apollo

Technical Publications Overview

D   O   M   A   I   N

This booklet provides a brief overview of standard and optional Domain® products and technical publications. We have organized this information as follows:

Technical Publications — explains the architecture of our document set.

The Domain System — introduces our distributed processing system and the documents that explain our system architecture, site requirements, system administration, and network mail software.

Operating Systems — describes the user and programming interfaces to the Aegis™ operating system and to Domain®/IX™, our System V and BSD4.2 implementations of the UNIX* operating system. This section also lists the documents associated with our operating systems.

Networks — describes the Domain products and documents that enable you to communicate with other nodes, remote computer systems, and remote networks.

Domain Graphics Resources — outlines our graphics packages and explains how our reference and task–oriented manuals work together to help you develop graphics applications.

High–Level Languages — explains how to use our language document set to develop FORTRAN, Pascal, C, Ada**, and Common LISP programs.

Program Development Tools — introduces the products and documents that you can use to manage complex software development projects, design advanced graphic user interfaces, and debug and bind programs.

Database Management — explains how to use our Domain Distributed Database Management System (D3M™) document set to create and use databases.

Workstations and Servers — introduces the Domain family of compatible workstations and servers, and the documents that explain how to unpack, install, operate, and service them.

Input, Storage, and Network Peripherals — describes the input, storage, and network peripheral products that we support, and describes the documents that explain how to unpack and install them.

Printers — presents our printer hardware and software products and the associated documentation.

Documentation Packages — lists our prepackaged sets of manuals, their order numbers, and their contents. Check here before you order manuals; there might be a documentation package you can order that contains all the texts you need.

How to Order Technical Publications — explains how to order the documents that are described in this booklet and order the binders for them.

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* UNIX is a registered trademark of AT&T in the USA and other countries.
** Ada is a registered trademark of the U.S. Government (Ada Joint Program Office).

Contents
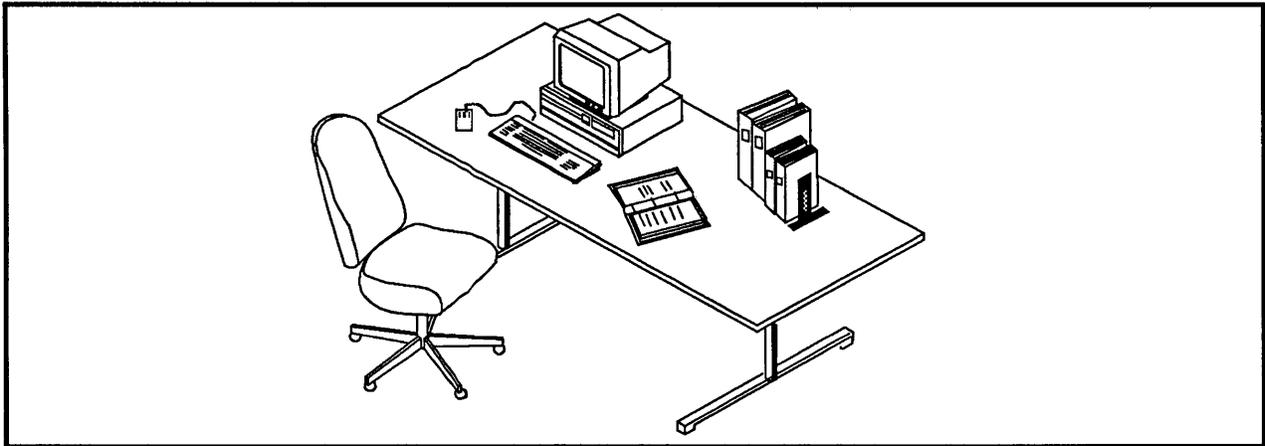
Domain products and technical manuals work together to enhance the productivity of technical professionals. Our document set's organization helps technical professionals find information easily and solve problems effectively.

Instead of putting all the information about a product into one dense manual, we have created several document types that reflect the different ways you use information. Keep this organization in mind as you read more about our products and technical publications.

Tutorials — teach you step-by-step how to use a product. *Getting Started with Your Domain System* is an example of this document type. Read a tutorial once, then rely on a task-oriented guide or a reference manual.

Task-oriented guides — explain how to solve specific problems, and demonstrate solutions with complete procedures and examples. The *Domain System User's Guide* is an example of this document type. Read task-oriented guides completely once, then refer to them when you need procedural information.

Reference manuals — document the details of software interfaces and hardware specifications in a standard, easy-to-reference format. The *Domain System Command Reference* is an example of this document type. Use a reference manual as you would a dictionary—frequently, for short intervals.

Architecture documents — survey a product's overall architecture. The *Domain Series 3000 Hardware Architecture Handbook* is an example of this document type. Read these documents to learn about our design philosophy and implementation and our product strategy.

Online information — makes reference information, examples, exercises, and demonstrations available on the system. We use the system's multiwindow capabilities to provide electronic information that supplements our manuals. For example, you can access command and system call descriptions online using the **help** command.

The manuals are different sizes; some require large or small binders, while others do not. The lists of books on the following pages indicate which books use the large binder and which use the small binder; books that don't need a binder are not marked.

The Domain System
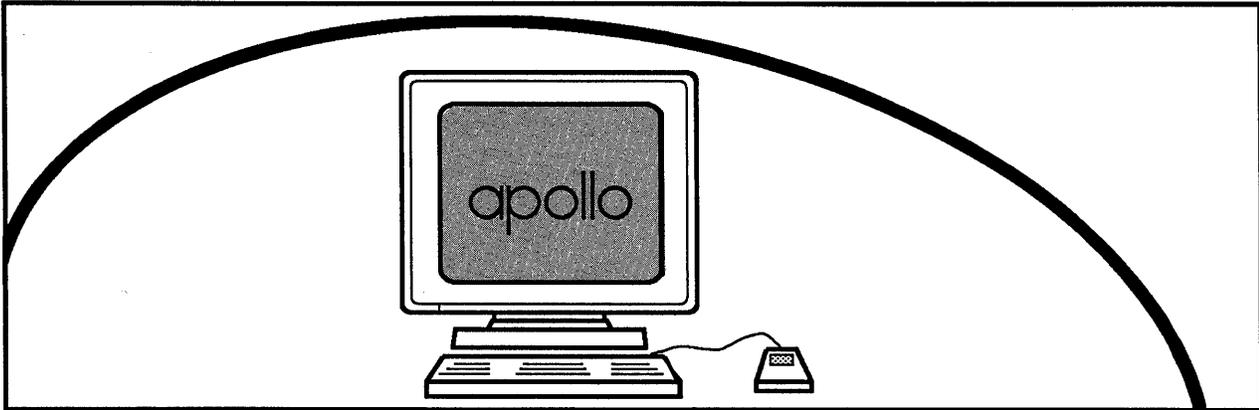
The Domain system is a collection of powerful workstations and server processors interconnected by a choice of high–performance, local–area networks. Each workstation is a single–user computer with a high–resolution, bit–mapped display and an optional Winchester disk. Server processors can be configured as peripheral servers, file servers, or as gateways to other networks. The following manuals explain the overall system design and how to perform tasks that involve the entire system.

Domain Architecture: A Technical Overview explains how the Domain system combines the response time of a dedicated minicomputer with the flexible environment of a time–sharing system. *Planning Domain Networks and Internets* describes how to prepare your network site for your Domain equipment.

Administering Your Domain System explains how to create the network environment, protect the network software, and maintain and troubleshoot the network. In addition, the *System V System Administrator's Guide* and the *BSD4.2 System Administrator's Guide* describe network administration for the System V and BSD4.2 implementations of the UNIX operating system.

Installing Domain Software explains how system administrators and users can install system software.

The *DPSS/Mail User's Guide* describes how to use our optional electronic mail product.

