# RSTS/E Documentation Directory

Order No. AA-2642F-TC

#### March 1983

This document contains general descriptions of RSTS/E software documentation. It describes the documents specific to RSTS/E as well as some of the optional software and documentation associated with the operating system. This document also contains ordering information for RSTS/E documentation.

OPERATING SYSTEM AND VERSION:	RSTS/E	V8.0
SOFTWARE VERSION:	RSTS/E	V8.0

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Commercial Engineering Publications typeset this manual using DIGITAL's TMS-11 Text Management System.

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# Preface

This directory describes the software documentation for the RSTS/E operating system. It introduces the RSTS/E manuals and helps you determine which ones you need to use the system.

This directory has four chapters:

- Chapter 1 Describes how the RSTS/E documentation set is organized.
- Chapter 2 Summarizes each manual in the RSTS/E set. If you are looking for information on a particular system topic, this summary can help you locate the manual containing that information.
- Chapter 3 Lists the documentation for products associated with RSTS/E. If you are looking for information on products offered under separate license with RSTS/E, this list provides order numbers for manuals describing those products.
- Chapter 4 Tells how to order DIGITAL manuals.

# Chapter 1 Overview of the Documentation Set

The RSTS/E documentation set is packaged in binders that are organized in eight volumes:

Volume 1	General Information
Volume 2	Installation and Management
Volume 3	System Usage
Volume 4	Editing and Text Formatting
Volume 5	Programming Utilities
Volume 6	MACRO and System Programming
Volume 7	BASIC-PLUS and System Programming
Volume 8	RMS (Record Management System)

Volume 1, General Information, is one binder that describes the system and provides information for managing and maintaining it. Volume 1 contains:

Software Product Description RSTS/E Documentation Directory RSTS/E Documentation Notes RSTS/E V8.0 Maintenance Notebook

Volume 2, Installation and Management, is two binders that describe how to install the system and control its use. Volume 2 contains:

RSTS/E V8.0 Release Notes RSTS/E System Generation Manual RSTS/E System Manager's Guide

Volume 3, System Usage, is one binder that explains RSTS/E concepts and describes system commands and utility programs. Volume 3 is for all levels of user and contains:

RSTS/E System User's Guide RSTS/E DCL User's Guide Volume 4, Editing and Text Formatting, is one binder that describes how to use RSTS/E text editing and formatting software. Volume 4 contains:

Introduction to the EDT Editor EDT Editor Manual RSTS/E RUNOFF User's Guide

Volume 5, Programming Utilities, is one binder designed for programmers who code in MACRO or high-level languages other than BASIC-PLUS. This volume describes the RT11 and RSX-based utilities used to develop programs, the SORT utility used to sort RMS-11 files, and TECO — an unsupported editor popular with programmers. Volume 5 contains:

RSTS/E Task Builder Reference Manual RSTS/E Programmer's Utilities Manual RSTS/E RT11 Utilities Manual PDP–11 SORT Reference Manual PDP–11 TECO User's Guide

Volume 6, MACRO and System Programming, is one binder that describes the MACRO-11 language, ODT (the Octal Debugging Tool), and system directives accessible through MACRO. Volume 6 is intended for use with the Programming Utilities binder and contains:

PDP–11 MACRO–11 Language Reference Manual IAS/RSX–11 ODT Reference Manual RSTS/E System Directives Manual

Volume 7, BASIC–PLUS and System Programming, is one binder designed for BASIC–PLUS and BASIC–PLUS–2 programmers and for those performing system operations through BASIC–PLUS. Volume 7 contains:

BASIC–PLUS Language Manual RSTS/E Programming Manual

Volume 8, RMS, is two binders designed for programmers who use the PDP-11 Record Management Services (RMS-11). Volume 8 contains:

RSTS/E RMS–11: An Introduction RSTS/E RMS–11 User's Guide RSTS/E RMS–11 Utilities RSTS/E RMS–11 MACRO Programmer's Guide

In addition to the regular size binders, the documentation set includes a smaller binder containing quick reference material. This RSTS/E Quick Reference Guide provides summary information on system use, system utility programs, DCL commands, and RMS. The material is in a 7 by 9 inch binder for portability and to expedite future additions.

The RSTS/E documentation set also includes two introductory handbooks, an SPR form, and a quick reference card:

Software Performance Report RSTS/E Primer Introduction to BASIC EDT Editor Reference Card

# Chapter 2 Manual Summaries

This chapter describes each manual in the RSTS/E set.

If you have never used RSTS/E, you may wonder which manual to read first. The *RSTS/E Primer* is a good place to start. Its companion, the *Introduction to BASIC*, shows you the fundamentals of BASIC programming.

If you have used other computer systems and want an overview of RSTS/E hardware and software, see Part I of the RSTS/E System User's Guide. If you have used DCL commands on other DIGITAL systems, you might want to start with the RSTS/E DCL User's Guide. If you plan to install the system, read the Release Notes and then consult the RSTS/E System Generation Manual.

If you need information on a particular topic or are upgrading to V8.0, the summaries in this chapter list the major topics covered in each manual. The summaries also note changes in their contents and organization for this release. In addition, most of the manuals revised for this release contain a summary of technical changes that lists major differences from the last release (V7.2).

