

Support Services

HEWLETT  PACKARD

→ Minicomputing

HP 3000 Series II Systems

A computer advance in data processing price/performance



A Complete Range of Support Services to Insure the Success of Your HP 3000 Series II Installation

Hewlett-Packard offers a comprehensive selection of Support Services to insure the success of your Series II installation. This publication describes these services, the HP Support team that provides them and how you may order them.

The support services described on the following pages are classified into three general areas:

Page 3

Site preparation and installation of your system. These services are included in the price of your system and assure you of a successful installation.

Pages 4 and 5

Professional training and consulting for your staff. A complete selection of training courses and consulting packages may be purchased to allow you to tailor a training program to your staff's needs.

Pages 6 and 7

The HP 3000 Series II maintenance program. A complete system maintenance program contracted for on a yearly basis to provide:

- Hardware maintenance
- Software maintenance
- Reference manual updates
- Information newsletter

Pages 7 through 14

Course and consulting offerings. Appendix, and data sheets describing each of the Series II training courses and consulting packages, in detail.

Good support depends on competent people. The following are brief descriptions of the Hewlett-Packard team that will provide support for your site.

- **Sales Representative** – The person responsible for handling your account on a continuing basis. When you need new solutions, additional system capability, extra training courses, technical consulting, or if you have any problems or questions – this is the person you contact.
- **Systems Engineer (S.E.)** – A technical specialist who works with the Sales Representative to insure that your application runs smoothly on the HP 3000. The S.E. has had extensive training on the subsystems and operating system, and can provide on-site training and consulting on their use. Your S.E. can also provide assistance to resolve problems you may be having in using your Series II System.
- **Customer Engineer (C.E.)** – Your service representative. Upon purchase of a system maintenance contract, Hewlett-Packard assigns an individual C.E. to be responsible for your system. The C.E. can help you with any service problem – carries a complete set of tools and spare parts and has been trained to quickly troubleshoot and maintain HP 3000 systems. The C.E. will also call-in any other help that may be required to keep your HP 3000 Series II System up and running. Your C.E. is backed by an HP 3000 system Product Specialist – a behind-the-scenes technical expert who provides hardware and operating system software backup for your HP Customer Engineer, and has extensive experience with the HP 3000 operating system. The Product Specialist also provides local assistance in analyzing possible problems.

The services that your Hewlett-Packard support team provides are described in the following pages.

Preparing Your Site and Installing Your HP 3000 Series II System



SITE PREPARATION CONSULTING

After an order has been placed for an HP 3000 Series II Computer System, your Sales Representative will make arrangements for the HP Customer Engineer who will be responsible for maintaining your system, to visit your site and consult with you on matters related to the environment of the system. The first visit occupies approximately four hours, exclusive of travel. The Customer Engineer evaluates the site with relation to the specifications contained in the HP 3000 Site Preparation Manual, and makes specific recommendations about any changes that are required. The Customer Engineer will visit your site a second time prior to system installation, to insure that the site is properly prepared. These visits are included in the purchase price of an HP 3000 Series II System.

During his first visit, the engineer:

- Provides you a copy of the HP 3000 Site Preparation Manual, publication number 30000-90016. This information helps you and your company's Facilities Engineer make preparations for installation, well in advance of actual delivery of the system.
- Calculates the heat output of the proposed system, to advise whether adequate air-conditioning equipment is available to keep the system within heat, humidity and dust limits.
- Checks to determine if adequate power facilities exist and that they conform to noise and neutral-to-ground impedance requirements; advises you on requirements for isolation transformers.
- Verifies the general suitability of the proposed system environment with respect to space, lighting, storage space, access to peripherals, etc.
- Checks the means by which the system is to be installed. For example, he makes sure that elevators are adequate to support size and weight of equipment.
- Advises you of your responsibilities in preparing for the installation.

SYSTEM INSTALLATION

Installation service, which is included in the purchase price of an HP 3000 Series II System, is directed by your local HP Customer Engineering group.

