system-dependent information. Information on the specific operating system is in the *RT-11/RSTS/E FORTRAN IV User's Guide*.

**2.15 RT-11/RSTS/E FORTRAN IV User's Guide<sup>1</sup> (DEC-11-LRRUA-A-D)**

This document provides the information necessary to compile, link, and debug a FORTRAN program under the RSTS/E operating system. The guide gives operating procedures, information about the Object Time System (OTS), programming suggestions, and system-dependent and reference information. The user of this guide should be familiar with FORTRAN and the RSTS/E operating system.

**2.16 RSTS/E FORTRAN IV Utilities Manual<sup>1</sup> (DEC-11-LRUMA-A-D)**

This manual describes MACRO, LINK, ODT, LIBR, PATCH and PATCHO. The descriptions of these utility programs allow a user to expand FORTRAN capabilities, to understand the creation of an executable image, to debug assembled and linked object programs, to utilize a library of object files, and to correct or update memory image and object modules. The manual also contains summaries of error messages and switches.

**2.17 CTS-500/E RPG II Reference Manual<sup>1</sup> (DEC-11-LRPGA-C-D)**

This manual describes the elements of the Report Program Generator II (RPG II) language. Elements described are the specification form, comment entries, the control specification, the file description specification, the extension specification, the line counter, input specification, calculation specification, and output format. There are also descriptions of other input forms, use of tables and arrays, and file processing in RPG II.

**2.18 CTS-500/E RPG II User's Guide<sup>1</sup> (DEC-11-OPRGA-A-D)**

This guide describes the utility programs available to support the Report Program Generator II (RPG II) language. Such program descriptions tell the user how to create and edit source programs, create data files, change a defined device, and convert System/3 source programs and data files. Also included is information on how to use RPG II and how to write RPG II programs.

**2.19 PDP-11 SORT Reference Manual<sup>1</sup> (DEC-11-USTMA-B-D)**

This manual describes the features and operation of the PDP-11 SORT program distributed with the COBOL Compiler and Object Time System.

---

<sup>1</sup> Available under separate license.

**2.20 DMS 500 User's Guide<sup>1</sup> (DEC-11-ORDUA-A-D)**

This document describes the set of software facilities called Data Management Services-500. The guide defines the characteristics of the indexed access method (IAM), the indexed sequential/relative access method (ISAM/RAM), and the extended disk sort modules. The guide also tells how to append the modules to BASIC-PLUS programs to organize and process logical data records.

**2.21 CTS-500/E System Generation Using Diskettes<sup>1</sup> (DEC-11-OCTGA-A-D)**

This document describes how to load CTS-500/E software distributed on diskettes onto a large disk. The document is used with the *RSTS/E System Generation Manual* to generate a CTS-500/E operating system.

---

<sup>1</sup> Available under separate license.





READER'S COMMENTS

NOTE: This form is for document comments only. DIGITAL will use comments submitted on this form at the company's discretion. Problems with software should be reported on a Software Performance Report (SPR) form. If you require a written reply and are eligible to receive one under SPR service, submit your comments on an SPR form.

Did you find errors in this manual? If so, specify by page.

---

---

---

---

---

---

Did you find this manual understandable, usable, and well-organized? Please make suggestions for improvement.

---

---

---

---

---

---

Is there sufficient documentation on associated system programs required for use of the software described in this manual? If not, what material is missing and where should it be placed?

---

---

---

---

---

---

Please indicate the type of user/reader that you most nearly represent.

- Assembly language programmer
- Higher-level language programmer
- Occasional programmer (experienced)
- User with little programming experience
- Student programmer
- Non-programmer interested in computer concepts and capabilities

Name \_\_\_\_\_ Date \_\_\_\_\_

Organization \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
or  
Country

Please cut along this line.

-----  
**Fold Here**  
-----

-----  
**Do Not Tear - Fold Here and Staple**  
-----

FIRST CLASS  
PERMIT NO. 33  
MAYNARD, MASS.

BUSINESS REPLY MAIL  
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

Postage will be paid by:

**digital**

Software Documentation  
146 Main Street ML 5-5/E39  
Maynard, Massachusetts 01754