Some manuals in this chapter have two order numbers: a number with an AA prefix and a number with a DEC-11 prefix. The AA numbers have superseded the older DEC-11 numbers so use the AA number to order additional copies of the manual. The DEC-11 number, enclosed in parentheses, appears on the title page of older manuals.

Order numbers marked "(update)" indicate a set of replacement pages to insert into the manual. When you order a manual that has an update package, include order numbers for both the manual and the update package.

### Handbooks and Quick Reference Guides

## **RSTS/E** Primer

AA-5408A-TC

This handbook introduces the RSTS/E system to people who are using a computer for the first time. It describes computer concepts and provides sample terminal sessions for "hands on" experience with system use and BASIC-PLUS programming.

Topics include:

- General system description
- Planning a program
- Using peripheral devices
- Files and input/output operations
- Batch processing

#### Introduction to BASIC AA-0155B-TK

This handbook introduces the beginning programmer to programming concepts and the BASIC language. It has been revised to be more compatible with structured programming and BASIC-PLUS-2, but can still be used as a learning tool for BASIC-PLUS and other BASIC languages.

Topics include:

- Language concepts (statements, numbers, operators, variables, and commands)
- Structured programming
- Loops and arrays
- Math and string functions
- Subroutines
- Files

#### **EDT Editor Reference Card** AV–J756A–TC

This foldout card summarizes EDT keypad editing features. It includes diagrams that show where EDT function keys are located on VT100 and VT52 terminal keyboards.

**RSTS/E Quick Reference Guide** AV–N996A–TC

This guide, in a 7 by 9 inch binder, summarizes system and command language information in a quick reference format.

Topics include:

- General system information, such as file specifications and file operations
- DCL commands and command qualifiers
- System utility programs (such as PIP, FIT, and DIRECT)
- RMS utility programs, MACRO operations, and error messages

## **Documentation Notes and Maintenance Notebook**

# **RSTS/E Documentation Notes**

AV-M895C-TC

These notes describe new manuals and major documentation changes in the RSTS/E manual set. They also contain product notes and should be read with the RSTS/E Release Notes before system installation.

**RSTS/E V8.0 Maintenance Notebook** AA-L997C-TC

This notebook contains optional updates for RSTS/E features. All updates described in this notebook are on the RSTS/E update kit included with your V8.0 software.

Topics include:

- Explanation of the component numbering system
- Software Performance Report guidelines
- Update procedures
- Compilation of all current mandatory and optional updates

This notebook is a working document. To keep it up to date, add the articles on RSTS/E and layered product software that are published in the RSTS/E Software Dispatch and are relevant to your installation. These articles are published periodically over the life of this version and discuss reported problems and solutions, programming notes, and documentation corrections.

### **Release Notes and System Generation Manual**

#### **RSTS/E V8.0 Release Notes** AA–5246F–TC

These notes describe new features and explain functional differences between V8.0 and V7.2, the previous release of RSTS/E. Read them before you install your system.

Topics include:

- New software features
- New device support
- System installation notes
- Helpful hints
- Differences between versions
- Distribution kit order numbers (including tapes, disks, and the location of control files)

The *RSTS/E V8.0 Release Notes* also describe the new features of RSM-11 V2.0 and contain notes and considerations for installing RMS on RSTS/E V8.0.

#### **RSTS/E System Generation Manual** AA–2669G–TC

This manual provides a task-oriented approach to generating your RSTS/E system. It has been completely revised into sequential phases with each phase consisting of one or more system generation tasks. Where tasks require you to answer dialogue questions, the manual provides explanations and possible responses.

The RSTS/E System Generation Manual should be used in conjunction with the RSTS/E Release Notes and the RSTS/E System Manager's Guide. The Release Notes describe the system hardware and software changes and additions that you need to know before generating RSTS/E. The Manager's Guide describes the programs and procedures you use to maintain and tune the system after you install RSTS/E.

Topics include:

- Preparing the system and nonsystem disks
- Tailoring the SYSGEN monitor
- Configuring the RSTS/E monitor
- Shutting down the SYSGEN monitor
- Tailoring the RSTS/E monitor
- Building and patching RSX, system programs, and bundled software
- Tailoring system files
- Preparing for timesharing
- Backing up the RSTS/E monitor
- Timesharing
- Tasks related to hardware, devices, memory allocation table, file manipulation, and bootstrapping tapes and disks

## System Manager's Guide

#### **RSTS/E System Manager's Guide**

AA-2762E-TC

This guide describes how to operate and manage a RSTS/E system. Because most of the programs this manual describes require privilege to run, its use should be restricted to the system manager and privileged users. To use this manual, you should be familiar with RSTS/E hardware and software.