Domain Architecture: A Technical Overview
   Order No. 002402-007
   Binder: Large

Planning Domain Networks and Internets
   Order No. 009916   Revision 00

Administering Your Domain System
   Order No. 001746   Revision 06
   Binder: Large

System Administration for Domain/IX BSD4.2
   Order No. 009355   Revision 00
   Binder: Large

System Administration for Domain/IX System V
   Order No. 009356   Revision 00
   Binder: Large

Installing Domain Software
   Order No. 008860   Revision 02

DPSS/Mail User's Guide
   Order No. 003660   Revision 03
   Binder: Large

See also: Workstation and Server Publications;
            Input, Storage, and Network Peripheral Publications

Operating Systems
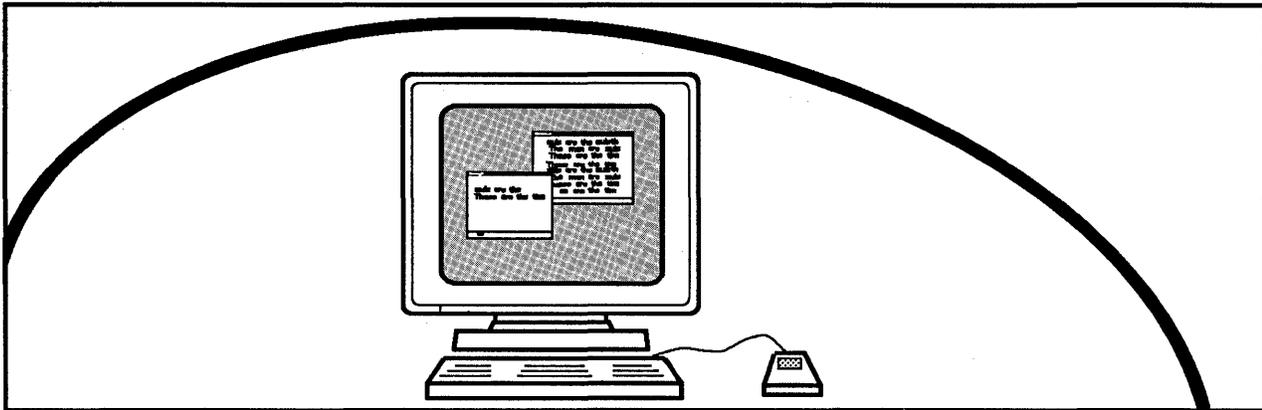
The Domain System supports several operating systems: Domain/IX, our System V and BSD4.2 implementations of the UNIX operating system; and the Aegis operating system, a proprietary system that provides an extremely productive environment for a wide variety of engineering disciplines.

Domain/IX software supports both popular versions of the UNIX operating system: AT&T's UNIX System V Release 2 and the University of California at Berkeley's BSD4.2. We publish a complete set of documents that describe the user interface and program development environment of Domain/IX.

Getting Started with Your Domain/IX System is designed to help users with prior UNIX experience accomplish everyday tasks using a multiwindow environment. It explains how to manage the display, manipulate files and directories, and use a UNIX shell on a Domain node. It also describes support for multiple versions, and how to switch between System V and BSD4.2 environments. The *Domain/IX User's Guide* provides a detailed view of the user interface through an extensive series of technical papers. In particular, it addresses the UNIX shells, communications programs, support tools, and various program development packages available to the Domain/IX user.

The *Domain/IX Command Reference for System V* describes the UNIX System V shell commands supported by Domain/IX. The *Domain/IX Command Reference for BSD4.2* describes the UNIX BSD4.2 shell commands supported by Domain/IX. Both manuals explain command syntax and usage, and provide helpful examples.

The *Domain/IX Text Processing Guide* describes the Domain/IX text editors, formatters, and preprocessors. The book also contains several papers related to these facilities. The *Domain/IX Text Editors Quick Reference* presents abbreviated information concerning Domain/IX text editors on an easy-to-use card.

The *Domain/IX Programmer's Reference for System V* describes the UNIX System V system calls and library functions supported by Domain/IX. The *Domain/IX Programmer's Reference for BSD4.2* describes the UNIX BSD4.2 system calls and library functions supported by Domain/IX. The *Domain/IX Support Tools Guide* describes the programming tools supported by Domain/IX.

Domain/IX User Interface

Getting Started with Your Domain/IX System
Order No. 008017   Revision 01

Domain/IX User's Guide
Order No. 005803   Revision 01
Binder: Large

Domain/IX Command Reference for System V
Order No. 005798   Revision 01
Binder: Large

Domain/IX Command Reference for BSD4.2
Order No. 005800   Revision 01
Binder: Large

Domain/IX Text Processing Guide
Order No. 005802   Revision 01
Binder: Large

Domain/IX Text Editors Quick Reference
Order No. 005804   Revision 00

Domain/IX Programming Interface

Domain/IX Programmer's Reference for System V
Order No. 005799   Revision 01
Binder: Large

Domain/IX Programmer's Reference for BSD4.2
Order No. 005801   Revision 01
Binder: Large

Domain/IX Support Tools Guide
Order No. 009413   Revision 00
Binder: Large

See also: High–Level Language Publications (C);
Networking Publications (TCP/IP)

Operating Systems
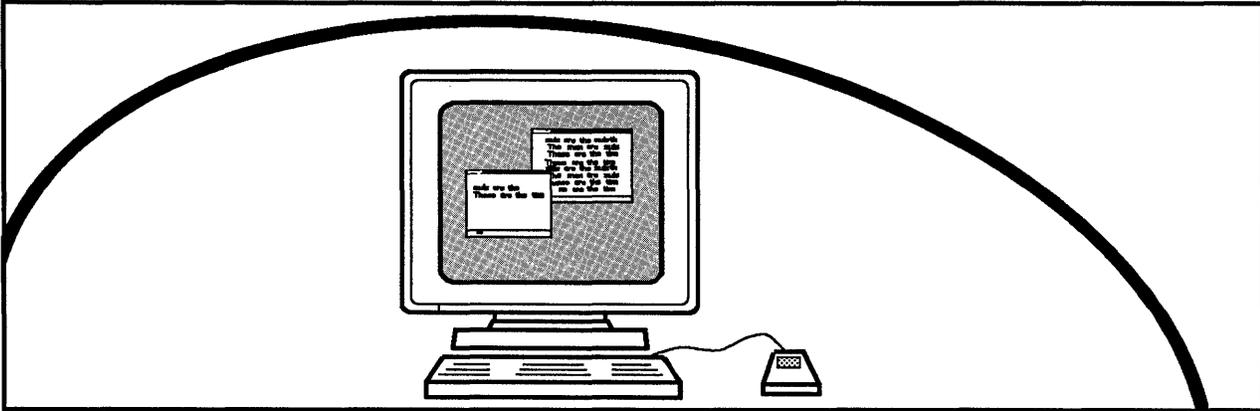
Our Aegis operating system provides a large library of system calls and utilities to aid in program development. We publish several documents that support both the Aegis user and programming interfaces.

Getting Started with Your Domain System is a tutorial that explains how to log in and use the keyboard, multiwindow display, and command interface to read, edit, and share files. It includes a tutorial chapter on the Aegis command line interface—the Aegis shell.

The *Domain System User's Guide* provides a task-oriented view of the user interface. It explains how to manage the display, manipulate files and directories, and how to tailor your work environment by defining function keys and creating your own commands.

The *Domain System Command Reference* is helpful for users who are already familiar with the Domain system. It documents the syntax for all shell and Display Manager (DM) commands, and provides examples of usage. You can also access this manual using our online HELP system.

Domain System Utilities expands on the information in the *Command Reference*, providing details about specific commands that are considered to be utilities; for example, **edfont**.

Two manuals, *Programming with General System Calls* and *Programming with System Calls for Interprocess Communication*, describe how to accomplish specific tasks with system service and interprocess communications calls.

The *Domain Graphics Primitives Resource Call Reference* describes the Domain system calls related to the Graphics Primitives Resource (GPR), and the *Domain System Call Reference* describes the rest of the Domain system programming calls. Each call description in these manuals provides information about syntax, data types, and error status.

Writing Device Drivers with GPIO describes how our general purpose input/output (GPIO) software enables you to write drivers for third-party devices.

Using the Open System Toolkit to Extend the Streams Facility describes how to extend the Streams facility so that it performs input and output for new types of files and devices.