An HP Customer Engineer will install your HP 3000 System and insure that it is operating according to specifications. Installation service consists of the following:

- Supervising unpacking and taking inventory
- Installing equipment as defined in the sales order (except terminals)
- Turning power on
- Running all diagnostics successfully
- Running verification program. (This is the same verification procedure used by the manufacturing division at the time the system was integrated)
- Familiarizing the operator with the system (power on, daily maintenance, emergency procedures)
- Loading and verifying all ordered software
- Showing you how to obtain the HP services you need

The following items which are **not** included in the system installation service, can be provided at your request, on a time and materials basis:

- Reconfiguring new systems
- Set-up of terminals (**not** including extensive cabling)

Your responsibilities:

- Physically moving the system from your delivery dock to your computer room
- Unpacking and taking inventory (under the supervision of the HP Customer Engineer)
- Connecting the system to the electrical supply
- Acquiring and installing data communications equipment (modems, telephone lines, etc.)
- All site modifications identified during the site preparation consulting visit.

Professional Training and Consulting for Your Staff

Hewlett-Packard offers a variety of training courses and consulting packages to get you started successfully using your Series II System, and to provide on-going support as you develop new applications. A special module called the "HP 3000 Start-Up Package" includes two fundamental training courses, plus three days of on-site HP 3000 Installation Start-Up Consulting. It provides a comprehensive introduction to use of the HP 3000 Series II, plus training in system management and operation. Key members of your staff may be trained at your site after system installation. All HP training and consultation services are available on a tuition basis and may be ordered from your HP Sales Representative. Training and consulting may be tailored to the specific needs of your installation in four different ways:

- Classroom courses taught at HP training centers, by professional instructors with a strong background in computer applications. These centers are equipped with HP 3000 Series II Systems; courses are designed to provide a generous amount of practical, hands-on experience with the system.
- Self study courses employing modularized audio cassettes, student workbooks, and language reference manuals. The student gains practical "hands-on" experience by completing lab problems in each module, using an HP 3000 Series II System at your site.
- Training and consulting conducted at your site by your HP Systems Engineer, after your Series II System has been installed. Your S.E. has the knowledge and can obtain materials to teach certain training courses on your site.

You can also purchase S.E. consulting in the form of on site HP 3000 System Consulting. In all cases, S.E. consulting is for the purpose of conveying information, (i.e., conducting training, providing advice based on his experience and special knowledge, and directing you to specialized sources of information, etc). The S.E. Consulting provided under this form of service **never** includes designing, coding, or converting the user's applications.

All on-site training and consulting is subject to availability; the specific times during which the training and/or consulting are given at the installation site must be mutually agreed upon by you and your HP Sales Representative. Typically, the services will be used during a period not exceeding four months, commencing prior to the installation date of the system.

- HP 3000 Phone-In Consulting Service. When you purchase this service, you are provided with a special toll-free telephone number (where available) for obtaining answers to questions related to your use of the HP 3000 System. See appendix.

HP 3000 SERIES II TRAINING COURSES

Two training courses are fundamental to successful operation and usage of your Series II system; the first, "HP 3000: A Comprehensive Introduction" is a five-day course available either at a Hewlett-Packard training center or on your site. This course is a prerequisite to all other 3000 Series II training, and is a must for your System Manager and all programmers on your staff. The second fundamental course is "HP 3000: System Management and Operation." Your System Manager, and perhaps one alternate person, must attend this course (either on site or at a training center), to learn proper management and operation of your system.

Successful completion of these courses by your company's System Manager makes the person eligible to take advantage of the Phone-In Consulting service and to submit "Software Problem Reports".

The following table shows current HP 3000 Series II training and consulting services. For detailed descriptions of any course, see the Appendix in this volume, and check with your HP Sales Representative for availability and course scheduling.