Topics include:

- RSTS/E system structure and privilege
- System start-up, shutdown, and automatic restart
- Controlling timesharing (INIT and SHUTUP programs)
- Creating accounts (REACT and MONEY programs)
- Operator services (OPSER, QUEMAN, SPOOL, BATCH, and PLEASE programs)
- System error package (ERRINT, ERRCPY, ERRDIS, ANALYS, and ODT programs)
- Online control of RSTS/E (UTILTY commands, SYSTAT, VT50PY, TTYSET, DSKINT, ONLCLN, REORDR, GRIPE, and TALK programs)
- Disk backup and recovery (BACKUP and SAVE RESTORE programs)
- Updating RSTS/E software
- DCL commands for system management (INITIALIZE, MOUNT, and spooling commands)

## System and DCL User's Guides

**RSTS/E System User's Guide** AA–5133C–TC

This manual introduces RSTS/E concepts, explains how to use files and devices, and describes system commands and utility programs for nonprivileged users.

Topics include:

- System access
- Hardware and system software concepts
- Keyboard monitors and a comparison of command environments
- Files

- Device-specific commands (such as ASSIGN and MOUNT)
- An alphabetic reference section for system utility programs (such as DIRECT, PIP, QUE, and TTYSET)
- Batch commands

Material on BASIC-PLUS programming is no longer in this manual. For example, the *RSTS/E System User's Guide* does not describe the commands for developing BASIC-PLUS programs or the BPCREF cross-reference program. See the *BASIC-PLUS Language Manual* for this information.

#### **RSTS/E DCL User's Guide**

AA-L426B-TC

This manual describes the use of DCL (DIGITAL Command Language) for nonprivileged users on RSTS/E. (The *RSTS/E System Manager's Guide* contains information on privileged DCL commands.)

Topics include:

- Basic system concepts
- DCL command syntax
- File manipulation commands
- System commands (status, terminal characteristics, and device names)
- Device commands
- Batch processing
- Program development (source compilation, linking, and execution)

#### EDT and RUNOFF User's Guide

#### **Introduction to the EDT Editor** AA-K443A-TC

This tutorial manual complements the *EDT Editor Manual*. It briefly describes basic EDT features and leads the reader through sample keypad, line, and nokeypad editing sessions. You should be able to do the sample sessions and learn the basics of EDT in about three hours.

#### **EDT Editor Manual**

AA–J726A–TC

This manual describes the EDT interactive text editor. It shows how to create and update files with EDT and also serves as a reference source.

Topics include:

- EDT editing concepts
- Sample editing sessions in line, keypad, and nokeypad modes
- Journal files and recovery
- Access to EDT on RSTS/E and other operating systems
- Keypad editing commands
- Line editing commands
- Nokeypad editing commands
- SET and SHOW editing commands
- Defining your own keys

**RSTS/E RUNOFF User's Guide** AA-3337B-TC (DEC-11-URUNA-B-D)

This manual describes RUNOFF, a RSTS/E system library program used to format reports, memos, and other documents.

Topics include:

- Invoking the program
- Creating a source file
- Text formatting commands
- Page formatting commands
- Mode setting commands
- Parameter setting commands

## Task Builder, RT11 and RSX Utilities, SORT, and TECO

**RSTS/E Task Builder Reference Manual** AA-5072C-TC

This manual describes how to use the Task Builder (TKB) to link separately compiled programs and subprograms with appropriate library routines to produce an executable file. The Task Builder, the linker for the RSX-based languages, works with object files compiled or assembled from source programs written in BASIC-PLUS-2, COBOL-81, PDP-11 COBOL, FORTRAN-77, DIBOL, and the MAC assembler.

In addition to doing simple (nonoverlaid) builds, you can also specify an overlay structure for your program. This manual explains what overlays are and shows how to set up an overlay descriptor (ODL) file.

Topics include:

- Task Builder, overlay, and library concepts
- Co–Trees
- Autoload
- Program Sections (PSECTs)
- Memory resident areas
- Cluster libraries
- Alphabetic reference sections for Task Builder switches and options and the Overlay Description Language (ODL)

**RSTS/E Programmer's Utilities Manual** AA–D749A–TC

AD-D749A-T1 (update) AD-D749A-T2 (update)

This manual describes four RSX-based utility programs available to RSTS/E users who program in MACRO or a high-level language.

Topics include:

- MAC, which creates object modules from MACRO source programs
- LBR, which creates and maintains object libraries of frequently used routines
- PAT, which lets you modify code in a relocatable binary object module
- MAKSIL, which creates save image library (SIL) files, run-time system image files, and resident libraries

## **RSTS/E RT11 Utilities Manual**

AA-M213A-TC

This manual describes the RT11-based utility programs available to RSTS/E users who program in MACRO or FORTRAN-IV.

Topics include:

- MACRO, which creates object modules from MACRO source programs
- LIBR, which creates and maintains object libraries of frequently used MACRO or FORTRAN-IV routines and macro libraries for the MACRO assembler
- LINK, which accepts object modules from an assembler or a compiler and produces an executable file
- PAT, which lets you modify code in a relocatable binary object module

These RT11-based programs parallel the RSX-based utilities described in the RSTS/E Programmer's Utilities Manual and the RSTS/E Task Builder Reference Manual.

**PDP-11 SORT Reference Manual** AA-3341C-TC AD-3341C-T1 (update)

This manual describes the SORT–11 utility program, which sorts RMS–11 files.