Aegis User Interface

Getting Started with Your Domain System
Order No. 002348   Revision 04

Domain System User's Guide
Order No. 005488   Revision 01
Binder: Small

Domain System Command Reference
Order No. 002547   Revision 04
Binder: Large

Domain System Utilities
Order No. 009414   Revision 00
Binder: Large

Aegis Programming Interface

Domain System Call Reference
Order No. 007196   Revision 01
Binder: Large

Domain Graphics Primitives Resource Call Reference
Order No. 007194   Revision 02
Binder: Large

Programming with General System Calls
Order No. 005506   Revision 00
Binder: Large

Programming with System Calls for Interprocess Communication
Order No. 005696   Revision 00
Binder: Large

Writing Device Drivers with GPIO
Order No. 000959   Revision 10
Binder: Large

Using the Open System Toolkit to Extend the Streams Facility
Order No. 008863   Revision 00
Binder: Large

Networks
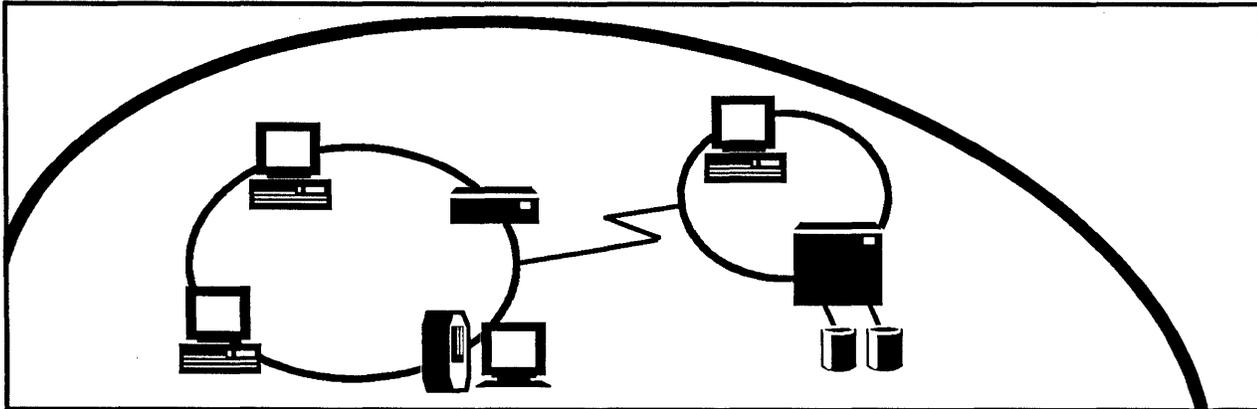
Our network products provide you with a range of methods for interconnecting systems. With these products, you can connect to multiple vendor environments and several Domain local-area networks. Many of our network controllers support multiple communications protocols. Our network documentation reflects the modularity and flexibility of our networking products.

Domain Internets allow you to extend the Domain system within a building or over a large or small geographical area by connecting local-area networks with high-speed bridges. Our internet documentation tells you how to plan, install, and manage an internet, extending transparent file access and resource sharing throughout a large user population.

Domain/PCI Connection is a product family that allows a personal-computer user to connect to a Domain network, access Domain system files, and use resources such as electronic mail, other shell services, and Domain printers.

Domain/PCC lets you emulate an IBM Personal Computer AT (PC AT). Domain/PCC creates a display in which you can use DOS commands, run applications designed for the PC AT, and access the resources of the Domain system.

Domain/SNA allows Domain users to log in to an IBM host or to submit jobs to an IBM host from their workstations. Our Domain/SNA documentation set contains books that assist you in planning, using, and managing your Domain/SNA gateways.

Networks
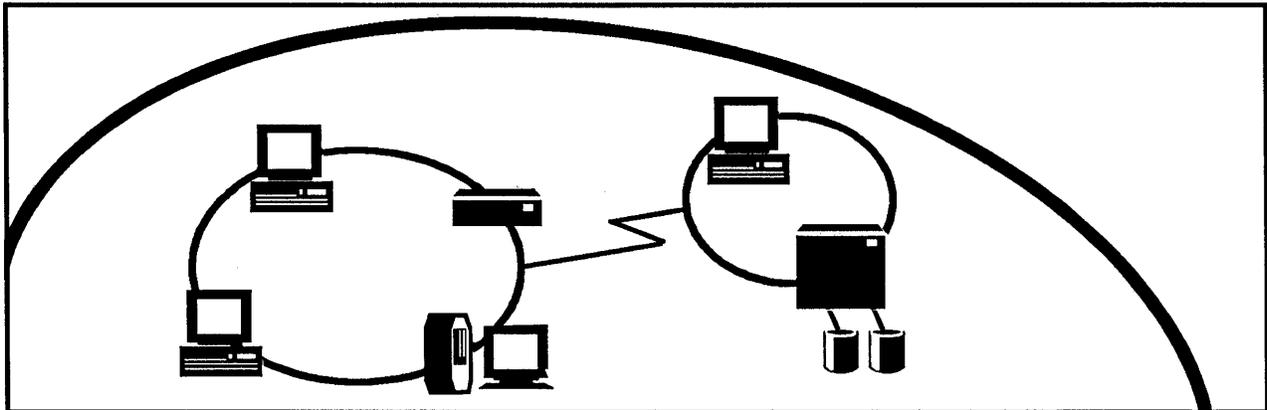
Domain TCP/IP consists of two products, Domain TCP/IP and Domain/IX BSD4.2 TCP/IP. These products provide communication services over a variety of physical networks that adhere to the DARPA Internet protocol. Domain TCP/IP provides communications for workstations running either the Aegis or Domain/IX operating system. Domain/IX BSD4.2 TCP/IP provides TCP/IP communications for workstations running Domain/IX. Both products contain utilities for terminal emulation (**telnet**) and file transfer (**ftp**). The documentation set describes how to install, configure, manage, and troubleshoot TCP/IP. It also describes how to use the **telnet** and **ftp** facilities for both TCP/IP products.

Domain/NFS enables Domain workstations and foreign systems connected on an ETHER-NET* network to access each other's files using commands and calls.

Domain/Access allows users to transparently access files on Digital Equipment Corporation (DEC**)VAX/VMS computers from Domain workstations. With this product, the VAX computer appears to be part of the Domain network. Domain/Access uses TCP/IP to communicate over an IEEE 802.3 network to the VAX computer. Our Domain/Access documentation set describes how to plan for, manage, and use this application.

Domain System RJE Emulation package allows users to submit jobs to an IBM host using the HASP, 2780, or 3780 protocols. *Using the Domain System RJE Emulation Package* explains how to use this package.

Domain X.25 allows users to connect two Domain networks over an X.25 network or to connect a Domain network to a remote computer. Our Domain X.25 documentation helps you install the controller and describes the product's facilities.

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* ETHERNET is a registered trademark of Xerox Corporation.
** DEC is a registered trademark of Digital Equipment Corporation.