TRAINING AND CONSULTING SUMMARY

Course	Type (Location)	Length Days	Tuition Per Student At Training Center	On-Site Course Price
22800A HP 3000 Start-Up Package: HP 3000: A Comprehensive Introduction - 5 days HP 3000: System Management and Operation - 4 days HP 3000: Installation Start-Up Consulting - 3 days	On-site	12		
22801A HP 3000: A Comprehensive Introduction	Training center	5		
22815A HP 3000: A Comprehensive Introduction	On-site	5		
22802A HP 3000: System Management and Operation	Training center	4		
22816A HP 3000: System Management and Operation	On-site	4		
22956A HP 3000: IMAGE (Data Base Management)	Training center	5		
22957-90000 HP 3000: COBOL	Self Study	—		
22958-90000 HP 3000: BASIC	Self Study	—		
22803A HP 3000: Advanced Usage	Training center	5		
22804A HP 3000: SPL (Systems Programming Language)	Training center	5		
22975A IBM System/3 to HP 3000 Conversion	Training center	2		
22817A IBM System/3 to HP 3000 Conversion	On-site	2		
22818A HP 3000CX to HP 3000 Series II Conversion	On-site	1		
22819A HP 3000: Data Entry Library	On-site	1		
22820A HP 3000: IMAGE Optimization	On-site	1		
22821A HP 3000: Installation Start-Up Consulting-3 days	On-site	3		
22822A HP 3000: System Consulting - 15 days (maximum of 2 days/week across a 3 month period)	On-site	15		
22826A HP 3000: Phone-In Consulting Service	Telephone Consulting	—		

Note: fees for on-site classes include up to 10 student. Additional students, up to the maximum number of students per class (see course data sheets, pages 8 - 14) can be accommodated at an additional charge per student.

HP 3000 Series II

System Maintenance Program

To help keep your installation running smoothly and to insure maximum up-time, Hewlett-Packard offers a basic maintenance service, with a series of options to tailor it to your particular needs. HP's System Maintenance Contract for the Series II System, covers hardware and software maintenance, reference manual updates, and a subscription to the **Communicator**, a bimonthly software information service.

SYSTEM HARDWARE MAINTENANCE

The System Maintenance Contract covers the following hardware-related services:

- Six preventive maintenance visits are included per year. Additional visits may be necessary because of adverse operating environment or extreme heavy usage of particular peripherals (such as line printers); these visits are subject to an extra charge.
- Emergency repair of system failures. The System Maintenance Contract covers all costs of repairing or replacing any defective part of your system.

The HP Basic Monthly Maintenance Contract provides for typical 4-hour response times within a 100 mile radius of a major metropolitan area. Coverage is provided Monday through Friday, 8 a.m. to 5 p.m.

Your local HP Sales Representative can provide you with a quotation for extended coverage tailored to your specific needs. Extended service provides coverage for weekends and after 5 p.m. Extended coverage is not available in some locations. Check with your Sales Representative for details.

Hardware Maintenance does **not** cover:

- Relocation or reconfiguration of the system
- Damage caused by misuse of the system, air-conditioning failure or fire
- Natural disaster

When you place an order for an HP 3000 Series II System, a Customer Engineer in your local HP Office is assigned to your account. This Customer Engineer will be, in most cases, the same person who consults with you on site preparation, installs the system, and is personally held accountable for the maintenance, reliability and up-time of your system.

Your HP Customer Engineer has a personal, complete stock of spares for the most vulnerable parts of your system and has access at regional service offices, for the less critical items. The C.E. is also backed by the Customer Engineering group in your HP Sales Region and by the Product Support group at Hewlett-Packard, General Systems Division. This organization is geared to respond quickly with additional personnel and/or equipment if your C.E. has not been able to resolve a system problem within 4 hours of arrival on your site.

SYSTEM SOFTWARE MAINTENANCE

The System Maintenance Contract covers the following software-related services:

- Automatic software updates – When your HP Customer Engineer performs preventive maintenance, the latest updates of software purchased for your site, are installed on your system. This service also covers any unscheduled visits to install revised software to solve emergency software problems.
- Service on non-reproducible system failures – If the system should fail for no apparent reason, the HP 3000 Series II central processor has a built-in memory dump facility that allows your system operator to dump the contents of memory to a magnetic tape, and restart the system – all in a matter of minutes. A system log is provided for your operator to enter this occurrence and note system user activity at the time of the failure.
- If this problem recurs frequently (i.e., more than once per week), your C.E. will collect the memory dump evidence, and with help from the HP 3000 Product Specialist, will attempt to isolate possible hardware or system software malfunctions. Your C.E. will send a report of the findings back to your company's System Manager, together with an action plan for resolving the problem.