Topics include:

- Sorting methods (record, tag, address routing, and index)
- How to run SORT
- SORT command strings
- SORT option switches and specification file format
- Error conditions
- Program internals
- Installation of SORT on RSTS/E and other operating systems

## PDP-11 TECO User's Guide AA-5530B-TC

(DEC-11-UTECA-B-D)

This manual describes TECO, an unsupported editing program distributed with RSTS/E. The first section contains basic information and introduces enough TECO commands for new users to create and edit files. The rest of the manual describes all TECO commands and explains how to create TECO programs for complex editing tasks.

## MACRO Language, ODT, and Directives Manuals

PDP-11 MACRO-11 Language Reference Manual AA-V027A-TC

This manual describes how to use the MACRO-11 relocatable assembler to develop assembly language programs. RSTS/E has two MACRO assemblers: the RSX-based MAC assembler and the RT11-based MACRO assembler. This language manual is a common reference source for both.

Topics include:

- Source program format and conventions
- MACRO character set and symbols
- Relocation and linking
- Addressing modes (register, autoincrement, autodecrement, index, immediate, absolute, and relative)
- Reference sections on MACRO directives
- Assembling MACRO-11 programs on RSTS/E and other operating systems

## IAS/RSX-11 ODT Reference Manual

AA--M507A-TC

This manual describes the Octal Debugging Tool (ODT) for debugging assembly language programs developed under the RSX run-time system. ODT is available to RSTS/E users as the object file ODT.OBJ and is used to set breakpoints, display and change the contents of memory locations as the program is running, as well as perform other debugging tasks.

Topics include:

- Linking ODT with your program
- Invoking and terminating a debugging session
- ODT characters and symbols
- Breakpoints and program execution
- Commands for opening, modifying, and closing word and byte locations
- Using registers
- Memory operations

# RSTS/E System Directives Manual

AA–D748C–TC

This manual describes RSTS/E run-time systems as well as monitor and emulator directives. The directives perform such operations as input and output, changing the memory size allocated for a program, accessing resident libraries, and switching to a new run-time system. These operations (and others described in the manual) are useful for assembly language programmers on RSTS/E. Topics include:

• General monitor directives

These directives let you open, close, read, and write files and perform other system functions. Some of these directives, called UUOs, correspond to the BASIC system function calls described in the *RSTS/E Programming Manual*. The *RSTS/E System Directives Manual* provides information on data passed and returned for each UUO, but refers you to the *RSTS/E Programming Manual* for a complete description of the call.

• RSX emulator directives

These directives are useful if you are coding a program to run under the RSX run-time system.

• RT11 emulator directives

These directives are useful if you are coding a program to run under the RT11 run-time system.

In addition to chapters on the directives, the manual contains appendixes on error messages, disk device sizes, resident library directives, and a summary of MODE and RECORD modifiers for various devices.

## **BASIC–PLUS and Programming Manuals**

#### **BASIC-PLUS Language Manual** AA-2623D-TC

This manual describes the BASIC-PLUS programming language and its use on RSTS/E. The manual includes material on BASIC-PLUS program development that previously appeared in the *RSTS/E System User's Guide*. More hints for compatibility with BASIC-PLUS-2 have also been added.

Topics include:

- The relationship between BASIC-PLUS and the RSTS/E operating system
- Commands and procedures for writing, running, modifying, and debugging BASIC-PLUS programs (including immediate mode procedures)
- BPCREF, a debugging tool that generates a cross-reference listing of compiled BASIC-PLUS programs
- EXTEND and NOEXTEND formats
- Data types, expressions, and elementary BASIC-PLUS statements
- String functions, integer and floating-point operations, matrices, statement modifiers, and error handling
- BASIC-PLUS data handling, including formatted ASCII, virtual array and block I/O files

### **RSTS/E Programming Manual**

AA-2726E-TC

This manual is for BASIC-PLUS, BASIC-PLUS-2, and MACRO programmers. It assumes that you know how to program in one of these languages and are familiar with RSTS/E system concepts and features. If you program in BASIC-PLUS or BASIC-PLUS-2, this manual contains all the information you need to use device-dependent features and system function calls. If you program in MACRO, you can use this manual as a companion to the RSTS/E System Directives Manual.

Topics include:

- System disk structure
- Privilege
- $\bullet$  File-structured and non-file-structured disk operations with MODE and SPEC%
- Flexible diskette operations with MODE and SPEC%
- File-structured and non-file-structured tape operations with MODE, SPEC%, and the MAGTAPE function
- Line printer control with MODE and RECORD
- Terminal operations with MODE, RECORD, and SPEC%
- Escape sequences
- Private delimiters
- Pseudo keyboards
- DECtape, paper tape, and card reader operations
- DMC11/DMR11 interprocessor link
- System function calls (SYS calls)
- System calls for local interjob communications (send/receive)
- The Concise Command Language (CCL) facility
- Magnetic tape label formats

### **RMS** Documentation

#### **RSTS/E RMS–11: An Introduction** AA–P508A–TC

This Introduction presents the major concepts of RMS-11 (Record Management Services): record formats, file organization, and record access. It also introduces RMS-11 utilities and defines the terms needed to understand RMS capabilities and functions. Topics include:

- Data storage on disk and tape
- File structure, including record formats, file organization, access modes, and relationships within the file structure
- File processing
- Record and block processing
- MACROs
- RMS Utilities

#### **RSTS/E RMS–11 User's Guide** AA–P510A–TC

The *RSTS/E RMS-11 User's Guide* provides information on the use of RMS features and operations. It is intended for application programmers using RMS in new or existing applications.