Multipurpose Controllers

Unpacking and Installing Your EtherController–AT
 Order No. 009741   Revision 00

Unpacking and Installing Your EtherController–MB
 Order No. 008265   Revision 01

Internets

Planning Domain Networks and Internets
 Order No. 009916   Revision 00

Unpacking and Installing the Domain/Bridge Controller
 Order No. 005697   Revision 01

Managing the Domain Environment in an Internet
 Order No. 005694   Revision 02
 Binder: Large

PCI

Planning for the Domain/PCI Connection
 Order No. 007457   Revision 01
 Binder: Small

Installing the Domain/PCI–1 Connection
 Order No. 007458   Revision 00
 Binder: Small

Installing the Domain/PCI–8 Connection
 Order No. 007459   Revision 00
 Binder: Small

Using Your Domain/PCI Connection
 Order No. 007460   Revision 02
 Binder: Small

PCC

Installing Domain/PCC in Your DN3000 Workstation
 Order No. 009501   Revision 00

Using Domain/PCC for PC Compatibility
 Order No. 009498   Revision 00

Using Domain/PCC–Remote (addendum to *Using Domain/PCC for PC Compatibility*)
 Order No. 010733   Revision 00

SNA

Planning for the Domain/SNA Gateway Products
    Order No. 007760   Revision 01

Using the Domain/SNA Gateway Products
    Order No. 007762   Revision 01

Managing the Domain/SNA Gateway Products
    Order No. 007763   Revision 01

Installing the Domain/ComController Product
    Order No. 007761   Revision 01

TCP/IP

Planning for TCP/IP
    Order No. 010483   Revision 00

Using telnet and ftp
    Order No. 008667   Revision 00

Configuring and Managing TCP/IP
    Order No. 008543   Revision 01
    Binder: Large

NFS

Using Domain/NFS
    Order No. 010414   Revision 00

RJE

Using the Domain System RJE Emulation Package
    Order No. 005146   Revision 00
    Binder: Large

X.25

Installing the COM-X.25 Product
    Order No. 008264   Revision 00
    Binder: Large

Domain X.25 Reference
    Order No. 003223   Revision 01
    Binder: Large

Access

Using the Domain/Access Application
    Order No. 008012   Revision 01

Managing the Domain/Access Application
    Order No. 010173   Revision 00

See also: The Domain System

Domain Graphics Resources
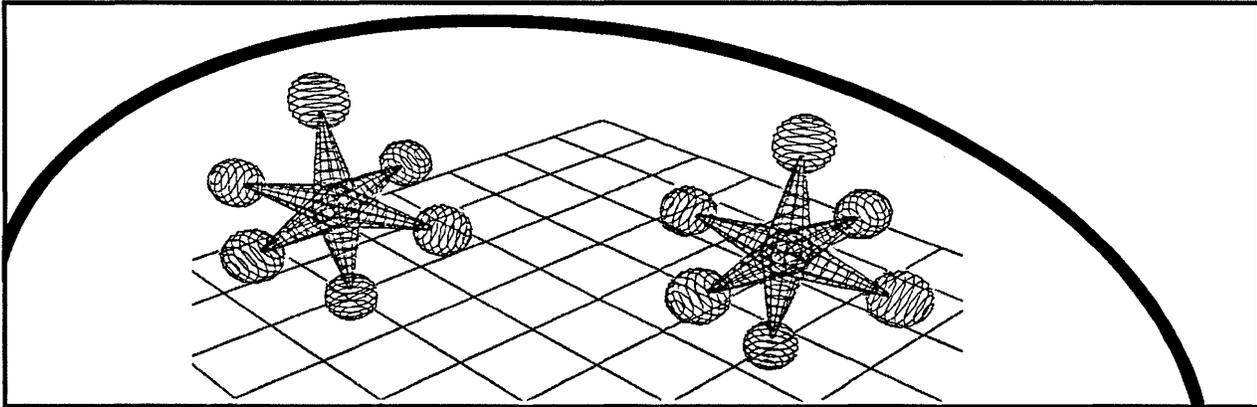
The Domain Graphics Resource (DGR™) is a set of four graphics packages:

Domain Graphics Service Routines (GSR™) is the lowest level software interface visible to the applications programmer for displaying graphic images. It allows programmers to send packets of graphics data directly to the display device without error checking. In addition, it does not provide other "bookkeeping" facilities that are provided by GPR and GMR. *Programming with Domain Graphics Service Routines* described GSR. The *Domain Graphics Instruction Set* describes the low-level graphics instructions used in Domain systems. These instructions are accessed through the Domain Graphics Service Routines.

The **Domain Graphics Primitives Resource** (GPR™) is a library of routines that let you manipulate low-level graphic elements to develop application programs. GPR has a procedural interface that includes error checking and attribute handling. The *Domain Graphics Primitives Resource Call Reference* provides reference documentation for these calls. *Programming With Domain Graphics Primitives* provides detailed programming examples to explain how to perform common graphics operations.

Domain Graphics Metafile Resource (GMR™) provides a high-level approach to graphics in two separate packages: 2D GMR and 3D GMR. Both packages allow you to create, edit, display, and store picture data in device-independent files. *Programming With Domain 2D Graphics Metafile Resource* describes how to perform various graphics operations using the 2D GMR package. Reference documentation on 2D GMR is in the *Domain 2D Graphics Metafile Resource Call Reference*. *Programming With Domain 3D Graphics Metafile Resource* describes how to use the 3D GMR package. The reference manual for 3D GMR is the *Domain 3D Graphics Metafile Resource Call Reference*.

Domain Core Graphics is a library of routines that conform to the de facto standard developed by the ACM/SIGGRAPHI graphics standards planning committee (1977-1979). Core simplifies the porting of existing Core-based applications onto Apollo nodes. Refer to *Programming With Domain Core Graphics* for information about Core.

Our graphics resources include, in addition to DGR, the Domain 4014 software package, which enables a Domain node to emulate a Tektronix 4014 graphics terminal. The *Domain 4014 User's Guide* contains details on this product.

Programming With Domain Graphics Primitives
    Order No. 005808   Revision 00
    Binder: Large

Programming With Domain 2D Graphics Metafile Resource
    Order No. 005097   Revision 00
    Binder: Large

Programming With Domain 3D Graphics Metafile Resource
    Order No. 005807   Revision 02
    Binder: Large

Programming With Domain Core Graphics
    Order No. 001955   Revision 02
    Binder: Large

Programming With Graphics Service Routines
    Order No. 009797   Revision 01
    Binder: Large

Domain 2D Graphics Metafile Resource Call Reference
    Order No. 009793   Revision 00
    Binder: Large

Domain 3D Graphics Metafile Resource Call Reference
    Order No. 005812   Revision 02
    Binder: Large

Domain Graphics Instruction Set
    Order No. 009791   Revision 01
    Binder: Large

Domain 4014 User's Guide
    Order No. 005224   Revision 00
    Binder: Large

See also: Operating System Publications

```
int     factorial(n)
    int    n;
{
    int    results;
    if (n == 0)   result = 1;
        else   result = n * factorial(n - 1);
        return(result);
    }
main()
```

The Domain system supports the following programming languages:

- FORTRAN

- Pascal

- C

- Common LISP

- Ada

We publish language reference manuals that detail the syntax of each language and document any differences between our implementation and an accepted standard. Our language manuals also explain how to compile, bind, and execute programs using options made available by our program development utilities.

We provide the manuals listed on the next page for FORTRAN, Pascal, C, Common LISP, and Ada. Our *Domain/Ada Development System Reference* is a set of reference manuals that covers Domain/Ada and Domain/Ada-related topics. The *Domain/IX Programmer's Reference* describes the C library for Domain/IX users. For users who do not use the Domain/IX product, the *Domain C Library (CLIB) Reference* describes the library routines accessible to C programmers.

We also provide an extensive library of online programming examples to supplement these language documents.

These language manuals assume readers have studied an introductory text in the particular language.

FORTRAN

Domain FORTRAN Language Reference
    Order No. 000530   Revision 05
    Binder: Large

Pascal

Domain Pascal Language Reference
    Order No. 000792   Revision 05
    Binder: Large

C

Domain C Language Reference
    Order No. 002093   Revision 03
    Binder: Large

Domain C Library (CLIB) Reference
    Order No. 005805   Revision 00
    Binder: Large

Common LISP

Domain/CommonLISP User's Guide
    Order No. 008791   Revision 01
    Binder: Large

Domain/CommonLISP Reference
    Order No. 010849   Revision 00
    Binder: Large

Ada

Reference Manual for the Ada Programming Language
    Order No. 008684   Revision 00

Domain/Ada Development System Reference
    Order No. 008917   Revision 00
    Binder: Large

Domain/Ada Development System Quick Reference
    Order No. 00   Revision 00
    Binder: Large

See also: Operating System Publications;
              Program Development Tools Publications

Program Development Tools

```
┌─────────────────────────────────────────────────────────────────────────┐
│  BOOL│ENUM│GMR│GPR│INT│MSG│NULL│REAL│SET│STRING                          │
│                                                                           │
│  The null task is used when the input event generates an action that the  │
│  application can perform without receiving any data. An example of such   │
│  an action is a request to exit the application.                          │
│                                                                           │
│  EVENTS:                    ACTIONS:                                       │
└─────────────────────────────────────────────────────────────────────────┘
```

The Domain system provides several software development tools.