REFERENCE MANUAL UPDATES

Under this service, which is part of the System Maintenance Contract, you receive one set of manual updates pertinent to the software purchased for your site. These updates are mailed directly to your company's System Manager.



Course and Consulting Offerings

If a software error is fixed or a product is enhanced, the appropriate reference manual is updated to reflect that change. Whenever an update to a manual is issued, your Company's System Manager will receive a set of replacement pages. These pages are provided in a convenient looseleaf format and can be easily inserted in the master set of system documentation. If changes are extensive, a reprinted copy of the manual will be sent.

If you require more than one set of manual updates, additional sets can be purchased through your local HP Sales Representative.

SOFTWARE INFORMATION SERVICE

This service is provided in the form of a publication called the **Communicator** which contains the following kinds of information:

- Lists of software problems fixed in the latest software updates
- Lists of known software problems, and "work-arounds" when available
- Training course schedules
- Lists of available software documentation, plus ordering information
- Announcement of the availability of new or updated manuals
- Application articles contributed by users, serving as a means of communication within the HP 3000 user community
- Feature articles of general interest

The **Communicator** is published by Hewlett-Packard, General Systems Division, six times per year, and distributed to customers by HP's Corporate Parts Center, which maintains the computer-based subscription service. The publication is printed simultaneously with the release of updated HP 3000 software and sent directly to your company's System Manager. Your System Maintenance Contract includes one subscription to the **Communicator**. Additional subscriptions for your site may be purchased through your HP Sales Representative.

APPENDIX OF TRAINING COURSES AND CONSULTING PACKAGES

HP 3000: Installation Start-Up Package (on your site)
HP 3000: A Comprehensive Introduction
HP 3000: System Management and Operation
HP 3000: IMAGE (Data Base Management Training)
HP 3000: COBOL (Self Study Training Module)
HP 3000: BASIC (Self Study Training Module)
HP 3000: Advanced Usage Course
HP 3000: Systems Programming Language (SPL)
HP 3000: Data Entry Library
HP 3000: IMAGE Optimization
IBM System/3 to HP 3000 Conversion
HP 3000CX to Series II Upgrade
HP 3000: Installation Start-Up Consulting
HP 3000: System Consulting
Phone-In Consulting

Notes:

Registration

Course registration should be made through your local Hewlett-Packard Sales Representative, including requests for assistance in obtaining hotel/motel accommodations.

Accommodations

As a service to customers, the training registrar at applicable Hewlett-Packard training centers will assist in obtaining accommodations (upon request to the HP Sales Representative) for students attending courses at the training center. Responsibility for payments for transportation, meals, and lodging, remains with attendees.

Course and consulting descriptions are presented on the following pages.

**22800A HP 3000: INSTALLATION START-UP PACKAGE
(on-site)**

This package combines the minimum training courses and consulting required to insure success with your Series II installation. This combination provides instruction and consulting.

This approach allows you to obtain the training for a maximum number of your staff, on-site, without incurring travel and living expense.

The 22800A, HP 3000: Installation Start-Up Package consists of the following courses (on-site):

22815A, HP 3000: A Comprehensive Introduction (5 days)

22816A, HP 3000: System Management and Operation (4 days)

22821A, HP 3000: Installation Start-Up Consulting (3 days)

Class size: Standard, up to 10 students
Maximum, 16 students

HP strongly recommends these courses as minimum training for your company's System Manager and System Operator. The equivalent instruction is also available at an HP Training Center, with only the Installation Start-Up Consulting to be conducted on-site by your Hewlett-Packard S.E. This enables you to train key members of your staff, and to begin application development planning before the arrival of your HP 3000 Series II System.

Of course, the alternative method of individual training is also available to all members of your staff. See course numbers 22801A, 22802A and 22821A.

Moreover, any combination of on-site and HP Training Center courses may be selected from the described course offerings (see appendix). Consult your HP Sales Representative to develop a training plan for your staff.