Topics include:

- Concepts of data organization and access, and how RMS implements those concepts
- General considerations to help the applications designer select the appropriate RMS file organization
- Sequential file organization
- Relative file organization
- Indexed file organization
- Program optimization techniques with RMS
- Description of the various operating system implementations of RMS

#### **RSTS/E RMS-11 Utilities Manual**

AA-P509A-TC

The *RSTS/E RMS-11 Utilities Manual* is a reference for the utility programs that RMS supports on RSTS/E and other PDP-11 operating systems. The utilities let you interactively define, manipulate, and maintain RMS-11 files without having to access full RMS capabilities.

Topics include:

- RMSDES, which lets you design and create RMS files
- RMSIFL, which reads RMS file records and loads them into an indexed file
- RMSCNV, which reads RMS file records and loads them into any type of RMS file

- RMSDSP, which displays a description of an RMS file (including backup files)
- RMSBCK, which copies an RMS disk file to a backup tape or disk
- RMSRST, which restores RMSBCK files
- RMSDEF, which lets you define RMS file attributes. RMSDES has replaced this utility, however, RMSDEF is still supported.

#### **RSTS/E RMS–11 MACRO Programmer's Guide** AA–P507A–TC

The RSTS/E RMS-11 MACRO Programmer's Guide provides the information needed to access and use RMS functions in MACRO programs. Use it in conjunction with the RSTS/E RMS-11 User's Guide.

Topics include:

- MACRO and symbol overview
- MACRO declarations
- Use of pool space
- Control blocks
- Writing routines and handlers
- Program assembly
- File and device characteristics
- Directory and file operations
- Record processing
- Block processing
- MACRO alphabetic reference
- Summaries of ALL, DAT, KEY, NAM, PRO, and SUM blocks, FABs and RABs

# Chapter 3 Associated Product Documentation

In addition to the software products included as part of RSTS/E, such as SORT, EDT, and RMS, there is a large variety of optional products available. Depending on your needs, you can purchase one or more of these software products and add them to the RSTS/E operating system.

These optional products include programming languages such as BASIC-PLUS-2, communications options such as DECnet/E, and application packages such as ADE.

This chapter briefly describes each of these optional products. The products are listed alphabetically and the descriptions include the titles and order numbers for the product's documentation. The descriptions of the products are not complete. Refer to the product's Software Product Description for a definitive list of product capabilities and requirements. If you want more information on a product prior to purchase or if you want to order additional documentation for a product you own, these titles and order numbers can be useful. See Chapter 4 for information on placing documentation orders.

#### ADE

#### ADE User's Guide AA-M651B-TK

#### **ADE RSTS/E Installation Guide and Release Notes** AA-M687B-TC

ADE (Application Development Environment) is a tool for automating office work. It is designed for use by nonprogrammers and can be used to create and maintain lists and records, to perform calculations on the data in those lists and records, and to produce reports.

## **BASIC Transportability Package**

#### **BASIC Transportability Manual** AA-L011A-TK

The Transportability Package consists of the BASIC Transportability Manual and a set of Translator Utilities. The manual highlights similarities and differences among the several BASIC implementations available on DIGITAL systems. It also provides information on writing new applications in transportable format and provides hints on moving existing programs and data.

The Translator Utilities translate programs from either BASIC-11 or RSTS/E BASIC-PLUS format to VAX-11 BASIC or RSTS/E BASIC-PLUS-2. The manual covers the use and limitations of these utilities and describes situations in which it is easier to rewrite applications than to attempt translation.

## BASIC-PLUS-2

**BASIC-PLUS-2 RSTS/E Installation Guide and Release Notes** AA–H773B–TC

**BASIC Reference Manual** AA-L334A-TK

BASIC User's Guide AA–L335A–TK

**BASIC on RSTS/E Systems** AA-L337A-TK

More BASIC for Beginners AA–M587A–TK

**DECUS Information for BASIC Users** AA–N427A–TK

**BASIC Pocket Reference Guide** AV–L341A–TK

The BASIC-PLUS-2 language processor is composed of a compiler and a Run-Time System/Library. The language, a superset of Dartmouth BASIC, is a conversational programming language that uses simple English statements and familiar mathematical notations to perform a variety of operations.

#### COBOL-81

**COBOL--81 Language Reference Manual** AA-J434B-TC

COBOL-81 RSTS/E User's Guide AA-J435C-TC

#### **COBOL--81 RSTS/E Installation Guide and Release Notes** AA-L028D-TC

**COBOL-81 Pocket Guide** AV-H630C-TC

**PDP-11 COBOL Translation Manual** AA-N339A-TC

COBOL-81 is a language processor composed of a compiler and an Object Time System/Library. It is a defined subset of ANS COBOL and meets the ANS-74 low-level specification with some additions and omissions as noted in the Software Product Description. On RSTS/E, this version of COBOL replaces PDP-11 COBOL.