Domain Software Engineering Environment (DSEE™) is a programmer's workbench—a collection of powerful tools that helps engineers construct, maintain, and manage complex software projects. The product includes an online tutorial that teaches the basic DSEE concepts. *Getting Started in the Domain Software Engineering Environment (DSEE)* guides you through the tasks most often performed with DSEE software. *Engineering in the DSEE Environment* describes the ways that software engineers use DSEE software to facilitate their work. The *Domain Software Engineering Environment (DSEE) Command Reference* contains complete details about DSEE commands. The *Domain Software Engineering Environment (DSEE) Call Reference* describes the programmable interface to DSEE facilities.

Domain Performance Analysis Kit (DPAK™) is a set of three tools that help you analyze the performance of your applications. DSPST looks at the relative use of CPU time by several processes at the system level. DPAT is an interactive tool that looks at the performance of programs at the procedure level. HPC looks at the performance of computational procedures at the statement level. All three tools are described in *Analyzing Program Performance with DPAK*.

Domain®/Dialogue™ provides programmers and user interface designers with a tool for creating advanced, graphic user interfaces to application programs. *Getting Started with Domain/Dialogue* introduces the tool, and the *Domain/Dialogue User's Guide* contains both procedural and reference information about using Domain/Dialogue.

Domain Language Level Debugger is a tool shipped with our standard software for use by programmers developing FORTRAN, C, or Pascal programs. See the *Domain Language Level Debugger Reference* for more information on this product.

Domain Binder and Librarian utilities are also shipped with standard software. These tools support high–level language programmers. The binder combines object modules into one executable object module. The librarian groups one or more object modules into a special file that serves as input to the binder. The *Domain Binder and Librarian Reference* describes both utilities.

DSEE

Getting Started with the Domain Software Engineering Environment (DSEE)
Order No. 008788   Revision 00

Engineering in the DSEE Environment
Order No. 008790   Revision 00

Domain Software Engineering Environment (DSEE) Command Reference
Order No. 003016   Revision 04
Binder: Large

Domain Software Engineering Environment (DSEE) Call Reference
Order No. 010264   Revision 00
Binder: Large

DPAK

Analyzing Program Performance with DPAK
Order No. 008906   Revision 00
Binder: Small

Domain/Dialogue

Getting Started with Domain/Dialogue
Order No. 010218   Revision 00

Domain/Dialogue User's Guide
Order No. 004299   Revision 01
Binder: Large

Binder and Librarian

Domain Binder and Librarian Reference
Order No. 004977   Revision 02
Binder: Large

Debugger

Domain Language Level Debugger Reference
Order No. 001525   Revision 04
Binder: Large

See also: Operating System Publications;
High-Level Language Publications

Database Management
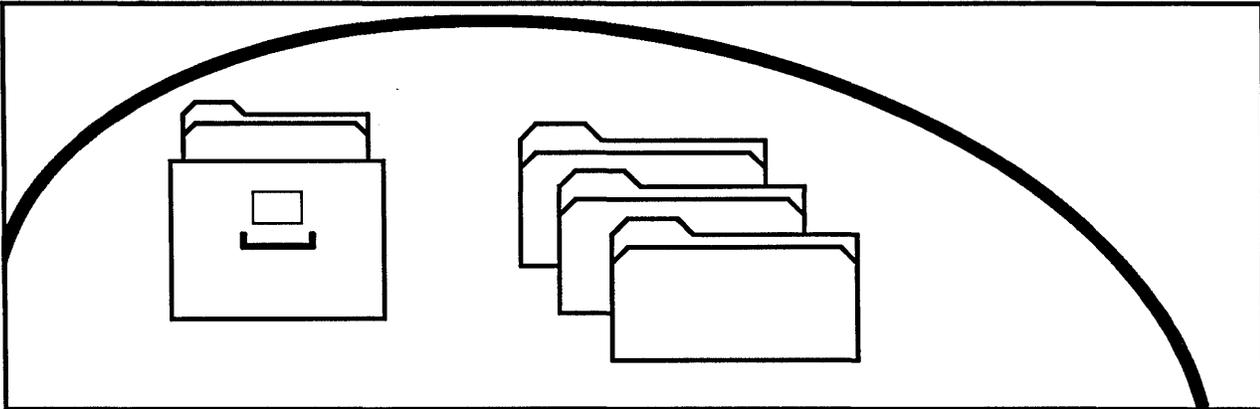
The D3M system is our network-model database management system. D3M works on local or distributed data, providing high-performance, multi-user access to databases located throughout a Domain network. The D3M data model and program interface are based on the CODASYL standard and support access from C, FORTRAN 77, and Pascal programs.

D3M consists of a server program and a set of utilities for database definition and operation, and for data retrieval, updating, and reporting. DESCRIBE is a menu-driven tool that allows the interactive definition of a new schema and the redefinition of existing schemas. D2V is an interactive database query, update, and basic reporting utility. RDL and D2F form a nonprocedural report writing package designed for nonprogrammers. Finally, the D3M run-time libraries, D3MLIB and DMLLIB, provide high-level and navigational Data Manipulation Language (DML) call interfaces.

The D3M document set includes an overview *(Introduction to D3M)* and a manual that describes how to define and operate databases *(How to Design, Define, and Operate a D3M Database)*. The manual *How to Write DML Programs* provides information on syntax and usage for D3M's Data Manipulation Language interfaces, while the manual *How to Use D3M/DATAVIEW and FORMATTER* describes the D3M query facilities and the RDL and D2F report-writing package.

Introduction to D3M
> Order No. 001950   Revision 00
> Binder: Large

How to Design, Define, and Operate a D3M Database
> Order No. 004302   Revision 00
> Binder: Large

How to Write DML Programs
> Order No. 004303   Revision 00
> Binder: Large

How to Use D3M/DATAVIEW and FORMATTER
> Order No. 004304   Revision 00
> Binder: Large
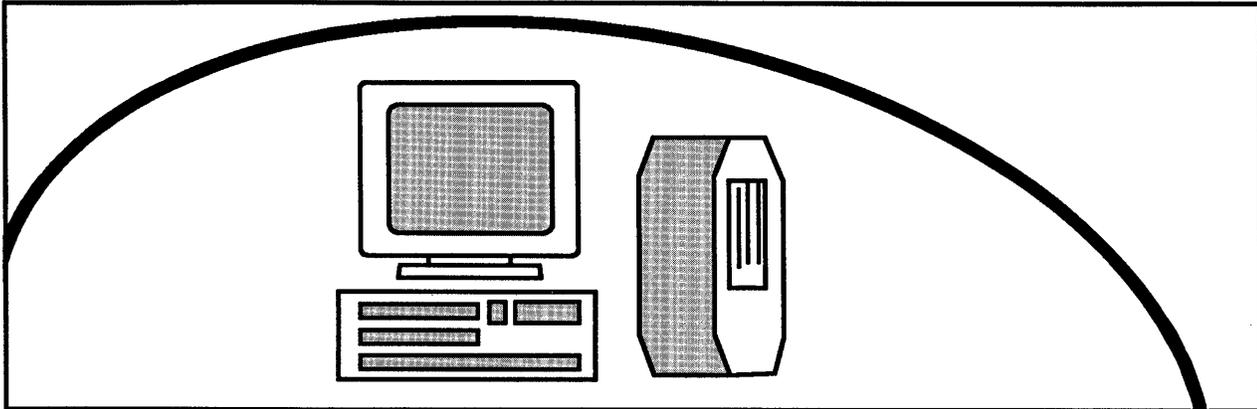
The Domain system provides a family of compatible workstations and servers. The publications that support these hardware products include unpacking and installing booklets, as well as technical reference, architecture, operating, and servicing manuals.

Our publications of general interest are applicable to all of our products. These books can help you to plan and prepare your site prior to the delivery of your Domain products, and service your workstations and servers. Our other workstation and server publications are relevant to specific product families.

The **DN3xxs** (the **DN300, DN320,** and **DN330**) and the **Domain Series 3000** are our low-end product families.