**22801A HP 3000: A COMPREHENSIVE INTRODUCTION
(HP training center)**

**22815A HP 3000: A COMPREHENSIVE INTRODUCTION
(on-site)**

This is the basic HP 3000 user training course and is the prerequisite for all other HP 3000 training and consulting.

It is available at Hewlett-Packard training centers or on your site.

Prerequisites: Some previous computer experience.
Knowledge of one of the HP 3000's programming languages.

Purpose: To learn the major features of the HP 3000's interactive terminal and batch environments.

Length: 5 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 50%.

Course Content:

- System overview – hardware, software, terminology, concepts of virtual memory and stack architecture
- User interface – MPE commands, accessing the system (batch and interactive)
- Text editor – using basic editor commands for program development
- File system – file type, security, user access, spooling
- Utilities – Dumping files, code conversion between files, copying files, comparing files, sorting files, merging sorted files, file backup, magnetic tape error-recovery, multi-file magnetic tape copying and dumping, copying portions of files by record numbers or contents
- Data base management system (IMAGE) overview -- definition of terms, capabilities, user interface
- Programmatic terminal control -- formatting, reading, range-checking

Student Materials:

03000-90121 Terminal Users Guide
03000-90012 EDIT/3000 Reference Manual
03000-90064 FCOPY/3000 Reference Manual
30000-90009 MPE Commands Reference Manual
30000-90011 MPE Segmenter Reference Manual
30000-90045 Index to MPE Reference Documentation
30000-90049 Software Pocket Guide
30000-90050 Data Entry Library Reference Manual
32214-90001 SORT/3000 Reference Manual
22801-90001 Student Workbook

Class Size: 20 Students maximum at HP training center. (Two students per Series II terminal.)

On-site class size limited to two students per available terminal. Standard, up to 10 students; maximum, 16 students.



22802A HP 3000; SYSTEM MANAGEMENT AND OPERATION
(HP training center)

22816A HP 3000; SYSTEM MANAGEMENT AND OPERATION
(on-site)

This is the basic course that your company's System Manager must attend in order to properly manage and control the HP 3000 system. It is available at HP training centers or on-site.

Prerequisites: Successful completion of HP 3000:

A Comprehensive Introduction. It is recommended that the student have a clear understanding of the company's user base, and of the applications to be performed on the HP 3000.

Purpose: To prepare the student for the responsibility of allocating system resources. The student learns how to operate the system and maintain system records; how to design, implement and modify the account/group/user structure; how to employ MPE commands to control system-wide activity; and learns about considerations affecting operating efficiency.

Length: 4 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 30%.

Course Content:

- Designing the account structure – creating, deleting, altering, listing accounts and file security; establishing and altering global security matrices
- System activity logging facility
- Operational management – controlling priority of jobs/sessions
- System generation, alteration and backup
- File backup and system reload
- Overview of hardware, peripherals, power on/off procedures, control panel
- System start-up/shutdown
- Managing power-fail/auto restart facility
- Operation/user communication
- Device and device-file-management
- System failure – interpretation and recovery

Student Materials:

30000-90044 MPE System Utilities Manual

30000-90013 System Console Operator's Guide

30000-90014 System Manager/System Supervisor Manual

22802-90001 Student Workbook

Class Size: 12 Students maximum at HP training center. On-site classes limited to two students per available terminal. Standard up to 10 students; maximum, 12 students.

22956A HP 3000: IMAGE, DATA BASE MANAGEMENT TRAINING
(HP training centers only)

Prerequisites: Successful completion of HP 3000: A Comprehensive Introduction, and programming experience in any of the following: COBOL, FORTRAN, RPG, or SPL.

Purpose: To provide the student with a working knowledge of data base concepts, HP 3000 IMAGE and QUERY. How to create and maintain a data base using the IMAGE utilities, and how to access the data base through programmatic calls and QUERY. Data base privacy and security are also included. Case-studies of existing IMAGE data bases will be discussed, stressing design considerations and performance trade-offs.

Length: 5 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 40%.