### PDP-11 COBOL

#### PDP-11 COBOL User's Guide

AA-1757E-TC AD-1757E-T1 (update)

#### PDP-11 COBOL Language Reference Manual

AA-1749E-TC AD-1749E-T1 (update) AD-1749E-T2 (update)

**PDP-11 COBOL Installation Guide** AA-1745F-TC

The PDP-11 COBOL language processor is composed of a compiler and an Object Time System/Library. PDP-11 COBOL is a defined subset of ANS COBOL and meets the ANS-74 low-level specifications with some additions and omissions as noted in the Software Product Description.

### CTS-500

#### CTS System Generation Using Diskettes AA-2321C-TC

CTS-500 is a software system configuration designed to support general purpose business-oriented data processing applications for the DEC Datasystems 530, 540, 560, and 570 series computer systems. CTS-500 is based on RSTS/E and supports multiple and concurrent interactive data processing, program development, and batch mode operations. Because CTS-500 is based on RSTS/E, information on system use is found in the RSTS/E document set.

## DATATRIEVE-11

User's Guide to DATATRIEVE-11 AA-C742B-TC

DATATRIEVE-11 Release Notes AA-D110D-TC

#### **DATATRIEVE-11 Installation Guide** AA-H169C-TC

#### **DATATRIEVE Primer** AA–J106A–TC

DATATRIEVE-11 is an interactive query, report, and data maintenance system. The product provides facilities for selectively retrieving data, sorting, formatting, and updating that data, and generating reports without the need for programming.

## DECAL

Instructor's Guide AA–1747B–TC

System Manager's Guide AA–1754B–TC

DECAL (Digital Equipment CAI Author Language System) is the Computer Assisted Instruction (CAI) lesson authoring system. It enables teachers with no prior computer experience to provide individualized student instruction on a computer.

### DECmail/RSTS

**DECmail/RSTS Installation and System Management** AA-P505A-TC

**DECmail/RSTS User's Guide** AA-P504A-TC

DECmail/RSTS allows you to send messages or files to other users on your RSTS/E system or to other RSTS/E or VAX/VMS systems that are connected to your system by means of DECnet/E. With DECmail/RSTS, you can send, read, answer, forward, file, list, print, and delete mail messages.

## DECnet / E

**DECnet/E Networks Installation Procedures** AA-K714A-TC

DECnet/E Release Notes AA-M269A-TC

Introduction to DECnet AA–J055C–TK

DECnet/E System Manager's Guide AA-H505B-TC

**DECnet/E Guide to User Utilities** AA-H504B-TC **DECnet/E Networks Programming in BASIC and BASIC-PLUS-2** AA-H501B-TC

**DECnet/E Networks Programming in COBOL** AA-H503B-TC

**DECnet/E Networks Programming in FORTRAN** AA-L266A-TC

**DECnet/E Networks Programming in MACRO** AA-L265A-TC

DECnet/E allows a suitably configured RSTS/E system to operate as a node in point-to-point computer networks. It offers task-to-task communications and network file transfer capabilities using the Digital Network Architecture (DNA) Protocols. The network functions available depend, in part, on the configurations of the rest of the network. You should consult the Software Product Description for a complete list of functions and features.

#### **DECword / DP**

**DECword/DP Directory** AA–L379B–TC

**Beginner's Guide to DECword** AA–L380B–TC

**DECword for WPS-8** User's AA-L381B-TC

How to Use DECword AA-L382B-TC

**DECword Quick Reference Guide** AA-L383B-TC

**Glossary of DECword Terms** AA–L384B–TC

How to Use DECword List Processing AA-L385B-TC

How to Manage DECword/DP AA–L387B–TC

How to Use DECword Options AA–L386B–TC

How to Install DECword / DP AA–L388B–TC

**DECword/DP Release Information** AA-L389C-TC

How to Use DECword Communications AA–N164A–TC

DECword/DP is a word processing system designed for use on RSTS/E: a combination that results in effective and efficient word and data processing. DECword/DP operations are menu-driven and include document creation, spelling correction, editing, and spooling.

## DIBOL-11/DECform

CTS-500/DIBOL User's Guide AA-5205C-TC

CTS-500 Release Notes AA-5504C-TC

**DECform User's Guide** AA–5792E–TC

**CTS-500 DIBOL Language Reference Manual** AA-L010A-TC

DIBOL-11/DECform is a software package that includes the DIBOL-11 language processor and the DECform screen formatting and file review utility. DIBOL is DIGITAL's business-oriented high-level language. DECform is a utility that allows the development of interactive data entry screen formatting, file modification, and verification functions.

#### **DMS-500**

DMS-500 User's Guide AA-2649C-TC

DMS-500 (Data Management Services) software aids the development and operation of business applications. It consists of a set of modules that provide general methods for organizing and processing logical data records. Interactive utilities are provided to define, allocate, and organize data into indexed and relative file structures.