The **DN300** and **DN320** are economical desktop workstations based on the Motorola 68010 microprocessor. Both workstations offer an integrated monochrome monitor. The **DN320** is also equipped with a hardware floating-point unit.

The **DN330** is an economical desktop workstation with an integrated monochrome monitor. The workstation is based on the Motorola 68020 microprocessor and has a hardware floating-point unit.

The **Domain Series 3000** is a low-cost, high-power, computational node available either as a workstation or a server. The node may be configured as a desktop or a floor-standing unit. The workstation offers both color and monochrome monitors.

The *Domain Series 3000 Technical Reference* contains the hardware specifications for the DN3000 subassemblies. The *Domain Series 3000 Hardware Architecture Handbook* describes the hardware from the operating system's point of view.

The *Domain Series 3000 Configuration Worksheet* lists the functional parameters (DRQ lines, IRQ lines, power required, and address space) for the DN3000 system and the Apollo optional devices for that system.

The Domain Series 3000 offers several hardware components that you can install, such as memory boards, network controller boards, and a graphics controller board. Individual handbooks describe the installation procedure for each of these components. The handbooks for the network controller boards also explain how to configure the board and verify proper network operation.

Publications of General Interest

Domain Hardware Site Planning Specifications
Order No. 009859　　　　Revision 00
Binder: Large

Using Domain Diagnostics
Order No. 009329　　　　Revision 01
Binder: Large

Servicing Domain Monitors
Order No. 009349　　　　Revision 00
Binder: Large

DN3xxs

Operating the DN3xx
Order No. 005448　　　　Revision 00
Binder: Small

Unpacking and Installing the DN3xx
Order No. 005447　　　　Revision 00

Servicing the DN3xx
Order No. 003135　　　　Revision 01
Binder: Large

Domain Series 3000

Domain Series 3000 Configuration Worksheet
Order No. 010531　　　　Revision 01

Domain Series 3000 Technical Reference
Order No. 008778　　　　Revision 02
Binder: Large

Domain Series 3000 Hardware Architecture Handbook
Order No. 007861　　　　Revision 01

Servicing the Domain Series 3000
Order No. 007859　　　　Revision 02
Binder: Large

Unpacking and Installing Your DN3000 Personal Workstation and the DSP3000 Server
Order No. 007857　　　　Revision 04

Operating the DN3000 Personal Workstation and the DSP3000 Server
Order No. 007858　　　　Revision 02
Binder: Small

Domain Series 3000 Guide to Adding Third-Party Options and Writing Device Drivers
Order No. 010332　　　　Revision 00

Installing Memory in Your Domain System 3000
Order No. 010615　　　　Revision 00

Installing Graphics Controllers in the AT-Compatible Bus
Order No. 010409　　　　Revision 00

Installing the Two-Slot Apollo Token Ring Network Controller-AT
Order No. 010694　　　　Revision 00

Installing the 802.3 Network Controller-AT
Order No. 010614　　　　Revision 00

Installing and Programming the Domain Series 3000 SPE Option
Order No. 009798　　　　Revision 00

Workstations and Servers
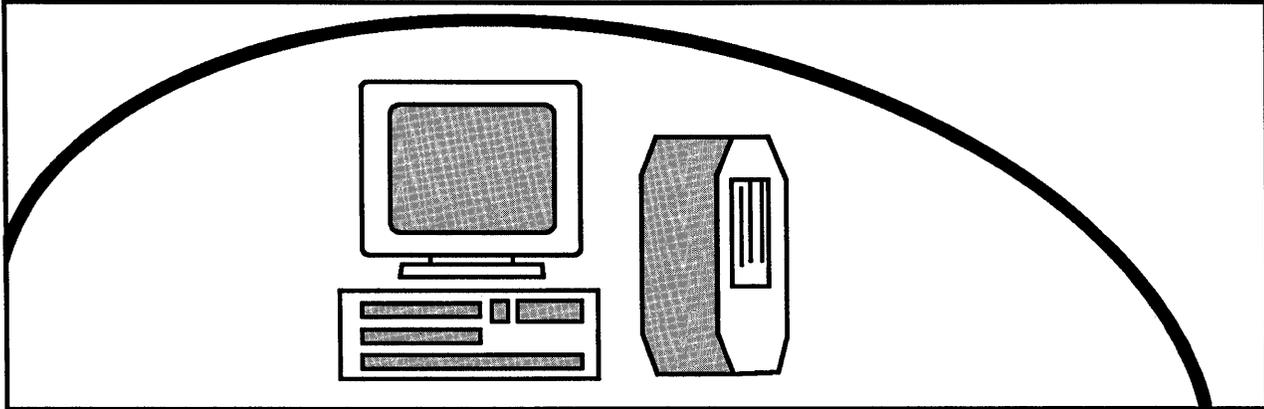
The Domain system offers these mid-range to high-end workstations:

The **DN550** is a low-cost, medium-performance color workstation based on the Motorola 68010 microprocessor.

The **DN560** is a high-performance color workstation based on the Motorola 68020 microprocessor. It uses the same graphics system as the **DN550**.

The **DN570/DN570A** are high-performance color workstations based on the Motorola 68020 microprocessor. They use a cost-reduced, single-board graphics system. The **DN570** offers a 15-inch, high-resolution color monitor while the **DN570A** offers a 19-inch, high-resolution color monitor.

The **DN580** is a high-performance, high-resolution, color graphics workstation based on the Motorola 68020 microprocessor. The **DN580** uses a graphics system with three-dimensional modeling capability.

The **DN5xx-Ts** (DN570-T, DN580-T, DN590-T) are high-performance, high-resolution, color graphics workstations based on the Motorola 68020 microprocessor, capable of performing three-dimensional modeling. These workstations provide up to 16 MB of main memory, a floating-point coprocessor for extremely fast data handling and transfer, a MULTIBUS*and/or a VMEbus module, and a mass storage subsystem, which lets you operate the systems as standalone workstations. The **DN580-T** includes 8 planes of graphics memory and the **DN590-T** includes 24 planes of graphics memory.

The **DSP500-T** is a high-performance server with up to 32 MB of main memory, a floating-point coprocessor, a MULTIBUS and/or a VMEbus module, and a mass storage subsystem.

The **DN660** is a color graphics workstation that is ideally suited to compute-intensive applications. The **DN460** supports the same functions as the DN660, but on a monochrome monitor.

*MULTIBUS is a trademark of Intel Corporation.

DN5xx

Unpacking and Installing the DN550/DN560/DN570(A) Workstation
  Order No. 004108   Revision 06

Operating the DN550/560/570
  Order No. 004107   Revision 03
  Binder: Small

Servicing the DN550/DN560/DN570
  Order No. 004827   Revision 03
  Binder: Large

DN580

Unpacking and Installing the DN580
  Order No. 007450   Revision 00

Operating the DN580
  Order No. 007451   Revision 00
  Binder: Small

Servicing the DN580/DN590
  Order No. 007452   Revision 01
  Binder: Large

DN5xx-T and DSP500-T

DN5xx-T Workstations and DSP500-T Server Hardware Architecture Handbook
  Order No. 009490   Revision 00

DN5xx-T Workstations and DSP500-T Server Technical Reference
  Order No. 009491   Revision 00
  Binder: Large

Unpacking and Installing the DN5xx-T Workstations and the DSP500-T Server
  Order No. 009493   Revision 00

Operating the DN5xx-T Workstations and the DSP500-T Server
  Order No. 009494   Revision 00
  Binder: Small

Servicing the DN5xx-T Workstations and the DSP500-T Server
  Order No. 009489   Revision 00
  Binder: Large

DN460/DN660

Unpacking and Installing the DN4xx/DN6xx
  Order No. 005508   Revision 00

Operating the DN4xx/DN6xx
  Order No. 005509   Revision 00
  Binder: Small

Troubleshooting Guide (DN4xx/DN6xx)
  Order No. 003239   Revision 01
  Binder: Large