Course Contents:

- IMAGE overviews – terminology, description of the IMAGE subsystems
- Development of an IMAGE data base – problem definition, flow-charting, documentation
- Data set relationships – master and detail data sets
- Data set access – serial, directed, calculated and chained, synonym chains
- Data base description language (SCHEMA) – syntax, commands, operation
- Data base privacy and security – system management implications, establishing security levels, controlling access
- Accessing data bases through IMAGE library procedures – programmatic access to the data base
- Data base utilities – security backup and recovery from system failures
- Data base maintenance
- QUERY – syntax, calling QUERY, commands, reports
- Case studies

Student Materials:

30000-90041 IMAGE/3000 Reference Manual

30000-90042 QUERY/3000 Reference Manual

22956-90001 Student Workbook

Class Size: Maximum, 20 students

22957-90000 HP 3000: COBOL (A self-study training module)

Prerequisites: The student should be familiar with data processing concepts and terminology including an understanding of program logic. It is also recommended that students complete sections one and three of the HP 3000 TERMINAL USERS GUIDE, (publication number 03000-90121, supplied with the system).

Purpose: To develop competence in COBOL for beginning and intermediate programmers.

Length: Averages 30 hours

Laboratory: This course requires access to an HP 3000 system with a card reader, line printer, and the HP 3000 COBOL compiler.

Course Content:

- Overview of COBOL
- Language elements
- Identification, environment and data divisions
- Procedure division
- Sorting and I/O procedure options
- Interprogram communication
- Library features
- Table-handling
- Random access
- Segmentation

Course Materials:

22957-90000 HP 3000 COBOL Self Study Course

Ten audio cassette tapes, two card decks, student workbook, HP 3000 COBOL Reference Manual, coding pad, and Advisor's Guide

ADDITIONAL COURSE MATERIALS AVAILABLE
(may be ordered separately)

22957-60006 HP 3000 COBOL Student Materials
(1 per additional student) Student workbook,
destructible card deck, coding pad

22957-60005 HP 3000 COBOL Advisor's Guide
(additional set) Advisor's Guide, tests answer sheets,
and answer key

22958-90000 HP 3000: BASIC (A self-study training module)

Prerequisites: Completion of sections one and four of the HP 3000 TERMINAL USERS GUIDE (publication number 03000-90121, supplied with the system).

Purpose: To provide an in-depth study of BASIC

Length: Averages 30 hours

Laboratory: This course requires access to an HP 3000 system user terminal, and the HP 3000 BASIC Interpreter

Course Content:

- Introduction and library commands
- Essentials of BASIC
- Strings – data structure
- Files – structure and direct access
- Segmentation

Course Materials:

22958-90000 HP 3000 BASIC Self Study Course

Five audio cassette tapes, student workbook, HP 3000 BASIC Interpreter Reference Manual, 3000 Series II General Information Manual, Commands Reference Manual, Basic 3000 Interpreter Pocket Guide, One Magnetic Tape containing examples

22803A HP 3000: ADVANCED USAGE
(HP training centers only)

Prerequisites: Successful completion of
HP 3000: A Comprehensive Introduction

Purpose: To enable the student to correctly use advanced features of the HP 3000 operating system, text editor and SPL. This course is highly recommended for users responsible for applications design and programming.

Length: 5 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 50%.

Course Content:

- Advanced text editing – NOT, OR, PROCEDURE, Q, SET, USE, VERIFY, WHILE, YES, and Z commands
- ALGOL-like components of SPL – program structure, simple variables, assignment statements, arithmetic expressions, GO TO statements, IF statements, arrays, input/output, high-level looping statements, high-level switching statements, procedures, data conversion
- Segmentation and program libraries – using the SEGMENTER
- File system – direct calls, efficiency considerations, and multiple accesses
- Advanced system capabilities – process-handling, extra data segments, RINs (resource identification numbers), and multiple RINs
- Debug tools and techniques

Student Materials:

30000-90010 MPE Intrinsic Reference Manual
30000-90011 MPE Segmenter Reference Manual
22803-90001 Student Workbook

Class Size: Maximum, 20 students

22804A HP 3000: SYSTEMS PROGRAMMING LANGUAGE (SPL)
(HP training centers only)

Prerequisites: Successful Completion of
HP 3000: Advanced Usage.