## DX/RSTS

DX/RSTS Release Notes AA-H233B-TC

DX/RSTS User's Guide AA-5476D-TC

**DX Programmer's Reference Manual** AA–5469C–TC

DX/RSTS is a software package that makes asynchronous communication possible between a RSTS/E host and a WPS-8 Word Processing System. It uses DX error-correcting protocol and causes the WPS system to appear as a normal terminal to the RSTS/E host application programs.

## FORTRAN-IV

**RT-11 RSTS/E FORTRAN-IV User's Guide** AA-5749B-TC

**PDP-11 FORTRAN Language Reference Manual** AA-1855D-TC

**RSTS/E FORTRAN–IV** Installation Guide and Release Notes AA–C762C–TC

FORTRAN-IV is an extended implementation of the FORTRAN language based on the ANSI FORTRAN X3.9–1966 standard.

### PDP-11 FORTRAN-77

**PDP-11 FORTRAN-77 OTS Reference Manual** AA-1874C-TC AD-1874C-T1 (update)

**PDP-11 FORTRAN-77 User's Guide** AA-1884D-TC AD-1884D-T1 (update)

PDP-11 FORTRAN-77 Installation Guide and Release Notes AA-K053B-TC AD-K053B-T1 (update)

PDP-11 FORTRAN-77 Language Reference Manual AA-L979A-TC AD-L979A-T1 (update)

FORTRAN-77 (formerly called FORTRAN-IV PLUS) is based on the American National Standard Programming Language FORTRAN, ANSI X3.9-1978. The ANSI standard specifies both a subset language and a full language. FORTRAN-77 supports all of the subset language features and most of the full language features. See the FORTRAN-77 Software Product Description for a complete definition.

## FMS-11/RSTS

**FMS-11/RSTS Software Reference Manual** AA-L323A-TC

FMS-11/RSTS Installation Guide and Release Notes AA-L324A-TC

FMS-11/RSTS Pocket Guide AV-L325A-TC

FMS (Forms Management System) is a forms-oriented, video I/O management system. It is an independent software user interface that handles much of the video I/O management you would normally have to code into the application programs.

## GIGI and REGIS

GIGI Data Plot Manual AA–J956A–TK

GIGI REGIS Applications Library Manual AA–J884A–TK

**Graphics Editor Manual** AA–J942A–TK

Slide Projection System Manual AA–J943A–TK

GIGI/REGIS CAI Primary Student Guide AA–K329A–TE

Character Set Editor Manual AA–K337A–TK

GIGI/REGIS CAI Primary Administration Manual, RSTS/E AA–K347A–TC

GIGI DEC-RITE Manual AA-J944A-TK

GIGI Package A Installation and Programming/Release Notes AA-L060A-TC

GIGI RSTS/E Package B Installation and Release Notes AA–M160A–TC

GIGI software is a set of host-resident graphics packages written in FORTRAN. It supports a wide range of educational applications on the GIGI terminal. Two hardware/software packages are available.

Package A is a set of interactive general-purpose utilities that facilitate access to the GIGI terminal's full capabilities. Package A consists of the graphics editor, the character set editor, and the slide projection system.

Package B is a set of specific applications using the GIGI terminal. Package B consists of GIGI RITE (an on-screen editor based on REGIS), the data plotting package, and the applications library.

**REGIS** (Remote Graphics Instruction Set) is a set of application subroutines that run on the GIGI terminal. The routines include such computer graphic functions as screen attribute definition, circles, vectors, text, and curves.

#### INDENT

INDENT User's Guide AA-H812A-TC AD-H812A-T1 (update)

**INDENT Installation Guide** AA-H813B-TC **INDENT Operator's Guide** AA-H814B-TC

**INDENT Release Notes** AA–J835B–TC

INDENT is a data entry and forms management product for commercial application programs written in DIBOL, COBOL, or BASIC–PLUS–2.

## **Micro RSTS**

#### **Micro RSTS Application Developer's Guide** AA-P421A-TC

Micro RSTS is not a separately orderable software product; rather, it is a defined subset of RSTS/E designed especially for the MICRO/PDP-11 hardware. The manual describes the software subset and the procedures you use to transfer the software from a RSTS/E system to the MICRO/PDP-11. The manual also contains recommendations on building application programs for the RSTS/E subset.

## PLXY-11/RSTS

#### PLXY-11 User's Guide AA-J535A-TK

PLXY-11/RSTS is a software package that provides RSTS/E users with access to the plotting capabilities of the LXY or LXV printer/plotter. The package consists of a library of callable graphic subroutines, written in FORTRAN, and a task that creates the plot file.

## RPG-11

**RPG--11 Language Reference Manual** D-11-LRPLA-A-D

RPG-11 RSTS/E User's Guide AA-C866A-TC AD-C866A-T1 (update)

RPG is a programming language designed for use in business data processing operations that involve data file manipulation and report generation. User applications are developed within defined specifications for description, input/output, calculation, and control parameters. The RPG compiler translates the set of program specifications into machine language instructions that are linked together with the RPG object time library routines for execution.