Workstations and Servers
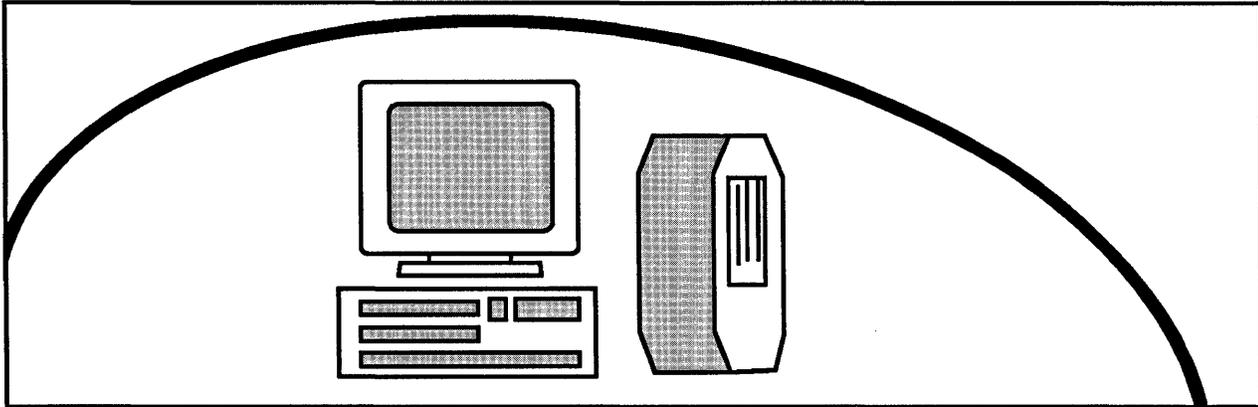
In addition to the Domain Series 3000 server processor, and the DSP500 and DSP500-T server processors, the Domain system supports these server processors for calculation and peripheral support throughout a Domain network:

The **DSP160,** with integral floating-point support, distributes accelerated calculation and computation resources throughout the network.

The **DSP80A/DSP90** are high-performance processors that allow users to connect a wide range of peripherals to the Domain system.

The **DSP9000** Series is a family of computational servers that provide high-performance for computationally intensive applications, using vector processing and parallel processing. *Introducing the DSP9000* shows you how to use the DSP9000 in a Domain network. The book also points you to the manuals that show how to install and configure the DSP9000 in the network.

DSP160

Unpacking and Installing the DSP160
    Order No. 005505   Revision 00

Operating the DSP160
    Order No. 005489   Revision 00
    Binder: Small

DSP80A/DSP90

Unpacking and Installing the DSP80A/DSP90
   Order No. 004958   Revision 01

Operating the DSP80A/DSP90
    Order No. 004957   Revision 01
    Binder: Small

Servicing the DSP80A/DSP90
    Order No. 005806   Revision 00
    Binder: Large

DSP9000

Introducing the DSP9000
    Order No. 008915   Revision 00

Input, Storage, and Network Peripherals
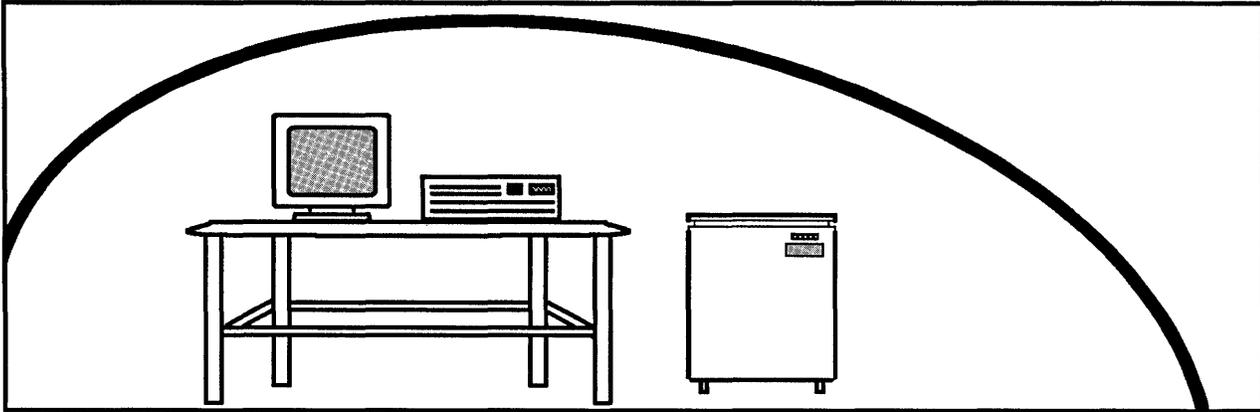
The Domain system supports a range of peripheral products, including printers, pointing devices, and storage media. Our manuals concerning printers are presented in the next section. Here we present the manuals that deal with input devices, storage media, and network hardware.

Installing Input/Output (I/O) Devices for Domain Nodes is a general installation guide that covers grounding and cabling information in preparation for connecting any peripheral to the Domain system. Each peripheral also has its own product-specific installation manual.

The Domain/DFL-100 extends a Domain ring using a fiber-optic cable link and fiber-optic interface units. *Installing and Operating the Domain/DFL-100 Fiber Interface Unit* describes how to install and operate the unit.

Written for cable installers, *Installing Coaxial Cable and Accessories for a Domain Token Ring Network* contains procedures for installing our specified coaxial cable and terminating the cable with the DQC-100 (for attaching nodes) and BNC connectors (for attaching network switches). The manual also contains a procedure for testing the cabling system for short or open circuit conditions. This manual is available through the Domain System User/Accessories Catalog (call 1-800-225-5290 to order the manual from the catalog).

Installing Coaxial Cable and Accessories for a Domain Token Ring Network
Order No. 009860   Revision 00

Installing Input/Output (I/O) Devices for Domain Nodes
Order No. 008268   Revision 01
Binder: Large

Unpacking and Installing the Domain Peripheral Cabinet
Order No. 004678   Revision 00

Installing the Tablet
Order No. 008257   Revision 00
Binder: Large

Installing the FSD-500
Order No. 008267   Revision 00
Binder: Large

Installing the MSD-300M
Order No. 008262   Revision 00
Binder: Large

Installing the MSD-1600
Order No. 008263   Revision 00
Binder: Large

Installing the MSD-6250
Order No. 007456   Revision 00
Binder: Large

Installing and Operating the Domain/DFL-100 Fiber Interface Unit
Order No. 008626   Revision 00

Printers
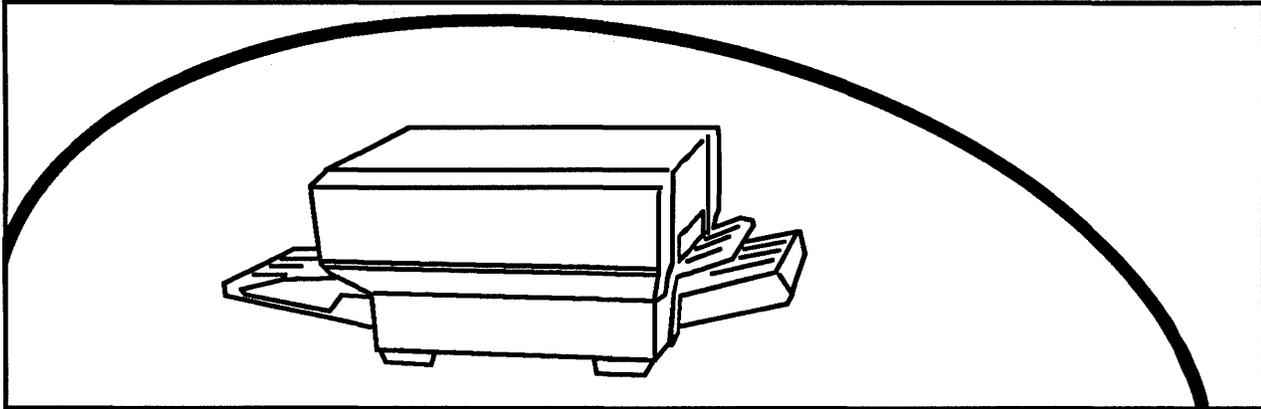
The Domain system supports a number of printers and plotters. The documentation we provide about these printers is listed on the next page. Our general peripheral installation guide, *Installing Input/Output (I/O) Devices for Domain Nodes*, listed on the previous page, contains general information about installing printers in the Domain system. Each printer also has its own product-specific installation manual.