Purpose: To enable the user to take full advantage of the SPL programming language.

Length: 5 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 50%.

Course Content:

- Process environment
- Assemble statement
- Instruction set
- Expressions
- Special machine-dependent features
- Procedures
- Bytes, pointers
- Moves, Scans, Compares
- Equivalence
- Case, Switch, For statements
- Bit operations
- Subroutines

Student Materials:

30000-90025 System Programming Language Textbook
30000-90024 System Programming Language Reference Manual
30000-90020 System Reference Manual
30000-90022 Machine Instruction Set Reference Manual
22804-90001 Student Workbook

Class Size: Maximum, 20 students

22819A HP 3000: DATA ENTRY LIBRARY (DEL) (on-site only)

Prerequisite: Successful completion of
HP 3000: A Comprehensive Introduction.

Purpose: To familiarize the student with the concepts and usage of the Data Entry Library commands.

Length: 1 day

Laboratory: 1/2 day, employing COBOL and/or FORTRAN,utilizing most of the DEL commands.

Course Content:

- Design considerations
- Environment
- Forms
 - specifications
 - listing
 - modifying
 - displaying
- Procedures
 - callable
 - access
 - terminal
 - edit

Student Materials:

30000-90050 Data Entry Library Reference Manual
22819-90001 Student Workbook

Class Size: 2 students per available terminal.
Standard, 10 students
Maximum, 16 students

22820A HP 3000: IMAGE OPTIMIZATION (on-site only)

Prerequisites: Successful completion of
HP 3000: A Comprehensive Introduction, and
HP 3000: IMAGE (Data Base Management).

Purpose: To identify to the user those elements that affect the performance of an IMAGE data base on the system.

Length: 1 day

Laboratory: 1/2 day, measuring the impact of performance variables on several data bases with the "IDEA" package (for data base measurement sampling).

Course Content:

- Effect of critical variables
- Approach to measurement
- Learning to use the IDEA package
- Stand-alone measurement
- Mix measurement

Student Materials:

22820-90001 Student Workbook
22820-90010 IDEA/3000 Reference Guide

Class Size: Standard, 10 students
Maximum, 16 students



22975A IBM SYSTEM/3 TO HP 3000 CONVERSION
(HP training center)

22817A IBM SYSTEM/3 TO HP 3000 CONVERSION
(on-site)

Prerequisites: Successful completion of HP 3000: A Comprehensive Introduction, is required, and completion of HP 3000: System Management and Operation is suggested. Familiarity with RPGII programming. A demonstration (customer-supplied) System/3 application is needed so that the student can gain experience in converting the programs.

Purpose: To guide users who are converting RPG programs, JCL job control commands and data files, from the IBM System/3 to the HP 3000.

As a result of this course, the user will be able to:

Modify and compile System/3 RPG source code on the HP 3000, and transfer peripheral and data media to the HP 3000.

Convert System/3 data files

Utilize commands taught in HP 3000: A Comprehensive Introduction course, to convert System/3 JCL.

Length: 2 days

Laboratory: Lab time provides each student with the opportunity for hands-on experience, approximately 40%.

Course Content:

- RPG source code conversion
- Peripheral and media conversion
- File conversion
- Coding requirements for HP 3000 IMAGE Data Base Management

Student Materials:

32104-90004 IBM System/3 to HP 3000 Conversion Guide

22975-90001 Student Workbook

Class Size: 20 Students maximum at HP training center. On-site classes limited to two students per available terminal. Standard, 10 students; maximum, 16 students

22818A HP 3000CX TO SERIES II CONVERSION (on-site only)

Prerequisites: Successful completion of HP 3000: A Comprehensive Introduction, and HP 3000: System Management and Operation, or equivalent pre-Series II training.

Purpose: To enable the current 3000CX owner to understand the difference between the 3000CX and Series II Systems. The objective of the course is to teach the student the key user-features of the Series II, the functional differences between the 3000CX and the Series II system, and the steps the customer must take when converting from a 3000CX installation to a Series II.