The RPG software package consists of the RPG compiler and object time library and utility programs for converting programs and data files from IBM System/3 to CTS-500 RPG-11.

#### **RSTS/E 3271 Protocol Emulator**

**RSTS/E 3271 Protocol Emulator User's Guide** AA–D365B–TC

**RSTS/E 3271 Protocol Emulator Release Notes** AA–H474C–TC

The RSTS/E 3271 Protocol Emulator allows BASIC-PLUS, BASIC-PLUS-2, COBOL, or DIBOL application programs running under RSTS/E to communicate interactively with user jobs running on an IBM 370 or 303x host system. The IBM application program can run with IMS/VS or TSO. The Protocol Emulator package makes it possible to implement applications that perform remote, online access to IBM databases for data entry, retrieval, update, or file transfer.

## **RSTS/E High Performance 2780/3780 Emulator**

RSTS/E 2780/3780 User's Manual AA–J177A–TC

RSTS/E 2780/3780 Release Notes AA–J458B–TC

The RSTS/E High Performance 2780/3780 emulates the communications protocol of an IBM 2780/3780 device while running as a user job on a suitably configured RSTS/E system. The Emulator appears as an IBM 2780 or 3780 data transmission terminal on a point-to-point switched or nonswitched synchronous data link operating with standard 2780/3780 protocol. The Emulator can transmit and receive data and/or job control files with an IBM System/370 or 303x running Power/VS, HASP, ASP, JES1, or JES3.

### WISE

WISE College System Installation Notes AA–D001A–TC

WISE Administration System TT User's Guide D-11-ACCGA-A-D

WISE Administration System Operator's Guide D-11-ACOPA-A-D

WISE Administration System Manager's Guide D-11-ACSMA-A-D

The WISE College Administrative System consists of a set of library utility programs for defining and maintaining an integrated hierarchical (tree structured) database, and several application subsystems. In conjunction with RSTS/E, the system is designed to provide simultaneous access to the administrative database, be integrated into existing administrative operations, provide data storage and security, and provide access to computer resources for administrative and instructional purposes.

# Chapter 4 Ordering Information

You can order RSTS/E documentation by telephone or mail. Detailed ordering information is at the end of this chapter.

You can order a complete RSTS/E documentation set or individual manuals. DIGITAL also offers several packages tailored to different types of RSTS/E users.

The rest of this chapter lists the name, order number, and contents of each RSTS/E package. To order individual manuals, use the order numbers that appear under each manual title in Chapters 2 and 3. Where two order numbers are listed, use the number with the AA prefix, not the one with the DEC-11 prefix. When you order a manual that has an update package, include order numbers for both the manual and the update package.

#### **RSTS/E V8.0 Documentation Kit** QR430–GZ

This kit contains all the manuals described in Chapter 2 of this directory.

**RSTS/E V8.0 System Manager's Documentation Kit** QR432–GZ

This kit is for people who manage or maintain a RSTS/E system.

General Information Binder

RSTS/E Documentation Directory RSTS/E V8.0 Documentation Notes RSTS/E V8.0 Maintenance Notebook

Installation and Management Binders RSTS/E V8.0 Release Notes RSTS/E System Generation Manual RSTS/E System Manager's Guide

#### **RSTS/E V8.0 System User Documentation Kit** QR433–GZ

This kit is for all types of users.

RSTS/E Primer EDT Editor Reference Card

System Usage Binder RSTS/E System User's Guide RSTS/E DCL User's Guide

Editing and Text Formatting Binder Introduction to the EDT Editor EDT Editor Manual RSTS/E RUNOFF User's Guide

RSTS/E Quick Reference Guide Binder

**RSTS/E V8.0 System Programming Documentation Kit** QR426–GZ

This kit is for MACRO and high-level language programmers who use RSTS/E utilities for system programming.

System Programming Binders BASIC-PLUS Language Manual RSTS/E Programming Manual PDP-11 MACRO-11 Language Reference Manual IAS/RSX-11 ODT Reference Manual RSTS/E System Directives Manual

Programming Utilities Binder RSTS/E Task Builder Reference Manual RSTS/E Programmer's Utilities Manual RSTS/E RT11 Utilities Manual PDP-11 SORT Reference Manual PDP-11 TECO User's Guide

**RSTS/E V8.0 System Primer Documentation Kit** QR439–GZ

This kit is for new RSTS/E users.

RSTS/E Primer Introduction to BASIC

#### Micro RSTS Documentation Kit QR421–GZ

The micro-RSTS kit is not a software kit. The kit consists of documentation that describes a defined subset of RSTS/E, procedures used to transfer the subset to a MICRO/PDP-11, and recommendations for building applications on micro RSTS.

Micro RSTS Application Developer's Guide

# HOW TO ORDER ADDITIONAL DOCUMENTATION

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Internal orders should be placed through the Software Distribution Center (SDC), Digital Equipment Corporation, Northboro, Massachusetts 01532

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RSTS/E Documentation Directory AA-2642F-TC

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Did you find errors in this manual? If so, specify the error and the page number.

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