PostScript* is a page-description language used to communicate with printers. The *PostScript Reference Manual* describes the PostScript commands.

* PostScript is a registered trademark of Adobe Systems Incorporated.

Printers

Installing the Printer/Plotter
    Order No. 008261   Revision 00
    Binder: Large

Installing the Apple LaserWriter in a Domain System
    Order No. 007864   Revision 00
    Binder: Large

Installing the Imagen Laser Printer
    Order No. 008266   Revision 00
    Binder: Large

Installing the Multi–Mode Printer
    Order No. 008258   Revision 00
    Binder: Large

Installing the Domain/Laser–26 in a Domain System
    Order No. 007851   Revision 00
    Binder: Large

Operating the Domain/Laser–26
    Order No. 007852   Revision 00
    Binder: Large

Installing and Operating the Tektronix 4692 Printer Interface
    Order No. 009906   Revision 01
    Binder: Large

Printer Software

PostScript Language Reference
    Order No. 007765   Revision 00

Documentation Packages

We have put together a number of documentation packages to make ordering our technical publications easier. Each of these sets contains all of our documents related to a particular topic or a particular user need.

Below are the names, order numbers, and contents of our documentation packages. We describe the contents of each book earlier in this manual.

Domain/IX Starter Documentation Package

This package provides new users and system administrators with the information they need to use the Domain/IX environment.

Order No. 009019

Administering Your Domain System
System Administration for Domain/IX BSD4.2
System Administration for Domain/IX System V
Getting Started with Your Domain System
Domain System User's Guide
Domain System Command Reference
Getting Started with Your Domain/IX System
Domain/IX User's Guide
Domain/IX Command Reference for System V
Domain/IX Command Reference for BSD4.2
Domain/IX Text Processing Guide
Domain/IX Text Editors Quick Reference

Domain/IX Advanced Documentation Package

This package provides programmers with the information they need to program in the Domain/IX environment.

Order No. 009021

Domain System Call Reference
Domain Graphics Primitives Resource Call Reference
Programming with General System Calls
Programming with System Calls for Interprocess Communication
Domain/IX Programmer's Reference for System V
Domain/IX Programmer's Reference for BSD4.2
Domain/IX Support Tools Guide
Configuring and Managing TCP/IP
Programming with Domain Graphics Primitives
Programming with Domain 2D Graphics Metafile Resource
Programming with Domain 3D Graphics Metafile Resource
Domain 2D Graphics Metafile Resource Call Reference
Domain 3D Graphics Metafile Resource Call Reference
Domain Language Level Debugger Reference
Domain Binder and Librarian Reference

Domain/IX Standard Documentation Package

Order No. DOC-IX

Domain/IX Starter Documentation Package
Domain/IX Advanced Documentation Package

Aegis Starter Documentation Package

This package provides new users and system administrators with the information they need to use the Aegis environment.

Order No. 009018

Administering Your Domain System
Getting Started with Your Domain System
Domain System User's Guide
Domain System Command Reference

Aegis Advanced Documentation Package

This package provides programmers with the information they need to program in the Aegis environment.

Order No. 009020

Domain System Call Reference
Domain Graphics Primitives Resource Call Reference
Programming with General System Calls
Programming with System Calls for Interprocess Communication
Programming with Domain Graphics Primitives
Programming with Domain 2D Graphics Metafile Resource
Programming with Domain 3D Graphics Metafile Resource
Domain 2D Graphics Metafile Resource Call Reference
Domain 3D Graphics Metafile Resource Call Reference
Domain Language Level Debugger Reference
Domain Binder and Librarian Reference

Aegis Standard Documentation Package

Order No. 008122

Aegis Starter Documentation Package
Aegis Advanced Documentation Package

PCI-1 Documentation Package

Order No. 008432

Planning for the Domain/PCI Connection
Installing the Domain/PCI-1 Connection
Using Your Domain/PCI Connection

PCI-8 Documentation Package

Order No. DOC-PCI-8

Planning for the Domain/PCI Connection
Installing the Domain/PCI-8 Connection
Using Your Domain/PCI Connection

PCC Documentation Package

Order No. 009159

Installing Domain/PCC in Your DN3000 Workstation
Using Domain/PCC for PC Compatibility

SNA-3270 Documentation Package

Order No. 008748

Planning for the Domain/SNA Gateway Products
Using the Domain/SNA Gateway Products
Managing the Domain/SNA Gateway Products
Installing the Domain/ComController Product

Documentation Packages

TCP/IP Documentation Package

Order No. DOC–TCP/IP

Planning for TCP/IP
Using telnet and ftp
Configuring and Managing TCP/IP

Domain/Access Documentation Package

Order No. DOC–ACC

Using Domain/Access Applications
Managing the Domain/Access Application

X.25 Documentation Package

Order No. DOC–X.25

Domain X.25 Reference
Installing the COM–X.25 Product

Domain/Bridge, EtherBridge Documentation Package

Order No. DOC–BRDG

Planning Domain Networks and Internets
Unpacking and Installing the Domain/Bridge Controller
Managing the Domain Environment in an Internet

C Documentation Package

Order No. 008125

Domain C Language Reference
Domain C Library (CLIB) Reference

CommonLISP Documentation Package

Order No. DOC–CLISP

Domain/CommonLISP User's Guide
Domain/CommonLISP Reference

Ada Documentation Package

Order No. 010144

Reference Manual for the Ada Programming Language
Domain/Ada Development System Reference

D3M Documentation Package

Order No. 008126

Introduction to D3M
How to Design, Define, and Operate a D3M Database
How to Write DML Programs
How to Use D3M/Dataview and Formatter

DSEE Documentation Package

Order No. DOC–DSEE

Getting Started with DSEE
Engineering in the DSEE Environment
Domain Software Engineering Environment (DSEE) Command Reference
Domain Software Engineering Environment (DSEE) Call Reference

Call your local sales office to order any of the documents listed in this booklet. In addition to these publications, we offer documentation update packages and release notes that reflect product changes. You should periodically check with your local sales office to learn whether any new update packages are available. Locations and telephone numbers for worldwide sales offices are listed below.

International Offices

Australia
Sydney
61-2-957-3382

Austria
Vienna
43-222-257-352

Belgium
Brussels
32-2-763-0303

Denmark
Copenhagen
45-2-890-977

Finland
Helsinki
35-8-0-524-533

France
Montigny Le Bretonneux
33-1-305-85833

Hong Kong
852-578-5785

Italy
Milan
39-2-824-2161

Japan
Tokyo
81-3-588-1561

Korea
Seoul
82-2-553-4630

Netherlands
Houten
31-34-039-03211

Norway
Oslo
47-2-23-28-80

Singapore
65-345-8633

Sweden
Kista
46-8-750-5620

Switzerland
Zurich
41-1-833-5060

Taiwan
Taipei
(88-6) 2-776-5590

United Kingdom
Milton Keynes, England
44-90-836-6188

Livingston, Scotland
44-50-641-6868

West Germany
Frankfurt
49-69-664-050

North American Offices

Northeastern USA
Framingham, Massachusetts
(617) 872-4802

Southeastern USA
Atlanta, Georgia
(404) 393-4720

Northwestern USA
Santa Clara, California
(408) 496-2900

Southwestern USA
Laguna Hills, California
(714) 768-2988

North Central USA
Schaumburg, Illinois
(312) 882-7030

Canada
Scarborough, Ontario
(416) 297-0700

When ordering manuals, you may also want to order binders and a label sheet. The binders come in two sizes: a large, 2-inch binder and a small, 1-inch binder. The lists of books on the previous pages indicate which books use the large binder and which use the small binder; books that don't need a binder are not marked. The label sheet includes stick-on titles to place on the binders.

Large 2-inch binder   Order No. 002715-001
Small 1-inch binder   Order No. 002715-003
Label sheet of titles   Order No. 007434-001