Length: 1 Day

Course Content:

The elements of the course are concerned with the following:

- New addressing scheme
- Changes to MPE
- New/changed INTRINSICS
- File system changes
- Changed UTILITIES
- Necessary conversion considerations for SPL, BASIC and FORTRAN

Student Materials:

22818-90001 Student Workbook

30000-90046 HP 3000CX to Series II Program Conversion Guide

Class Size: Maximum, 10 students

22821A HP 3000: INSTALLATION START-UP CONSULTING
(on-site) 3 Days

22822A HP 3000: SYSTEM CONSULTING (on-site)
15 Days (maximum of 2 days per week across a 3-month period)

Prerequisites: In order to gain the maximum benefit from the HP Systems Engineer's consulting provided under this service, it is necessary in almost all cases, that the following courses be successfully completed:

HP 3000: A Comprehensive Introduction
IBM System/3 to HP 3000 Conversion
(for customers upgrading from IBM System/3).

HP 3000: IMAGE (for personnel needing review instruction in HP's data base management package).

HP 3000: System Management and Operation (for personnel needing additional instruction in implementing account/group/user structure, establishing file security, or scheduling job flow on your Series II).

Purpose: To provide instruction and consulting expertise appropriate to the customer's individual needs, which are not otherwise met by HP predefined course modules. This SE consulting does not include designing, coding or converting a customer's application.

Length: To meet your unique needs, on-site consulting is available in two ways:
HP 3000: Installation Start-Up Consulting, which may be purchased in units of 3 consecutive days; or,
HP 3000; System Consulting, which provides a total of 15 days, permitting their use a maximum of 2 days per week, across a 3-month period.

The amount of consulting and its scheduling must be mutually agreed upon by you and your HP Sales Representative.

HP 3000 Installation Start-Up Consulting and HP 3000 System Consulting (on-site) are subject to local availability.

22826A PHONE-IN CONSULTING SERVICE

This consulting service provides access to HP Systems Engineers located in major HP Sales Offices, via a toll-free call (where available) to a special telephone number. Phone-In Consulting is subject to availability; consult your HP Sales Representative.

When you place a call to Phone-In Consulting, a trained Systems Engineer will discuss your questions with you and provide advice to resolve any problems. Misunderstandings on proper use of the system can be cleared up, suggested enhancements to software will be logged and forwarded to the factory, documentation clarification can be made and possible software problems will be noted. If the S.E. verifies that you have a reproducible problem with software not meeting its published specifications, the S.E. will give you advice on how to work around the problem, and a Software Problem Report will be filled-out and forwarded to the factory.

You will receive an acknowledgement from the Phone-In Consulting service within 20 working days as to the resolution of your problem.

If an immediate solution to the problem is necessary to your site operation, the S.E. will schedule all necessary local and factory resources to resolve the problem as soon as possible.

This service is not a vehicle for prolonged questions on applications that cannot be answered effectively over the phone. You can obtain consulting help for your applications problems through the on-site HP 3000 System Consulting, as described earlier in this section.

If you subscribe to the Phone-In Consulting Service, your HP Sales Representative will ask for the names of two people in your organization (one to be your System Manager), qualified to place calls. Only calls from these two people will be accepted. Both of these individuals must have successfully completed the HP 3000: A Comprehensive Introduction, and HP 3000: System Management and Operation training courses.

Charges for the Phone-In Consulting Service are calculated, based on an average of five calls per month from each subscribing installation. Usage beyond this level will result in additional charges.

If you have not subscribed to Phone-In Consulting Service but have a system maintenance contract, your company's System Manager may submit Software Problem Reports by mail to the nearest HP Sales Office where Phone-In Consulting is located. Response will be by mail within 30 working days of receipt of report.



Sales and service from 172 offices in 65 countries.

1501 Page Mill Road, Palo Alto, California 94304

In Europe: Post Office Box CH-1217 Meyrin 2 Geneva, Switzerland. In Japan: Yokogawa-Hewlett-Packard 59-1, Yoyogi 1-chome Shibuya-ku, Tokyo, 151.

In Canada: 6877 Goreway Drive, Mississauga, Ontario L4V 1L9

All other international locations: Contact 3200 Hillview Avenue, Palo Alto, California 94304.

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